The First International & 4th National Congress on
HEALTH EDUCATION & PROMOTION
16-19 May 2011 Tabriz Iran
Organized By: Tabriz University of Medical Sciences

ABSTRACTS
Health Promotion Perspectives (HPP)

Health Promotion Perspectives (HPP) which is indexed in Index Copernicus International is an international open access journal published by Faculty of Health and Nutrition, Tabriz University of Medical Sciences. HPP publishes electronically the original articles, reviews, short communications, case reports, letter to the editor on major themes and innovations including health and nutritional policies, practices and interventions on the community level. It specifically provides a unique focal point for articles of high quality and most welcomed to manuscripts including:

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ON HEALTH EDUCATION & PROMOTION

ABSTRACTS

16-19 May 2011, Tabriz-Iran

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• Ministry of Health and Medical Education
• Iranian Health Education Association
• International Union for Health Promotion and Education (IUHPE)
• WHO, Eastern Mediterranean Regional Office (EMRO)
• National Public Health Management Center (NPMC)
• IRIB, Health Policy Making Council
• Tabriz Municipality
• Tabriz Petrochemical Company (TPC)

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Health Minister's Message

Dear distinguished guests and participants
As the Health Minister of Iran, I extend you a warm welcome to the 1st International and 4th National Congress on Health Education and Promotion organized by Tabriz University of Medical Sciences. This congress is a great opportunity to bring scientists, policy makers and health education and promotion professionals from Iran and around the world together.
This gathering reveals the role and importance of health education and promotion as the primary goal of the Ministry of Health and Islamic Republic of Iran's Government from one side, and the development and improvement of health education and promotion sciences through opening a new scope in health care activities, from the other side. Undoubtedly, achieving the Iranian 20-year vision, which being healthy, having a high quality life and a safe and healthy environment are the main parts of it, without the efforts of researchers and professionals in the field of health promotion would be impossible. It will be a great honor that community health promotion, as a priority among the goals and activities of the Health Ministry, would guarantee the health of community.
Since the “Iranian comprehensive health map” is developed based on the country’s 1404 vision to be the first among 25 countries in the south west Asia in science and technology, scientific achievements of researchers in the field of health education and promotion that ensure welfare and enjoyment of an appropriate lifestyle could play an effective role in achieving the goals of health system in the near future. Therefore, health education and promotion specialists have a great responsibility to use all their scientific and professional capacities and continue their national and international collaboration to promote health. I hope the results of this landmark event will play a valuable role towards the goal of a high quality life and a healthy Islamic Republic of Iran. I also want to thank the Scientific and Executive Committees of congress for all their hard work and dedication.

Dr. Marzieh Vahid Dastjerdi
Minister of Health and Medical Education
Dear colleagues and friends, as the Chancellor of Tabriz University of Medical Sciences and the President of the Congress, it is my privilege to greet you. We would like to express our gratitude for your participating in the First International and 4th National Congress on Health Education and Promotion, which is held in Tabriz, Iran, on May 16-19, 2011, hosted by the Tabriz University of Medical Sciences and Iranian Health Education Association.

I hope this event would allow participants and researchers to discuss the latest developments in the field of health education and promotion and to gain an in-depth understanding about the challenges we are facing as national and international communities to maintain a standard healthy living for all. Personally I think that the scientific content of this Congress will stand the test of time and will be remembered for many years. I would like to express my thanks to all participants. First, to the authors, whose worthy works is the essence of the congress. Next, my thanks go to all the members of the Scientific and International Program Committees. Special thanks to my colleagues of the Organizing Committee. I am pleased to have worked with such a highly capable team for their dedication and enthusiasm which lead to the successful organization of the 1st ICHEP.

Alireza Yagoubi, MD
Chancellor of Tabriz University of Medical Sciences and President of the Congress

Dear attendees
It is my great pleasure to welcome you to the 1st international and 4th national congress on health education and promotion in Tabriz. Our city is famous for its ancient cultural treasures, for its contribution to the world heritage, for its hospitality and for its many vibrant handicrafts among which hand woven oriental and pictorial rugs are paramount. Weaving a rug requires a great deal of patience, time and enthusiasm. Inspired by such an enthusiasm a group of my colleagues by their enormous efforts helped the congress to be convened for the 4th consecutive time.

As the chairman of the congress I am very grateful for excellent works and encouragement of the scientific and executive committee members, and for contributions we received through over 1735 submissions from several countries worldwide. I also would like to personally thank our distinguished guest speakers for delivering speeches in this scientific event.

The extent of the research topics and number of registrations reflect the commitment of national and international public health community to provide evidence for health promotion activities globally. In spirit of our common commitment I hope discussed issues in the congress would develop and extend health communication knowledge and health promotion experiences among professionals and policy makers to achieve healthy population in the national and worldwide level. I am sure our efforts will produce a profound impact on stimulating an evidence based dialogue among health scientists and on reaching our goal to promote health for all, locally and globally. Many thanks for your cooperation and I wish you a great time in Tabriz.

Hamid Allahverdipour, PhD
Scientific Chair, 1st ICHEP
It is a great pleasure to welcome delegates to the 1st International and 4th National Congress on Health Education and Promotion. The program for this event provides many opportunities for researchers and practitioners in the health education and health promotion fields to share their experiences and learn from each other. Promoting health in the 21st century is complex and challenging but meetings like this one can help to build better understanding of both the challenges and the potential solutions. I hope this Congress will provide an opportunity for the exchange of information, learning, networking and a renewal of energy and commitment to address global health and wellbeing issues through health education and promotion. As President of the International Union for Health Promotion and Education, I welcome the internationalisation of this Congress and the inclusion of international presenters and delegates. Iran and the neighbouring countries in this region have much to offer the world in terms of applied practice, research results, and the evidence of health promotion effectiveness in this part of the world. I trust that this will be the first of many such meetings that will strengthen the contribution of this region to the global knowledge-base. Locating this Congress in the beautiful city of Tabriz is another great attraction for delegates. I hope that, like me, you will take some extra time to enjoy the sights, learn about the unique culture of this area and get to know some of the warm and welcoming local people. I hope you enjoy the conference and your time in Tabriz.

Michael Sparks
President, International Union for Health Promotion and Education

A number of experts claim that “health” cannot be fulfilled utterly without related “education”. According to Greek mythology, Hygeia, the goddess of good health, once suggested her father and the god of medicine, Aesculapius, to put efforts on “prevention” rather than “remedy”. From name of Hygeia, the term “Hygiene” was coined that is: “the science of preventive medicine and the preservation of health”. No doubt that “education” was the bottom line of Hygeia’s consideration. In the starting decades of the third millennium, Health education and health promotion have been developed so widely that even those physicians who used to refute traditionally the importance of health education, are now inclined to receive the benefits of co-working with health educators to treat their patients. In recent years, the increasing rate of incurable diseases has aided trends toward “prevention” activities which possess “health education” in their cores. Nowadays, Health education and health promotion have been elevated to a higher standing in health care systems; yet this approach in developing countries has not received sufficient support since those societies still tend to the traditional stage of “treatment after disease”. Hopefully in developing countries, the whole process is moving toward a “healthier” understanding of the significance of prevention as well as allocating related investments.

In Iran and all over the world, recently, the growth rate of academic majors in health education and health promotion has shown a drastic increase, though “professionalism” has not being achieved by Ph.D. and Master scholars yet, and they have to hold a job either in health care offices or in the state Universities. If related instructors and educators are given opportunities to perform in nonprofit consultation offices of health care and promotion, a substantial revolution in health field will be expected. Holding the 4th National and the 1st International Congress on Health Education and Promotion offers us an invaluable opportunity to get benefit of all scientists’ and scholars’ achievements in and out of Iran and to employ them effectively in our future planning. I am very grateful to my colleagues at Tabriz University of Medical Sciences, especially Dr. Alireza Yaghoubi the dean of University and the President of Congress, and Dr. Allahverdipour the Congress Scientific Chair, for supporting and managing this event.

Mohammad Kamali, PhD
President, Iranian Health Education Association
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ASSESSMENT OF BURNOUT SYNDROME IN HEALTH WORKERS; STRATEGY FOR PROMOTING
Master Lectures
CAPACITY DEVELOPMENT FOR HEALTH PROMOTION GOVERNANCE

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If health promotion is “a process, the purpose of which is to strengthen the skills and capabilities of individuals to take action, and the capacity of groups or communities to act collectively to exert control over the determinants of health”, then effective health promotion required ensuring the development of sustainable skills, organisational structures, resources and commitment to health improvement in health and other sectors. Capacity building for acting on the determinants of health is a central task for promoting health. Sustained change, however, depends on systems for health governance. Thus, action on determinants of health needs to ensure decision-making processes and mechanisms incorporate diverse voices and prioritise health concerns, particularly intersectoral governance. Leadership and leadership development are critical in creating effective governance mechanisms to assure health in all policies.

EMPOWERMENT, LEADERSHIP AND HEALTH PROMOTION: LESSONS FROM THE FAMILYWELLBEING PROGRAMEVALUATION.

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The Australian Aboriginal community suffers significantly greater mental and physical ill health on most measures compared to the Australian population. Much of the health disadvantage arises from social disruption, historical and current disempowerment, discrimination and poverty. Although Indigenous communities have experienced many externally driven health education and promotion programs and other direct interventions, the impacts have been limited. People rarely experience profound transformation and change as a result. Empowerment is recognised as a core element of health promotion, quite distinct from prevention, which often takes a deficit approach rather than focusing on identifying and building strength for change. Despite this, empowerment is not usually a fundamental concept underpinning the content of many health promotion programs. Effectively implemented public policy as the key strategy to improve the social and physical environment and thereby the health of disadvantaged communities remains of paramount importance. However such is the level of personal distress, generational grief, and personal disempowerment in most aboriginal communities, indigenous workers developed the Family Wellbeing Program (FWP) to help individuals develop personal insight and resilience. This core program has been used to inform variations specific for different settings such as men’s health groups.

Working with four communities over more than 10 years, we have used mixed quantitative and qualitative methods to examine the ways in which this individual-focussed empowerment program has impacted on broader family and community empowerment and the health of communities. This research includes analysis of transcribed interviews with over 170 individuals, multiple group sessions, mini-surveys and analysis of routinely collected demographic, health and justice data. We developed the Growth and Empowerment Measure, designed to capture change in dimensions of empowerment at individual and community level as defined and described by Aboriginal Australians.

Evidence of the strength and empowerment gained for individuals from participation in the FWP was poignant. Participants clearly articulated ways in which FWP gave them greater understanding and control over their lives and enhanced ecological or multi-level change. Work continues examining the impacts of individual empowerment programs on family and community empowerment and health.

These studies demonstrate the contribution that community empowerment education programs, grounded in the principles of self determination, control and local norms and value systems, can make on social determinants of health and individual health. The longevity and high level of community engagement in the intervention and research team have also provided a special opportunity to observe how leadership in health can develop in different ways in different communities.

Keywords: Health promotion, empowerment, resilience, indigenous communities, health inequity.

HEALTH PROMOTION AND CULTURAL ENGINEERING

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Introduction: Individual’s values and norms as well as behaviors are related to the society which they are lives and work, in the other hand, society culture is the process of Individual, groups and community behaviors.

Materials and Methods: This study is based on the Ottawa Charter (1986) and the World Health Organization declarations on the health promoting settings approach.

Results: The Ottawa Charter and other Health Promotion Conferences until now emphasizing on the people positions which they are living; working and playing in the different settings. So this change of emphasis to people and their health demands that attention should be paid to
environmental factors (settings within specific social and physical environment) associated with people health. The challenge is to envisage taking the individual approach to the settings approach and practical application as cultural engineering. Which it may extend state intervention beyond personal education to various forms that establish society norms and values of a healthy society for all.

Discussion and conclusion: In the resent years the social determination of Health factors (SDH) has been the central of promoting health in the society. Culture as a system depends on the individual and community value and norms. So promotion health in the community is related on the creating healthy public policy and creating supportive environments.

Cultural engineering health based ensure health for all and all for health and this will be Introduction to healthy planning, implementing and evaluating in all community settings.

Key words: Health promotion; Health Promoting settings; Health Cultural engineering

INTRODUCING HEALTH PROMOTING SETTINGS: THE CURRENT APPROACH IN HEALTH PROMOTION

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Health promotion and in particular health promoting settings is relatively new concept among health professionals and also schools of public health in Iran, although it is not new in many other high income and few low and middle income countries. This paper seeks to introduce the health promoting settings concepts and practices. The paper first describes the history of emergence of health promoting settings approach in health promotion worldwide, then reviews the nature of settings based work, highlighting the challenges, opportunities and benefits can be expected in delivering health promoting settings services. Similarly, the many factors that influence the ability of health promoters to deliver such activities are considered. In relation to the construction and delivery of health promotion activities and intervention, the paper suggests that settings approach should be more advocated among the health professionals and policy makers.

HEALTH EDUCATION AND PROMOTION AND PERSONS WITH INTELLECTUAL/DEVELOPMENTAL DISABILITIES

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Good health is essential for quality of life of all individuals including those with intellectual and/or developmental disabilities (I/DDs). Research from developed and developing countries show that there are significant health disparities between persons with and without I/DDs. As a group, people with I/DDs have poorer health, less access to health care services and yet less likely to be included and involved in public health education and promotion programs. To reduce health disparities experienced by persons with I/DDs, there is an urgent need to explore their specific health needs, and develop and implement effective health education and promotion programs aimed at this population. In addition, it is important to research and overcome barriers that might prevent this particular population from accessing health promotion activities which are aimed at the general population. This presentation provides an opportunity to overview these barriers and provides a few examples of successful health education and promotion programs targeted at this population. Relevant health policy issues will be discussed.

FROM GLOBAL IDEAS TO LOCAL ACTION TO GLOBALLY SHARED KNOWLEDGE.

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Introduction: Global issues for health promotion and education arise from international meetings and agreements as well as from developments in research and practice. Often people at the community level are told what they should be working on, but not how to do that work or how the work that they are doing might contribute to globally shared knowledge. A framework for workers at a local level to systematically assess global issues and translate them into context-appropriate activities would assist these workers to more effectively engage local action on global issues.

Materials & Methods: This presentation focuses on a newly developed framework for translating global issues into local action and then disseminating the results of local action to a global audience. The author’s RATED Framework has been developed to lead health promotion and education workers at a local level through a process to understand global issues and translate them into action at the local level. The framework also includes steps to evaluate the local action and to disseminate it to a global audience.

Results: While knowledge of the framework alone may be useful to community workers, the ongoing development of supporting resources will also be indicated. Through discussion of the framework and its application to community settings, the speaker hopes to engage local level workers in the adoption of the framework and contributing to further developing and refining the framework. The presentation also will emphasize the role of academic institutions, professional associations and other organizations in supporting local action on global issues.

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Discussion & Conclusions: Community-level health promotion and education workers are frequently challenged to understand how they can contribute to global issues through their locally-based activities. The RATED Framework provides a way for these workers to analyze and translate these global issues into local action, and then to add their local contribution to a global knowledge base. The framework has broad applicability across a range of contexts.

Keywords: Health promotion, practice framework, global issues, local action.

THE ROLE OF GOVERNMENTAL ORGANIZATIONS IN HEALTH PROMOTION: QUALITY OF BEHAVIORAL ETHICS.

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Introduction: How can the governmental bodies promote for health if they have several malpractices within the health System? These malpractices cover several aspects such as: Managerial, Administrative, Legislative and Scientific deviations.

In order to promote for health (by insuring the approval and use of safe medicines) the governmental regulatory bodies should first eliminate such defects.

The main solution to such major problem is to establish applicable rules and regulations and then to insure their proper implementation by the different managerial levels.

In addition there should be high emphasis on job description for each managerial level.

This requires the initiation of several meetings for the different officials of different managerial levels to discuss the details of each required vital step in the different procedures.

Furthermore there is a major need for establishment of an independent Reference body to receive complaints and to have serious actions to stop different malpractices.

Materials and Methods: It is the actual reflection of real and actual facts and events that took place during my 27 years work at the Ministry of Health in different Positions the latest were: Director of Pharmacy Specialization and Advisor to the Minister of Health for Drug Affairs

Results: The results of such Mal-Practices are: Wrong decisions towards approval of medicines and drug manufacturing companies consequently , the patients will have more complications because of inefficient medications, the government will spend more money on insured patients by buying more medications in order to treat not only the original disease but also the complications resulted from faulty medications.

Further more the impacts on different managerial levels of employees are: dissatisfaction (especially the highly qualified employees), because they are not given in the right position to work within their specialization to achieve their tasks.

Discussion and conclusion: Health promotion could only be achieved if we could establish the following:-

*Establish new rules and regulations regarding enforcement of job-description (including Qualifications suitability) to overcome each of the mentioned obstacles that are present against health promotion.

*There should be an independent body that has the authority to investigate and implement legal actions towards mal-performance of the employees of different managerial levels with no exception.

*There should be new rules that can protect the employees if they report about any discovered mal practices without being exposed to any negative actions from the above managerial levels.

After that the quality of Behavioral Ethics could be fulfilled.

Keywords: Malpractices, Rules, Regulations, Governmental System, Medicines Approval, Drug Quality Control, Quality Assurance, Behavioral Ethics.

HEALTH AND WELLBEING THROUGHOUT LIFE: THE UK EXPERIENCE ON SUSTAINABILITY AND EFFECTIVENESS OF LIFE CYCLE APPROACH

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The concept of health and well-being has attracted attention amongst a wide range of academic disciplines, public health practitioners and politicians nationally and internationally in recent years (Carlise & Hanlon, 2008). In UK, there is concerns about increase in health inequality and debate about whether well-being should be a focus for public health strategy and the extent to which a fairer society could lead to a better health and whether the current government health policy is achievable and sustainable(Marmot, 2010).

In addition, the tension between subjective, objective, individual and collective approaches to improving health has never been greater, and the challenge of dimensions of human experience in the 21st century therefore calls for an integrative Public Health Model.

This presentation begins with unpacking some of these debates; it will address a number of the contemporary health promotion issues facing our global village including health inequalities, social justice, social capital, environmental & ecological issues, financial crises, war on want and/ or war on terrors to name a few.

It advocates looking at health and wellbeing from a health, social policy and cultural perspectives; sustainability of health promotion programmes through community settings, widening participation, increasing resilience, and re-examining the concept of effectiveness; and finally understanding health through fuller sense of ourselves and our relationship to the world.
It move on to look at the lifecycle approach to health and wellbeing and examines the sustainability of this approach focusing on a number of UK health strategies and case studies in the last 2 decades and concludes by examining briefly the relevance of these issues/approaches to Iran, as well as the challenges & opportunities we face in Iran to improve the health of our nation.

RESHAPING HEALTH PROMOTION POWER: FOCUSING ON THE PARTICIPATION

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Power as one of the determinants of people’s health is a central notion in health promotion. The concept of empowerment is fundamental to any social justice strategy and a range of health promotion approaches. Current evidence indicates that empowerment works at individual, community, society, and international levels. Empowerment is intimately linked to participation. People will seek the opportunity to participate in issues influencing their lives, when they feel they are able to take control over it. Participation as a key strategy in health promotion offers numerous benefits at many different levels. This presentation will provide insights into the concept of power and how it relates to health; will address why power relations are essential to participation, and why public participation is important in health promotion. It will also comment on issues such as the major challenges of public participation.

ROLE OF HEALTH PROFESSIONALS IN TOBACCO CONTROL IN MALAYSIA EXPERIENCE 1982-2011

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Introduction: The burden of mortality, morbidity and disability attributable to non-communicable diseases is currently high and continuing to grow in developing countries and also in Malaysia. Rapid changes in socio-economic conditions, diets and patterns of physical activity are further causing rates to rise. Cardiovascular diseases have been the leading cause of death in Malaysia for the past 40 years. The prevalence of hypertension amongst adults aged 30 years and above in Malaysia has increased from 32.9% in 1996 to 40.5% in 2004 and to 42.6% in 2006. Prevalence of obesity amongst Malaysians 18 years and above has increased from 35.3% in males. The overall prevalence of smoking amongst Malaysians 18 years and above has decreased from 24.8% in 1996 to 23.2% in 2004 and 21.5% in 2006. This paper presents the role of Health Professionals in tobacco control activities and its impact in Malaysia 1982-2011. It also highlights the health and economic burden of tobacco use, factors influencing tobacco use and history of tobacco control activities in Malaysia. The paper will also discuss the current situation and how health professionals and other Non Government Organizations (NGOs) can apply for funding from the Malaysian Health Promotion Board for Tobacco Control.

PROFESSIONALISM IN HEALTH EDUCATION AND PROMOTION

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Introduction: Educators and regulatory bodies have attempted to define professionalism to facilitate discussion and scholarship, as well as for teaching and evaluating trainees and health professionals. Further the identification of professional attitudes, behaviors and competencies is perceived by many as providing a solid basis not only for professional preparation and training, but also for credentialing and continuing professional development. This paper offers definitions of profession, professionalism, professional attitudes and professional behaviors, describes their specific components, and identifies educational impacts upon them.

Materials and Methods: This review article has been composed by studying more than 25 prestigious scientific papers or documents. An internet-based search was conducted to access these sources, using key words including: professionalism, professional practice and preparation, health education/promotion, and medical professionalism. Documents were found mostly in the realm of medical professionalism; few articles, however, were found on professionalism in health education and promotion.

Results: Social scientists described professions as possessing sets of structural, attitudinal and behavioral attributes that set them apart from occupations. A profession has also been defined as an occupation that regulates itself through systematic, required training and collegial discipline; that has a base in technical specialized knowledge; and that has a service rather than profit orientation, enshrined in its code of ethics. In some countries, health promotion is a defined profession and/or a specialty area within multidisciplinary public health. In the United States, health education is considered a distinct profession. Consequently, these different workforce structures and perspectives influence the delineation of competencies for professional practice. Although professionalism is an elusive concept, it is
defined by sets of attitudes, behaviors and qualifications specific to professions. Professionalism can be identified as the behaviors, aims, standards or traits that typify a profession or a professional person. According to the ABIM, professionalism aspires to altruism, accountability, excellence, duty, service, honor, integrity, and respect for others. The establishment of professional competencies and standards is important to enhance the quality of practice in any discipline or profession, including health education and health promotion.

Discussion and conclusion: Considering the obvious lack of scientific literature, especially in Iran, there exists a strong need for scientific and research endeavors to generate required knowledge regarding professionalism in health education and promotion. This paper examines health education and promotion professionals to critically reflect upon and to strive in developing a guiding professional charter for their profession, as well.

Key words: professionalism, professional practice, health education/promotion, medical professionalism.

HEALTHY LIFE-STYLE MEANS ISLAMIC LIFE-STYLE
Tavakoli R

Introduction: Life-style means the way that we live. It includes our beliefs, thoughts, feelings, attitudes, knowledge and behaviours. Healthy Life-style directs our thinking and behaviors toward quality of life and a healthy living. Taking in account the importance of life-style at the present time and its effects on our different aspects of health including physical, mental, social, economic, cultural and spiritual, we are going to propose that directing life-style towards Islamic rules and guidelines is the best approach to promote the quality of life and health status of the both individuals and society.

Materials and Methods: In this review lecture following the definitions of both healthy life-style and Islamic life-style, characteristics of both styles are being presented and compared.

Results: Islamic Life-style is a good replacement for healthy life-style approach at any time especially at the present time where we are facing with many health problems known as life-style related diseases. On the basis of our studies on both approaches, healthy and Islamic, it is believed that Islamic guidelines based on their rules acquired from Holy Quran and hadith are able to direct and support both individuals and society as a whole toward a healthy life-style which is desired goal of any society.

Discussion and conclusion: By reviewing similarities and differences of both approaches presented here, one can conclude that Islamic life-style can potentially manage both individuals and populations from the healthy view of point

and promote the health status and quality of any society.

Key words: Healthy, life-style, Islamic,

PROMOTING CANCER SCREENING AMONG UNDERSERVED COMMUNITIES: “AN APPROACH THROUGH FAITH-BASED ORGANIZATIONS”

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Faith-based health promotion interventions can reach broad populations and have great potential for reducing health disparities. Collaborative efforts among academic institutions, health care professionals, and faith-based institutions can prove valuable in efforts to improve community health. Faith-based organization leaders, in particular, are considered to be instrumental in the successful implementation of health programs. It is well documented that a collaborative partnership approach involving community and faith-based leaders in program design and delivery is essential for sustainability of the program. Numerous studies have documented the effectiveness of faith-based community health programs to increase cancer screening in United States. However, the sustainability and long-term impact of these interventions remain a major shortcoming of these interventions. Studies that have used the community participatory approach show that a key element of sustainability is the emphasis on capacity building and co-learning. Therefore, the goal of this project is to increase the leadership role of faith-based organizations in cancer awareness and prevention among underserved communities.

This community-based participatory intervention includes the following elements: 1) Provide the leaders with the latest information and build positive attitudes toward the prevention and screening of colorectal, breast, cervical, and prostate cancer; 2) Enhance leaders’ ability and level of self-efficacy, confidence motivation, and behaviors that provide leadership and direction for the cancer prevention within their respective worshippers; 3) Develop a curriculum and training manual for faith-based organization leaders and their congregations; and 4) Obtain the materials for congregants to keep a library and resource room for cancer-related materials that will support educational presentations, classes, and sermons.

Two theoretical models underlie the intervention: the Information-Motivation-Behavior (IMB) model of Fisher and Fisher and the Diffusion model of Rogers. The study includes two phases: 1) Phase I will be based on the IMB model and will include faith-based organization leaders who will meet monthly to identify specific cancer screening and prevention-related needs of their congregations. They will participate in a small group interaction to build attitudes regarding the unique potential of the church and the leaders to enhance cancer screening and prevention; and 2) Phase II will focus on diffusion of the positive attitudes and provide an atmosphere for innovative development, dissemination, adaptation, implementation, and maintenance of a practical model for dealing with cancer screening and prevention issues.
LITERACY OF HEALTH PROMOTION TERMINOLOGIES IN DOCTORS OF A HEALTH INSURANCE SYSTEM IN PAKISTAN

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This study attempts to estimate health promotion literacy among health professionals working in the public sector health insurance system of social security in Pakistan. It was done by using a structured questionnaire delivered and filled by the researchers through face to face interviews. Among the 100 doctors interviewed, majority were male; mostly between aged 30-40 years. Results showed that there were very few responses which were correct. Most respondents could not describe and define various health promotion terminologies. The study concluded with the finding that there is limited literacy of public health and health promotion terminologies among the doctors of social security system in Pakistan. It was suggested that it’s time to consider the trainings of the doctors in the field of health promotion. It’s also hoped that results of this study will be used to mobilize necessary resources and actions to improve the health and quality of lives of related Community.

Keywords: Health Literacy, Health promotion terminologies, social security
Symposia
Health Education and Health Promotion in Iran, Challenges and Realities

HEALTH LITERACY: A NATIONAL & INTERNATIONAL APPROACH

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Health literacy has been defined as the ability to obtain, process, and understand basic information and services needed to make appropriate health decisions. Research during the past 15 years has shown that those with limited health literacy skills have higher health care costs, use health care services more frequently, and have poor understanding of chronic disease management techniques, under use preventive health services, engage in riskier health behaviors, and tend to be less knowledgeable about health-related topics than those with adequate health literacy skills.

Measuring health literacy could be the first major step in constructing a new type of health index for societies. Although several literacy assessment tools are available, the Rapid Estimate of Adult Literacy in Medicine (REALM) and Test of Functional Health Literacy in Adults (TOFHLA) were most frequently used. Unfortunately, none of these tools completely capture health literacy definition and have not the same components to make them useful for comparison of their results.

The history of health literacy research in the world comes back to about 25 years ago, in EMRO a few number of research conducted. Ministry of health and medical education in Iran put increasing health literacy as a main goal in 5th National Development Plan (2011-2015) and developed 5-year comprehensive program to obtain this goal.

This lecture present different dimensions of health literacy as an index, its different measurement tools, and what should be considered for future action and interventions in Iran and the region.

Evolving World: Adapting Strategy

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In the past three decades, global human civilization has developed rapidly. Scientific and technological growth combined with shifts in social norms and behaviors have created new challenges, as well as new opportunities in the field of public health. The focus on prevention and treatment of infectious diseases has been surpassed by the need for management of chronic conditions. The method of instilling change in society is no longer simply uniform dissemination of correct information, but rather implementation of necessary prerequisites of determinants such as popular culture, political initiative, and basic economic infrastructure. The scale of public health programs, although global in nature, is becoming more focused on the needs of individual communities. Instead of tackling these problems single-handedly, public health workers are increasingly forming partnerships and coalitions to access a broader range of resources, inputs, and outlets for reform. The newest development in the realm of public health takes a new approach to the most basic unit of action in society: the individual human being. For years the well-being of a person’s biological machinery was the yardstick by which we measured health. However, the most significant factors in the lives of human beings not only are physical parameters, such as blood pressure or cholesterol levels, but also mental parameters, such as relationships with others, creative discoveries, ability to adapt to change and cope with adversity and, ultimately, happiness. The public health of a society revolves around the mental health of its individuals, yet most sectors lack adequate emphasis and logistics to deal with this issue. Therefore, public health workers must serve a unique and crucial role in understanding and addressing the protean problems of this evolving world.

Keywords: Mental Health, Global, Partnership, Coalition

Recreation of New Roles for Health Educators in Health Care Services

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Introduction: The point I want to make is that it is crucial that we provide invigorated leadership in health education in the twenty-first century. If we don’t shape the direction of events in health education, others less able will. The forces of change are moving quickly, and if we don’t guide them, we’ll have no choice but to follow or be pushed out of the way.

I am focusing this discussion in response to three questions:
1. What is the context for change between now and 1410 the trends that will reshape Iran in the next twenty years?
2. What kind of health education is needed as we move into the next century?
3. What do health educators need to do to meet the future with confidence?

This is a time of unprecedented change in the world. At least five things have been identified as central themes that drive change (Cox & Hoover, 1992). I’m going to suggest that in this moment, the practice of health education, and we as health educators, are confronted by all five and because we are as we move toward the new century we will fundamentally change the way we do business.

1. Whether or not we recognize it, changes in society will cause changes in our essential mission as health
educators. Our future task will not be to teach people facts to focus on their cholesterol number the mission will be to help them become more analytical thinkers, to be more able to deal with an uncertain and complex environment. We will become people’s health enablers, helping them to manage new and confusing information and to make decisions in turbulent situations.

2. Our identity and image is changing. In my professional lifetime, health behavior has moved from obscurity to the forefront of Iranian culture. Health is “chic” and more and more Iranians are meditating, eating right, and exercising. By association, we’ve been carried along on this wave to prominence, and we have the potential for increasing credibility with a large audience that will become even larger.

3. Our relationship to key stakeholders in the arena of health is changing. The medical care establishment is slowly but surely experiencing an erosion of power. The public is rethinking its health goals slowly but inevitably shifting from notions of longevity coupled with high tech medicine to notions of quality of life. We have the potential for newer and stronger partnerships with the people and communities who have always been the health education constituents. Medicine by necessity will become partners with us. Collaboration and partnership have new, more powerful meaning for health education.

4. There are changes afoot in the way we work. We are in the midst of a shift back to community based health education interventions after more than a decade of focus on individual behavior. We have a renewed sense of urgency for helping to empower communities to find appropriate solutions to their health problems.

At the same time we have an amazing array of technology at our disposal. We can reach people in new and powerful ways. Recently we can connect to AIDS educators around the country via a television and together we explore ways to improve community education for AIDS. Computers, fax, and television are changing the way we work. Technology will be central to health education of the future but the emphasis will be technology for people, not in spite of people. User friendly, people focused technology is the future.

5. Finally, we are undergoing a massive change in culture in our society. We are literally looking different as a nation and the conventional majority values and norms are being challenged as we become a more diverse, more ethnic, more interesting culture. Health educators have long prided themselves with working across cultures and being sensitive to individual differences. The cultural changes that are in the works, however, are of a greater magnitude than any of us have experienced previously.

Keywords: Health Educators, Change, Leadership

HEALTH EDUCATION VISION IN 1400

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Health education in the past three decades has witnessed many changes, and beside its largely quantitative development, always has encountered with unresolved problems and failures. This study try to briefly, and with a holistic vision, addresses the problems, obstacles and achieved successes as far as possible, and also visualizes the vision of the next decade of this scientific field providing some recommendations. For the year 1400 what goals we should pursue, what barriers should be removed and our widespread orientation should be toward what direction are necessary.

In summary, in last 30 years, the major challenges of this field may be known as: 1- lack of skilled manpower in universities, 2 - poor structure of health education in administrative section and health services delivery system of the country, 3- lack of belief and confidence toward new methods in health and health education and health promotion (lack of trust in professionals) and 4 - lack of necessary knowledge regarding the new methods of health education in macro levels of health programming. In past years, major success have been achieved in some above mentioned cases within which the most important are the development of scientific and academic experts and the significant increase in expert manpower in medical universities throughout the country. So that the current number of country experts has increased to more than 100 doctoral degree and more than 500 master degree. Meanwhile, in line with this development, increasing the academic research projects and scientific articles of the respected professors in this field should be confessed.

But this scientific flourish and development has not gone out from the universities of the country and has had no intrusion in the executive level of the country, towns and villages. Therefore, this type of development and continuing it may have adverse effects on the public health systems.

In other challenges such as the structure of health services and education and the distrust of health services authorities toward the family of health education almost we have witnessed no positive changes. The main reason of this problem may be known as the scientific and communication weaknesses of the experts working in this field. But health education has not been waiting for breaking the obstacles and making readiness among the experts in the country and we are always observing the regional growth and localization throughout the country. So, many new organizations such as municipalities, mass media, the police organization as well as banks and oil companies have tried to work in the field of education and health of people especially in education area. And their activities have also accelerated, because the health education as people’s need may not be ignored.

Unfortunately, in this dimension we have lost the management of the affairs which was expected to be the health education duty. The existence of no health education specialists in the local municipalities, mass media and .etc, may be assessed as a result of the wrong behaviors of ourselves during the previous years.

At the end, it seems that in order to rebuild and reform the structures, we should think and decide in a way that at least 85% of the graduates in this field to be attracted by administration affairs to train health to the people.
There are researches who seek to compare and contrast health education models and theories or assess the utility of a particular theoretical model for changing health-related behaviors that could potentially advance health behavior research and assist us in learning more about the processes by which people may change and/or maintain health behaviors. There are several challenges that should be addressed, especially in Iran, where the use of theories and models in providing the framework for research questions and/or hypotheses has been increasing at a rapid pace. The most important challenges in Iran may be listed as follow:

1. Theories and models are usually tested in samples which do not represent the population. For example, a theory-based intervention which is found to be effective in a non-random sample of, say, 200 cannot be generalized to the population due to limited external validity of the findings. Additionally, if the setting for the experimentation is a controlled environment, say, a laboratory, results cannot be generalized to the real world.

2. Most of the published papers represent basic research in which theories are tested for the sake of knowledge, which of course are fine, as the findings may be used to develop interventional programs. However, there is a need to plan and execute more applied research to systematically evaluate the effectiveness of various interventions.

3. Usually, only statistically significant findings are presented and insignificant results are ignored, which is not a good practice, because not finding the results statistically significant can be an important finding and worthy of further investigation. Additionally, we have to begin paying more attention to the practical significant of the findings by, for example, assessing the clinical implications of the effect sizes.

4. There is an unnecessary effort to provide the evidence that a given model is suited for the behavior, while avoiding any explanatory work.

5. Some researches extend theories and models without providing sufficient evidence and without conducting the scientific inquiry correctly.

6. There are instrumentation shortcomings. For example, using a published instrument without adequately understanding it; translating the instrument from a foreign to the native language without paying adequate attention to the needed cultural adaptation.

7. Not testing the psychometric properties of the measuring instrument is a major problem. The various processes to assess the validity and reliability of the instruments are not usually implemented correctly due to insufficient expertise, resources, and interdisciplinary cooperation.

8. In spite of a variety of emerging models and theories in health education, a limited number of old models and theories are still used in research studies.

9. Most of the model and theory based research investigations in health education are done with the aim of paper publication rather than providing practical implications.

10. Plagiarism, weak methodology, and weak discussion of the findings are seen in some published papers.

The following strategies are proposed for coping with the above challenges:

- Promoting productive team work in which duties are assigned to team members on the basis of their expertise.
- The principal investigator must clearly describe the study’s protocol. It is helpful to divide the study into stages and assigning each stage to a graduate student which may lead to his/her doctoral dissertation study. Typical stages are: 1) research design, 2) intervention design, 3) intervention implementation, 4) subject selection, 5) instrumentation, 6) data collection, 7) data analysis, and 8) synthesis of findings to draw conclusions and offer practical implications.
- Researchers should be encouraged to conduct explanatory studies and editorial boards of scientific journals should be lobbied to include insignificant findings in the results section. Also, researchers must be encouraged to pay attention to the practical significance of their findings. Note that a statistically significant finding does not necessarily indicate that the finding is important.
- A fruitful cooperation between professionals and academicians in health education should be promoted.
- Researchers should be encouraged to pursue continuing education to keep themselves up-to-date with respect to research methodology, instrumentation, and data analysis.
- Tool development should be recognized as a program of research that can be followed by some researchers in health education.
- Qualitative as well as mixed methods research must be conducted by researchers in health education.
- Finally, in my professional opinion, the most important strategy is the reinforcement of our commitment to our discipline.

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**School Health**

**Emergence Of Health Promoting Schools Approach In School Health Promotion: Main Concepts And Strategies**

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Historically, schools and their related issues such as...
health have always been of interest for many professions in most countries including Iran. The importance of school health in Iran for a long time has been recognized. Iran is one of the first nations which its government established a department for school health in Ministry of education in 1935. Rapid increase of population in Iran after 1979 led to increased population of school students up to nineteen millions after more than a decade and then dropped down after implementation of family planning programs. Consequently school health gained more attention; and significant major school health promotion programs implemented in schools. However, majority of the programs, even up to recent years, have been based on traditional classroom based programs while health promoting schools as a holistic and modern approach to school health has emerged from around 1996. This presentation aims to describe the emergence of health promoting schools initiative, explain the main concepts and the theoretical foundations of this concept. It also draws upon the international experiences in health promoting schools to shed light on the diversity of perspectives regarding health promoting schools, potential and experienced challenges and opportunities around the world in implementing and sustain health promoting schools. It suggests that development of health promoting schools in Iran, which just has been started, should be based on comprehensive review and understanding the theoretical foundations and also existing experiences to improve the management of the limited resources and enhance the effectiveness and sustainability of health promoting schools interventions in Iranian schools.

**AN OVERVIEW OF SCHOOL HEALTH IN SOUTH AFRICA SCHOOL HEALTH SYMPOSIUM**

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South Africa has prioritised children by ratifying the United Nation’s Convention on the Rights of the Child of 1996. According to the World Health Organisation, school health programmes can improve educational outcomes as well as reduce common health problems facing school children. In this presentation, the most important challenges that impact on the health of school going children in South Africa will be highlighted. The history and structure of delivering school health services and health promotion will be discussed. It will also cover the type of school health services and school interventions offered. Finally, the future of school health promotion in South Africa will be explored.

**IMPACT OF EDUCATION TO PROMOTE THE KNOWLEDGE AND ATTITUDE ON HIV/AIDS PREVENTION: A TRIAL ON 17,000 IRANIAN STUDENTS**


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**Introduction:** It is estimated that 5 million new cases are infected world wide with the virus of Acquired Immune Deficiency Syndrome (AIDS) with 3 million deaths each year. The high risk groups for the AIDS include prisoners, addicts, sex workers, and youth. Some studies show that lack of knowledge and negative attitude of high risk population, especially young people, about the transmission of disease and its preventive strategies increase the risk of disease. Research reports from Africa, Asia and Latin America has also indicated that educational programmes may have an impact on the prevention of the diseases in the community level. The aim of this study was to assess the impact and efficacy of educational methods on the promotion of the knowledge and attitude of students on HIV/AIDS prevention in Tabriz, Iran.

**Materials and Methods:** Data concerning this study was collected by self-assessment techniques including a validated questionnaire. The questionnaire included two set of questions: thirty questions to assess the knowledge, and three more questions, as the second part, to evaluate the attitude of students. A sample of 17000 of students of Tabriz University and Tabriz University of Medical Sciences were taken as the study subjects. They were then prepared to fill the questionnaire. An educational programme was conducted within the student groups (20-40 in each group). The educational programme included a 45-minutes interactive discussion on the preventive strategies and transmission methods of AIDS. Forty senior medical students were trained by the university departments of Infection Diseases, Psychiatry, and Community Medicine as coordinators of the discussion groups (peer educators). In the second stage of the study, 10 percent of study subjects (1778 students) were randomly selected and the same self-assessment techniques were applied to assess the impact of educational intervention on the promotion of the knowledge and attitude of students on HIV/AIDS prevention. Likert scaling method was used to measure the knowledge and attitude of students both for before and after the intervention. Kolmogorov-Smirnov test was performed to check the normal distribution of the data, and paired T-test was then used to compare the pre-test vs post-test data.

**Results:** The findings showed that the knowledge of students increased significantly (P<0.05). The attitude to the problem also increased positively in the subjects (P<0.05). There was a remarkable significant increase in both...
knowledge and attitude of the study subjects in terms of AIDS prevention (13 and 12 percent, respectively). Although a significant increase in the knowledge and attitude was observed in both male and female students, educational intervention had more effect on the knowledge and attitude of female students compared to males. The base line level of awareness and attitude about the prevention of AIDS was however higher in male students compared to females.

Our findings showed that medical compared to non-medical students seem to be more alert on the preventive strategies of the disease both in terms of awareness and attitude. There was a positive association between the base line level of knowledge with age in all groups of study subjects. The promotion of knowledge and attitude after the educational programme was also significant in all age groups.

Discussion and conclusion: The results of this study indicated that female students has performed better than male students in terms of the study objectives indicating that female students may pay more attention to prevention, and they are much more alert than male students to the disease. This might be reflecting the fact that females are more sensitive to AIDS as the prevalence of disease is generally higher in women. Both medical and non-medical students had similar significant performance in educational programme.

It is concluded that the short term training courses and continuous educational programmes (i.e. peer education, etc) should be provided to young students in the universities and schools through the course materials promoting the awareness and attitude of youth to this ever-increasing health problem. Course materials should, of course, meet youth demands, and must be acceptable and desired by these age groups.

THE EFFECTIVENESS OF “PICTORIAL WARNINGS ON CIGARETTE PACKS ON THE INITIATION OF SMOKING AND QUITTING INTENTIONS” AMONG SCHOOL CHILDREN

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Introduction: Tobacco use is the leading cause of morbidity and mortality worldwide. The Framework Convention for Tobacco Control, the first World health treaty, has set out guidelines for policy change to promote tobacco control. One such intervention is the implementation of large pictorial health warnings on tobacco products. Evidence suggests that pictorial warnings are more effective than text warnings. The effectiveness of such warnings is associated with their size, their location, the graphic nature of the pictures, and the specificity of the message. Cultural and contextual factors within a country also influence the effectiveness of a particular warning. An evaluation of a range of possible pictorial warnings prior to the implementation of a law requiring such warnings will inform choice of warning and enhance impact of the law. To date there has been no evaluation studies of pictorial warning among youth in the EMR.

Materials and Methods: A random sample of 30 public and private schools across Lebanon were selected using a stratified random sample from a list of all schools obtained from the Ministry of Education. Eighty-three students aged 13-17 years were selected in each school and parental consent and child assent requested. A total of three mock packs, one that has the current text warning used by the Ministry of Public Health and a combination of 2 different pictorial warnings were shown to youth. The youth were asked to complete a survey about their reaction to each of the mock packs. The survey included questions on demographics, smoking behavior, knowledge of the impact of smoking on health, and their response to the pictorial warning. The response includes their overall perception of effectiveness, their attitudes towards the warning in terms of perceived susceptibility and severity, and the warning’s influence on intentions and self efficacy not to smoke or to quit.

Health communication and Media

ROLE OF MEDIA ADVOCACY ON COMMUNITY HEALTH PROMOTION IN IRAN

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Introduction: Media advocacy is one of the important strategies and community health education tools we have that allow us to promote population health on the overreaching issues that perpetuate public health problem. In fact, traditional role of mass media as vehicle of public health for public information campaign to change personal behavior customized mass media as a tool to transmit public health information that lead to passive mission of mass media , while mass media could take an active mission by integrating media as an advocacy tool to change health promotion enhancing policies. Based on the new approaches, the news media, is a primary source of information, play a very powerful role in shaping the public dialogues that eventually form community rules and policies and standards. In other words, media advocacy, used as a tool to accelerate and amplify community organizing and policy advocacy can direct public and policymaker attention to the policies that can reshape our social and physical environments so that people can make healthier choices as well as generate community support for changes in community norms and policies.

Materials and Methods: Integration of systematic review of literature and assessing mass media broadcasted
programs in Iran was applied to illustrate and articulate how media advocacy provoke activities that lead to legislate health promotion enhancing policies. Additionally, we assessed what kinds of community health enhancing programs and messages have produced and broadcasted through media in Iran.

**Results:** It seems TV as main effective media in Iran has determinant responsibility to advocate policy makers. Because of absence of non-governmental TV in Iran and insufficiency of print media to provoke advocacy, governmental TV in Iran is most important media that could help health promotion program through media advocacy. In spite of this capability of Iran’s TV, this media usually report and broadcast the news that policy makers and health managers oblige to report as their organizations output. Mass media in Iran engaged much more to broadcast public health information and less focused to identify problems as well as problem solutions and policy.

**Discussion and conclusion:** Public health advocates need to be clear about what they want to be happen and news media accelerate this clarification to change policy makers’ decisions. However governmental TV in Iran is known as one of the powerful organization in Iran, but this media organization is not insight to the mission of media to advocate health enhancing policies. In fact, the manner, in which policy makers and the public understand and resolve the problems and challenges faced by communities at the present world, is guided by the quality of information available to them. As a result, Media in Iran must emphasize on information that activate media advocacy toward policy makers instead of reporting health system actions and outputs. Additionally, media must focus on problems that legislation could accelerate community health promotion.

Key words: Media advocacy; Mass media; Health policy.

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**OBSTACLES OF PROCESSING PROGRAMS IN MEDIA**

**Saheb H**

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**Introduction:** Accessing to Health For All as a major Challenge that we are encounter in Third Millennium. Developing Health and efficacy community and conquest on complex of Health-Social problem depended to participation approach of all organizations, institutes and community. Undoubtedly without accurate assessment and recognizing needs, capacity, provision and abilities of community any organization cant underlying planning Health promotion oriented programs.

The most important challenge in health promotion programs is decision making and adoption healthy life style in all life.

It’s not forgot that Role of culture, normals and values of community is more effective of knowledge and attitudes of people or accessing of to health services

In health education and communication science all of communicative activities such as content and themes shold be audience oriented and acceptable for them.

This regards for all groups of people according with language, race, resource is essential.

Nowdays the media is the most important and main influencing tools. They explained real needs of audience based on “Need, interest and tendency” by using of Art and trying for more influencing. Apostolate of media in health absulotly is promoting healthy life style and developing health promotion programs.

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**MEDIA COMMUNICATION AND HEALTH**

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It has become increasingly clear that people’s responses to illness, health care and health related behavior generally are profoundly influenced by mass media representations. An understanding of this is essential for health educators, providers of health services, and students of illness behavior. It seems too, that people interested in media ought also to be concerned with the life of the body, and the place of media in influencing this, so that both fields may benefit from each other. Based on findings of a study in US, Health news was the 8th biggest subject in the national news, comprising 3.6% of all coverage. This is more than three times the amount of coverage for education or transportation, but much less than coverage about foreign affairs, crime, or natural disasters.

Effective and theory-based media communication is a key responsibility of public health professionals. Well-constructed and properly delivered media messages can inform and calm a worried public, reduce misinformation, and focus attention on what is most important. Communicate badly may be perceived as incompetent, uncaring or dishonest. Theories at the population level, such as Communication theory, explore how social systems function and change and how to mobilize individuals at the different settings. Communication theory focuses on two main areas: (1) message production, which involves both the creation of a message and the way the message is delivered, and (2) media effects, in which the impact that a message has on one or more levels (individual, group, or society) is investigated. Effective message production requires that messages be tailored to the target audience. Tailoring messages has four components: content (Message content aligns with an individual’s wants and needs), context (Message is framed to be applicable to an individual), design and production (Message is interesting to an individual), and amount and type of channels (Appropriate channels of delivery are used, and the amount of exposure is acceptable to an individual). The aim of this lecture is to bring together the field of media considerations with that of the health and illness.
**EVIDENCE BASED RESEARCH: A DILEMMA FOR IRANIAN PUBLIC HEALTH STUDIES**

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**Introduction:** Quality of health promotion research determines usefulness of the findings for application in practice. Rapid increase in the volume of public health research focused attention to the quality of research evidence worldwide. There is now an international policy mandate to adopt quality standards for health promotion research in synchrony with the multidisciplinary nature of public health field. Previous studies have indicated that not all health studies carry the same credibility to be used as empirical evidence for decision making. Our objective was to evaluate the extent and quality of the submitted abstracts to the 1st international and 4th national congress on health education and promotion which is going to be held on 16-19 May 2011 in Tabriz, Iran. Our special focus was on the accuracy of applied methodology as well as the validity of conclusions.

**Materials and Methods:** A qualitative assessment of the abstracts was done based on the criteria explained by Shamliyan T A et al. A checklist was created consisting of internal and external validity criteria to assess quality of a representative sample of abstracts (n=315) selected from a total of 1735 submitted articles. Authors individually scrutinized the abstracts for the quality criteria and any disagreement was resolved with consensus.

**Results:** Poor reporting quality was common in the studied abstracts. Among the evaluated abstracts in 50.1% cases the findings of original studies were reported and others were indicated to be review articles. Sampling technique was explained properly only in 32.3% of the reviewed abstracts. Participation rate and outcome measures were reported only in few studies.

**Discussion and conclusion:** Our study would be highly desirable if we could have access to the full text of submitted abstracts in order to understand the rationale behind the applied methodology in the reviewed abstracts, thereby to enhance our judgment about the quality of research evidence. We found a considerable heterogeneity in the quality of research evidence submitted to the congress. The observed inconsistent reporting quality of the abstracts may reflect the absence of research methodology guidelines in our academia. We recommend a massive revision in the current health research methodology lesson plans in order to have a more stringent national research performance.

Key words: evidence-based, research, quality, validity, methodology.
Oral Presentation
**Adolescent Health**

**REASONED ACTION AND SOCIAL REACTION: COMPARISON A DUAL-PROCESS APPROACH TO SMOKING INITIATION**

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**Introduction:** Tobacco use among adolescents, morbidity and mortality due to smoking are negative aspects of smoking. Based on CDC reports 8.11% of secondary schools’ students and 22.3% of high school students reported that they have used tobacco in the last month. Additionally, tobacco use was known as gateway for using drugs such Marijuana, cocaine, and LSD. It is therefore important to identify aspects and related factors of smoking among students; as a result, this study used the Prototype/Willingness Model (PWM) to examine factors related to onset of smoking.

**Materials and Methods:** This study was a cross sectional study that applicability of extending the theory of planned behavior and Prototype/willingness Model was assessed for explaining the normative processes in tobacco use among Iranian youth. Participants were 871 adolescents including high school students, employee, and unemployment adolescents who were living in Hamadan, Iran. The self report and written questionnaire was used for recruiting data about tobacco use pattern and the predictability of theory of planned behavior and Prototype/willingness Models’ for smoking among youth people.

**Results:** our findings showed that there is significant relation between unemployment (X2: 12.8, Sig <0.000) and tobacco use and it was found relation between having smoker friends and smoking (X2:134.7, sig:0<0.000). In addition, it was found significant correlation between subjective norms and behavioral intention (r: 0.63), subjective norms and willingness (r: 0.53), positive attitudes and behavioral intention for smoking (r: 0.65). Moreover, prototype and behavioral intention were important factors for predicting smoking. In other side having smoker friends, peer pressure, truancy, and improper relation with parents are predisposing factors for beginning tobacco use among adolescents.

**Discussion and conclusion:** Results demonstrated the unique importance of the reasoned intention path in which attitudes and subjective norms are antecedents of behavioral intention when examining smoking behavior among high school students. Life skills, resistance skills and drug resistance training would be useful for protecting youth people against tobacco use and consequently drug abuse. Adjacent to school health programs, public health providers must extend their activities beyond employment and street adolescents.

**Keywords:** Tobacco; Adolescent’s Health; High Risk Behaviors; School Health

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**PREDICTORS OF SEXUAL RISKY BEHAVIORS AMONG IRANIAN ADOLESCENT FEMALES: A POPULATION BASED STUDY**

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**Introduction:** Female adolescents may be more susceptible to sexual transmitted diseases when exposed. The purpose of this study was to evaluate the prevalence of sexual risk behaviors and related factors that influence the initiation of sexual experience among female adolescents.

**Materials and Methods:** The current study was a population-based cross sectional survey with multistage sampling method. This study was conducted among 669 female adolescents in Tehran, Iran in 2010 using the 2009 Youth Risk Behavior System questionnaire.

**Results:** About 9% of girls had sexual experience and 1.6% of girls had sexual experience for the first time before age 13 years and 8.4% of girls were currently sexually active. Among girls who had had sexual experience, 74.5% reported that had not used a condom during last sexual intercourse, 33.3% reported that had not used birth control methods to prevent pregnancy before last sexual contact, and 13.2% had drunk alcohol or used drugs before last sexual intercourse. Univariate analysis of factors associated with sexual experience among girls showed the significant differences in the term of sexual experience found only in older age, school type, fathers’ and mothers’ educational level, use of punishment by parent, parental supervision on adolescent friend selection, pattern decision making in family, preferring male sex by parent, social class, life time smoking cigarettes, life time smoking water pipe, life time drinking alcohol, life time using opium, marijuana, crack, and ecstasy. Multiple logistic regression analysis with sexual experience among girls revealed that mothers’ educational level, social class, life time smoking water pipe, and life time drinking alcohol were also significant factors.

**Discussion and conclusion:** Sexual activity is a proximate cause of sexually transmitted disease and unwanted pregnancy that are prevalent among adolescents. Therefore, public health policies aimed at reducing such activity would have health benefits. Community and school based sexual health promotion programs among adolescents is recommended.

**Keywords:** Adolescents, Sexual, Female, Risk behavior

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**EFFECTS OF EDUCATIONAL INTERVENTION ON PROMOTION AND MAINTENANCE OF PHYSICAL ACTIVITY AMONG ADOLESCENT GIRLS**

Pirasteh A*, Hidarnia A, Asghari A, Faghizadeh S, Ghofrani P

**Introduction:** Physical activity is regarded as an...
INEFFICIENT EDUCATIONAL SYSTEM AND OBESITY RELATED BEHAVIORS IN ADOLESCENTS: A QUALITATIVE STUDY

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Introduction: In any society the educational system plays an influential role in improvement of life style in children and adolescents. Considering the vitality of evaluating and comprehending defects of an educational system with a view to rectifying it, and the limited studies available on the issue, this study aimed at assessing defects of educational system and its effects on obesity-related behaviors from the adolescent’s perspective.

RESULTS: There were no significant differences between the two groups before the intervention regarding the dependent variables of the stage of change and physical activity. The study findings showed significant improvements in the stage of change and level of physical activity (P=0.001) in the experimental group compared to the control group, after the intervention. There were also significant differences in the mean of scores of self-efficacy, social support, pros and cons, change strategies (except the environmental factors (P=0.001) in the experimental group compared to the control group after the intervention.

Discussion and conclusion: Applying a combined model of Transtheoretical Model and Social Cognitive Theory has notable effects on the promotion and maintenance of physical activity among adolescent girls. Therefore, having an enhancing health behaviors education program in adolescent girls is recommended.

Keywords: Social Cognitive Theory, Transtheoretical model, Adolescent, Physical activity

APPLICATION OF HEALTH BELIEF MODEL IN INCREASING ADOLESCENT GIRLS’ DIETARY CALCIUM INTAKE

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Introduction: Peak calcium retention by girls has been shown to occur in the prepubertal and early pubertal periods. Diets in many developing as well as industrialized countries are moving towards foods that are poor in calcium. In order to reverse this trend, it is necessary to actively promote healthy behaviors and lifestyles in adolescent girls. School nutrition education programs are critical opportunities for facilitating healthy lifestyles for youth. The Health Belief Model (HBM) is one approach to school nutrition education...
ABSTRACTS

THE RELATIONSHIP BETWEEN INTER-DENTAL CLEANING BEHAVIOR AND GINGIVAL INDEX BASED ON THE TRANS-THEORETICAL MODEL IN IRANIAN ADOLESCENTS

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Introduction: A healthy mouth is an important part of a healthy body. Poor oral health can affect a person’s quality of life. Oral pain, missing teeth or oral infections can influence the way a person speaks, eats and socializes. The present study is done with the purpose of determining the relationship between inter-dental cleaning behavior and gingival index based on Trans-theoretical Model in adolescent in Yazd, Iran.

Materials & Methods: The present research is an experimental study. Based on statistical calculations, 361 students at pre-university level were selected by cluster random sampling method and allocated in two groups of intervention (n=185, 51.2%) and control (n=176, 48.8%). The instrument for collecting the information was a questionnaire consisting of demographic characteristics, self-efficacy questions; decisional balance (perceived benefits and perceived barriers). Validity and reliability of questionnaire was confirmed. The educational program was designed based on self-efficacy, decisional balance (perceived advantages and perceived obstacles) of Trans-theoretical Model. After three months, evaluation of the variables of model and gingival index that was determined by dentist was performed. The information was analyzed by SPSS software using statistical tests of ANOVA, Paired T-test, T-test, Fisher, and correlation coefficient.

Results: The average age of the participants in the study was 17.53 ± 0.55 years. Subsequent to implementation of the educational program, a considerable difference was found in the average degree of self-efficacy (P<0.001), perceived benefits (P<0.001), barriers decreased (P<0.001) and gingival index (P=0.01) improved for the intervention group before and after the education. After intervention, significant difference was not found in the average degree of self-efficacy, perceived barriers and gingival index for control group but significant and positive increase was found in perceived benefits (P=0.01)

Discussion and conclusion: In total, the findings indicate that educational intervention has had an effect on the gingival index, self-efficacy and perceived benefits and since the self-efficacy factor is an important predictor in oral self-care behavior, it is suggested to use Trans-theoretical Model in educational interventions for improving self efficacy, increasing advantages and reducing obstacles.

Keywords: Trans-theoretical Model, Self Efficacy, Decisional Balance, Gingival Index.

GUESS HOW MUCH YOU WEIGH: A DESCRIPTIVE STUDY

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Introduction: The world is no longer a simple place for children to live and grow. It is filled with ethical, social and environmental pressures such as violence, teen pregnancy, drug and alcohol abuse, tobacco usage, bullying and so on. One of the less spoken pressures is the issue of body image that can be resulted in destructive behaviors in a child such as eating disorders, malnutrition and drug abuse. Eighty percent of American girls start dieting as early as fourth grade submitting to social messages of who is acceptable and who is not. Many contributing factors are determinants of forming the body image in early childhood about age six. The
strongest influence on a child’s satisfaction with his body is parental body image. This descriptive study examined the discrepancy between children's perceived versus actual body weight and explored their comfort level and satisfaction as it related to their body weight.

Materials and Methods: Data were collected from a convenient sample totaling 219 children and adolescents ages 4 to 20 who participated in a Health Fair conducted in disadvantage section of Fresno, California. A short questionnaire was developed and a digital scale was used for weighing the children. Measures included Children's perceived and actual body weight, comfort level with weight, happiness and self-esteem.

Results: The participants profile consisted of 44.3% male, & 56.7% female with multiple ethnic background (16.9% Caucasian, 53.4% Latino, 22.4% African-American, 7.3% South East Asians and other). Overall 27% perceived themselves as heavy, 12% as thin, 39.3% as normal and 22% had no idea. Regardless of perceived or actual weight, 67% were happy with their weight, 17.4 were not and 15.5% did not know. Overall, 58% felt highly socially acceptable, 28.5% did not and 15% did not know. The level of feeling socially acceptable varied by Ethnicities: 66% of Latinos had the highest rate, followed by 54% of Caucasians and 49% of African American. There was no significant difference between the means of perceived (36.1 kg) and actual weight (36.7 kg).

Discussion and conclusion: Overall, the children's perceived weight was consistent with the actual. The 9-13 year olds were the happiest and their self esteem has not yet been distorted while the 17-20 groups was catching up with the negative interfering factors of their body image. Sampling and lack of information regarding parents’ income & education are considered limitations of study. A refined follow up study is needed.

Keywords: Body Image, Environmental pressures, Weight perception, Actual weight, Happiness, Self-esteem.

THE EFFECT OF PARTICIPATORY REPRODUCTIVE HEALTH EDUCATION UTILIZING COMPUTER ON SELF SUFFICIENCY AMONG ADOLESCENTS

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Introduction: Adolescence is one of the three critical periods of life with a variety of developmental changes in which the reproductive health plays a key role towards the general healthiness. Participation of adolescents in their health education programs can improve the quality and sustainability of their effect. The present study prepares a computerized reproductive health program based on the adolescents (15-18 years) needs in order to improve knowledge, attitude and self sufficiency about reproductive health in Tehran, Iran.

Materials and Methods: This was an interventional study carried out in zone 17 of Tehran. At first an initial qualitative phase of research was completed which consisted of 12 sessions of focus group discussions among adolescents which facilitated and analyzed by adolescents. Reproductive health educational computerized package (Multimedia CD) was developed according to data extracted from discussions. Also adolescents conveyed their message through playing a movie. In intervention phase 100 samples were selected from a municipality cultural center in zone 17 of Tehran through stratified randomized sampling. Tools for data collection were a valid questionnaire. The impact of intervention assessed through pretest and post test. Data were analyzed using the Statistical Package for Social Science version 11.5.

Results: Qualitative information showed that the knowledge of adolescent about reproductive health is insufficient and superficial. Also there was negative attitude towards the relationship with the opposite sex in boys and girls. Results of intervention showed that knowledge (P=0.01), attitude towards person with HIV/AIDS (P=0.00) and self sufficiency (Girls: P = 0.01, Boys: P = 0.02) has improved significantly after education.

Discussion and conclusion: The study findings suggested that participation of adolescents in health education and using computerized attractive method can be considered as an effective approach for improving their reproductive health.

Keywords: Reproductive Health, Adolescents, Participation, Self sufficiency

Elderly Health

AWARENESS, ACCESSIBILITY OR AVAILABILITY, ATTITUDES TOWARDS AND USE OF HOME-BASED TECHNOLOGY DEVICES AMONGST ELDERLY PEOPLE LIVING IN EXTRA CARE HOUSING

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Introduction: The increasing number of the older people and rapid innovations in household devices means that technology is becoming more familiar in the everyday life of elderly people. Technological solutions may promote independence levels and allow elderly people to remain at home by coping with age-related difficulties such as falls, isolation, medication management, sensory impairment, and diminished mobility. This study aimed to explore participants’ awareness, access to or availability, attitudes towards and use of home-based technology (HBT) devices, and obstacles that influence the use of technology.
**Materials and Methods:** A quantitative-designed and structured questionnaire was administered for this study. Using purposive sampling method 160 elderly people living in extra care housing schemes were selected from 23 schemes in England. A face-to-face interview was conducted in each participant’s living unit. The version 16 of Statistical Package for the Social Sciences (SPSS) was used in terms of turning data into numbers, coding data for analysis, re-coding and re-weighting data, ranking of ordinal data, using descriptive statistics, and contingency tables.

**Results:** A majority of respondents reported that most of the new technological devices were not available in their living unit or schemes. Many respondents had positive attitudes towards devices. Although most basic appliances and emergency call systems were used in the living units, communally-provided facilities such as personal computers, washing machines, and assisted bathing equipment in the schemes were not well utilised. Health/mobility problems and inadequate information/training/support were reported frequently by the participants.

**Discussion and conclusion:** Although older people do use new technologies, they often have difficulties when attempting to adopt these devices and systems. In order to increase the receptivity, elderly people’s perceptions, attitudes, and understanding of the needs and capabilities of elderly people should be assessed properly in planning and predicting the future use of devices.

**Keywords:** Home-Based Technology, Elderly People, Extra Care Housing, Awareness, Attitude

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**PHYSICAL ACTIVITY IN OLDER MEN: COMPARING SELF-EFFICACY WITH THE THEORY OF PLANNED BEHAVIOR**

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**Introduction:** The greatest challenge of health care sectors all over the world is providing adequate healthcare for the growing population of older people in order to best maintain their health and quality of life. Healthy People 2010 have developed goals to improve levels of physical activity among adults, adolescents, and children and to reduce sedentary behaviors among older adults. According to the World Health Organization physical activity is the single most useful thing that individuals can do to maintain their health, daily function and quality of life.

**Material and Methods:** This study examined the utility of Theory of Planned Behavior (TPB) and the self-efficacy construct in explaining the prediction of physical activity intention and behavior in a sample of elderly men. Men (age 60 and up) in a nursing home (n = 60) completed measures of the TPB, self-efficacy and physical activity behavior.

**Results:** A hierarchical step wise multiple regression analysis indicated that affective/instrumental attitude, subjective norm, and perceived behavioral control (PBC) explained 32.8% of the variance in physical activity intention; self-efficacy provided an additional 2.7%. In a reverse step regression, the TPB variables explained an additional 12.2% of physical activity intention. In a multiple regression analysis on physical activity behavior, affective/instrumental attitude, subjective norm, perceived behavioral control (PBC) and intention explained 15.7% of the variance in physical activity behavior while self-efficacy contributed an additional 5.6%. In the reverse step regression, TPB predictors contributed an additional 3.0% in explaining the variance in physical activity behavior.

**Discussion and conclusion:** The results indicated that in addition to the TPB, self-efficacy may also play an important role in the prediction of behavior and should be included when designing physical activity programs for older men.

**Keywords:** Physical Activity, Self-efficacy, Theory of Planned Behavior, Older

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**THE EFFECT OF OLDER EDUCATION ON KNOWLEDGE ABOUT HEALTHY LIFESTYLES. A RANDOMIZED CONTROLLED TRIAL**

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**Introduction:** The proportion of older adults in the population is growing in the developing countries. More than 8% of Iran’s populations are elderly. As Iran started to experience population ageing, it is important to consider and address the elderly people’s needs and concerns, which might have direct impacts on their wellbeing and lifestyles. In addition, healthy lifestyles decrease in geriatrics because of several factors, such as, unhealthy food intake and low physical activity. This study was performed to determine the effects of interventional education on the healthy lifestyles in elderly people.

**Materials and Methods:** This study examined the change in healthy lifestyles among (≥60 years) elderly persons as a result of health education intervention. This pre-post quasi-experimental study was performed in ten randomly selected villages (Intervention: n = 5; Control: n = 5) in rural Arak during 1389/2 – 1389/5. The intervention included, for example, physical activity, advice on healthy food intake and other aspects of management. The analyses included 408 participants (Intervention: n =
Socio-cultural barriers are important to inform the development of strategies for activity among older members of the population is identifying the barriers to and facilitators of physical activity in Iran especially among old women. However, no studies have investigated the barriers among Iranian older people.

Materials and Methods: This study aimed to investigate the barriers of participation in physical activity among Iranian older people. It was a qualitative study among 40 community-dwelling Iranian older people aged 60 years and over. Data collection was conducted through face-to-face in-depth, semi-structured in-depth interviews. Data was analyzed using NVIVO 8 Software.

Results: Generally, the findings of this study showed that most of the Iranian older people were interested in physical activity. However, there were several barriers that decreased their capacity to be physically active such as health, personal, social and environmental factors. Participants, especially women, reported religious belief, cultural issues and air pollution as barriers.

Discussion and conclusion: Socio-cultural barriers are one of the most important barriers of participation in physical activity in Iran especially among old women who need to be considered in physical activity and health promotion programs to be able to increase their level of physical activity. Therefore, socio-cultural issues need to be considered in designing physical activity promotion programs for Iranian older people and people with similar culture.

Keywords: Older people, Physical activity, Education

EFFECT OF EDUCATIONAL INTERVENTION BASED ON PRECEDE MODEL ON THE LEVEL OF STRESS AMONG ELDERLY REFERRED TO HEALTH HOMES IN TEHRAN, 2009

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Introduction: The elderly people face stress from various situations, which are different from those that are faced by adults. They are at a stage in life where they may face extended and critical health problems. In general, aging adults are vulnerable to the harmful effects of negative stressor factors. This study was conducted to evaluate the effects of PRECEDE model-based educational program on level of stress among the elderly referred to health homes in Tehran in 2009-2010.

Materials & methods: In this quasi-experimental study, 94 patients were randomly divided into experimental and control groups. Planning of the educational program was done according to PRECEDE Model. Before implementing the program, valid and reliable Depression, Anxiety, and Stress questionnaires (DASS-21), were completed by both groups. The experimental group

BARRIERS TO PARTICIPATION IN PHYSICAL ACTIVITY AMONG IRANIAN OLDER PEOPLE

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Introduction: Despite the recommendations about the beneficial effects of physical activity in health, sedentary behaviours are increasing particularly with age. Therefore, older people are at increased risk of a sedentary lifestyle and it is difficult to motivate older people to undertake physical activity. Therefore, identifying the barriers to and facilitators of physical activity among older members of the population is important to inform the development of strategies for physical activity promotion. Some qualitative studies
received the educational intervention based on PRECEDE model (eight sessions—one session in a week), and both groups were followed up 2 months after intervention (the previous questionnaires were filled out by them again). DASS-21 Scoring & Interpretation Generator was used for calculating scores of questionnaires. Finally, the obtained data was analyzed by SPSS 15 software using T-Test, Paired T-Test, and Mann-Whitney Test at the significant level P<0.05. Participation of individuals in present research was voluntary and with informed consent.

**Results:** Results of present research showed significant differences about stress scores mean (P<0.001) and negative scores mean (of Depression, Anxiety, and Stress) (P<0.001) between experimental and control group two months after educational program. In addition, significant increasing and significant decreasing of negative scores mean was found respectively in experimental and control group (P<0.001).

Discussion & Conclusion: The findings of present study confirmed the practicability and effectiveness of the PRECEDE Model-based educational program on preventing or declining the stress level in aging adults.

**Keywords:** Elderly, Stress, Educational Intervention, PRECEDE Model.

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**PERSPECTIVES OF IRANIAN ELDERLY REGARDING HEALTHY EATING AND PHYSICAL ACTIVITY: A QUALITATIVE STUDY**

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**Introduction:** Growing elderly population is a phenomenon which has great political, economic, and social consequences. The aim of this qualitative study was to explore the perspectives of Iranian elderly regarding healthy eating and physical activity.

**Materials and Methods:** Ten focus group, each one consisted of 6 participants (N = 60) were conducted in elderly centers in Tehran. Convenience purposeful sampling was used from 3 elderly centers.

Inclusion criteria were as: aged 60 years and over, caring in elderly centers, not hospitalization in past four weeks. The Ethics committee of Tehran university of Medical Sciences approved the study.

**Results:** Participants articulated their beliefs regarding healthy eating and physical activity through 4 themes: Meaning of healthy aging, Meaning of healthy eating and regular physical activity behaviors, perceived benefits of and barriers to healthy eating behaviors and perceived benefits of and barriers to physical activity.

The results of this study revealed that different people verified different meaning of health. These meanings were included: complete body wellbeing, complete individual satisfaction, and absence of pain and disorder. Nearly most of participants revealed that healthy eating means adequate eating, eating according age, avoidance from hypo and hyper alimentation, and consumption of fruits and vegetables. The participants in this study believed that healthy eating behavior was influenced by age, level of activity, income and mass media.

Discussion and Conclusion: Almost all participants believed that physical activity was beneficial for their health. Almost all participants were in agreement that benefits such as meeting a lot of people and communication with them, decreasing tension, being open minded, feeling courage, helpfulness, better sleep, enduring difficulties, decreasing Alzheimer, improving health, improving body function such as cardiovascular system, freshness, prevention of obesity, increasing strength would achieve through physical activity.

In terms of barriers to physical activity, participants raised issues that could be grouped under 3 themes: 1) Lack of motivation and gloomy mood 2) physical health limitations, and 3) cultural and custom barriers.

**Keywords:** Elderly, Healthy ageing, Healthy eating, Qualitative study, Physical activity.
to describe elderly caring behaviors. Emerged categories explained nature of caring behaviors of the elderly in elderly primary health care. Their behaviors manifested as internal and external responses. The internal responses included categories depicting ‘accepting conditions as the only way’, ‘feeling of being at the end of the way’, ‘death expectation in spite of potential abilities’, and ‘motivational weaknesses. External responses manifested as ‘non-adoption of healthy lifestyle’ and ‘non-adoption of proper caring behaviors’.

Discussion and conclusion: This qualitative study has gathered data that could be used by policy makers and health care providers and researchers concerned with elderly health and their quality of life. Based on these findings, it is recommended that providing primary health care for the elderly should be included in a comprehensive approach which aims to change the conditions affecting the caring behaviors of the elderly primary health care in urban areas.

Keywords: Caring behaviors, Elderly health, Primary Health Care.

EFFECT OF SOCIAL CAPITAL DETERMINATES ON MENTAL HEALTH STATUS AMONG ELDERLY IN TEHRAN CITY

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Introduction: Mental health is an important indicator of health status in successful ageing that may be conceptualized quite different. Since data on the mental health status of elderly household in Tehran city are not accurate, this study will, in part, fill the gap in gerontological knowledge in elderly health programs. These findings contribute to better understand relationships between mental health components (depression and anxiety /K6, psychological well being /Yield) and Socio-economic determinants and medical conditions and the enrichment of health policy for aged people. The aim of the study was to achieve to the mental health status of the Iranian elderly in Tehran province.

Materials and Methods: In this study 402 elderly aged 60 years and over who had lived in Tehran Metropolitan area participated in 2010. A quantitative technique was used. Both univariate and bivariate analyses were carried out for the purpose of the study. Data were collected using a written survey instrument, and face-to-face interviews. The participants collected by simple random sample. The Questionnaire which used in this survey, originally risen from the“ older people’s health survey” of ministry of health and wellbeing in Australia. The applied instruments were Psychological distress (Kessler / K6) and psychological well-being / Yield.

Results: Results demonstrated that the majority of elderly respondents in Tehran reported feeling so sad and nervous most of the time in the last four weeks (23%). The bulk of old people had moderate level (46%) of psychological distress (depression and anxiety). Half of the respondents (50%) had sometimes feeling of happiness in the last four weeks preceding this study. Majority of elderly (43%) had moderate level of Psychological wellbeing. There were significant associations between Psychological distress and all medical common diseases or disorders at (P ≤0/000). Meanwhile, There were significant associations between Psychological wellbeing with Masco skeletal (P ≤0/002), pain and fatigue (P ≤0/001), and incontinence (P ≤0/005). The predictor variables of Socio-demographic and economic; sex in female (P ≤0/004), and home ownership (P ≤0/005) were strong significant variables in Psychological distress (depression and anxiety) status of the elderly participants. Regarding Psychological wellbeing predictors only earning money or income was significant variable (P ≤0/005) in mental health status of the elderly participants in Tehran city.

Discussion and conclusion: Generally, Masco- skeletal disorders, pain, fatigue and incontinence are major medical components which effected Psychological wellbeing of aged people. Furthermore economic components (income and housing status) effected on mental health status of elderly respondents in Tehran capital city.

Keywords: Elderly, Mental health, Psychological distress, Psychological wellbeing, Socio-demographic, Medical condition.

Health Promotion Capacity & Ethics

PROFESSIONAL ETHICS AND HEALTH SYSTEM

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Introduction: Previous medical ethics codes (1847 version) of the American Medical Association’s (AMA) Code involved an integration of ethical and professional requisites related to patients and society in medical professions and health system.

Material and Methods: Along with gathering some professional experiences, AMA designed some policy agreements and declarations on the rights of physicians and health care system staffs (and of course responsibility of them about patients), the responsibilities of governments and other sections of societies like NGOs, charities, etc. These agreements and declarations were included:

• The 1984 Statement on Freedom to Attend Medical Meetings
**MESSAGE STRATEGIES TO PROMOTE HEALTHY BEHAVIOR: LOSS FRAMED OR GAIN FRAMED?**

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**Introduction:** In health promotion program the first step in promoting health behavior is providing persuasive health messages for people. Messaging is the process of physically getting the message to the target audience through a medium or media (print, internet, television). The content of the message can affect on probability of that people will pay attention to think about and be persuaded by the information included in a message. Effectiveness of messages is increased when framing of health messages is appropriate. The most effective message for a desired behavior depends on a variety of factors, including whether the behavior is preventative versus detective, the certainty of the outcomes and the risks associated with the behavior. Message framing as theoretically base approach enhance effectiveness of health messages. Prospect theory states that people's preferences are changed by framing of information. There are two predictions about how health messages should be framed. First prediction is that when individuals engage in risky and uncertainly behaviors, loss-framed message could be more effective. Detection of risk is posed for such behaviors include breast self-examination, HIV testing, viral test for a hypothetical illness. The second prediction relates to those individuals that engage in behavior with certain outcomes. Gain-framed messages are more effective in motivating prevention behaviors. In such situations gain-framed message could be more effective. Prevention is posed for such behaviors including using an infant car seat, getting an inoculation for a hypothetical illness.

The framing implications of prospect theory suggest that individuals respond differently to factually equivalent messages depending on whether they are framed to emphasize either benefits (gain framed) or costs (loss-framed). Prospect theory also suggests that when gains are salient, people are averse to risk, and when losses are prominent, individuals seek risk. This concept applies to messages intended to promote health. Gain-framed appeals are more effective when targeting behaviors that prevent the onset of disease, whereas loss-framed appeals are more effective when targeting behaviors that detect the presence of a disease. Such as sunscreen use at the beach. In contrast, if behaviors result in an outcome associated with a high level of risk, loss-framed messages are more persuasive and effective, such as mammography and breast self-examination. Studies on the use of sunscreen, the use of infant car seats, and intentions to use condoms, endorsed that gain-framed messages were more effective compared to loss-framed messages.

In light of these findings, we consider how message frames may affect other types of health behaviors and identify the need to understand better the processes that shape how people construe health behaviors. It is not clear that in Iran what types of message framing would work better in adopting preventive or detective behavior.

**Keywords:** Message Framing, Loss Framed, Gain Framed.

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**THE ROLE OF INDIVIDUAL’S ATTITUDE AND PERCEPTION TOWARDS THE PHILOSOPHY OF CREATION AND EXISTENCE OF THE WORLD IN HEALTH PROTECTION AND PROMOTION.**

**Mostaghimi A*, Partovi F, Sharifkashan S**

**Introduction:** Knowledge advancement especially in recent decades has expanded our collective knowledge towards the different determinants of health including a range of factors from genetics to individual knowledge, attitude, belief, perception and practice, life style and finally social and ecological factors. However it is not a long time that the role of personal worldview, in
the other words the individual’s ideology and hence his attitude and perception towards the philosophy of creation and existence of the world in health protection and promotion has been examined. However, there was few studies examining the therapy effect of modification of individual’s attitude and perception towards the philosophy of creation and existence of the world in health protection and prevention. Among these studies, the most dominant one is the Iranian complementary medicine.

Materials and Methods: Reviewing the related literature in the term of experiences in practicing one of the most popular theories/practices regarding the role of individual’s attitude and perception towards the philosophy of creation and existence of the world in health protection and prevention in Iran,” Iranian supplementary medicine “, was selected. Then a comprehensive review on the reports and publications (mainly published in Medical science and holistic medicine Journals and conference proceedings of holistic medicine) about the experimental interventions applying this method in treatment of patients in Iran was conducted. The data were analyzed using qualitative techniques such as content analysis.

Results: The study found numerous case reports examining the healing effect of this method in last two decades in Iran. These experiments had included a very broad range of diseases like gynecologic disease, auto immune disease, neurologic disease, psychological disorders, cancers, ophthalmologic disease, and pulmonary disease. Although the majority of studies were case reports but few clinical trials were also published examining the effect of this method on pulmonary diseases.

Discussion and conclusion: All the researchers testing the effect of Iranian complementary medicine which modifies individual’s attitude and perception towards the philosophy of creation and existence report significant success in treatment of different diseases. However, the weakness of methodology prevents strong generalization of the reported findings. The current literature strongly suggests that there is a high potential for this method to be effective in practice, which if proved scientifically and can be considered as a revolution in health promotion and medicine. Hence, it is suggested that future examination be based on a strong research methodology in collaboration with medical universities.

Keywords: Attitude, Promotion, Philosophy, Supplementary medicine

**COMMUNITY-BASED PARTICIPATORY RESEARCH STATION IN IR: LOOKING FORWARD TO COMMUNITY EMPOWERMENT**

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**Introduction:** In the past decades, various approaches to human development have been devised. Since late 1990s, most approaches are based on "Community Participation" and "Community Empowerment". "Community-Based Initiatives" in World Health Organization are within the same line. In Iran, The Community-Based Participatory Research station (CBPRS), which were established in 28 medical universities in 2001, have been working together in order to reach the following goals:

1) Enabling students, faculties and community members to create a partnership to engage collaboratively in addressing the identified needs of the community
2) Improving individual and collective skills to reach the control over living conditions and their impact on wellbeing.
3) Enabling society for further cooperation.

**Materials and Methods:** Community-Based Participatory Research station (CBPRS) is designed to ensure and establish structures for encouraging participation of the community to take action in order to promote health and to solve their problems of prepared methods to encourage organized and informed participation of community in health promotion for approaching to tackle all those problems. The methodology consisted to:

1) selection of 28 universities based on their commitment and willingness to get involved in such research discipline.
2) The population of the community must be at least 35000 (about 7000 households) with minimum rate of immigration/emigration.
3) Formation of a core steering board committee composed academics and community leaders at each university and representative from the local government, health care authorities and NGOs..
4) Creation of an expert focal point subcommittee.
5) Setting the priority list of needs based on default and standard criteria.
6) Designing interventional projects and implementation and evaluation of the projects.

**Results:** 1) The priority list of needs is formulated in all 13 involved universities.
2) Pilot interventional projects are designed in almost all engaged universities and some are being implemented.
3) The specific website has been designed and established.

**Discussion and conclusion:** CBPRS are successful examples of a community-based approach in needs assessment and priority setting, but their effectiveness in the intervention at phase depends on socio-economic and political infrastructure of the country.

**Keywords:** Community-Based Participatory Research, Community Empowerment, Health promotion
COMPETENCY-BASED EDUCATION (CBE); IT'S IMPORTANT IMPLICATIONS FOR MANAGEMENT AND QUALITY IMPROVEMENT OF HEALTH EDUCATION/PROMOTION CURRICULA

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Introduction: The aim of this article was to review the literature on the competency-based education (CBE), explaining its importance and implications for managing, evaluating and reforming HE/P curricula.

Materials and Methods: Over thirty prestigious scientific papers or documents, in the field of competence-based education in health sciences were studied. A substantial number of scientific articles published about the social accountability of schools of health sciences were also reviewed. Our focus in this review was to explore the basic concepts of CBE, its applications in the areas of teaching, research and services in education and health promotion.

Results (Key points): Schools of health sciences should be held accountable for their products, research results, type and pattern of health services that they offer. Today, it is considered as a fundamental right of the communities, which provide resources, seeking from educational institutions. The quality of an educational system can be judged from at least three perspectives: the inputs, the process and the outputs from the system. In recent years there have been increasing calls in the world for greater attention to be paid to the outcomes of education so that the return on investments in education could be evaluated. General agreement seems to indicate that improvements will come when health care providers work more effectively in teams and when they have the competencies to practice in increasingly accountable and technological environments. Health professionals themselves feel insecure about their ability to deal with workplace challenges and performing skillfully. Indeed, Staff competency is one of the Immediate Determinants of high quality care. CBE is outcome-based instruction and is adaptive to the changing needs of students, teachers, and the community. CBE offers a powerful and appealing way of managing and reforming health education. The emphasis is on the product rather than on the educational process. It provides a framework for curriculum evaluation. A clear Log of competencies is also useful but essential for well implementation of managerial tasks such as monitoring, supervision and evaluation of performance. It guides continuous professional development programs, as well. It seems that CBE makes teaching-learning activities more meaningful and helps students to be satisfied.

Discussion and conclusion: In sum, multiple evidences emphasize on educational reform and improving administrative processes, using CBE approach. It seems that this movement should be considered as a priority in health education/promotion research, education and practice.

Keywords: Competency-based education, Health education, Health promotion, Curriculum, Quality improvement.

THE HEALTH PROMOTION CAPACITY ASSESSMENT IN GEORGIA

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Introduction: The specific objectives of the research were:
1. To identify the shortfalls, requirements and opportunities in health-promotion communication through qualitative research.
2. To define and analyze healthcare workers’ knowledge, attitude and practice (KAP) related to health promotion/communication aspects, the level of the professional development and requirements for their future training/retraining.

Materials and Methods: The research methodology was developed by UNICEF and the National Center for Disease Control and Public Health (NCDC&PH) based on recommendations made by an international UNICEF expert. The following methods were used:
• Analysis of focus group discussion findings
• Analysis of data of in-depth interviews

Results: Legal provisions for health promotion exist in the country but corresponding enforcement mechanisms are lacking. Health promotion and prevention of the non-communicable diseases are not a priority for Georgia even on paper. No formal mechanism for inter-institutional cooperation and networking exists within health-system management and this shows how weak and inefficient the management system is. Cooperation with other sectors, like mass media, “Public Broadcasting” television station, parliament, donors, organizations, etc. is also weak.

There is obvious neglect of the importance of professional groups’ involvement in planning and financing processes of preventive interventions; the state also fails to mobilize donor and private sector resources. There is a lack of reliable methodologies on undertaking research, data gathering and analysis in Georgia. There is no system for financing of health promotion programs.

The shortage of qualified human resources in health promotion is due to the absence of financial incentives. Even though state healthcare bodies are legally entitled to decide on program financing independently at central and regional levels, at municipal level no activities are financed due to the lack of interest. Health promotion programs are absent from both state and private insurance programs.

Health promotion service provision in primary healthcare centers is unstructured and disorganized. Managers in healthcare institutions are not interested in providing
**Discussion and conclusion:** The decentralization of health promotion system should be continued, but it should not mean that the state gives up its responsibility for stewardship in this area; rather it should strengthen it; An inter-sectoral approach to health promotion should be established. A special state commission/body (representatives of government, experts from different areas, NGOs, donors, mass media, etc.) should be formed, with the premier as the person in charge; Contemporary standards/guidelines for health promotion should be developed and their implementation should be supported through trainings for primary healthcare workers.

**Keywords:** Health promotion, Education, Capacity, Assessment

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**RECEIVING INFORMED CONSENT IN HEALTH SYSTEM**

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**Introduction:** It is apparent that informed consent is one of the indispensable parts in health system and it is getting more and more significant today. In our country like other parts of the world it must be considered more. Information from review of medical charts is often used to carry out audits, perform non-interventional observational studies, create disease registries, and do other types of health services research. Informed consent is not always necessary for these types of research, which involve abstraction of data from patients’ records. Many such studies do not influence practice or patients’ outcomes and therefore confer no risk and no benefit to participants. That notwithstanding, recent legislation to protect the privacy and confidentiality of patients’ information in medical research introduced in many jurisdictions (for example, the regulations to the Health Insurance Portability and Accountability Act in the United States) has resulted in increased requests from research ethics boards to obtain informed consent to use data from medical records for such observational studies. As early as 1977 concerns were voiced about the possible negative impact of privacy laws on epidemiological research. More recently, editorial reviews highlighted the negative impact of mandatory informed consent on observational research through conservative interpretation of privacy legislation.

As with many other aspects of research, requirements for informed consent to use data from medical records vary across research ethics boards within and among countries. For example, in a multisite study involving a review of children’s charts who presented to emergency departments with bronchiolitis, 34 research ethics boards arrived at divergent requirements for consent at their institutions, ranging from none to mandatory written consent. Four of the invited 34 sites did not participate owing to the investigator perceived hurdles with research ethics boards pertaining to informed consent.

**Keywords:** Ethics boards, Informed Consent, Patient.

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**High Risk Behaviors**

**APPLICATION OF PROTECTION MOTIVATION THEORY IN DETERMINING PREDICTORS OF UNSAFE DRIVING AMONG DRIVERS, IN YAZD**

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**Introduction:** Road traffic injury is one of the most significant global public health issues of the 21st century. The human factor appears in the literature as the most prevalent contributing factor of road traffic crashes. The purpose of this study was to utilize components of the Protection Motivation Theory (PMT) to predict unsafe driving behaviors among 19 years old and above people in Yazd city.

**Materials and Methods:** In this cross-sectional study, total number of 379, 19 years old and above people, who had a driving license entered in the study with a clustered random sampling from 10 health care centers of Yazd. Data was collected with a researcher designed questionnaire based on PMT and analyzed using SPSS software.

**Results:** The mean score of unsafe driving was 14.49 out of 85. The most reported unsafe driving behavior was becoming impatient with a slow driver in the outer land and over take on the inside. The occurrence of unsafe driving behaviors was higher among younger, male and single drivers. There was a significant correlation between unsafe driving with perceived self-efficacy, response efficacy, severity, rewards, costs and unsafe driving intention at 0.01 level. Regression analyses indicated that the perceived self-efficacy, perceived response efficacy, perceived rewards, perceived response costs and fear, predict 36.5 percent of the variances in unsafe driving behaviors. Perceived rewards was the most important predictor \((β=0.317)\) of unsafe driving.

**Discussion and conclusion:** The result of the present study supported the effectiveness of Protection Motivation Theory in prediction of unsafe driving behavior; So PMT can be used as a conceptual framework for designing educational programs aimed to improve the driving style and decreasing road traffic accidents.

**Keywords:** Protection Motivation Theory, Unsafe Driving, Road Traffic Injury
THE MANCHESTER DRIVER BEHAVIOR QUESTIONNAIRE: A CROSS-CULTURAL STUDY IN IRAN

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Introduction: Seat belts are effective safety devices used to protect car occupants from severe injuries and fatalities during road vehicle accidents. Despite the proven effectiveness of seat belts, seat belt use rates are quite low, especially in developing countries, such as Iran. The aim of this study was to determine the factors that affect driving and test the psychometric properties.

Materials and Methods: This is a cross-sectional survey. The study collected the information on socio-demographic characteristics of drivers such as age, gender, educational level, occupation status, driving experience, car type, and seat belt use. Using Manchester Driver Behavior Questionnaire (DBQ) in the students in Shiraz University of Medical Sciences. A specially designed data collection form was used to collect the socio-demographic data, driver behavior and DBQ items. The second part of the questionnaire included some questions about the driver behavior while driving such as violating red traffic signal indication, smoking, the use of mobile phone and etc.

Results: The data were collected from 156 respondents (67 men and 89 women university students). The mean age of the samples was 23.22 years and 52.56% had a driving license. There were no significant differences between males and females with respect to the use of seat belts. The results showed that use of seat belts was as following: 45.5% always, 44.2% often, 2.6% seldom and 3.2% never. Eating and drinking behavior was as following: 3.2% always, 14.7% often, 57% seldom and 25% never and talk with phone was as following: 1.9% always, 18.6% often, 52.5% seldom and 26.9% never.

Discussion and conclusion: The results of this survey demonstrated the increased risk of road traffic crashes amongst young male and female groups. This distinction was critical for understanding the behavior of each of the three identified subgroups of drivers, and for planning the appropriate interventions to promote safe driving.

Keywords: Manchester Driver Behavior Questionnaire, Student

RISKY BEHAVIORS AMONG OFFENDER MOTORCYCLISTS IN TEHRAN, 2009.

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Introduction: While speeding behavior has been recognized as one of the most important risk factors in fatal road traffic accidents. Speeding has been reported as one of the most important public health issues worldwide. Using the theory of planned behavior (TPB), this study examined the self-reported behavior of driving within posted speed limits for a sample of commercial car drivers.

Materials and Methods: This cross-sectional study was carried out in Bandar Abbas in August 2010. A sample of 10 participants from each shift for 7 days (totaling 140 participants from each car stop) was obtained. In
this cross-sectional study, all commercial car drivers who were literate and who transported people to and from Bandar Abbas and other cities in August 2010 were likely to be included in the study. A self-administered questionnaire including demographic characteristics and a questionnaire based on TPB constructs were used to collect data. Multiple regression analyses were used to predict factors of driving within speed limits at a level of P<0.05.

Results: In all, 246 eligible drivers with a mean age of 32.2 years (SD=6.7) were studied. The mean years of car driving was 8.7 (SD=5.0). Multiple regression analysis revealed that subjective norms and perceived behavioral control could predict the intention to drive within speed limits (R2 =0.25, F=27.2, p<0.001). Furthermore, behavioral intention and perceived behavioral control predicted driving within speed limits (R2 =0.41, F=85.1, p<0.001).

Discussion and conclusion: It was concluded that commercial car drivers in Bandar Abbas, Iran are most in need of appropriate interventions based on improving their subjective norms and behavioral control.

Keywords: Predictor, Driving, Speed limit, Theory of Planned Behavior.

PREDICTION OF SEAT BELT USE AMONG IRANIAN CAR DRIVERS: APPLICATION OF THEORY OF PLANNED BEHAVIOR AND HEALTH BELIEF MODEL

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Introduction: Seat belt use plays an important role in traffic safety by reducing the severity of injuries and fatality rates during vehicle accidents. The aim of this study was to investigate predictors of self-reported seat belt use in a sample of car drivers in Bandar Abbas, Iran. The theory of planned behavior and the health belief model served as the conceptual framework for the study.

Materials and Methods: The convenience sample consisted of 284 eligible car drivers who frequented eight petrol (gasoline) stations in different geographical areas of the city. Of the drivers approached to participate in the study, 21 declined to take part in the study and twelve other questionnaires were incomplete. Thus, a total of 251 questionnaires were analyzed (response rate=88.4%). A self-administered questionnaire including demographic characteristics and items arising from the theory of planned behavior and health belief model constructs were used to collect data. Data were analyzed using SPSS16.

Results: The subjects' mean age was 31.6 years (SD=8.7), mostly male (72.9%) and 53.4% of them reported that they used their seat belt “often.” Multiple regression analyses revealed that from the theory of planed behavior attitude, subjective norms, and perceived behavioral control significantly predicted intention to use seat belt (R2 =0.38, F=51.1, p<0.001); and subjective norms, perceived behavioral control, and behavioral intention significantly predicted seat belt use (R2 =0.43, F=45.7, p<0.001). Arising from the health belief model perceived benefits and perceived barriers significantly predicted seat belt use (R2 =0.39, F=26.2, p<0.001).

Discussion and conclusion: This study revealed that car drivers who perceived more subjective norms, more behavioral control, more intention to use seat belts, and who perceived more benefits and fewer barriers, were more likely to use their seat belts.

Keywords: Seat belt, Theory of Planed Behavior, Health Belief Model, Automobile driver, car accident, Prediction

USING SOCIAL MARKETING MODEL TO REDUCE DRIVING BEHAVIORS AMONG TAXI DRIVERS IN TEHRAN

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Introduction: In Iran, the basis of most interventions for reducing road traffic crashes is education or enforcement and marketing, but the third approach, has not been considered much. In social marketing, commercial marketing techniques and principles are used to increase the acceptance of an idea or action and this research has studied the impact of an intervention based on this planning model to reduce risky driving behaviors among taxi drivers in Tehran.

Materials and Methods: In this interventional study, the subjects were selected from taxi drivers’ community in two municipal districts of Tehran with the highest rate of traffic crashes. These two districts were considered as intervention and control groups. Formative research consisted of two studies, qualitative and quantitative, were designed to determine the intervention and products. In qualitative phase, 42 participants in four focus group discussions expressed their views on risky driving behaviors and the observational behaviors were studied for all subjects by checklist. In quantitative study, attitudes and self-reported behaviors were assessed by questionnaire. Based on the results, Intervention consisted of communicating persuasive message in the form of stickers installed before driver's eyes and

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The First International & 4th National Congress on Health Education & Promotion —— ABSTRACTS

EFFECT OF HABIT, MORAL NORM AND ANTICIPATED REGRET ON PREDICTING SEAT BELT USE IN BANDAR ABBAS

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Introduction: Using seat belt is an effective safety behavior for protecting car occupants from injuries and fatalities in road vehicle accidents. Efforts to improve seat belt usage can be enhanced by identifying specific factors that motivate this behavior. The aim of this study was to investigate the effect of habit, moral norm and anticipated regret on seat belt use in a sample of car drivers in Bandar Abbas, Iran.

Materials and Methods: The convenience sample consisted of 284 eligible automobile drivers who frequented eight petrol (gasoline) stations in different geographical areas of the city. Data were collected through a self-administered questionnaire including demographic characteristics, frequency of seat belt use and items related to habit, moral norm and anticipated regret. Items were measured on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Results: The subjects’ mean age was 31.6 years (SD=8.7), the majority were male (72.9%), and more than half (53%) were university educated. Just over half of the participants (52.2%) had a history of automobile accidents. Of all the subjects, 53.4% reported that they “often” used seat belts. Habit, moral norm and anticipated regret each had a positive significant correlation with seat belt use (p<0.001). Multiple regression analyses revealed that habit and anticipated regret significantly predict seat belt use, but there was no significant relationship between moral norm and seat belt use (R²=0.46, F=72.6, p<0.05). The contribution of habit to the prediction of seat belt use was more than the contribution of anticipated regret.

Discussion and conclusion: It is concluded that car drivers who had more habit and more anticipated regret were more likely to use seat belt.

Keywords: Seat belt, Habit, Moral norm, anticipated regret, Car driver

A THEORETICAL MODEL BASED ON PROBLEM BEHAVIOR THEORY TO EXPLAIN PROBLEMATIC BEHAVIORS: FOCUSING ON THE ROLE OF MEDIATORS

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Introduction: The aim of this study was to assess the factorial validity and reliability of the Iranian version of the psychosocial constructs as predictors of problem behaviors in framework a structural relationships model based on problem behavior theory.

Materials and Methods: A cross-sectional self-report survey method was used in this study. A sample of 505 students (288 male and 217 female) from 18 governmental and semi governmental high schools of Tehran suburban areas were randomly selected during autumn 2008. A stratified two-stage, cluster sampling procedure were used to make them representative of distribution of demographic characteristics. Data was gathered by demographic questionnaire, the adolescent health and development questionnaire, Rosenberg’ self esteem and Simons-Morton’ social competence. Analysis approach of structural equation modeling (SEM) was employed to test the associations among psychosocial constructs and with problem behaviors of the theoretical framework of the present study.

Results: The confirmatory factor analysis performed to test the fit developed models through exploratory factor analysis techniques. Generally, the goodness-of-fit indices indicated a good fit for all the first and second-order measurement models. The final result of the CFA was to develop of a new model to explain adolescents’ problem behaviors and introduce problem
behavior syndrome. Fit statistics indicated that model provided an adequate model fit (CFA=.98, NNFI=.98, RMSEA=.068). This model also specifies risk index at the individual level as a moderator of the effects of family, peer and schools factors on problem behaviors.

Discussion and conclusion: factor analyses provided support of existence problem behavior syndrome. The results suggest that new established model for problem behaviors can be usefully applied for studies among Iranian high school students.

Keywords: Problem Behavior Theory, Risk factors, New Explanation Model, High school students

Physical Activity

PREDICTING PHYSICAL ACTIVITY AMONG IRANIAN COLLEGE STUDENTS BASED ON THE TRANSTHEORETICAL MODEL USING PATH ANALYSIS

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Introduction: Despite the many benefits of exercise behavior, physical inactivity is a global health issue. Evaluating the efficacy of behavior change models and identifying the factors that influence physical activity in various populations is clearly a research priority. The Transtheoretical Model (TTM) is a dynamic approach to understanding exercise and physical activity behavior. The purpose of this study was to determine the efficacy of the TTM to predict exercise behavior in a sample of Iranian college students.

Materials and Methods: This study is a cross-sectional study. Participants were 418 first year students of Guilan University of Medical Sciences who completed Iranian versions of the TTM and physical activity questionnaires. Data were analyzed using bivariate correlation and path analysis.

Results: In the final model, the processes of change (behavioral strategy), self-efficacy in exercise and pros were 0.54, 0.20 and -0.11 had path coefficient respectively with stage of change as a mediator. This mediator accounted for 62% of the variance in current physical activity. The model accounted for 62% of the variance in current physical activity.

Discussion and conclusion: Study findings support the application of TTM in physical activity changes among Iranian students.

Keywords: Transtheoretical Model, Physical Activity, Students

SOCIAL AND ENVIRONMENTAL DETERMINANTS OF PHYSICAL ACTIVITY IN OVER 18 YEARS OLD WOMEN IN TABRIZ

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Introduction: Physical activity is an important protective factor against most diseases. Most of the Iranian women have not sufficient physical activity. For physical activity interventions to be effective, they must adequately address the barriers and factors to promote it. The aim of this study is to determine the related factors of physical activity among women in Tabriz.

Materials and Methods: The International Physical Activity Questionnaire (IPAQ), was used to gather data among housewives, physicians, bank and university employees in a 9 months period. Validity of the questionnaire was determined by forward –backward translation and expert opinions and reliability was determined by calculating Cronbach’s alpha coefficient equal to 70%. Data were analyzed by SPSS 13.

Results: Among 300 women, 35% were physician, 33% employee and 32% were housekeeper. Mean age of participants was 34.5 and mean BMI (Body Mass Index) was 24.4. The most common exercise among studied sample was walking. Forty percent of participants had no exercise at all. Barriers of physical activity were: not enough time(62.7%), spouse disagreement(5.3%) , early fatigue(25.3%), workload(78.9%), no motivation for physical activity(27.7%) , inappropriate neighborhood for walking and exercise(22%). There was no significant differences between single and married, employed and unemployed women in doing exercise.

Discussion and conclusion: Multiple factors influence physical activity. Interventions to increase physical activity should use multilevel approaches that incorporate the personal, social environmental, and physical environmental factors related to participation in physical activity. Women in Tabriz city have inadequate physical activity. Workload, time limit, low motivation and inappropriate environmental facilities are the most important barriers of physical activity among women in Tabriz.

Keywords: Physical activity, Women health

DESIGNING AND IMPLEMENTING AN EDUCATIONAL PREVENTIVE PROGRAM TO PROMOTE PHYSICAL ACTIVITY AND INCREASE PHYSICAL WORK CAPACITY USING TRANSTHEORETICAL MODEL AMONG SASAD EMPLOYEES.

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**REGULAR PHYSICAL ACTIVITY AND ITS RELATED FACTORS AMONG STUDENTS IN HAMADAN UNIVERSITY OF MEDICAL SCIENCES: AN APPLICATION OF BASNEF MODEL**

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**Introduction:** The aim of this study was to assess regular physical activity and its related factors among students in Hamadan University of Medical Sciences based on BASNEF model.

**Materials and Methods:** This study, which is a cross-sectional study which conducted on 400 students of Hamedan University of Medical Sciences. Stratified cluster sampling was used. The data collection tools used in this study was two standard questionnaires. The data analyzed using SPSS. 13. Appropriate statistical tests (Chi-square, t test and Logistic regression analysis) were used to perform statistical analysis.

**Results:** Based on the results, out of 400 students participating in the study, 270 (67.8 %) had low physical activity, 124 (31 %) had moderate physical activity, and 5 (1.2 %) had severe physical activity. There was not any significant difference between age, gender, grade, marital status, and performing physical activity (P > 0.05), but significant relationships were found between performing physical activity and resident place (X² = 5.705, df = 1, p-value = 0.017) and the students living in dormitories reported higher levels of physical activity. Among the BASNEF variables, the most important predictors of physical activity were enabling factors and the variables of Behavioral Intention Model.

**Discussion and conclusion:** Considering the enabling factors as the most important predictors of physical activity among students, provision of sport facilities for them is suggested.

**Keywords:** Medical students , Enabling factors, BASNEF model, Physical activity

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**THE EFFECT OF 8-WEEK AEROBIC EXERCISE ON BODY COMPOSITION, BLOOD GLUCOSE AND CARDIO-VASCULAR RISK FACTORS IN WOMEN WITH TYPE 2 DIABETES**

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**Introduction:** Physical exercise can be therapeutic in patients with type 2 diabetes that the resistance to insulin increases due to the accumulation of too much fat. Aerobic Exercise holds promise for reducing risk factors for type 2 diabetes by promoting weight loss, improving glucose levels and insulin sensitivity, reducing blood
pressure and lipid levels. The aim of this study was to
determine the effect of 8-week aerobic exercise on blood
glucose and cardio-vascular risk factors in patients with
type 2 diabetes.

Materials and Methods: Thirty five diabetic women
(age:38-48) were divided in to exercise (aerobic) (n=18)
and no-exercise (control) (n=17) groups. The aerobic
group exercised 8 weeks, three times per week, 40-60 min
each session, with training progressing gradually in length
and intensity. Heart rate monitors (Polar Electro;Finland)
were used to adjust workloads to achieve target heart
rate. Participants progressed from 40min per session at
60% of maximum heart rate to 60min per session at 75%
of measured maximum heart rate.

Results: Results indicated significant difference in fat
percentage, WHR1 ,and fasting blood glucose in exercise
group compared with control group. HDL and LDL levels
did not change between two groups. Total cholesterol
level decreased by %8.1 in aerobic group. Triglycerides
level decreased by 22.2 percent in exercise group. This
value was 4.9% in control group.

Discussion and conclusion: It is well documented that
exercise training induces increased expression of the
GLUT4 isoform of the glucose transporter in muscle.
Increase in GLUT4 results in a proportional increase
in the number of GLUT4 glucose transporters that are
translocated to the cell surface in response to a given
insulin stimulus. This appears to be the mechanism
by which exercise results in an increase in insulin
responsiveness. Aerobic exercise can improve blood
glucose in patients with type II diabetes, therefore; it
should be considered seriously as part of the treatment
protocol of these patients.

Keywords: Aerobic Exercise, Fat Percentage, Blood
Glucose, Lipid Profile

FACTORS AFFECTING PHYSICAL
ACTIVITY AND METABOLIC CONTROL
IN TYPE 2 DIABETIC WOMEN REFERRED
TO THE DIABETES RESEARCH CENTER
OF HAMADAN: AN APPLICATION OF
TRANSTHEORETICAL MODEL (TTM)

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Introduction: Active lifestyle and regular physical
activity have a great impact on improving the health and
metabolic control in diabetic patients. The aim of this
study was to investigate the factors affecting physical
activity and metabolic control in type 2 diabetic women
referred to the Diabetes Research Center of Hamadan
based on Trans Theoretical Model.

Materials and Methods: 114 women with type 2
diabetes participated in the cross-sectional study.
Data were collected by International Physical Activity
Questionnaire (IPAQ) and the TransTheoretical Model
Questionnaire, using interviews with patients.

Results: mean ages of participators were 57.47±10.04
years. Glycosilated hemoglobin (HbA1C) mean in
patients were 7.74 ± 1.75. Physical activity findings
showed that 9/ 64 percent of participants had low-
intensity physical activity, 8.29% had moderate intensity
physical activity, and 3/5% had high-intensity physical
activity. Stage of change construct was significantly
associated with cognitive and behavioral processes of
change and self- efficacy (P < 0.05). Also decisional
balance construct was significantly associated with
behavioral change and self-efficacy (P < 0.05) but not
associated with cognitive processes (P > 0.05). Self-
efficacy was significantly associated with cognitive,
behavioral processes of change and decisional balance (P
< 0.05).

Discussion and conclusion: According to the results,
physical activity program developed for increasing
physical activity level, improved metabolic control in
type 2 diabetic women in Hamadan.

Keywords: Type 2 diabetes, Physical activity, Metabolic
control, Trans Theoretical Model

APPLICATION OF HEALTH PROMOTION
MODEL IN LONGITUDINAL STUDY OF
PHYSICAL ACTIVITY BEHAVIOR OF
STUDENTS IN ADOLESCENTS.

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Introduction: There is evidence that physical activity
decreases during adolescence in Western countries.
However, this pattern has not yet been shown in
Iranian youth by longitudinal studies. The purpose
of this longitudinal study was to detect changes in
physical activity behaviour, psychological factors
and interpersonal influences associated with exercise
behavior during the transition from secondary school to
high school in Sanandaj, Iran.

Materials and Methods: The data were collected by
following 1073 students conducted in 2006. The study
population in 2009 included 844 high school students
(51% male and 49% female) with mean age of 16.42
± 1.73 years. The physical activity related cognition,
interpersonal influences, and physical activity behavior
using self-reporting questionnaires were collected.
To assess the effects of time and sex on psychosocial
factors ANOVAs and relative stability physical activity
psychosocial correlates from wave 1 until the wave 2
Pearson product-moment correlations was used.

Results: The test of time effects indicated significant
differences according to sex for more physical activity
and psychological variables and interpersonal influences associated with exercise activities. The girls had less physical activity than boys at both time points. Moderate physical activity in the first time was 31.82 and 53.75 minute and at follow-up was 23.7 and 44.7 minutes for girls and boys respectively. Girls had lower self-efficacy and perceived more barriers and fewer perceived benefits for physical activity over time follow-up. There was more stability of family interpersonal influences for girls than boys.

Discussion and conclusion: The results of this study offer evidence for decreasing physical activity in boys and girls and sex differences in cognitive variables and interpersonal influences. This is important for understanding how to address the problem of physical inactivity among Iranian youth.

Keywords: Physical Activity, Adolescents, Health Promotion Model, longitudinal

PHYSICAL ACTIVITY AND DIFFERENCES IN DECISIONAL BALANCE AND SELF-EFFICACY: AN APPLICATION OF TRANSTHEORETICAL MODEL

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Introduction: Physical inactivity is one of the most important public health problems of the 21st century which leads to the most chronic diseases. Regular physical activity has been shown to yield a number of physiological and psychological benefits, such as decreased incidence of coronary heart disease, hypertension, diabetes mellitus, colorectal cancer, and obesity, as well as a reduction in stress and depression. Transtheoretical Model (TTM) is one of the most popular models for studying behavioral determinants.

Material & Methods: A descriptive- cross-sectional design was used to examine the decisional balance (pros and cons of Physical inactivity), and self-efficacy constructs and sociodemographic characteristics of the students from different stages of change as proposed by the transtheoretical model. A random sample of 160 students of health faculty from Shahid Sadoughi University of Medical science completed research instrument which was a multi-sectional questionnaire that was approved and measured of TTM and sociodemographic variables. Data entered and analyzed in SPSS Win 11.5.

Results: The majority (26.1%) of the students were classified into the contemplation stage for regular physical activity, 20.6% in preparation, 18.8% in precontemplation and 34.9% in action and maintenance stages. The top four reasons for participation in physical activity were improving function of coronary heart system, living longer, having good fitness and increasing mental power. Having access to few activity places (3.08±1.17) and having much time in future for physical were two most important perceived barriers noted for not participating in physical activity (3.3±1.2).

The results indicated that there were significant differences in the level of perceived Benefits and barriers and self-efficacy across different TTM stages (p < 0.03).

Discussion and conclusion: According to this study, students who were in the later stages had more perceived benefits, more self-efficacy and lower perceived barriers than other students in the early stages of TTM.

Keywords: Stages of change, Decisional balance, Self-efficacy, Physical activity

THE EFFECT OF TRANSTHEORETICAL MODEL (TTM) TO EXERCISE BEHAVIOR AMONG PREGNANT WOMEN IN DEHAGHAN HEALTH CENTERS IN 2009-10.

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Introduction: One of the most beautiful and important periods of a woman life is pregnancy. But on the other hand poor knowledge about the correct methods of exercise during pregnancy may find out to convey to the mother and fetus. It seems necessary to use a behavioral model; such as TTM to plan more effective interventions to promote physical activity. The aim of this study was to assess Trans theoretical Model (TTM) to physical activity in pregnant women referred to Dehaghan Health Centers has done.

Methods: In a quasi-experimental study, 100 women referred to health centers were recruited. Interventions included training about physical activity, benefits and perceived barriers during pregnancy in the form of discussion, lecture and showing film during the five sessions for pregnant woman. Data gathering tools according to the standard physical activity during pregnancy and Trans theoretical Model has been set in to parts. Part 1 and Part 2; contains demographic questions about benefits; perceived barriers and social advocacy to sports and activities that each of the women in two groups before and after of study does. The data software analysis was "SPSS".

Results: After intervention, the training group had a positive significant progress in stages (P-value=0/001). Significant improvements in benefits of physical activity were noted in the training group (P-value=0/001). Significant improvements were noted in the training group about the barriers of physical activity (P-value=0/001), but not in control group (P-value=0/92).

Conclusion: These results supported the application of TTM for physical activity intervention and indicate this progress is very effective in improving attitude and
actions in women during pregnancy.

**Keywords:** Pregnancy, Trans theoretical Model (TTM), Physical activity.

**EFFECTS OF AN INTERVENTION ON PROMOTING AND MAINTENANCE OF EXERCISE BEHAVIOR AMONG COLLEGE STUDENTS BASED ON INTEGRATING THE TRANSTHEORETICAL MODEL AND SELF-DETERMINATION THEORY.**

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**Introduction:** Despite the many benefits of exercise behavior, lack of physical activity is a health problem in college students. A key issue in exercise behavior research is using health education models in order to promote and maintain exercise behavior. Previous researches have shown in light of the complex and dynamic nature of exercise behavior change, it seems unlikely that a single theoretical approach can truly capture it. Therefore, the purpose of this study was to investigate the effect of a combined model of Transtheoretical model and self-determination theory on the promotion and maintenance of exercise behavior among college students.

**Material and Methods:** This study is a randomized controlled trial. The experimental group (66 students) received the intervention based on TTM and SDT, and control group (67 students) did not receive any intervention by researcher. Evaluation was conducted by tools based on constructs of TTM and SDT as well as METs, before intervention, post intervention and after 8 months.

**Results:** There were no significant differences between the two groups before the intervention regarding the demographic variables, constructs of TTM and SDT and METs. The study findings showed significant differences in the exercise behavior stage of change and METs between experimental group and control group in the post intervention and follow up evaluation. There were also significant improvement in the exercise behavior stage of change and METs in the experimental group throughout pre, post and follow up intervention. Whereas, in the control group, there were no significant differences.

**Discussion and conclusion:** Education intervention based on combined model of transtheoretical model and self-determination theory has effects on the promotion and maintenance of exercise behavior among college students.

**Keywords:** Transtheoretical model, Self-determination theory, Exercise behavior, Students.

**THE EFFECT OF HEAVY PHYSICAL ACTIVITY ON TOTAL ANTIOXIDANT STATUS AND MALONDIALDEHYDE IN TRAINED INDIVIDUALS**

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**Introduction:** Antioxidants are the molecules which can safely interact with the free radicals and terminate the chain reaction before damaging of the vital molecules. Malondialdehyde (MDA) is a naturally occurring product of lipid peroxidation and prostaglandin biosynthesis that is mutagenic and carcinogetic. A physically active life style has an important role in preventing thrombotic events and decreasing the risk of cardiovascular disease. Physical exercise alters oxidant/antioxidant balance which is known to be important in several physiological and pathophysiological events such as intracellular signaling, aging, atherosclerosis, myocardial infarct and ischemia/reperfusion injury. The purpose of the present study was to investigate the effect of heavy physical activity on plasma total antioxidant status (TAS) and MDA in trained men and women.

**Materials and Methods:** we selected twenty-one trained men and women (At least three times a week doing exercise) and divided them into two group (n1= 10 women, n2= 11 men) within the age range of 20-24 years old. Venous blood samples were collected pre-exercise and immediately after intensive exercise with treadmill (10 km/h, grade 5%, 25 min) and 3 hours after of physical activity. Samples were collected for measuring of TAS status and MDA. ANOVA was used to study the effect of intensive exercise on Total Antioxidant status and MDA.

**Results:** No significant difference was observed in TAS between the two groups before exercise. MDA level was low in trained men. Heavy physical activity significantly increased the TAS (p < 0.05) in immediately and 3 hours after exercise in total samples, but significant differences was not observed in total antioxidant status between men and women, although MDA experienced small increase immediately after exercise in two groups, but significant decline was observed 3 h after exercise (p < 0.05). Our finding indicated that this marker remained higher in men than women, although this difference was not Significant (p > 0.05).

**Discussion and conclusion:** These findings support the idea that heavy physical activity increased plasma total antioxidant status in trained men and women. Exercise also was decreased of Malondialdehyde in trained men and women and showed . This shows that physical activity increases the body's immune system to fight with free radicals. This means that exercise is a way to promote immune and quality of life.

**Keywords:** Heavy physical activity, TAS, free radicals, MDA, Trained men and women, Immune system.
Research in Health Education

WHO GLOBAL STATUS REPORT ON NONCOMMUNICABLE DISEASES 2010: NEW GROUNDS FOR RESEARCH IN HEALTH EDUCATION AND HEALTH PROMOTION.

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A recent publication by the World Health Organization (WHO), Global status report on noncommunicable diseases 2010, sets out the statistics, evidence and experiences needed to launch a more forceful response to the growing threat posed by noncommunicable diseases. The report indicates that of the 57 million deaths that occurred globally in 2008, 36 million were due to noncommunicable diseases, comprising mainly cardiovascular diseases, cancers, diabetes and chronic lung diseases. The combined burden of these diseases is rising fastest among lower-income countries, populations and communities, where they impose large, avoidable costs in human, social and economic terms.

In general as indicated by the report noncommunicable diseases are caused, to a large extent, by four behavioural risk factors that are continual aspects of economic transition, rapid urbanization and 21st-century life: tobacco use, unhealthy diet, insufficient physical activity and the harmful use of alcohol. Indeed as suggested a major reduction in the burden of noncommunicable diseases will come from population-wide interventions. It seems that this report provides new directions for health education and health promotion activities including new grounds for its development and research. This lecture will focus on the report and highlights its implications for health education and health promotion.


Keywords: Attitude, Students, Curriculum

A CASE STUDY OF HEALTH NEEDS ASSESSMENT IN PRIMARY HEALTH CARE SYSTEM OF EAST AZERBAIJAN

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Introduction: Health needs prioritization has been one of the great challenges for health policy makers. One of the most important factors in successful needs assessment is simple and clear flowchart priorities. Another critical factor is using of appropriate evidences. Community participation is other factor that influences the needs assessment. This study explores the needs assessment in PHC system.

Materials & Methods: This case study was explained health needs assessment in primary health care system of East Azerbaijan province of Iran. Health needs are problems that are seen in health status, health determinants and health services of any defined population. Determination of health needs was carried out in the catchment of rural health facility. Needs assessment were begun in health house (HH) and were continued in regional health centers and district health centers and were ended in province health center. In any village, community health council was founded. In first step, Health problems of villages were listed with brainstorming. Then, they were prioritized with the help of nominal group technique and decision matrix. The three first priorities were sent to rural health centers. In health centers, the regional health priorities were determined. Four forms were used in prioritization process.

Results: From 2007, needs assessment is being done in primary health care system of East Azerbaijan annually. The priorities of all rural health houses, rural health centers and districts health centers were determined. Improvement plan was written to all of health priorities at all service delivery points.

Discussion and conclusion: clear prioritization process, appropriate evidences, needs assessment team and simple improvement tools are four important factors of a successful health needs assessment. The teams were combined from service providers, community representatives and regional health administrators. Evidences include region health indicators, expert’s opinions and community data about health problems.

Keywords: Needs assessment, Prioritization, Health needs.

PRACTICAL MODEL OF EDUCATION IN ATTITUDE DOMAIN

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Introduction: Attitude is the ignored domain of education, and teachers do emphasize on Knowledge in the terms of recall. The Attitude is a field in which the students learn it by self learning and self –interpretation and that is why there are different understandings from one fact.

Materials and Methods: We included attitude education in an educational plan and at the beginning of any course in a workshop we educated the students with attitude education as priority. They had a logbook and recorded their achievements about attitude on it and reported their findings in morning reports.

Results: Including attitude education in the curriculum, we can help students to have a deeper comprehension from it.

Discussion and conclusion: Including attitude education in the curriculum, we can help students to have a deeper comprehension from it.

Keywords: Attitude, Students, Curriculum
FACTORs AFFECTING THE ACCURACY AND QUALITY OF HEALTH NEWS
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Introduction: Nowadays keeping up-to-date with the current news and knowledge on health is considered important by all. Mass media plays an important role in this respect. For this purpose we decided to examine the quality of health news disseminated in the media, its course of production and determinant factors.

Materials and Methods: The study was conducted both quantitatively and qualitatively. In the quantitative section the content of the health-related news published in the Iranian public press during a 6 month period was analysed. In the qualitative section two focus group discussions were held with reporters, chief editors and news gatekeepers. The sessions were audio-recorded (with permission), transcribed and analyzed through thematic framework with the help of Opencode software.

Results: Among the 410 news articles extracted, only 58 had referred to the research quoted and its address. Results showed that 18% of the news whose details were analyzed did not live up to the qualifications of dissemination in public. The findings of the qualitative analysis were analyzed in two sections: the production, selection and dissemination of the news, and factors affecting its quality. Multiple factors at various levels were recognized to affect the quality of news, the most important of which are journalists and chief editors level of awareness and knowledge in research studies. Competitions among researchers and their lack of perspective towards the media are also noteworthy. At times political and economical factors also lead to the untimely or inappropriate dissemination of health news.

Discussion and conclusion: According to the current study’s findings, different factors affect the production, selection and dissemination of health news. Determinants such as knowledge on media and health and professional characteristics of journalists, chief editors and researchers, time, competition and authority are among these factors. However, other factors, such as political and economical factors also play a role here, which cannot be ignored if complete interventions are to be carried out to promote the quality of health news. Keeping these in mind, two series of steps should be taken henceforth: those concerned with the context of production, selection and dissemination of health news (strengthening journalists and chief editors), and those concerned with the infrastructures related to the sources of news and organizations supervising the quality of news produced. A high percentage of health news lacked the necessary qualifications for dissemination in public, but has anyhow been disseminated. This matter requires identification of points of intervention and rectification.

Keywords: Media, Misutilization, Health news, Dissemination, Quality

CONFIDENTIALITY AS A FOUNDATION FOR PHYSICIAN-PATIENT RELATIONSHIP: CHALLENGES AND APPROACHES
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Introduction: Confidentiality is one of the core tenets of medical practice that provides the foundation for the physician-patient relationship. Confidentiality is an important principle in health and social care because it functions to impose a boundary on the amount of personal information and data that can be disclosed without consent. Patient privacy has always been an important concept in the medical profession. Yet daily physicians face challenges to this long-standing obligation to keep all information between physician and patient private.

Materials & Methods: This is a review article study, which attempts to have an applicable discussion on various aspects (challenges and approaches) of confidentiality.

Results: In the first part of this article, after explaining creation source of the duty of confidentiality, inappropriate kinds of disclosure, and exception cases for breaching of confidentiality, applicable examples in medical settings accompanied by appropriate recommendations have been discussed. In the second part, regarding frequent overlaps between law and medical ethics, three approaches (as conceptual models) about legal regulations - that both protect and limit patient's right to privacy - accompanied by applicable cases have been detailed.

Discussion & Conclusion: Today, confidentiality is an issue that both patients and health care providers take extremely seriously. In fact, confidentiality has been a crucial component in the history of the doctor-patient relationship. For decreasing problems, it is necessary that confidentiality-related issues were educated in health and medical schools.

Keywords: Physician - Patient Relationship, Confidentiality, Ethics, Law, Risk Management.

TEACHING MOTIVATIONAL INTERVIEWING TO HEALTH EDUCATION STUDENTS IMPROVE COUNSELING SKILLS IN HEALTH BEHAVIOR CHANGE IN YAZD UNIVERSITY OF MEDICAL SCIENCE
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Introduction: Motivational Interviewing is a clinical skill that has been used in a range of different contexts involving behavior change. It aims to help patients explore and resolve ambivalence to change. Evidence shows that Motivational Interviewing has shown potential in encouraging patient behavior change in health care settings. Motivational interviewing incorporates empathy, open-ended questions, and reflective listening as techniques to explore patient ambivalence and to
decrease patient resistance to behavior change. The present study examined the effectiveness of motivational interviewing training on improving health education students’ knowledge of and confidence in their ability to counsel patients regarding health behavior change.

Materials and Methods: 28 health education students (PhD and MS) from Yazd University of Medical Science participated in Motivational Interviewing workshop in the autumn of 2010. The workshop consisted of one four-hour session. Students completed an identical pre-course and post-course questionnaire that measured their confidence and knowledge regarding counseling skills in health behavior change. The first section of the questionnaire contained 8 items regarding confidence in communication skills, ability to assess a patient’s “stage of change,” and whether the student felt confident in providing motivational interventions. The 5-item confidence scale ranged from “very confident” to “not sure of confidence level” to “very not confident.” The second portion of the questionnaire asked 4 multiple-choice knowledge based questions regarding the key concepts of MI and the appropriate interventions required for the patient’s stage of change.

Results: 85.7% of the sample was female and 14.3% was male and the mean age of students were 28.37±4.25. The students reported improved confidence in their understanding of motivational interviewing after participation in the workshop (somewhat confident, 78.6%) compared with before the workshop (somewhat confident, 43.4%). Each of the 8 confidence items were compared before and after the workshop using a signed rank test. All comparisons indicated a significant improvement (P<.001) in confidence. Regarding knowledge-based questions, students showed significant improvement; 23.6% of students answered all the questions correctly before the workshop, and 85.7% answered all the questions correctly after the workshop, (P<.05).

Discussion and conclusion: These results showed that teaching motivational interviewing techniques to health education students can enhance student confidence and knowledge of providing counseling to patients regarding health behavior change.

Keywords: Motivational Interviewing, Health Education Students, Health Behavior Change

UNDERSTANDING TEACHERS’ BEHAVIOR ABOUT PARTICIPATING IN A HEALTH EDUCATION PROGRAM IN QOM, IRAN: AN APPLICATION OF THEORY OF PLANNED BEHAVIOR (TPB).

Aligol M

Introduction: The research framework was based on the Theory of Planned Behavior (TPB) in order to identify its most influential component that may affect intention to join a HE program. The main purpose of this study was to investigate and predict the behavioral intention of teachers regarding whether they would join a Health Education (HE) program or not.

Materials and Methods: The research methods used in this study was simple sampling and data collection, questionnaire translation pilot study, reliability, and statistical analysis of the data were done. Data were analyzed using SPSS and Excel. Tow hundred fifty six valid questionnaires were collected and analyzed by descriptive statistics, t-test, one-way ANOVA, Pearson correlation and regression analysis. In this study, the research instrument was divided into two parts. The first part was the elicitation study and the second part was the questionnaire. The pilot population (n = 30) consisted of teachers, not currently joining a HE program.

Results: The independent variables were attitude toward the behavior, subjective norm, and perceived behavioral control. Behavioral intention was the dependent variable. The Pearson correlation coefficient of each component and the behavioral intention were all correlated to behavioral intention (P < 0.05), except for perceived behavioral control component which was not significant. The results showed that attitude toward the behavior was correlated to the behavioral intention (r = 0.476). The subjective norm was correlated to behavioral intention, also (r = 0.651). The perceived behavioral control was correlated to the behavioral intention (r = 0.161), but the significance level was .229. The strongest variable to predict the behavioral intention in this study was subjective norm. Therefore, the subjective norm still influenced the teachers’ intentions to join HE program. The second strongest variable to predict the behavioral intention in this study was attitude toward the behavior.

Discussion and conclusion: based on the study results, those teachers who had the most positive intention of normative beliefs and attitude beliefs were those who exhibited the strongest intentions to enroll in HE program. This is because they understood that their participation in further education would empower them for better future.

Keywords: Theory of Planned Behavior (TPB), Teachers, Health Education (HE) Program

POLISH ANTI-ALCOHOL POSTER CAMPAIGNS IN 20TH CENTURY: AN ANALYSIS OF VISUAL PUBLIC HEALTH STRATEGIES.

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Introduction: Throughout the 20th century Poland experienced increasing levels of alcohol consumption, notably of vodka, with its attendant health and social
In any health house (HH), FOCUS PDCA method is widely used in improving health education CQI projects in primary health care.

Materials & Methods: We surveyed and classified posters in five major archives in Warsaw, Krakow and Katowice according to date, content, artist, target group and style. Databases such as PubMed, MEDLINE (2006-2008), and that of the State Agency for Prevention of Alcohol Related Problems were reviewed for relevant literature. The research was funded by Welcome Trust and Jagiellonian University own sources.

Results: Alcohol was a major public health concern: out of almost 1000 posters identified 257 have anti-alcohol themes. Stylistically realism predominated initially, though from the late-1950s designs reflected the emergence of the Polish School of Poster (several of whose leading artists figure in our sample), with its eclecticism, openness to Western graphical style and use of symbolism and ambiguity. Messages fall into three broad categories: the financial effects of alcoholism, risk of accidental injury and appeals to personal morality. Subsidiary themes, such as drink-driving, sober tourism and youth drunkenness emerge in specific campaigns.

Discussion & Conclusions: Although the emphasis on alcoholism in Polish public health reflects an underlying epidemiological imperative, it may also arise from the cultural status of alcohol as symbol of political disillusion and nihilism. Realist images emphasized contribution to productivity and social and familial obligation were important themes throughout. Appeals to the individual become more prominent after the thaw, though rarely on the basis of personal medical risk. Some symbolism deployed by artists was ambiguous, potentially subverting official messages.

Keywords: Health promotion, Health education, Poster, Alcohol.

USE OF FOCUS PDCA IN IMPROVEMENT OF HEALTH EDUCATION PROGRAMS

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Introduction: Continuous Quality Improvement (CQI) is a management philosophy that promotes performance improvement and enhances client’s satisfaction. Every organization must select a simple method and educate all staff about it. FOCUS PDCA was designed by American hospital association in 1989 for process performance improvement. This study was conducted to describe use of FOCUS PDCA in improvement of health education programs.

Materials & Methods: This retrospective study evaluated health education CQI projects in primary health care system of East Azerbaijan province. CQI projects data were gathered from health centers in 1999 – 2002. All projects results were evaluated by checklist which includes improvement indicator, strategy, project place, process type and amount of changes.

Results: In study time, nine CQI projects were about health education programs. Three of them were about health volunteers and six were about health education. Six projects were from health centers and three projects were from district health centers. In all projects, the amounts of changes were significant. The most used strategy was writing the education plans.

Discussion and conclusion: FOCUS PDCA method starts from improvement opportunities and continues with organization of improvement team and measurement of process performance. In later phases, the process owners select appropriate change strategy and prepare the change plan. In FOCUS PDCA, thirteen simple tools were used. With regard to Simplicity and consecutive phases of FOCUS PDCA, using of this method is effective in primary health care system.

Keywords: CQI, FOCUS PDCA, Health education, PHC.

DETERMINATION OF HEALTH PRIORITIES IN EAST AZERBAIJAN DISTRICTS

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Introduction: With regard to the limitation of resources in contrast to health needs, the usage of prioritization has been inevitable in health system. Needs assessment process and health system definition effects on the policy making process. Determination of health needs and planning for them, have a great role on rural community health promotion. This study was conducted to describe health needs in primary health care system of East Azerbaijan.

Materials and Methods: In any health house (HH), village health needs were obtained by community participation in 2010. The first priority of each village was collected with a statistic form. The data was entered to Excel soft ware and were analyzed. The most common health needs of villages and also health programs were described.

Results: Ten top priorities of rural population were unhealthy collection of solid wastes (15.75%), unhealthy disposal of water waste (11.3%) , increased prevalence of hypertension(HTN,10.7%) , family planning services (10.5%) , unsafe drinking water (10.2%) , unhealthy collection of domestic animal feces (8.9%) ,increased prevalence of diabetes mellitus type 2 (DMII ,2.9%) , unhealthy toilets (2.6%) , pregnancy care (2.3%) and high frequency of mental disorders (1.8%) respectively.47.7% of priorities were related to environmental factors , 16.2 % to non communicable diseases , 14.8 % to population and family health services and 6.2 % to communicable...
APPLICATION OF SHORT MESSAGE SERVICE (SMS) TO ENCOURAGE PEOPLE IN CONTROLLING THEIR BLOOD CHOLESTEROL: A FIELD TRIAL

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Introduction: The application of Short Message Service (SMS) for changing behaviors is now growing worldwide. We studied the application of SMS to encourage Iranian general population to check their blood cholesterol.

Materials and Methods: In this field trial, a random sample of cell phone users who were older than 30, were randomly assigned to intervention and control groups. A text message package was sent to the intervention group for five rounds every two weeks. At each round, the intervention group was sent a daily SMS on three consecutive days. Two weeks after the dispatch of last SMS, both intervention and control groups were called on their cell phones. They were asked when they checked their blood cholesterol for the last time and what its level was. The intervention group was asked if they had received any SMS, if they had remembered their contents and what their attitude was. Collected data were analyzed. Chi-square test was used to compare categorical data among groups for univariable analysis and logistic regression model was used for multivariable analysis.

Results: Intervention and control groups were consisted of 1200 and 2400 cell phone users, respectively. In the telephone interview, 44.2% of subjects in control group and 42.1% of subjects who confirmed SMS reception were unaware of their cholesterol level (P>0.05). Moreover, 23.5% of subject in control group and 25.5% of subjects who confirmed SMS reception had never checked their cholesterol level (P>0.05). In control group, 6.46% of responders compared to 3.25% among SMS recipients, believed that it is not worth checking their cholesterol annually considering the cost and time required for (P<0.001). Subjects in the intervention group were more likely to check their blood cholesterol compared to control group. The total cost of SMS dispatch was 907.0 USD.

Discussion and conclusion: Despite the limitations of SMS usage, the present study provides valuable information on the potential of text messaging as a new reminder method for high risk groups. SMS is a cost-effective method to encourage people to control their cardiovascular risk factors. The cost of urging a person to check his cholesterol was 5.7 USD by this strategy and it could be reduced to 2.9 USD by restriction of intervention to people who had a family history of cardiovascular diseases. However, more studies are needed to demonstrate how many messages and how many times are more effective.

Keywords: SMS, Cholesterol, Behavior, Health Education

PARENTS-TO-PARENTS TRAINING: A NEW METHOD TO TRAIN PEOPLE BASED ON CLIENT-CENTRED AND KNOWLEDGE TRANSLATION APPROACHES

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Introduction: Parents often have major roles in training their children with disabilities such as Down syndrome and cerebral palsy. Having children with special needs will encounter these parents with many problems in their caring, management, social, and educational activities. The purpose of parents-to-parents training is to transfer these positive experiences of parents to each other. It helps parents to identify, organise and present their experiences to other parents in their own language through workshops, pamphlets, video clips etc. This research aims to apply the idea of parent-to-parent training to a group of parents having children with Down Syndrome and examine the usefulness of this for other parents.

Materials and Methods: 12 parents (11 female and one male) from Iranian Society of Down syndrome participated in this research. Parents developed a group in order to discuss and prioritise the problems that they encountered as well as their solution to these problems when their children were in preschool age. This group was aimed to present their experience to other parents in a panel hold in the First Seminar on training of families with Down syndrome in Tehran in 2010. In first phase, parents attended four sessions and discussed their experience in the group. Two researchers facilitated the discussion, took note and help parents to organise their experiences. Parents identified and prioritise a list of ten themes and decided to present only the first four important of this list. In the second phase of the study they practised their experiences and presented the results of the group discussion in a two hours panel in the conference. In the
School Health

THE STUDY OF SCHOOL AND PUBLIC HEALTH CENTER PARTICIPATION FOR STUDENTS’ HEALTH PROMOTION

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Introduction: School health system is composed of three main groups of teachers, parents and health care providers. Students are main customers of this system. The main programs of students’ health promotion are preventive health cares, healthy nutrition, health education, students’ empowerment about life style and environmental health. This study was conducted to evaluate school health system.

Materials and Methods: This cross sectional survey studied the participation of different school health stakeholders from schools managers' view points. In first, 135 health centers were selected with systematic random sampling. From schools around each health center, at least one school was selected in any levels of elementary, junior high school and high school. Data were gathered by interview with managers of 357 schools. Main variables of study were level of participation, health related activities, position of health in policy making of education ministry and role of different stakeholders in students health promotion. Data were analyzed with spss 16.

Results: from schools managers' points of view students, teachers and health care providers had greatest partnership and the most significant effect on health promotion of students. The most common tasks of students about health promotion, were control of death (80.7%), and attention to individual hygiene (42.3%). The most common works of teachers were control of individual hygiene (76.5%), health education (57%), request of a paper about health (55.2%) and improving environment health (46.8%). Health cares providers often have accomplished case finding (65.8%), health education (60%) and monitoring of environmental health (49.9%). From schools managers points of view health has high effect in 74.8%, 62.2% and 38.7% of education ministry planning , schools accreditation and budget allocation respectively. 83.5% of schools managers told that health policies are came from districts education office and 35.9% were believed that regional health centers had some roles.

Conclusion: Students like health education such as other education programs. PHC system must use them for empowering the people and promotion of community health. Schools are a place within which three important groups may effect on students’ health promotion.

Keywords: Parent-to-parent training, Client-centered approach, Knowledge translation

THE EFFECTIVENESS OF SCHOOL- BASED INTERVENTION PROGRAM ON SELF ESTEEM IN PEER GROUP IN MIDDLE SCHOOLS STUDENTS

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Introduction: Adolescence is a critical period in life and the important behavioral patterns such as smoking, alcohol and drug use, that affects whole of the life, is formed in this stage. Many of the risky behaviors of health, which is a main cause of adolescent and adult’s death, is established and reinforced in adolescence ages. Life skills training (LST) is the best way to promote the psycho-social abilities in the protective unit, which is named school. We did this study in order to determine the effectiveness of school- based intervention program on self esteem in peer group in middle schools students.

Materials and Methods: This study is a pre and post test semi- experimental study with control group, consisting 199 students in 2 and 3 grades of Maragheh’s middle schools that we selected them randomly, and after pre-test divided in 2 groups. In the case group, we performed the LST program in the 7 session, and then assessed self esteem in peer group. We used HSS (Hare Self Esteem) scale to assess it and analyzed data by SPSS ver 15 software and t-test and χ2.

Results: In the post- test, mean scores of self esteem in peer group in the case group had a significantly increasing to pre-test, that after school- based intervention program (P=0.02), self esteem in peer group in case group increased.

Discussion and conclusion: LST program in case group was affective on students’ self esteem in peer group, and then we offer it as a protective factor in school to implement.

Keywords: School- based services, Early Intervention (Education), Student, Prevention, Substance
HEALTH PROMOTING SCHOOLS: IDENTIFYING AND ADDRESSING HEALTH ISSUES IN NEW ZEALAND SCHOOLS

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Introduction: There is a developing international understanding of the interlinked relationship between education and health. The concept of ‘Health Promoting Schools’ (HPS) - schools that promote the health and wellbeing of their students and in doing so enhance the learning outcomes of students has received global recognition, and is an integral aspect of school life in a number of countries such as Scandinavia, Canada, and Scotland. Research clearly shows a link between HPS schools and improved academic outcomes. The extent to which the concept of HPS is recognized and implemented in New Zealand has not, to date, been formally investigated. This is despite the Ministry of Health stating that HPS is one method of enabling schools and communities to identify and address health issues in an educational setting. Health issues impact on students’ abilities to learn and in doing so constitute major barriers to learning for many students.

The aim of this research was to survey a randomly selected sample (1000) of New Zealand schools to determine the health issues that impact on learning, the strategies that the schools have implemented to address the health issues, and the schools’ understanding of the concept of HPS. The postal survey was sent to schools with a return post envelope and utilized a mixed methodology. This allowed the researchers to acquire quantitative data that could be further explored through the use of the qualitative narratives.

The data was collated using both qualitative and quantitative methods. The quantitative data was coded and then analyzed in SPSS. The qualitative data which consisted of rich narratives was coded using thematic analysis.

Results: The results identified an extensive range of health issues that impact on student learning. Particularly, food choices, lack of food and mental health issues such as bullying, relating to others, anxiety, abuse and family trauma. An extensive range of strategies were identified to address health issues with a clear identification of the benefits of utilising elements of the ‘health promoting schools’ approach. The results lend further support to the importance of funding for the national implementation of the ‘health promoting schools’ framework. Supporting teachers, schools and their communities is crucial in addressing health issues that are barriers to learning.

Keywords: Health promoting schools, Educational outcomes, Mental health, Food choices, Barriers to learning.

UTILIZING HEALTH BELIEF MODEL TO EXAMINE OSTEOPOROSIS PREVENTION BEHAVIORS AMONG HIGH SCHOOL FEMALE STUDENTS IN ARAK, IRAN.

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Introduction: Osteoporosis is a disease in which bones gradually lose mass and structure. Hip fracture is the most frequent and serious complication of osteoporosis. Since the majority of bone mass develops during puberty, the best time to start taking steps to prevent osteoporosis is during the teenage years. Being considered as a high risk group, teen girls make up 14 percent of the country’s population. The focus of this study was on the examination of osteoporosis preventive behaviors based on Health Belief Model among high school girls.

Materials and Methods: This descriptive study used a survey method. Multi-stage sampling method was used to include the participants (209 high school female students). Data analyzed using SPSS statistical software. Descriptive statistics were used to analyze collected data. The data gathering instruments were two questionnaires. One questionnaire covered demographic information and the other questionnaire, Osteoporosis Health Prevention belief Scale, which was prepared based on Health Belief Model. The questionnaire consisted of 25 questions which covered the following domains: knowledge; barriers; benefits; perceived susceptibility and perceived severity; cues to action and individual perceived beliefs in capabilities to execute prevention behaviors. Validity and reliability of the Osteoporosis Health Prevention Scale have been proven in the previous studies (α=.8).

Results: The mode age was 16 years (42.1%). Most of the participants lived in private home (89%) with their parents and 44% of the participants rated their economic status at good level. Research findings showed that the mean of knowledge score, the mean of self-efficacy scores and perceived barriers were 33.1±12, 26.1±4 and 21.3±19 respectively. The result indicated low level of benefits, perceived susceptibility and severity. The majority of participants (75%) received their information from friends and family and the school role in providing information was negligible.

Discussion and conclusion: These results may be useful in planning educational intervention programs based on health education models. Osteoporosis prevention education should be included in high school curriculum.

Keywords: Osteoporosis, Health Belief Model, Knowledge, High school female students

THE STUDY OF FACTORS RELATED TO SKIN CANCER PREVENTIVE BEHAVIORS IN FEMALE HIGH SCHOOL STUDENTS IN YAZD BASED ON PROTECTION MOTIVATION THEORY

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THE RELATIONSHIP BETWEEN AUDIOVISUAL MEDIA AND ADOLESCENT VIOLENT BEHAVIORS IN IRANIAN SCHOOL-AGED CHILDREN

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Introduction: This study explores the correlation between using two common audiovisual media, television and video and violent behaviors among male adolescent boys. Iranian children have access to television, satellite, videogames and computer facilities that are exposing them to violent scenes. 34.4% of adolescent students use television or video for more than 30 minutes per day in schooldays. Also 47.4% of them use computer for more than 30 minutes per schooldays.

Materials and Methods: 604 adolescent boys aged 13 and 15 years participated in a cross sectional survey on Health Behavior in School-Aged Children in year 2008. Students were a representative sample of adolescent male schoolchildren of Pakdasht County in Tehran.

Results: Average hours of using the audiovisual media for school days were 2.39±2 for 13 year-old students and 2.86±2 for 15 year-old students. The target community of Iranian students overall spends rather the same time to use the audiovisual media than what has been reported by some other multinational studies in developed countries. Increasing use of audiovisual media is correlated with higher rates of carrying weapon, committing fight and bullying others that can endanger both health and life of school children.

Discussion and conclusion: Using the audiovisual media is accompanied with higher violent behavior in spite of anti-violence cultural policy of Iran. School supervision may have a great role in controlling violent behavior of students; however, this might not prevent hidden episodes. It is recommended to revise the content of audiovisual programs which are accessible by adolescents through enforcement of the adopted anti-violence broadcasting policy.

Keywords: Audiovisual media, Adolescent, Violent, behavior, school-Aged children.

HEALTH PROMOTING BEHAVIORS IN SCHOOL AGE CHILDREN

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Introduction: The objective of this study was to predict health promoting behaviors (HPB) among children. Based on the Pender Health Promotion Model, we posed the following question: does affective state (self-esteem, depression) serve as a mediator for social support (support from teachers and parents) and context (neighborhood safety) as predictors of HPB (healthy eating, physical activity)?

Materials and Methods: Data were derived via a secondary analysis of longitudinal data collected using the Coordinated Community Student Survey in a sample of 1,444 4th-6th grade students recruited from schools in a mid-Western state (male=42%, Caucasian American=72%, African American=17%).

Results: Results of the mediational model indicated that neighborhood safety and social support had indirect effects on HPB via affective state. Neighborhood safety and social support were both significant predictors of affective state (p< .05), although these variables did not significantly predict HPB directly. Affective state was a significant predictor of HPB (p=.01), and the Sobel test indicated that affective state was a significant mediator between neighborhood safety (p=.001) and social support (p=.001)

Discussion and conclusion: The results of this study suggest that efforts designed to instill HPB in school-age children must be based on public health models
grounded in systems approaches rather than one-solution causal models. Whether individual children will be responsive to attempts to instill HPB will depend on the extent to which prevention efforts are capable of improving affective state (self-esteem and depression) so that children can be receptive to HPB messages. Nursing preventive-intervention approaches, therefore, should be multifaceted, focusing on enhancing self-esteem and reducing depression, while simultaneously working to build support systems that effectively enhance HPB in children. These results can inform health care providers, teachers, parents, and researchers interested in enhancing factors for promoting health behaviors for future interventions.

**Keywords:** Health Promoting Behavior, School Age Children, Pender Health Promotion Model

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**REALISTIC EVALUATION OF IMPLEMENTATION OF HEALTH PROMOTING SCHOOLS**

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**Introduction:** The University of the Western Cape is involved in developing three secondary schools as Health Promoting Schools (HPS) in a historically disadvantaged community in Cape Town, South Africa. Youth at these schools are poorly equipped to deal with the many challenges that they face in the community. In addition to poverty, high rates of unemployment and violent crime, there are also the more specifically health related problems of alcoholism, HIV/AIDS and tuberculosis (TB). The goal of this five-year Project is to reduce the spread of HIV and TB in the selected community through the development of HPS.

It is difficult to set up HPS because schools not only have to contend with their core business of learning and teaching but also with the broader social context in which the school finds itself making schools complex systems. The HPS approach is based on the Ottawa Charter and therefore its interventions are complex by nature. HPS interventions inevitably have to do with change in the context of the school. In order to put such interventions in place however, the complex nature of the interventions as well as of the context within which it is introduced needs to be thoroughly understood. Therefore the process as well as the outcomes needs to be taken into account when evaluating HPS interventions. Evaluation approaches which are sensitive to the nature and quality of the implementation can provide good insight and explain causality. HPS therefore requires evaluation designs and methods that can capture and provide evidence of change, not only in the elements but also their interactions. One way of ensuring that the evaluation approach to HPS is sensitive to all the complexities, would be to use the Realistic Evaluation approach. Realistic Evaluation has the potential to track the outcomes, the mechanisms or processes that produce the outcomes and the contexts in which these mechanisms are triggered which will result in a comprehensive understanding of the development of HPS.

The proposed evaluation will be guided by the Complex Adaptive System, Realistic Evaluation and HPS frameworks. The CAS approach can be used as a lens through which to understand HPS. The CAS framework will inform the analysis of the context of the school system and the processes of the different interventions within that context. The HPS framework will show whether the schools have adopted the HPS approach by analyzing the outcomes, processes and context against the different action areas of the HPS framework.

**Keywords:** Health promoting schools, Realistic evaluation, complexity science, South Africa

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**EFFECT OF HEALTH PROMOTION PROGRAM ON CONTROLLING RISK FACTORS OF OBESITY AMONG STUDENTS**

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**Introduction:** Obesity in children and adolescents is a significant health problem that requires comprehensive prevention and intervention efforts. Present study was carried out to assess the effect of implementation of health promotion program in school on controlling the risk factors of obesity.

**Materials and Methods:** This study is a quasi-experimental research in two groups (case and control) carried out in 1385 in Tehran. Two schools were selected randomly from secondary schools of 6th region of education and training organization in Tehran. All participants were male. Body weight and height of students were measured and body mass indexes (BMI) were calculated. samples were composed of two groups of 35 overweight and at risk for overweight as case and control (Overweight and at risk for overweight were defined as ≥ 85th and ≥ 95th percentile of age-sex-specific CDC 2000 BMI values, respectively). Tools for data collection including electronic scale, stadiometer, demographic questionnaires of adolescents and parents, Food Frequency Questionnaire (FFQ), nutritional knowledge and a questionnaire for recording physical activity & watching TV in one week that were distributed to fill out by students before and 1 month after intervention. Interventions program that lasted four months included educational program for teachers, parents and adolescents and changes in school environment. Data were analyzed using paired and independent T-test.

**Results:** The results showed that there was no significant differences between samples mean Body Mass Index (BMI) in two groups after intervention (P>0.05). There was significant differences between mean nutritional knowledge score in case group after intervention in comparison with before intervention (P=0.0015). There was significant differences between mean consumption
of dairy group, salty snack, sweet and carbonated beverages and fast food in case group after intervention in comparison with before intervention (P=0.001, P=0.006, and P=0.034, P=0.001 respectively) but there was no significant differences between mean consumption of this food in control group after intervention in comparison with before intervention (P>0.05). T-test showed that there was significant differences between mean time of vigorous physical activity in one week and TV viewing in case group after intervention in comparison with before intervention (P=0.04, P=0.001 respectively) whereas there was no significant differences between mean time of these activities in control group (P>0.05).

Discussion and conclusion: according to the results, this research showed that although there was no significant differences between samples mean BMI in two groups after intervention but implementation of this program to control risk factors for obesity regarding to dietary pattern and physical activity was successful. Therefore it is recommended that the effectiveness of such interventions should be considered over time.

Keywords: Health Promotion Program, Obesity, Adolescent, School

**Women Health**

**APPLICATION OF BASNEF MODEL IN PREDICTION OF DOMESTIC VIOLENCE AGAINST WOMEN IN SABZEVAR**

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**Introduction:** Violence against women by an intimate partner is a major contributor to the ill-health of women. WHO study indicated that 15–71% of women experience physical and/or sexual violence by an intimate partner at some point in their lives. Primary and secondary prevention are central points in domestic violence concept, therefore looking at violence against women from a public health perspective offers a way of capturing many dimensions of the phenomenon in order to develop multispectral responses. This study has examined the application of BASNEF model in prediction of domestic violence against women in Sabzevar.

**Materials and Methods:** This is an analytical- descriptive and causal study conducted on 256 women who referred to the health centers in Sabzevar. The sampling method was proportionally stratified and randomized. Data was collected by self-reported questionnaire based on BASNEF model and Conflicts Tactics Scale (CTS). The instrument was validated and reliable through content validity and internal consistency (α=0.84), respectively. Data was analyzed by descriptive and analytical statistics including Pearson Correlation and Structural Equation Modeling. SPSS (16) for data entry and primary analysis was used. Lisrel software (8.1) for the Structural Equation Modeling (SEM) was applied.

**Results:** The mean age of women was about 27 and the mean length of women living with their husbands was about 7 years. The results of t-value were: attitude and intention=3.32, subjective norms and intention =3.67, intention and domestic violence=3.25, enabling factors 0.98. The standardized values were: 0.55, 0.38, 0.39, for subjective norms, attitude toward domestic violence, intention, respectively. RMSEA was 0.10. Chi-square statistic divided by degrees of freedom equals to 3.96 and P-Value for Test of Close Fit (RMSEA < 0.05) = 0.00048

**Discussion and conclusion:** The effect of subjective norms on domestic violence was significantly higher. Although the effect of subjective norms and attitude toward domestic violence were significant, the goodness of fit of this model on this data was not so good. (RMSEA>0.09 and X^2/df >3). Due to the importance of domestic violence prevention, more researches, applying and comprising health education and promotion planning models are suggested.

**Keywords:** Domestic violence, BASNEF, Women, Sabzevar health centers.

**RELATIONSHIP BETWEEN RELIANCE ON GOD AND MARITAL SATISFACTION AMONG EMPLOYEE WOMEN IN NEHBANDAN**

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**Introduction:** The relationship between reliance on God and the rate of depression and marital satisfaction of the female administrative staff in the city of Nehbandan. Objective: Reliance on God is as a precious jewel in the living of human beings. Believing in him, without any doubt, would resolve many of the spiritual problems in our lives and as a result we would proceed with living under more satisfaction and serenity. The present investigation proceeds with studying reliance on God and its relationship with depression and marital satisfaction among married female practitioners.

**Materials and Methods:** In a scientific comparative of the post event type, 183 individuals among the female staff practitioners of the administrative offices in all of the offices thorough the city of Nehbandan were selected in 2008-2009. The tools for collecting information consisted of three types of questionnaires. The questionnaire for reliance on God, the questionnaire for depression and the questionnaire for marital satisfaction. In addition to these, demographic questionnaire was added.

**Results:** A meaningful relationship was observed between marital satisfaction and reliance on God; also a positive meaning full relation was found between reliance on God and the rate of depression. In the study
no meaningful relation was observed between marital satisfaction and depression.

Keywords: Reliance on God, Marital satisfaction, Depression, Female practitioners.

THE EFFECTS OF “THEORY OF PLANNED BEHAVIOR” BASED EDUCATION ON THE PROMOTION OF BREAST CANCER CONTROL BEHAVIOR IN EMPLOYED WOMEN

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Introduction: Breast cancer remains the most common malignancy and major cause of death in women worldwide. Mammography is considered the most exact means to detect breast cancer in the earlier stage, which can reduce mortality of the disease. The current study aimed at evaluating the effects of an education program using the Theory of Planned Behavior on promoting of breast cancer control behavior among employed women aged 35 years and over.

Materials and Methods: This survey was a quasi-experimental study which evaluated the effectiveness of an education program to promote attitudinal factors associated with early detection of breast cancer in 220 women aged 35 years and over, who were working in Tehran pharmaceutical factories. Means of data collection was a questionnaire. The obtained data was analyzed by means of SPSS statistical software (version 11.5) using non-parametrical tests (Chi-Square, Mann-Whitney, McNemar’s, Wilcoxon); and P<0.05 was taken as the significant level.

Results: It was found that the mean score of knowledge, attitude, perceived behavioral control, intention and behavior in women regarding mammography in the case group significantly increased and the observed difference in the control group was not significant.

Discussion and conclusion: Application of the Theory of Planned Behavior has an acceptable influence on promoting mammography behavior. It is, therefore, recommended that education programs apply the theory to promote mammography behavior (in women).

Keywords: Breast cancer, Mammography, Theory of Planned Behavior, Employed women's education

ROLE OF HEALTH VOLUNTEERS IN EDUCATING WOMEN ABOUT MENOPAUSAL HEALTH: RESULTS OF AN INTERVENTIONAL STUDY

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Introduction: Today, due to increased life expectancy, women live at least one third of their lives in menopausal period. This period of life is usually accompanied by some early and late undesirable changes, which lead to decline in women’s quality of daily livings. Self care education to women during menopause or before through partnership of health volunteers seems an appropriate but a needed strategy. Searches to find relevant literature showed few Studies conducted in this field. This study, therefore, was carried out to evaluate the impact of a self-care training, delivered by health volunteers, on women's knowledge and practice about menopause health. This is done in public health centers of Shiraz city, Iran, 2009.

Materials and Methods: Among the 70 centers affiliated with Shiraz’s health district eight health centers were randomly selected. 48 healthy volunteers (six volunteers in each center) were selected randomly. They, then, were randomly assigned to intervention and comparison groups. 480 women among women covered by health volunteers (10 women per volunteer) randomly chosen target audience, as well. At first, health volunteers were trained through a two-day workshop. The health volunteers, then, were asked to teach the instructional content to the women. A written test to measure knowledge of women before and one month after intervention was implemented training for them. Changes in the women's knowledge, as an index of health volunteers practice, were measured before and one month after intervention by using a written test. Research data were processed and analyzed, using nonparametric tests (Wilcoxon and Mann Whitney), in SPSS statistical software, version 11.5.

Results: Few women in the study groups (2 and 12 women in the intervention and comparison groups, respectively) due to some reasons (death of spouse, traveling and not available at the time of the posttest) were excluded from the study. More women in the intervention group (50.80) and comparison group (47.20), had secondary school certificates. Pre-test findings showed a low level of knowledge about menopause among studied women. The average pre-test scores of knowledge of women in case and control groups were 12.37 and 15.15, respectively. Posttest findings (done one month after the intervention) showed that knowledge of women in the experimental group (mean=25.36, SD=3.39) significantly improved, in comparison with pretest findings (p<0.001). Knowledge of women in the comparison group at posttest (mean = 14.89) was not significantly different from their knowledge at pretest.

Discussion and conclusion: Findings of this research support the effectiveness of health volunteers’ role in educating women about menopausal health, and suggest this as a useful strategy for empowering community women for their health.

Keywords: Health volunteers, Menopausal health, Women, Empowerment, Knowledge, Practice
**THE RELATIONSHIP BETWEEN WOMEN'S BODY SATISFACTION AND ANTHROPOMETRIC FACTORS**

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**Introduction:** Body weight is of physical and psychological importance to women; it is associated with health status, physical activity, body image, and self-esteem. Overweight women are most susceptible to being stigmatized for their weight due to a cultural preference for women to be thin. Women have reported more negative experiences due to weight stigma than men have. We investigated the relationship between body satisfaction and anthropometric factors in a sample of middle aged Iranian women.

**Materials and Methods:** Data were collected from 58 middle aged urban women using convenience sampling method. The women expressed their perceptions of current and ideal body image, which allowed assessment of satisfaction or dissatisfaction. Heights, weights, waist and hip circumference were measured, and body mass index was calculated. Body satisfaction was determined using a BASS scale.

**Results:** Mean age and education of the participants were 34.4 and 8.3, respectively. Only 17.2% of women were physically active. Approximately, 38% of women were overweight and 48% were obese, but 27.6% reported a diet history. Mean body satisfaction rate was about 60%. There was a statistical relationship between height satisfaction and facial features, body weight, upper & lower limbs appearance and muscles (p<0.05). We found an inverse correlation between weight satisfaction and body mass index (p<0.01).

**Discussion and conclusion:** Body satisfaction was correlated indirectly with BMI and hip circumference and directly with WHR index (p<0.05). Addressing these issues may help to reduce the negative effect of weight perceptions, as well as offer a way for women to address multiple aspects of their psychological well-being.

**Keywords:** Obesity, Body satisfaction

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**STAGE OF CHANGE FOR MAMMOGRAPHY ADOPTION ACCORDING TO HEALTH BELIEF MODEL AMONG IRANIAN WOMEN**

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**Introduction:** Breast cancer is the most common type of cancer in women. The incidence of breast cancer is increasing and the incidence age for Iranian women is at least 10 years earlier than in western countries. Adherence to recommended screening behaviors is reported to be low in Iranian women and is likely a contributing factor in the incidence of breast cancer deaths in this population. The Health Belief Model can guide research regarding the beliefs Iranian women hold toward breast cancer screening. Another model that applied to this research area was the Stage of change model of behavior change which includes the stages of change that a person moves through when adopting a behavior. The aims of current study were to investigate proportion of women in each stage of mammography adoption. Differences in psychosocial factors across the stage of mammography adoption.

**Materials and Methods:** A random sample of 477 employed women (mean age=47.7, SD=5.8) from Sanandaj, Iran, was recruited in the study. Inclusion criteria were being older than 40 years, not having breast cancer, and not breastfeeding or pregnancy. Participants were asked to respond a self report questionnaire to assess their beliefs mammography and past mammography history also their intention to be screened in the future year. Descriptive statistics were computed to describe the distribution across the stage of mammography adoption. ANCOVA with post-hoc sheffes tests were used to identify stage differences of independent variables and socio-demographic variables as covariates.

**Results:** Results distribution across the stages was: pre-contemplation, n= 97 (20.3%); contemplation n=189 (39.6%); action, n= 82 (17.2%); maintenance, n= 85 (17.8%) and relapse n=24 (5%). Difference in psycho cognitive factors according to constricst of health belief model were found between the stages when socio-demographic variables (age, education level, income, history family breast and insurance) included as covariates (p<0.001). Those who were in action and maintenance stages perceived higher susceptibly, severity, health motivation, benefits and lower barriers than participants in per-contemplation, contemplation and relapse.

**Discussion and conclusion:** These data can also be used to guide the development of more effective educational programs and behavioral interventions. By understanding women’s beliefs and practices related to breast cancer screening, the facilitators and barriers can be better determined.

**Keywords:** Breast cancer, Iranian women, Stage of mammography adoption, Health Belief Model

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**PREVALENCE OF FEMALE GENITAL MUTILATION AND THE EFFECTS OF HEALTH EDUCATION BASED ON BEHAVIORAL INTENTION MODEL ON ATTITUDES AND BEHAVIORS IN WOMEN REFERRING TO HEALTH CENTERES IN RAVANSAR-IRAN**

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**Introduction:** FGM (Female Genital Mutilation) in
women, include all methods of partial or total withdrawal of foreign sector of genitalia without specific medical reasons. World Health Organization has estimated that about 100 to 140 million girls and women with side effects of FGM. Due to the effects of FGM, this study has performed to determine the prevalence of FGM and its risk factors in women referred to health centers of Ravansar (Kermanshah province) and to investigate the effect of educational interventions on change of women's attitudes based on Behavioral Intention Model.

**Materials and Methods:** The first part of this study was cross-sectional (descriptive-analytical) method. 348 women referred to 5 city health centers were studied. Structured questionnaire were used to determine the prevalence and effective factors of performing FGM. Data analysis using descriptive statistics and Pearson correlation coefficient were performed. The second part of this research was an experimental study within which an educational intervention on 50 women who practiced FGM were conducted.

**Results:** FGM prevalence among women participating in this study was 55.7%. The mean age of women was 24.9 years and the prevalence of surgery increased by age. All participants were undergoing FGM by local midwives. FGM prevalence showed relationship with mother's educational level (p = 0.00), religion (P = 0.00) and age (P = 0.00).

**Discussion and conclusion:** Elimination of FGM requires participation of religious leaders and custodians of health and also increase people's awareness about the surgery and its complications. Foreign research has shown that in communities where they take their decision to ban FGM, this action will be dismantled quickly.

**Keywords:** FGM, Behavioral Intention Model, Female

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**INVESTIGATION OF BREAST CANCER SCREENING BEHAVIORS USING THE STAGE OF CHANGE MODEL AND IT’S RELATIONSHIP WITH PSYCHO-COGNITIVE FACTORS AMONG ISFAHAN FEMALE TEACHERS**

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**Introduction:** Breast Cancer is the most common type of cancer and is the second leading cause of cancer deaths in women. Breast Cancer Screening behaviors have critical roles in early detection and decreasing of its mortality. Stages of Change Model and Health Belief Model are two most common models have been applied in Breast Cancer Screening behaviors. The aim of the current study was to investigate the breast cancer screening behaviors based on Stage of Change Model and its relationship with psychocognitive factors in Isfahan female Teachers.

**Materials and Methods:** Thorough Clustered sampling method, 392 teachers were recruited in a descriptive-analytic study (Cross-Sectional). Breast cancer screening behaviors determined by using the Rakoweski stage of change measure, which categorized stage of change to: Pre-contemplation, Contemplation, Action, Maintenance and Relapse. Psycho-cognitive factors were determined by Persian version of Champion’s Health Belief Model scale (CHBMS). Data were analyzed by descriptive statistical tests and One-Way ANOVA tests.

**Findings:** The subjects mean age and SD was 41.9±6.1 years. Stages of Change Distributions for BSE were 15.8% in precontemplation, 32.1% in contemplation, 17.6% in action, 27.8% in maintenance and 6.6% in relapse stage. For mammography screening behavior 22.5%, 31.5%, 22.7%, 17.6% and 6.6% were in the stages of Precontemplation, Contemplation, Action, Maintenance and Relapse stage, respectively. ANOVA test showed significant difference between stages of change and perceived benefits with BSE (p=0.04) and mammography (p=0.02) and motivation for health (p=0.001).

**Discussion and conclusion:** The Findings indicated that higher perceived benefits and motivation for health are the best predictors for BSE and Mammography performance (action and maintenance stages). Hence, it is recommended that with implementing appropriate educational programs with focus on benefits of BSE and Mammography in early detection of Breast Cancer. Additionally creating positive motivation for health among women, increase their adherence and transition into action and maintenance stages.

**Keywords:** Screening Behaviors, Breast Cancer, Stage of Change Model, Health Belief Mode, Teachers
Short Presentation
**Chronic and Degenerative Diseases Prevention**

**LIFE STYLE-RELATED OSTEOPOROSIS PREVENTIVE BEHAVIORS AND ITS RELATED FACTORS: A CROSS-SECTIONAL STUDY AMONG FEMALE STAFF**

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**Introduction:** Osteoporosis is a serious metabolic bone disorder. It is a silent disease that causes a debilitating loss of bone mass. Osteoporosis is a major health problem in women, and affects their life quality. This disease is largely prevented with lifestyle changes. Considering the fact that investigation of life style-related osteoporosis preventive behaviors in health promotion planning is necessary, this study was done to determine Factors influencing life style-related osteoporosis preventive behaviors in female staff.

**Materials & Methods:** This study was a descriptive-analytical cross-sectional study. About 172 staff was randomly chosen by stratified sampling in female staff of Tehran University of medical sciences. Data were collected using three questionnaires: 1) demographic questionnaire, 2) osteoporosis related food habits questionnaire, and 3) other preventive behaviors questionnaire (Physical Activity and cigarette smoking). Data were analyzed using student t-test, one-way analysis of variance, kruskal-wallis, mann-whitney and tukey tests.

**Results:** Mean score of life style-related osteoporosis preventive behaviors in female staff was 14 out of a possible 24 maximum attainable score. Significant relationships were found between life style-related osteoporosis preventive behaviors and educational level, menopause status, number of pregnancies, age, information sources, kind of faculty and knowledge (P<0.03 and less).

**Discussion & conclusions:** According to the findings, these staff demonstrated average level of life style-related osteoporosis preventive behaviors. The authors recommend development and implementation of educational programs especially for Pharmacy faculty staff, middle aged staff and staff with diploma grade, offering educational booklets, reduce consumption of tea and allocate places and facilities for physical exercise.

**Keywords:** Osteoporosis, Life style, Staff

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**THE QUALITY OF SERVICES PROVIDED IN PHYSIOTHERAPY CLINICS FROM THE CLIENTS PERSPECTIVE IN TABRIZ**

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**Introduction:** Regarding study results indicated that from the participants’ perspective, choice of care providers, prevention and safety had lowest performance level scores and prompt attention, confidentiality and quality of basic facilities and equipments had the highest level of performance score, respectively. Furthermore, result showed significant relationship between age and continuity of care; education level and autonomy, and prompt attention (p<0.05).

**Discussion and conclusion:** Regardless study results it could be conclude that in some aspects of service quality there is a considerable gap between perceived and expected level of services. So, there are significant opportunities to improve at least 6 aspects of service quality including choice of care provider, autonomy, respect, safety, prevention and accessibility.

**Keywords:** Service quality, Patient perspective, Physiotherapy

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**MODEL OF SELF-MONITORING OF BLOOD PRESSURE DETERMINANTS AMONG HYPERTENSIVE PATIENTS IN YAZD BASED ON PATH ANALYSIS OF BASNEF MODEL VARIABLES**

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**Introduction:** The high prevalence of hypertension along with its serious complications on the body, have changed this disease to an important problem in the world. The prevalent remedies have not been effective in controlling the disease, yet. Blood pressure monitoring in the house may be an effective method. Path analysis is an exact statistical method for determining a best causative model of variables. So, the aim of this paper is application of regression based path analysis for *Introduction* of the best model of self-monitoring of blood pressure.
undertaken and several themes were emerged from the data. The themes derived from patients are presented into two groups including: factors influencing awareness of the programmes and factors affecting the programme attendance. The themes related to health professionals are also grouped into two categories including: factors influencing health professional engagement and perceived factors affecting patients.

Discussion and conclusion: This study indicated that participation in the programmes is influenced by individual factors and self-management support. To promote improved awareness and access of patients to the programmes, both patients and health professionals need to be better supported.

Keywords: Diabetes, Self-management education programmes, Participation

EFFECTS OF EDUCATIONAL INTERVENTION BASED ON PRECEDE MODEL ON SELF-CARE BEHAVIORS IN PATIENTS WITH TYPE 2 DIABETES

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Introduction: Diabetes is a chronic disease and its control requires essential change in patients’ lifestyle. The aim of this study was to design and evaluate an educational program on the basis of PRECEDE Model on self-care behaviors in type 2 diabetes patients.

Materials and Methods: This was a quasi-experimental study of the pre- and post- intervention test type carried out in 78 patients with type 2 diabetes, who have referred to Minoodasht clinic of diabetes. The educational program has been designed according to the stages of PRECEDE Model and the educational content was based on the educational needs of patients. Prior to perform the educational intervention, the patients filled a questionnaire which was designed according to the structure of PRECEDE Model for type 2 diabetes patients. The diabetes education program was performed in PRECEDE Model framework on three target groups (patients, their families, and Health care personnel for six weeks. After four weeks, the effect of the educational program on promotion of self-care behaviors of patients (blood glucose control, drug taking, their diet, exercise, formation File and participation in clinic’s educational programs of diabetes) have been evaluated through a questionnaire. The findings were analyzed using SPSS software, pair T-test, and McNemar’s test at the significance level of 5%.

Results: The findings showed that there was a significant difference between pre- and post-test scores of elements in PRECEDE Model (predisposing factors, enabling factors, and behavior reinforcing factors), in such a way that the pre-test mean score of participants’ behavior

FACTORS INFLUENCING PATIENTS’ PARTICIPATION IN SELF-MANAGEMENT EDUCATION PROGRAMMES FOR DIABETES IN LEEDS-ENGLAND

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Introduction: Diabetes is a common chronic condition and a challenging issue for the NHS in the UK. Despite the established benefits of diabetes self-management education programmes for patients and healthcare systems, most people with diabetes have not attended and also only small number of those who have not participated in the programmes would like to take part. Factors that influence patients’ participation in the programmes are not well-defined in England and this study attempted to identify such factors.

Materials and Methods: An inductive approach was adopted to explore the perspectives and experiences of patients who would not like to attend the programmes as well as health professionals who had contact with patients with diabetes. A purposive sample was recruited comprising 14 health professionals providing diabetes care and 16 patients with diabetes who had previously stated their willingness to take part in a qualitative study. The individual semi-structured face-to-face interviews were conducted from June to October 2009. The data was coded using NVivo software (QSR 8) and a thematic analysis approach was undertaken.

Results: An inductive approach to coding was
which was 3.98±1.02, has been increased to 4.83±0.87. **Discussion and conclusion:** The obtained results based on PRECEDE Model would support the positive effect of the educational intervention and its major elements (predisposing factors, enabling factors, and behavior reinforcing factors) on diabetes self-care behaviors. **Keywords:** Education, PRECEDE Model, Self-care, Type 2 diabetes

DETERMINANTS OF SELF-REPORTED NON-ADHERENCE TO MEDICATIONS IN PATIENTS WITH HYPERTENSION

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**Introduction:** Anti-hypertensive drugs are the most frequently used intervention to control blood pressure. Research concerning the effect of drugs showed serious non-adherence (NA): people failed to use anti-hypertension drugs as prescribed and it is estimated that over the third of medication prescribed for chronic illnesses is not taken as directed. Adherence is a strong determinant of taking medication in patients, suffering from hypertension (HTN). The aim of the study was to examine determinants of medication non-adherence in hypertensive patients.

**Materials & Methods:** predictor variables included gender, education, living status (with others or alone), perceived health status, the Beck Depression Inventory-2, perceived hypertension symptoms, and economic status. This cross-sectional descriptive study included 60 patients, referring to Bajgah health home to control hypertension. Patients scoring ‘once’ or higher on the item “During the past 14 days, how often didn’t you take your medication?” were considered NA.

**Results:** Prevalence of medication non adherence was 15% and the following factors were related to non adherence: male gender (p< 0.01), employers (p< 0.05), lower education (p< 0.001), depression (p<0.01), living alone (p< 0.05), lower economic class (p< 0.001), less perceived understanding for high hypertension symptoms (p< 0.05).

**Discussion and conclusion:** Addressing these predictors in interventions may increase medication taking and better hypertension control in patients. Patients’ understanding of hypertension side effects, their distrust about medications in general, and specific concerns and feeling the necessity of taking anti-hypertension drugs could be rewarding targets for further intervention studies.

**Keywords:** Non-adherence, Hypertension, Medication

THE EFFECT OF EDUCATIONAL PROGRAM BASED ON BASNEF MODEL ON CONTROLLING BLOOD SUGAR IN TYPE II DIABETIC PATIENTS

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**Introduction:** The purpose of this study was to determine the effects of educational program based on the BASNEF Model on Diabetic (Type II) patients about Controlling of Blood sugar.

**Materials and Methods:** This was a quasi-experimental intervention study. One hundred patients with type II diabetes (50 cases and 50 controls), between the ages of 40 and 65 years, having had diabetes for over 5 years, participated in the study. The instruments for data collecting were a questionnaire established based on the BASNEF Model, a check list related to patient practice on the basis of self reporting, a check list for recording the patients’ HbA1c and FBS levels report as well. All groups completed the questionnaires and check lists results were documented before and three months after intervention. The patients of the experimental group participated in 6 educational session classes during the one month of intervention and again two months after, with 2 session meeting classes as the follow up of intervention. The data were collected and analyzed by SPSS computer software.

**Results:** Our findings indicated that mean scores of BASNEF Model variables (beliefs, attitudes, subjective norm, enabling factors) were significantly increased in the experimental group compared to the controls after intervention. Also, behavioral controlling blood sugar, rate of HbA1c (before intervention as 8.65% after three months 7.47%) and FBS levels (before intervention 207.08, after three months 124.2) improved significantly among the experimental group, compared to control group.

**Discussion and conclusion:** Applying the BASNEF Model is very effective for developing an educational program for diabetics, in order to control their blood sugar and enhancing behavioral controlling blood sugar. Besides such programs, follow up education on controlling and monitoring blood sugar is highly recommended.

**Keywords:** Type 2DM, blood sugar, Educational BASNEF Model

HELP SEEKING BEHAVIORS OF THE HEMOPHILIAC PATIENTS AND THEIR FAMILIES IN ISFAHAN: A QUALITATIVE STUDY

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Introduction: Most of the studies about hemophilia have accented to medical and therapeutic aspects. Regardless of their importance, these studies can not explore construction of patients' perceptions and their families about prevention methods and help-seeking behaviors of them. We have run a qualitative research to explore and develop construction of hemophilic community's culture and their related help-seeking behaviors. We argue in this article about findings of this qualitative research.

Materials and Methods: We applied an ethnographic approach in this study. Participants were 61 hemophilic patients and their first degree sibs in Isfahan (center of Iran). We organized them in 7 Focus Groups Discussions. After quotes' transcription, data analysis was applied via thematic and discourse analysis.

Results: This ethnographic research explored that help-seeking behaviors in participants are formed with concepts such as: self-efficacy, isolation and privacy due stigmatization, religious ideas and beliefs, genders, family contexts as family support, poverty, cultural characteristics and previous experiences on hemophilia disease. This study revealed also some of the most important barriers to contribution of participants in health-related interventions, such as lack of negative perception toward hemophilia due to especial experiences of them, unwarness toward prevention methods and poverty.

Discussion and conclusion: We advise comprehensive counseling and obviation of economic barriers to promote attitudes and help-seeking behaviors of hemophilic community. Also insurance supports can help to promote familial contribution in preventing programs. Meanwhile social education toward hemophilia and its preventing methods will help to cultural correction and relief of hemophilia community from social restrictions.

Keywords: Qualitative study, hemophilia, help-seeking behavior

APPLICATION OF HEALTH BELIEF MODEL IN CHANGING SELF CARE BEHAVIORS OF PATIENTS WITH CORONARY ARTERY DISEASE

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Introduction: Coronary artery disease is the most common cardiovascular disorder with the highest rate of mortality, disability and costs. The purpose of this study was to examine the effect of educational intervention focusing on Health Belief Models (HBM’s) on self care behaviors of patients with coronary artery disease.

Materials and Methods: In this quasi-experimental study, 142 patients with coronary artery disease, who had been admitted in medical and surgical heart wards of Shahid Madani hospital in Tabriz, were conveniently selected. These patients were randomly assigned to either intervention group or control group (71 patients in each group). After determining their education needs using the HBM’s education program was implemented for intervention group. At the initial visit and two month after education, self care behaviors, HBM’s domains and awareness of patients were assessed with using an interview schedule and a questionnaire. Spss software (version 13) was used for data analysis.

Results: Independent T test did not show any statistically difference between two groups in the awareness, self care behaviors and HBM’s domains before the educational program. After implementing the program, the same test indicated a statistically significant difference between two groups in HBM’s domains (p<0.05), except in perceived barriers and perceived benefits domains. Also, a statistically significant difference was seen between two groups in self care behavior domains (p<0.05). After education, paired T test and Wilcoxon test indicated a statistically significant difference in mean and median of awareness, perceived susceptibility, perceived severity, self efficacy and self care behaviors in intervention group (p<0.05).

Discussion and conclusion: Implementing education program based Health Belief Model is useful to predict and change self care behaviors of patients with coronary artery disease.

Keywords: Health Belief Model, Self Care Behaviors, Coronary Artery Disease, Education

EFFECT OF FAMILY-CENTERED EMPOWERMENT MODEL ON QUALITY OF LIFE IN CAREGIVERS OF PATIENTS WITH CEREBROVASCULAR ACCIDENTS

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Introduction: Families are the first source of caring for patients who suffering from cerebrovascular accidents. They provide economic, mental and home support for their patients. By transverse caring from hospital to community, it is obvious that need to caregivers is vital. This study was performed to assess the effect of Family-Centered Empowerment Model on quality of life in caregivers of patients with cerebrovascular accidents (CVA).

Materials and Methods: This quasi-experimental study was conducted on the caregivers of CVA patients refering to Shahrekord Neurology Clinic in 2010. In this study, 60 CVA patients' caregivers were randomly allocated and divided into two groups; experimental (35) and control (33). Family-Centered Empowerment Model was administrated to the individual of experimental
group for 3 months; subsequently using quality of life questionnaire, the level of quality of life was measured in the two groups at the beginning and the end of the study. The data was analyzed, using, chi-square and nonparametric tests.

**Results:** Independent T-test showed that there was no significant difference in quality of life before intervention (p≥0.05) whereas this test determined significant difference between the two groups after intervention. Paired-t test also showed a significant difference in increasing quality of life in experimental group after 3 months (p=0.001). However, this test did not show a significant difference in quality of life in control group (p≥0.05). Using family centered empowerment model, increase level of quality of life in CVA patients caregivers in trial group (p<0.01), whereas in the control group, these parameters, were unchanged (p>0.01).

**Discussion and conclusion:** Empowering the caregivers of patients with cerebrovascular accidents promotes their quality of life leading to more efficient care for these patients. Planning and implementing more effective A program for those caring for chronic diseases is recommended.

**Keywords:** Family-Centered Empowerment Model, Cerebrovascular accident, Caregiver, Quality of life.

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**MODEL OF RHEUMATOID ARTHRITIS PATIENTS QUALITY OF LIFE PREDICTORS IN YAZD BASED ON PATH ANALYSIS OF THE PRECEDE MODEL**

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**Introduction:** Rheumatoid Arthritis (RA) can have a considerable impact on patients’ quality of life. Path analysis is an exact statistical method for determining a best causative model of variables. So, the aim of this paper is application of regression based path analysis for **Introduction** of the best model of RA quality of life determinants, using PRECEDE Model constructs.

**Materials and Methods:** A non-probability sample of 181 outpatients with RA, referring to a rheumatology clinic in the city of Yazd in Iran, participated in this analytic cross-sectional study. Appropriate instruments included questions regarding PRECEDE model constructs were used to measure the variables. Reliability and validity of the instruments were examined and approved.

**Results:** Health status and enabling factors had a direct effect on quality of life within which health status had the most powerful effect. Self-care behaviors, predisposing, reinforcing and enabling factors had an indirect effect on quality of life through health status. After health status, self-care behaviors are the second powerful predictor of quality of life in RA patients and then enabling factors is the third one.

**Discussion and conclusion:** PRECEDE model could be used as a conceptual framework for designing and implementing educational intervention programs to promote quality of life in RA patients. Enabling factors were found as the most powerful factor in the educational and ecological diagnostic stage of predictors of quality of life in RA patients and need to be considered, carefully, while designing intervention programs.

**Keywords:** Self-care behaviors, quality of life, PRECEDE model, Path Analysis.

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**DEVELOPMENT OF A RHEUMATOID ARTHRITIS EDUCATION PROGRAM USING THE PRECEDE_PROCEED MODEL**

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**Introduction:** Pain and functional limitation are specific health-related problems that can lead to the significant low quality of life and suffering from Rheumatoid Arthritis (RA). In order to help RA patients in carrying out and attaining relevant self-care behaviors and adaptation to the limitations of the disease and, consequently, promoting their level of health status, an education program based on the PRECEDE component of the PRECEDE–PROCEED model targeting patients with RA was developed. This paper describes the planning of a Rheumatoid Arthritis Patient Education Program (RAPEP) designed to promote their quality of life.

**Materials & Methods:** The development of the program began with a comprehensive review of the literature. This included a review of the signs and symptoms of RA, accompanying functional disabilities, previous educational programs and the effect of the disease on the patient’s QOL. Moreover, in order to help inform our program development, and organize the survey according to the factors identified in the PRECEDE model a cross-sectional survey was applied on a non-probability sample of 181 outpatients in Yazd.

**Results:** Based on our results regarding QOL and what was found from other studies, for the RA education program, the QOL problem identified was the significant low role functioning, health perception and physical functioning due to chronic pain. It was concluded that one of the most significant modifiable behavioral factors impacting pain and functional limitations is self-care behaviors in RA patients. Our findings suggest that higher level of knowledge, attitude, self-efficacy, enabling factors and social support is associated with better self-care behavior.

**Discussion and conclusion:** Planning, key to any
successful public education project, must include a thorough literature review and the adoption of a conceptual framework that will systematically guide the process. The PRECEDE component of the PRECEDE–PROCEED model provided an excellent conceptual framework for the development of RAPEP targeting RA patients in Yazd. This model provided defined stages that could be systematically utilized in program planning, development and evaluation.

**Keywords:** Key words: Rheumatoid Arthritis; Educational Program; PRECEDE Model

### THE EFFECT OF EDUCATIONAL PROGRAM BASED ON BASNEF MODEL ON BEHAVIORAL METHODS OF STRESS MANAGEMENT IN PEOPLE WITH MULTIPLE SCLEROSIS

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**Introduction:** Multiple Sclerosis (MS) is one of the most common diseases of the central nervous system. MS is the result of damage to myelin. There is the exact relationship between stresses and the onset or progression of MS so stress management is important in people with Multiple sclerosis.

**Materials and Methods:** To investigate the effect of educational program based on BASNEF Model on behavioral methods of stress management in people with multiple sclerosis.

**Materials and Methods:** This was a quasi-experimental intervention study. This study was performed on 97 patients With Multiple Sclerosis between the ages of 15-50 years from Sina and Shariati hospitals, and were randomly divided to two groups, experimental and controls. The instruments for data collecting were a questionnaire established based on the BASNEF Model, a check list related to patient practice on the basis of self reporting. All groups completed the questionnaires and check lists before and one month after intervention, and the patients of the experimental group participated in educational classes during the two months. Eventually, the collected data were analyzed by using statistical tests.

**Results:** Our findings indicated both groups don’t have any significant difference based on demographic characteristics. The mean scores of BASNEF Model variables (attitudes, subjective norm, enabling factors, intention) were significantly increased in the experimental group compared to the controls after intervention. Also behavioral methods of stress management improved significantly among the experimental group, compared to control group.

**Discussion and conclusion:** Applying the BASNEF Model is effective in developing an educational program for people with Multiple sclerosis in order to control their stress. In people with MS stress management is highly recommended.

**Keywords:** Multiple sclerosis, Stress management, BASNEF Model

### QUALITY OF STUDIES PERFORMED ON THE PREVALENCE OF CARDIOVASCULAR DISEASES RISK FACTORS AMONG IRANIANS: FINDINGS OF A SYSTEMATIC REVIEW

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**Introduction:** Expanding urbanisation and alteration in life style of Iranians have had substantial impacts on the occurrence of some major diseases among them cardiovascular disease (CVD) is leading. Qualities of research evidence to base our knowledge about CVD health status of Iranians have a crucial importance.

**Materials and Methods:** All studies that have measured the prevalence of CVD risk factors among Iranians were considered eligible. Nine databases that were considered to be most relevant in terms of objectives of this systematic review were searched. References of relevant articles also were checked and studies recognised through serendipitous discovery were included.

**Results:** Search of the proposed databases yielded 1470 articles. From 104 articles, which met our initial criteria, 63 were multiple publications of the 5 main studies in Iran and in 13 articles usable information was not provided or format of the provided data was not applicable. Eligible studies were classified based on a quality assessment procedure adopted from methods developed by Siegfried N et al. From the included studies indirect method (self report) of observation to measure a quantitative variable was used in two studies. Only in 16 publications participation rate as a criterion of external validity was reported. Only in nine articles prevalence rate estimates of CVD risk factors were given with their precision. Adjusted prevalence rates for major confounding factors were provided in 11 articles. Thus only in four studies all intended criteria for internal and external validity were met.

**Discussion and conclusion:** The overall quality of included studies was highly variable. Different methods, instruments or cut-off points were used in the most of the retrieved articles. Due to the considerable amount of heterogeneity in the applied methodology and differences in the study location or field work date, the calculation of the pooled estimates of the prevalence rates for some of the CVD risk factors among Iranian is burdensome. We strongly recommend using of standard methodologies in CVD related health studies in Iran.

**Keywords:** Quality, Prevalence, Cardiovascular disease, Study
**SELF-CARE BEHAVIORS AMONG CARDIAC PATIENTS AFTER CARDIOVASCULAR SURGERY IN HESHMAT HOSPITAL, RASHT, IRAN**

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**Introduction:** After heart surgery, the patients need to perform self-care behaviors. Thus, assessments of these behaviors in order to promote these behaviors are recommended. The aim of this study was to determine the self-care behaviors in cardiac patients after heart surgery in Heshmat hospital.

**Materials & Methods:** This cross-sectional study was done in Heshmat hospital in Rasht, Iran. Totally, 110 patients who operated in this hospital were selected by purposive sampling method. The data were collected through interview with patients, patients’ self-reporting and patients’ records. The measurement tools were two questionnaires about demographic characteristics and self-care questions. Data were analyzed by descriptive statistical tests.

**Results:** This study showed that just ten percent of studied patients conducted self care at a good level. However, factors such as age, education, occupation, income level, time of illness, and time of hospitalization had a significant relationship with self care behaviors.

**Discussion and conclusion:** As this study showed, the minority of the participants performed self care behavior well. Therefore, training and encouraging the cardiac patients to care themselves, is strongly recommended.

**Keywords:** Self-care behaviors, Cardiac patients, Cardiovascular surgery

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**SOCIOECONOMIC STATUS AND CORONARY HEART DISEASE**

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**Introduction:** Iran has undergone a remarkable demographic transition over the last three decades. Socioeconomic status (SES) indicators including education, income, and occupation are associated with coronary heart disease (CHD) risk factors, morbidity, and mortality. The aim of the present study was to evaluate demographic and socioeconomic characteristics and their association to the diseases and to explore the predictive risk of CHD in Tabriz, Iran.

**Materials and Methods:** This cross-sectional descriptive study was carried out to explore and analyze the current situations and relation deals. The study was conducted among Tabriz statistical population and all related patients referred to Madani hospital were considered. Based on census sectional method, total sample of 189 were chosen from relative cardiac units. In order to collect data, a questionnaire with 15 questions in the form of open and semi-structured questions was designed and used. To analyze the data, SPSS software were applied by using descriptive and inferential statistics and student’s t-tests.

**Results & Conclusion:** The study revealed that participants who were less educated were more susceptibility to CHD. Regarding to occupational status, housewives and retired men experienced the diseases more than the rest of people. Furthermore, most participants were from urban areas who living in an apartment or a complex.

**Keywords:** Coronary Heart Disease, Socioeconomic Status, Health Determinants.

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**Communicable Disease Prevention**

**DESIGN AND EVALUATION OF AN EDUCATIONAL INTERVENTION TO REDUCE HEAD LICE INFESTATION IN FEMALE STUDENTS IN CHABAHAR CITY**

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**Introduction:** The goal of present study was to measure the effects of a designed educational intervention to reduce head lice infestation in female elementary students in Chabahar city.

**Materials and Methods:** This research was a RCT (Randomized Controlled Trial) study. Data gathering tools were questionnaire, check list and head examination. Two schools were randomly selected among female primary schools in Chabhar. Totally, 153 students were divided into case (75) and control (78) groups. After collecting the data, an educational program was designed and performed in the case group. The intervention was evaluated after 2 months.

**Results:** Results showed a significant differences in knowledge, attitude and practice of the students in the case group pre and post education (P<0.0001) which in the control group it was not significant (P=0.05). The infestation rate was 69.3% in the case group before the education, and 82.1% in the control group which decreased to 26.7% in the case group (P<0.0001) and no significant difference in the control group after education (P>0.05). There was a significant relationship between infection and some demographic variables such as father’s level of education, number of bedrooms, number of individuals in a room, lack of water for bathing at home, sort of hair, preinfection in students and having infected cases in family (P<0.05).
Discussion and conclusion: The health education program had a positive effect on the reduction of Pediculosis Capitis among students. It is suggested that applying deliberated educational intervention on students, their parents and teachers might be useful to reach standard health promotion criteria in this field. Keywords: Health education program, Head lice, Elementary students

EXPERIENCES OF STIGMA IN HEALTH CARE SETTINGS AMONG ADULTS LIVING WITH HIV IN AN ISLAMIC COUNTRY
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Introduction: Individuals living with HIV (PLWH) sometimes experience discrimination. There is little understanding of the causes, forms, and consequences of this stigma in Islamic countries. This qualitative study explored perceptions and experiences of PLWH regarding both the quality of health care and the attitudes and behaviours of their health care providers in the Islamic Republic of Iran.

Materials & Methods: In-depth, semi-structured interviews were held with a purposively selected group of sixty-nine PLWH recruited from two HIV care clinics in Tehran. Data were analyzed using the content analysis approach.

Results: Nearly all participants reported experiencing stigma and discrimination by their health care providers in a variety of contexts. Participants perceived that their health care providers’ fear of being infected with HIV, coupled with religious and negative value-based assumptions about PLWH, led to high levels of stigma. Participants have mentioned at least four major forms of stigma: 1) refusal of care; 2) sub-optimal care; 3) excessive precautions and physical distancing; and 4) humiliation and blaming. The participant’s health care seeking behavioural reactions to perceived stigma and discrimination included avoiding or delaying seeking care, not disclosing HIV status when seeking health care, and using spiritual healing. In addition, emotional responses to perceived acts of stigma included feeling undeserving of care, diminished motivation to stay healthy, feeling angry and vengeful, and experiencing emotional stress.

Discussion & Conclusions: While previous studies demonstrate that most Iranian health care providers report fairly positive attitudes towards PLWH, our participants’ experiences tell a different story. Therefore, it is imperative to engage both health care providers and PLWH in designing interventions targeting stigma in health care settings. Additionally specialized training programs in universal precautions for health providers will lead to stigma reduction. National policies to strengthen medical training and to provide funding for stigma reduction programming are strongly recommended. Investigating Islamic literature and instruction, as well as requesting official public statements from religious leaders regarding stigma and discrimination in health care settings, should be used in educational intervention programs targeting health care providers. Finally, further studies are needed to investigate the role of the physician and religion in the local context.

Key Words: Stigma, HIV, AIDS, IRAN, Muslims

THE RELATIONSHIP BETWEEN SENSATION SEEKING AND BEHAVIORAL ACTIVATION/INHIBITION BRAIN SYSTEM IN HIV POSITIVE PATIENTS
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Introduction: Sensation seeking is a part of Behavioral Activation System (BAS). The present study has been conducted with the aim of determining the sensation seeking and Behavioral Activation/Inhibition Brain System (BAS/BIS) in HIV positive patients.

Material and Methods: This was a correlational study. 50 HIV positive patients of Tabriz Health Center were chosen by disposal sampling method. All data were collected with demographic questionnaire, Zukerman Sensation Seeking Scale (SSS) and Carver- White Behavioral Activation/Inhibition Brain System Scale. Statistical analysis with SPSS.17 software and statistical methods Pearson's correlative coefficient and Stepwise Regression were performed.

Results: The mean age of HIV positive patients were 36.14±8.36. Forty nine (98%) of HIV positive patients had the experience of drug addiction. 25 (50%) of HIV positive patients had the experience of sexual relations in which 24 (96%) of them had not used a condom. General Sensation Seeking and Adventure seeking had the negative correlation of 0.29 and 0.31 with BIS respectively (P<0.05). General Sensation Seeking, Experience seeking and Adventure seeking had positive correlations with BAS (P<0.01). According to the results of Stepwise Regression analysis, Adventure seeking had a predicting role in BIS, and Experience seeking had predicting role in BAS.

Discussion and conclusion: The results of this study suggests that Behavioral Activation/Inhibition Brain System has a good theoretical importance in explaining the high risk behaviors.

Keywords: Behavioral Activation/Inhibition Brain System, Sensation Seeking, Human Immune deficiency virus
EVALUATION OF HIV/AIDS WEBSITES IN PERSIAN: A PRELIMINARY STUDY

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Introduction: HIV positive patients or individuals who are at the risk of AIDS, have a few intentions to visit a physician, hospital or other clinical centers for achieving information about AIDS because of wrong perceptions or cultural reasons in Iran. Since internet and websites create privacy for their users in order to search needed information, reliability of the information is very crucial. The aim of this study is to evaluate the structure of Persian HIV/AIDS websites.

Materials and Methods: We searched for “AIDS” in Persian as a keyword in the first 15 pages of Yahoo and Google and also LinkedIn website. Fifty four HIV/AIDS websites in Persian retrieved. Considering at least 2 articles about AIDS in the website was the main inclusion criteria. The checklist developed based on Silberg, NLM and MLA checklists. The data were analyzed using SPSS 14.0 and Chi-square ($\chi^2$) test was used to compare the qualitative variables.

Results: Of the selected websites, 28 were organizational and 26 were non-organizational websites. Authors were identified in 53.7% and editors in 27.8% of the websites. The policy of data selection was clear only in 37% of the websites. More than 55% mentioned website creation date and 40.7% identified their content posting update. Thirty seven percent of websites had disclaimer notice. Only 8% used podcasts and 37.7% utilized images on their webpage. Less than 54% cited the reference. In 70.4% interaction was via email, 57.4% via comments and less than 10% via forums. Insite searching was possible in 70.4% and only 9.3% in other search engines. While 79.6% of websites were designed for public, only 7.4% had specific webpage for teenagers. There was no significant difference between organizational and non-organizational websites in specification of authors, editors, creation date and updating, while it was significant in mentioning goals ($\chi^2 = 5.4$, df = 1, $p < 0.05$) and reaching goals ($\chi^2 = 6.73$, df = 2, $p < 0.05$).

Discussion and conclusion: Most of the websites suffered from the lack of fundamental evaluation indicators. Although the provided information was useful, it seems they get low credits in website evaluation because they do not follow fundamental indicators. This is true even in organizational websites which most of them are related to universities and accredited institutions. According to the essential role of teenagers’ awareness, dramatically low percentage of specific websites for them needs more attention.

Keywords: Website evaluation – HIV/AIDS websites

EFFECTS OF EDUCATIONAL INTERVENTION ON BRUCELLOSIS CONTROL AND EPIDEMIOLOGIC FINDINGS IN EAST AZERBAIJAN, IRAN

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Introduction: Brucellosis is a zoonotic disease with worldwide distribution which is transmitted to humans from infected animals. Brucellosis is a common disease in East Azerbaijan. Charoimagh is the most prevalent area in the province. The aim of this study was to determine the effect of interventions which were designed by epidemiologis findings and needs assessment.

Materials and Methods: After conducting a situational analysis and needs assessment by gathering data from all general and specialists clinics, public and private sector, laboratorries ,the following interventions were selected: face-to-face education for patients and their families, systematic data gathering, recognizing infected area and improving the process of patient visit as follow: 1- General practitioner(GP) visit,2- laboratory test,2-referring to disease control unit in order to completing the forms and health education,4- visiting GP for prescribing medicine,5- refer to pharmacist to get the medicine

Results: Before implementation of this intervention, incidence rate of brucellosis was 4.14/100000 or 421 cases in a year( the highest rate in the province) .Among 360 cases,55% were male and 78% lived in rural area. The most common age group was 30-50 years old.After controlling program and improving the patient detection and education process , incidence rate fell to 2.4/100000 . There were no change in male to female ratio age distribution of disease before and after intervention .

Discussion and conclusion: Interventions such as intensive health education of patient at the time of disease diagnosis and registration and family education, and improving the process of patient visit decrease the incidence rate of this common disease .

Keywords: Brucellosis, Control program, Health education.

THE SURVEY OF PREVENTIVE BEHAVIORS REGARDING THE H1N1 SWINE INFLUENZA PANDEMIC 2009: AN APPLICATION OF PROTECTION MOTIVATION THEORY AMONG HIGH SCHOOL STUDENTS IN ISFAHAN.

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Introduction: The objective of this study was to evaluate the preventive behaviors of students against the H1N1 swine influenza pandemic 2009. The study took place in a high school in the city of Isfahan in 2010. The students (N=378) were selected through cluster random sampling.

Results: The results showed that the highest rate of students' preventive behaviors was in the pharmacist. It was followed by visiting GP, referring to disease control unit in order to completing the forms and health education, visiting GP for prescribing medicine, visiting GP for performing a laboratory test.

Discussion and conclusion: The results showed that the preventive behaviors of students against the H1N1 swine influenza pandemic 2009 were not sufficient. It is necessary to implement more educational programs and health education to increase the students' preventive behaviors.

Keywords: H1N1 swine influenza, Preventive behaviors, Protection motivation theory.
Maternal Health

QUALITY OF NON-HEALTH ASPECTS OF CARE FROM THE PERSPECTIVE OF PEOPLE WITH CAESAREAN SECTION AND NORMAL DELIVERY

Tabrizi J.S', Asghari S, Koshavar H
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Introduction: Non-health aspect of care reflects the experience of the patient with the health care system, including relationships between patients and care providers, facility standards and support services. So, this study aimed to assess the non-health aspects of quality of delivered care for people with Caesarean Section and Normal Delivery.

Materials & Methods: A cross-sectional study was conducted among 168 people who had caesarean section and normal delivery in Al Zahra teaching hospital in Tabriz. Quality of non-health aspects of care was calculated using the equation of: 10 – (I × P) based on importance (I) and performance (P) of non-health aspects from the patients’ perspective. Quality of 8 and grater was considered as good quality. Data analyzed with SPSS.

Results: The average value of importance, performance and quality of care were calculated for 12 non-health aspects of quality from the participants’ perspective. “Communication”, “choice of care provider” and “autonomy” achieved scores at the level of good quality; and “support group”, “continuity of care”, “basic amenities”, “timeliness”, “dignity”, “prevention and early detection”, “confidentiality” and “safety” reached service quality score less than 8. Statistically significant differences was found between service quality score and living in urban area (P=0.014), planned pregnancy (P=0.004) and continuity of care (P<0.001).

Discussion and conclusion: Study results revealed that from the participants’ perception there was a notable gap between their expectations and what they have actually received in most aspects of provided care. So, there is good opportunity to reduce the gap and improve the quality of delivered care for people with caesarean section and normal delivery.

Keywords: Non-health aspect, Patients’ perspective, Caesarean section, Normal delivery

THE EFFECT OF HOLY KORAN SOUND ON THE INTENSITY OF LABOUR PAIN IN NULLIPARUS WOMEN

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2. Nursing& Midwifery Faculty, Kordestan University of Medical Science

Introduction: Labour pain is often severe, and analgesic medication may not be indicated. Non-pharmacological pain relief is any method used to relieve pain that does not involve taking medications. In this study we examined the effects of holy Koran sound on sensation and distress of pain in primiparous women during the active phase of labor.

Materials & Methods: The present research is a semi experimental study carried out on the prima gravida women who were admitted to delivery room in khoy in 2010 to investigate the effect of holy Koran sound on the primary stage of labour. This research was conducted on 60 prima gravida women with age 18-39 years old who were selected randomly and then divided into two equal experimental and control groups. After being admitted in to the delivery room during initial stage, the intensity

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of labour pain were measured and recorded by a ruler, for the experimental and control group during the active phase of delivery. Women in the intervention group were allowed to hear holy Koran sound by headphones for thirty minutes followed by 30 minutes of silence repeatedly during the first stage of labor. Labor pain was measured and recorded. we used x2, t and t test to analyze the collected data statistically.

**Results:** There was no significant difference between the two groups in terms of pain intensive when being admitted to study. However, significant difference between the experimental and control groups were observed during the active phase of delivery in terms of pain intensities(p< 0.001). So that the average pain intensity during the first stage of delivery in the control were higher than in the experimental group. In the experimental group, significant difference of labour pain intensities during admittance and first stage of delivery was not observed, but there was a significant difference in the control group. The significant difference between the experimental and control groups were observed in term newborn infant's Apgar score (p<0.04), the length of first stage of labour in the experimental was shorter than the control group (p<0.001).

**Discussion and conclusion:** The results indicated that holy Koran sound can be used as non-pharmacological method in reduction of labor pain and length of delivery in nulliparous women.

**Keywords:** Labour pain, Nulliparity, Delivery, Sound

**THE EFFECT OF EDUCATION BASED ON HEALTH BELIEF MODEL ON OSTEOPROSISE PREVENTION AMONG PREGNANT WOMEN REFERRING TO ARAK HEALTH CENTERS**

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1. Arak University of Medical Sciences.

**Introduction:** Osteoporosis is a systemic skeletal disorder, characterized by reduction of bone mass, deterioration of bone structure, increasing bone fragility, and increasing fracture risk. Prevention of osteoporosis is one of the most important issues in World Health Organization. By now researches that study on mother in osteoporosis prevention is not performed so this study was designed to evaluate effectiveness of HBM model in osteoporosis prevention among pregnant mothers refer to Arak health centers.

Methods and materials: In this quasi-experimental study one hundred fifty pregnant women participated. The subject divided into two experimental and control groups (each group included 60 women). Data collected with a questionnaire based on HBM and checklist about prevention of osteoprosis in order to evaluated the effectiveness of education program. Before intervention questionnaires were completed. Then the educational intervention was performed. Educational intervention in the form of four training sessions using lectures, group discussions, dialogue, more there training packages (posters, pamphlets and pictures) After one month data were gathered again and then analyzed.

**Results:** The mean age of cases and controls were 26.7±4.7 and 23.4±4.4 years respectively and the mean duration of gestation were 23.2±11 and 23.4±10 weeks, respectively.

**Discussion and conclusion:** Research findings showed that knowledge, self efficacy health behavior action for osteoporosis prevention were in low stage. With knowledge, perceived susceptibility, severity and benefits and self efficacy increasing, perceived barriers decreased and health behavior action for osteoporosis prevention was increased. So this model is suggested to other health centers.

**Keywords:** Health Belief Model, Osteoporosis, Pregnant Women

**EFFECTIVENESS OF NUTRITION EDUCATION PROGRAM BASED ON HEALTH BELIEF MODEL COMPARED WITH TRADITIONAL TRAINING ON THE RECOMMENDED WEIGHT GAIN DURING PREGNANCY**

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**Introduction** and aim: The greatest physiological pressure in women’s life is caused during pregnancy when the most important changes are created in their biological conditions. One of these changes is weight gain in pregnant women as valid indicators of nutrition in this period which is measured by Body Mass Index (BMI). This study compared the effect of nutrition education program based on health belief model with classical training on the recommended weight gain in pregnant women during pregnancy in Gonabad city.

**Materials and Methods:** In this quasi-experimental controlled study ,110 pregnant women were present who referred to health centers in Gonabad city in 2009. They were two groups of experimental(54 women) and control (56 women). The data was collected based on researcher-made questionnaire in which the validity and reliability were approved. At the first time we had a pregnancy care. Then there were 2 sessions of educational intervention program, proportional to the health belief model structures of both groups and finally two training sessions based on the classical (traditional) training. Post test was done in the last stage of pregnancy care for both groups. All the data was analyzed by the statistical tests (in the significance level of P<0.05).

**Results:** The results did no show any significant differences among education, parity, abortion, jobs and the age mean age in two groups. After the intervention, the most important external action guide was spouses in experimental group (88.26%) and healthcare workers for control group (51.56%). Also, there was a significant
difference in the score mean of knowledge, perceived susceptibility, severity, threat, benefits and barriers and nutritional behaviors of the experimental group, where as just knowledge score mean showed this difference in control group. And finally, there was a significant difference between two groups due to recommended gaining weight in pregnancy.

Discussion and conclusion: While 77.78% of experimental group achieved recommend BMI, just 32.29% of control group members gained this criterion. This study proved that HBM application in nutritional education was successfully effective to gain recommended weight in pregnancy. So, this increased suitable weight gain reached its maximum and unstandardized weight gain reached its minimum in accordance with women BMI.

Keywords: BMI, Health Belief Model, traditional education, pregnant women, prenatal nutrition

EFFECT OF EDUCATION ON FAMILY PLANNING PRACTICE USING TRANSTHEORETICAL MODEL (TTM) AMONG WOMEN IN ZAHEDAN

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Introduction: In last decade, world population has grown faster, approximately 93% of this growth has occurred in Africa, Asia, and Latin America. Trend of Iran population growth in last century shows that during 92 years Iran population has grown six-fold. The only way of solving this problem is, using effective family planning methods. Objectives: This study aimed to increase the family planning practice among women with the use of Transtheoretical model in Zahedan suburb.

Materials and Methods: This study is semi experimental with intervention (44 women) and control (52 women) group on 96 women between 15-49 years old were studied in two areas almost with similar socio-cultural field. Data were collected by constructed researcher questionnaire that its validity with content validity and reliability with Cronbach were proved. Intervention group according to their stage of change received necessary education and both groups were followed after 3 months. Data were analyzed by SPSS (t- test, paired t- test).

Results: Approximately all women in intervention group showed progress in at least one stage. From eleven people in precontemplation in intervention group 27% went to contemplation, 27% preparation, 45% action stage. In the control group all people in precontemplation stayed in the same stage, variation rate in knowledge and attitude and practice (using contraceptive) between two groups were significant.

Conclusion: education based on TTM can be effective to change, attitude, knowledge and practice (using contraceptive), going ahead during the stage of change

Keywords: Education, Contraceptive, TTM

INVESTIGATION OF EFFECTIVE INFORMATION SOURCES ABOUT FERTILITY BEHAVIOR USING TRIANGULATION METHOD IN VASECTOMIZED MEN

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Introduction: One of the greatest problems of the world at the present time relates to the irregular growth of population in the third world countries including Iran. In Iran, vasectomy only makes up 3.5% of contraceptive methods; it seems that one of the major impediments in the men’s desire to use this method is their lack of knowledge. One of the ways of raising awareness and participation of males for having vasectomy is gaining information from the men who had vasectomy.

Materials and Methods: Triangulation included a combination of qualitative method in the form of individual interviews and quantitative method for investigation of effective factors and the amount of their influence on vasectomy. The number of participants was 25 in qualitative part of the study and 101 in quantitative section.

Results: The results of qualitative part of the study showed that the main sources of obtaining information could be classified into three categories including the effective information sources on the fertility behavior in the men- current position of the mass media upon males’ fertility behavior- men with vasectomy. The qualitative results of the study also revealed that the information sources which were effective on persuading men to have vasectomy, respectively based on their frequency, included men with vasectomy among coworkers, friends, acquaintances, neighbors, and staff of health centers; however, mass media was not the source of obtaining information at all.

Individuals under study were asked to give advice for other people in respect of vasectomy. It was determined that 94.1% of participants persuaded other men to choose it. Only 5.9% of them stated that they wouldn’t suggest to others to bear vasectomy surgery.

Discussion and conclusion: The majority of participants in the current study mentioned friends, acquaintances, and staff of health centers as the main factor of their familiarity with vasectomy, and they indicated that mass media had no role in introducing this contraceptive method and presenting information about it. Lack of presenting information through mass media was indicator of predominance of patriarchy in the system of community. Additionally it revealed that for increasing the amount of males’ participation in fertility health, no measure has been taken by social system of community.

Keywords: Fertility behaviour, Vasectomy, Information sources
EFFECTIVENESS OF “HANDS-ON” AND “HANDS-OFF” EDUCATIONAL METHODS ON BREASTFEEDING SELF-EFFICACY AMONG PRIMIPAROUS MOTHERS

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Introduction: Exclusive breastfeeding is very important for an infant's growth and development. Self-efficacy is a modifiable psychological variable in sustained breastfeeding that is defined as a mother's confidence in her perceived ability about successful exclusive breastfeeding. Self-efficacy beliefs function as an important set of human motivation, affect, and action which operate on action through motivation, cognitive and affective intervention process. Teaching strategies, based on Bandera’s Self-efficacy Theory and adult learning principles were incorporated in this research’s design. regarding the importance of education in increasing breastfeeding self-efficacy and exclusive breastfeeding, the current study was conducted in order to compare of the effectiveness of two educational methods, i.e., “Hands on” and “Hands off” on breastfeeding self-efficacy in primiparous mothers.

Materials and Methods: In the present clinical trial, 136 nursing mothers were randomly assigned to one of the three groups. Participants in the experimental groups received one of the structured one-on-one educational sessions (i.e., hands off or hands on) within the first two hours of giving birth. Mothers in control group received usual postpartum care. Follow-up assessments were conducted one, four, and eight weeks after the birth. Data collection was done through interview forms, examination and observation, checklist of breastfeeding status, breastfeeding self-efficacy and daily-feeding form.

Results: Women who were educated through hands-off technique reported higher self-efficacy exclusive breastfeeding than those receiving hands-on education or usual postpartum care at all measurement points after the intervention.

Discussion and conclusion: The hands-off education possibly is a better technique than hands-on technique.

Keywords: Breastfeeding self-efficacy, Hands off, Hands on, Social Cognitive Theory.

EXPOSURE TO SECOND HAND SMOKE DURING PREGNANCY: UMBILICAL CORD BLOOD COTININE MEASURES

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Introduction: Exposure to Second Hand Smoke (SHS) is a major worldwide public health problem. Exposure to SHS during pregnancy leads to adverse effects on the mother and fetus. The present investigation was designed to evaluate the association between mother’s urinary cotinine concentration and umbilical cord blood Cotinine level and to determine the accuracy of mother’s reported exposure to cigarette smoke during pregnancy.

Materials & Methods: This cross-sectional study was conducted on 108 non-smoker pregnant women in Tehran, Iran. Mothers’ exposure to cigarette smoke was evaluated through reports and urinary cotinine levels and the fetal exposure was measured by level of cotinine in the umbilical cord blood. The association of mothers’ urinary and umbilical cord cotinine was evaluated. Urine samples were collected from the mothers and blood samples after birth were taken from the umbilical cord. The data were analyzed using independent t-test, chi-square test, Pearson and Spearman correlation and Kappa test.

Results: The geometric mean of the Cotinine concentration of the maternal urine and the umbilical cord serum were 27.4 ng/ml and 3.71 ng/ml, respectively in the exposed group and 0.75 ng/ml and 0.40 ng/ml, respectively in the non-exposed group (p<0.001). There was a significant correlation between the maternal urinary and umbilical cord serum cotinine (r=0.58). Significant association was found between maternal reports of cigarette smoke exposure with urinary (Kappa= 96%) and umbilical cord (Kappa= 98%) cotinine (p<0.001).

Discussion and conclusion: The results of the present study suggested a relatively high association between Cotinine and reported SHS exposure, suggesting an equal degree of validity for both objective and reported measures.

Keywords: Second hand smoke exposure, pregnancy, cotinine, Urine cotinine

THE COMPARISON OF UNPLANNED AND PLANNED PREGNANCY OUTCOMES

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Introduction: One of health threatening difficulties in developing countries, is unplanned pregnancy outcomes which has bad effects on reproductive health. Studies showed that, the mother’s decreased attention toward unplanned pregnancy may affect fetal growth. The Purpose of this cross sectional study was determining the outcome of unplanned and planned pregnancy.

Materials and Methods: 225 women referring to Tehran hospitals in 2007 were recruited. An information form was used to collect data. Its validity and reliability were achieved by content and test-retest methods respectively. 65 cases were assigned to unplanned group and 165 cases to planned pregnancy group, respectively. Pregnancy outcomes including birth weight, length, head and chest circumference and apgar score were calculated. Data collection was done by multi stage sampling. Data analysis was done by SPSS 15 and t test and x2 test.

Results: mean maternal age was 25.86 ±4.6 and mean
Mental Health

USING PARTICIPATORY EDUCATIONAL PROGRAM BASED ON PRECEDE MODEL FOR THE SELF-ESTEEM AND PSYCHOLOGICAL WELL-BEING ENHANCEMENT AMONG UNIVERSITY STUDENTS

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Introduction: Students are susceptible to mental health and psychological problems in different situations such as during exam time that may create concerns about the exam results, and also when they have a great deal of assignments, a lack of leisure time, and long time. Therefore, the purpose of this study was to use a participatory-educational intervention for enhancement of self-esteem and psychological well-being of the students in Gonabad and Birjand medical universities during two years.

Materials and Methods: This study was an experimental based on PRECEDE model that 154 university students were randomly selected for the case and control groups. The data were collected by GHQ_28, Rosenberg’s self-esteem scale, enabling, predisposing and reinforcement factors questionnaires. Afterwards the skill training program was used based on focus group discussion method in the sub-group of 12 participants. Then planned and implemented program was evaluated in the groups. The data analyses were conducted through related software and were performed by descriptive and analytic statistical methods.

Results: The results showed that there are significant differences between predisposing, enabling and reinforcement factors, self-esteem and psychological well-being variables before and after intervention to the groups. Moreover, after intervention revealed significant differences psychological well-being (P<0.0001), self-esteem (P<0.001), predisposing factors (P<0.01), enabling and reinforcement factors (P<0.02) to case and control groups.

Discussion and conclusion: With regards to these results that show poorer outcome in the unplanned pregnancy group, performing effective actions to decrease unplanned pregnancy and considering it as a high risk pregnancy is necessary for prevention of the effects of unplanned pregnancy on society health. Additionally effective consultation with mothers about the necessity of correct use of family planning methods seems to be necessary.

Keywords: Unplanned pregnancy, Outcome

COMPARING THE MENTAL HEALTH

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Introduction: Anxiety is a psychological disorder which is treated in different ways such as music therapy. Sometimes it is a melody and sometimes it is a natural music. In this research, an attempt is made to study Quran sound as music and compare it to a quiet music.

Materials & Methods: The research method is semi-empirical with pre-test, post-test on 60 volunteer patients waiting for dental surgery. They are randomly divided into two groups of Quran and music. The Quran group listened to Yasin surah by Menshavi and music group to quiet music of secret garden by Rolf Lovland about 15 minutes with an mp3 headphone. They both completed Spilburger questionnaire. The result was analyzed by SPSS through variance analysis with repeated measure.

Results: The results showed that the average age was 25 and both men and women were the same. Quran and music decreased anxiety similarly (p<0.05) and the result did not have any significant differences. Also this difference was not meaningful in manner anxiety but we had more decrease in Quran group than music one in trait anxiety (p<0.05).

Discussion and conclusion: Quran and music both decreased anxiety but Quran sound affected on personality and covert anxiety in addition to situational anxiety. Therefore, we can infer that the effect length of Quran was more and we can use Quran music in anxiety disorders.

Keywords: Quran sound, Quiet music, Anxiety

THE RELATIONSHIP BETWEEN METACOGNITIVE BELIEFS, SELF-EFFICACY AND MENTAL HEALTH OF M.A STUDENTS

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Introduction: Mental health and survey of its related factors has been the focus of many researchers. Examples of these factors are metacognitive beliefs and self-efficacy. On one hand metacognition has been surveyed as base of many psychological dysfunctions and on the other hand, people should believe their ability to make these changes for changing the undesirable behaviors and choosing suitable hygienic behaviors, which lack of this belief disturbs the motivation of people to change the behaviors related to mental health. So this research has been done to survey relationship between metacognitive beliefs and self-efficacy with mental health of M.A students in Ferdowsi University of Mashhad.

Materials and Methods: The method of this research is descriptive and is of correlation kind. For this purpose, 150 M.A students who are studying in 89-90 academic year in Ferdowsi University of Mashhad, were selected according to Sample Size Formula and using Stratified Random Method. They were assessed using metacognitive questionnaires of Velz(2000) including 30 options, General self-efficacy of Shrer(1982) including 17 options, and General Health of Goldberg(1979), 28-question Form. With regard to slightly hypotheses in this research, we used Descriptive Statistics methods (mean, standard deviation, correlation coefficient of Pearson) and Inference Statistics methods (independent t test, multiple regression with enter and stepwise method). Data analysis were done by Spss 16.

Results: The results of Pearson correlation coefficient show that there is significant correlation between metacognitive beliefs with mental health of students (r=0/29, p<0/001). The other result of this research show that self-efficacy has significant relationship with mental health, too (r=0/73, p<0/001). The results of enter regression analyze show that generally, %59 of mental health variance of all the students can be explained by metacognitive beliefs and self-efficacy. The results of regression analyze with stepwise method show that metacognition and self-efficacy for girls and only self-efficacy for boys have the capability of prediction of mental health (p<0/001). There has been no significant difference between the mean of girls' and boys' scores in three mentioned variables.

Discussion and conclusion: Since mental health is one of the treatable topics nowadays and metacognitive beliefs and self-efficacy have the capability of prediction of this important issue, so the education systems should reinforce these two issues.

Keywords: Metacognitive beliefs, Self-efficacy, mental health, Ms students

THE PREDICTIVE ROLE OF EMPOWERMENT AND PSYCHOLOGICAL WELLBEING IN THE QUALITY OF LIFE OF BREAST CANCER PATIENTS

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Introduction: Previous researches among cancer patients emphasized the fact that patients with senses of empowerment and wellbeing have greater control and better management of their health condition. This research focused on the predictive role of empowerment and wellbeing in the quality of life of breast cancer patients. Also, this study sought to consider that empowerment and psychological wellbeing improves outcome in patients.

Materials and Methods: In a study, 164 patients with a diagnosis of breast cancer by clinicians were randomly selected in five clinical centers of Tehran Universities of Medical Sciences. Participants were completed The Patient Empowerment Scale (PES), Psychological Wellbeing Scale (PWS) and Quality of Life scale (QLS). Psychometric characteristics on the scales evaluated.

Results: Multiple Regression Analyses confirmed that empowerment and psychological wellbeing has significantly predictive role in quality of life of breast cancer patients. Higher empowerment and higher psychological wellbeing was significantly related with better quality of life of breast cancer patients (p < .001). In the other hand, the research also demonstrated that low empowerment and low psychological wellbeing was significantly related to inappropriate and negative quality of life of breast cancer patients (p < .001).

Discussion and conclusion: Patient empowerment and psychological wellbeing emerged as main aspects of enhanced quality of life regardless of disease prognosis and other social and psychological factors for breast cancer patients. The implications of this research are greater attention to empowerment and wellbeing and condensate them to health promotion programs for breast cancer patients in order to foster adaptive coping and control over their disease. Thus, these concepts are fundamental and necessary to regaining management and increasing quality of life for these patients.

Keywords: Empowerment, Psychological wellbeing, Quality of life, Breast Cancer

Nutrition Education

EFFECTS OF EDUCATION ON NUTRITIONAL BEHAVIORS AMONG IRANIAN MILITARY PERSONNEL

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**Introduction:** A healthy diet plays an important role in the wellbeing of military personnel, and can increase physical and mental functions. Educational programs are one of the most important methods for correct nutrition and nutritional behaviors. Correct education may have effects on nutritional knowledge, attitude and practice. The aim of this study was to determine the effects of education on nutritional behaviors in Iranian military personnel.

**Materials and Methods:** This study was a Semi-experimental one through before and after done on 422 military centers personnel with an age range of 19-55 years in Tehran Province. Data collected using a questionnaire that consisted of 56 questions. Before applying the questionnaire it was sent to six experts in nutrition education domains to confirm its validity. The reliability of the questionnaire was tested by test-retest technique (r=0.8). A face-to-face interview, as well as completion of the questionnaire, was used to collect data. The subject's practice was measured in three different levels: low (<50%), moderate (50-75%) and good (>75%). After determining levels of dietary habits, an educational program (software) was designed and distributed among the study participants. Then, four weeks following the first stage, post test was done. The collected data before and after intervention has been analyzed using the SPSS package and Paired t-test.

**Results:** The score mean of knowledge, attitudes, and practice towards correct nutritional model has been raised significantly following the intervention (p<0.05). That is, the score mean and SD of the subjects' KAP was changed from 62.99 (17.09), 44.54 (6.32), and 38.36 (11.48) to 73.47 (18.53), 58.04 (14.35), and 55.57 (25.65) respectively. These differences as mentioned, was statistically significant (p<0.001).

**Discussion and conclusion:** The educational intervention has an accepted effect on correct nutritional model in military centers personnel. According to the study results, it is recommended that such educational intervention may be applied to other military centers.

**Keywords:** Education, Nutritional behaviors, Military Personnel, Iran.

**Impact of a Customized Dietary Intervention on Antioxidant Status, Dietary Intakes, Periodontal Indices and Inflammatory Markers in Patients with Adult Periodontitis.**

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**Introduction:** Nutrition may be important in the prevention and control of chronic adult periodontitis. The role of adequate consumption of fruits, vegetables and whole grains in dietary antioxidants in chronic periodontitis has not been thoroughly investigated. The main aim of this dietary intervention study was to assess the influence of customized dietary intervention (aiming to increase the consumption of fruits, vegetable and whole grains) on antioxidant status in adults with chronic periodontitis. In this study, 51 subjects aged 30 – 65 years old, were recruited from Newcastle
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Dental Hospital in the UK between 2007 and 2008 and were randomly allocated to intervention and control groups. Both groups received normal clinical treatment but, customized dietary advice was delivered to the intervention group by a community nutrition assistant. Dietary intakes, anthropometric parameters, biochemical indices, inflammatory markers in biological fluids (blood and saliva) and periodontal indices, were evaluated at baseline, 3 and 6 months post-dietary intervention. At 3 and 6 months post intervention, the intervention group showed a significant (P<0.05) increase in plasma total antioxidant capacity (TAC) (measured by Trolox equivalent antioxidant capacity assay, TEAC) compared with the control group. At 3 and 6 months following dietary intervention, the intervention group had significantly higher intakes of fruits and vegetables compared with the control group. The intake of whole grain was significantly higher in the intervention group than in the control, 6 months post intervention. No significant differences were observed in periodontal indices and inflammatory markers between groups. High consumption of antioxidant rich foods followed by improving dietary habits may improve antioxidant status in patients with chronic periodontitis, however the impact on periodontal indices and inflammatory markers needs further investigation. It is suggested that dietary advice may help to improve dietary habits and consequently the antioxidant status of patients with chronic periodontitis.

**Keywords:** Periodontitis, Antioxidants, Dietary Intervention

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**THE EFFECT OF NUTRITION EDUCATION ON NUTRITIONAL BEHAVIORS AND GLYCEMIC CONTROL INDICES BASED ON BASNEF MODEL AMONG ELDERLY WITH TYPE 2 DIABETES.**

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**Introduction:** Few diabetes educational programs have been designed specifically for older adults. The purpose of the present study was to determine the effects of nutrition educational program based on the BASNEF (Belief, Attitude, Subjective Norm, and Enabling Factors) Model on the elderly subjects (+60 and higher) with type 2 diabetes.

**Materials and Methods:** In this randomized controlled trial 100 diabetic elderly (+60 and higher) patients were selected who were divided into intervention and control groups randomly. Data of control and intervention groups was collected in two stages, before intervention and 12 weeks after intervention. Intervention of nutritional education was performed based on BASNEF model. Finally, data were analyzed using chi-square, t-test and paired t-test.

**Results:** Our findings indicated that mean scores of knowledge and BASNEF Model variables were significantly increased in the intervention group compared to the controls after intervention (p<0.001). Also, behavioral nutrition improved significantly. The number of eating meals containing the fruit and vegetable has been increased significantly in the intervention group (p<0.001). The intervention group showed a significant decline in body weight (-1.3 kg), body mass index (-.48), Triglycerides (-18.25 mg/dl), Fasting plasma glucose (-19.5 mg/dl), HbA1c (-.36%). A decrease in HDL (-1.02 mg/dl, P = .9) and LDL (-4.04, P = 2) was observed in the interventional group, although it did not reach statistical significance.

**Discussion and conclusion:** BASNEF – based nutrition educational intervention led to improve nutritional behaviors in addition to improve knowledge and attitude of diabetic elderly and it led to improve indices of glucose control during 3-month intervention.

**Keywords:** Nutrition education, BASNEF model, Metabolic indexes, Elderly, Type 2 diabetes mellitus

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**EFFECT OF EDUCATION ON SNACK AND BREAKFAST CONSUMPTION OF GIRL STUDENTS (10-11 YEARS OLD) BASED ON HEALTH BELIEF MODEL IN SARI**

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**Introduction:** The student who does not have access to enough breakfast and suitable snack are concerned with mentally and physically problems in the future. Children spend a lot of their time in school that cause nutrition at school, critical and crucial issues. The aim of the study was to determine the effect of education based on health belief model on the belief of girl students (10-11 years old) about snack and breakfast consumption in Sari.

**Materials and Methods:** This was a quasi-experimental study in which 136 girl students entered in the study. Cluster stage sampling was employed to the students before and 6 weeks after implementing the educational program through group discussion, lectures, pamphlet and educational CD. A self prepared questionnaire was completed by the students. Validity and reliability of the scale were approved. Data were analyzed using regression analysis, Mac-Nemar test in the SPSS software.

**Results:** Logistic regression revealed that cues to action and perceived susceptibility significantly predict the snack and breakfast consumption among students. Path analysis showed that the mean score of health belief model (HBM) scale was significantly increased after intervention. (p<0.002). By increasing the mean of cues to action (1 grade), the consumption of breakfast increased to 0.29, and by increasing the perceived barriers (1 grade) in student, the consumption of breakfast increased to 0.21.

**Discussion and conclusion:** cues to action and perceived barriers were found as the most powerful factors in the breakfast consumption which need to be considered
Introduction: Preeclampsia is an alarmingly common pregnancy condition. Enormous etiologies have been presented in causing and onset of preeclampsia. Recently there has been more attention towards the role of Folic acid. This study was performed to investigate the relationship between Folic acid intake, the level of serum folate and occurrence of Preeclampsia among women referring to ALZAHRA educational hospital, 2009.

Materials and Methods: subjects of this case-control study were 52 preeclamptic women aged at 18-35 with 34-42 weeks of gestation and 52 normotensive healthy pregnant matched by age, number of pregnancy and gestational age. Study setting was ALZAHRA educational hospital in 2009. Data was gathered through an interview with the women and review of their medical records. Serum folate levels were measured by Roche brand kit (reference range 3.1-17.5 µg/l), on Elecsys-2010 system using the electrochemiluminescence method at Danish lab. Data were analyzed by descriptive statistical tests (means, standard deviation and frequency) and inferential statistics (t-test, chi-square, Fisher’s exact test and logistic regression) using SPSS13/win software.

Results: Serum levels of Folate was significantly lower in the preeclamptic group (10.9±3.9 vs. 13.6±4.0 ng/ml, p=0.001). About half of women in the case group and three-quarters in the control group regularly consumed supplements containing Folic acid before and during the first trimester of pregnancy. Ten percent of women in the case group started regular consumption of supplements containing Folic Acid during the second trimester of pregnancy (3 cases) or stopped its consumption before end of the second trimester (2 cases), while such cases were not reported in the control group. In total, frequency of regular use of supplements containing Folic acid in the case group were significantly lower than control group (p=0.02). The finding of food frequency consumption showed that the mean of fruit group consumption per week in preeclamptic women was significantly lower than non-preeclamptic women (2.8 vs. 3.5, p=0.002).

Multivariate analysis showed a significant decrease in the frequency of preeclampsia in women with high serum levels of Folate and the frequency of preeclampsia was decreased with increasing the serum levels of Folate (OR=0.88, CI95%:0.77-0.99).

Discussion and conclusion: As result of this study showed an association between serum levels of Folate and preeclampsia, also low frequency of regular consumption of supplements containing Folic acid in women with preeclampsia, it is better all health care providers including midwives emphasize on the importance of supplements containing Folic acid and its possible role in the prevention of preeclampsia during client educations.

Keywords: Preeclampsia, Serum level, Folic acid consumption, Prenatal care
showed significant correlation and coefficient between academic achievement and depression scores (p=0.049). Even though, there was no significant correlation between ferritin, Hct and MCV with academic performance, relationship between Hb and academic achievement was positively significant (p=0.043).

**Discussion and conclusion:** Our study showed that student girls with iron deficiencies sufficient to cause anemia are at a disadvantage academic achievement. Suffering from depression and low quality of life may affect academic performance in health college students. Physical and mental health could be considered before public health students' candidate appointment and need to be monitored with periodical health status screening to reach maximum academic performance. As public health college graduates mainly appointed in public health service providing centers, their own health status would be considered in high priority to provide better community health in the country.

**Keywords:** Academic achievement, Iron deficiency, Anemia

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**THE IMPACT OF SELF-EFFICACY AND SELF-ESTEEM ON WEIGHT CHANGE AMONG OVERWEIGHT PARTICIPANTS IN A WEIGHT LOSS TRIAL**

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**Introduction:** The purpose of this study was to examine the potential improvements in eating self-efficacy, eating behavior and other psychological factors in obese subjects participating in a weight management program. Psychosocial determinants could act as a link between life style and obesity. Our objective was to study Self-efficacy and self efficacy as determinants of general health behavior and to evaluate whether these are connected with obesity. A total of 96 overweight girls: 17.6 y; mean body mass index: 31.2 kg/m2) were recruited from body building centers.

**Materials and Methods:** weight was measured by study personnel at baseline, and self-reported weight was assessed at 6 months; self-reported self-efficacy for weight control was assessed by the Weight Efficacy Lifestyle Questionnaire. The participants also completed the Rosenberg Self-esteem Scale prior to weight management program and again 24 weeks after the program. High self-efficacy score was significantly associated with high weight loss among all participants. Also, high negative emotions and physical discomfort scores were significantly associated with high weight loss among all participants.

**Results:** Results indicated that body mass index was inversely associated with global self-esteem and behavioral conduct. The correlation of the obesity index and self-esteem indicated that as weight increased self-esteem decreased. Our findings suggest that the role of self-efficacy has an important role in obesity treatment regarding to weight control behavior. Efficacy can be enhanced and this enhancement is related to subsequent health behavior change.

**Discussion and conclusion:** As a conclusion, the findings of this study suggest methods for modifying health practices. These methods diverge from many of the current, traditional methods for changing health practices. Recommendations for incorporating the enhancement of self-efficacy into health behavior change programs are made in light of the most findings. More studies should be done to clarify whether increases in self-esteem are related to enhanced weight-loss.

**Keywords:** Self-Efficacy - Self-esteem - Overweight

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**Substance Abuse**

**EFFECTS OF A SMOKING PREVENTION PROGRAM BASED ON EXTENDED PARALLEL PROCESS MODEL (EPPM) AMONG MIDDLE SCHOOL MALE STUDENTS IN SHIRAZ**

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**Introduction:** Cigarette smoking is a preventable cause of morbidity and mortality in the world. Because of side effects of tobacco use, about 50000 people die each year in Iran. Early start of smoking among adolescents is worrisome and is a strong predictor for using it in adulthood. The most important action for prevention of smoking is supporting students for applying resistance skills against peer pressure. Therefore, the effects of interventional programs for prevention of smoking among middle school male students was studied based on Extended Parallel Process Model as a theoretical framework.

**Materials and Methods:** Method: A quasi-experimental study carried out in the middle school male students of Shiraz in 2009-2010 academic year. Before start of the study a baseline study was carried out and 2 schools were selected then a total number of 240 students were randomly assigned to intervention (n=120) and the control (n=120) groups. Educational curriculum was designed based on students’ educational needs. A questionnaire, based on the Extended Parallel Process Model, was designed for prevention of smoking in students.

**Results:** The results showed that educational intervention had significant effect on intervention group’s average response for knowledge (t= -13.96, p<0.000), perceived susceptibility (t= 6.84, p<0.000), perceived severity (t= -11.46, p<0.000), perceived response efficacy of recommended message for avoid smoking (t= -7.07,
Discussion & Conclusion: These findings suggest that applying Extended Parallel Process Model within education of resistance skills against peer pressure would be an efficient tool for preventing and increasing protective behavior for smoking. But further studies are needed to increase perceived susceptibility for cigarette smoking in adolescents.

Keywords: Smoking, Extended Parallel Process Model, Middle School Students, Health Education

DETERMINANTS OF ALCOHOL CONSUMPTION AMONG HAMEDAN UNIVERSITY STUDENTS ACCORDING TO PROTOTYPE WILLINGNESS MODEL

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Introduction: There is widespread concern about the health and social consequences of alcohol consumption among college students. Increased alcohol consumption by college students can result in harmful physical, behavioral and social consequences, including aggressiveness, poor academic performance, to vandalism, and even death. It is therefore important to identify aspects and related factors of alcohol consumption among college students; thus, this study used the Prototype/Willingness Model (PWM) to examine factors related to onset of drinking.

Materials and Methods: This descriptive-analytical study was carried out on 400 college students of Hamedan which were recruited with a stratified sampling method. The data-gathering tool consisted of a questionnaire based on the PWM, assessed the variables of attitudes, subjective norms, intention, prototype and behavioral willingness. Subjects’ demographic variables such as age, sex, education level and status of dwelling were also recorded.

Results: The subjects reported 50%, 47%, 35%, 49% and 44% of receivable scores of knowledge, attitude, subjective norm, prototype and behavioral willingness, respectively. Among our sample, 19.3% indicated that they did drink alcohol in the past. Intention versus behavioral willingness was better predictor for alcohol consumption; also, there was statistically significant correlation between alcohol consumption among student and sex, their status of dwelling and smoking and drug abuse experiences with each other at 0.05 levels.

Discussion and conclusion: Results demonstrated the unique importance of the reasoned intention path in which attitudes and subjective norms are antecedents of behavioral intention when examining drinking behavior among college students, also results suggest that a dual-process model approach that targets both intentions and willingness can be more successful than either approach alone.

Keywords: Alcohol consumption, Prototype/Willingness Model, Students

DESIGNING AND IMPLEMENTING PREVENTIVE EDUCATIONAL PROGRAM FOR AVOIDING PSYCHOACTIVE DRUG ABUSE BASED ON PROTOTYPE /WILLINGNESS MODEL AMONG COLLEGE STUDENTS

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Introduction: Recreational drug use among young people has been increased in recent years which causes health problems. The effect of interventional programs on attitudes and intention against drug abuse, subjective norms, and knowledge about side effects of psychoactive drugs and drug abuse related behaviors among university students was studied based on Prototype/Willingness model as a theoretical framework.

Materials & Methods: A quasi-experimental study carried out in the students’ universities of Hamadan city in the 2008-2009 academic years. A total number of 140 students were selected through randomized cluster sampling and randomly assigned to the intervention (n=70) and the control (n=70) groups. Educational curriculum was designed based on students’ educational needs. Before intervention 6 students who were known as a favorite and leader of students, were selected by student’s opinion in interventional group students’ leaders. The each leader of the group had a coordinator and mediate role between his groups. A questionnaire, based on the PWM, assessed the variables of attitudes, subjective norms, intention, prototype and willingness.

Results: The result showed that educational manipulation had significant effect on intervention group’s average response for knowledge (t= -12.78, p<0.000) , and attitude against drug abuse (t= 4.49, p<0.000), subjective norms (t=8.26, p<0.000), intention (t= 5.78, p<0.000), prototype(t= 6.93, p<0.000), and willingness(t= 4.63, p<0.000).

Discussion and conclusion: These findings suggest that applying Prototype/Willingness Model would be an efficient tool for preventing drug abuse education programs but further studies are needed to define function of willingness versus intention for creating social inoculation against drug abuse among non-drug expose students.

Keywords: Psychoactive Drugs, Willingness, Substance Abuse
PREDICTING FACTORS RELATED TO TRAMADOL ABUSE AMONG COLLEGE STUDENTS BASED ON THEORY OF PLANNED BEHAVIOR

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Introduction: Tramadol is an opioid analgesic indicated for the management of moderate and severe pains. After prohibition of injective diclofenac, considering Iranian’s tendency for rapid sedation of pain symptoms, tramadol has been prescribed widely. In the case of long administration, tramadol has a potential to cause dependency, tolerance and also drug abuse. The status of attitudes and intention against drug abuse, subjective norms, and perceived behavior control and knowledge about side effect of tramadol abuse related behaviors among university students was studied based on Theory of Planned Behavior (TPB) as a theoretical framework.

Material and Method: This descriptive-analytical study was carried out on 400 college students of Hamedan which were recruited with a stratified sampling method. The data-gathering tool consisted of a questionnaire based on the TPB, assessed the variables of attitudes, subjective norms, perceived behavior control and intention. Subjects’ demographic variables such as age, sex, education level and status of dwelling were also recorded.

Results: The subjects reported to have received 16%, 50%, 35% and 77% of scores of knowledge, attitude, subjective norm and perceived behavior control, respectively. Subjective norms and perceived behavior control were better predictor for tramadol abuse, also, there was statistically a significant correlation between drug abuse behavior among student and sex, their status of dwelling and drug abuse experience with each other at 0.05 levels.

Discussion and conclusion: It seems that, living in the university dormitories is a predisposing factor in the pattern of drug abuse. Therefore, it would be necessary that to pay more attention to the environmental living situation of the students, in the universities, Also, The result of the study indicating the effectiveness of Theory of Planned Behavior (TPB) in predicting the behavior of students towards tramadol abuse. Therefore, application of this theory in order to prevent substance abuse is recommended.

Keywords: Tramadol, Theory of Planned Behavior, Student

SMOKING: HEALTH EDUCATION AND PROMOTION IN THE KINGDOM OF SAUDI ARABIA

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Introduction: The Kingdom of Saudi Arabia is the birthplace of Islam and Islam prohibits the use of any substance which might harm health. On the basis of number of studies conducted in the Kingdom, the proportion of smokers in Saudi Arabia is nearly 35 to 45% among adult males, 24 % in preparatory schools' male students and 8 % in female students. The social, health and economic burden of tobacco use, costs the Kingdom up to 5 billion Riyals per year (1.3 billion US$).1 The Kingdom is the top Arabian tobacco importer with Iran in second place, Jordan third, Turkey fourth. Morocco fifth and Egypt in sixth place, also the Kingdom pays more than 1.7 billion Riyals (453 million US $) to import tobacco per year. Saudi Arabia is the world’s 23 rd leading consumer of cigarettes despite its small population.2 More than 15 billion cigarettes worth US $ 1.3 billion are smoked by Saudis per year,3 and estimated 23,000 deaths per year due to smoking. Apart from these huge deaths related to smoking, the major population of the Kingdom is suffering from the consequences of smoking or smoking related diseases like cancers, cardiac illnesses, bronchitis, and lung diseases. To study the need and urgency of health education, promotion and awareness among both the genders to reduce the smoking habits in the Kingdom of Saudi Arabia.

Materials and Methods: It is an observation and review of literature method, in which the primary data was collected by direct observations and secondary data, was collected from the MOH statistical year books, all papers published in english language in national and international relevant journals. The World Health Organization (WHO) and the Center for Disease Control and Prevention (CDC) reports, related government articles, MOH reports on smoking policy, production, trade, industry, and consumption, health promotion, awareness, and education are also reviewed.

Results: There is lack of health education, awareness and promotion on smoking in the Kingdom of Saudi Arabia.

Discussion and conclusion: Cigarette smoking is an important public health problem in Saudi Arabia. A more intense and comprehensive tobacco control effort is needed including the health education, promotion and awareness on smoking by the public, private and other sectors, and to reduce the extra burden of cost to treat the smoking related diseases in the Kingdom.

Keywords: Kingdom of Saudi Arabia (KSA), Ministry of Health (MOH), Smoking, Tobacco, Health Education, Health Promotion.
**PROCESSES OF CHANGE FOR SMOKING CESSATION THROUGH STAGES OF CHANGE BASED ON TRANS-THEORETICAL MODEL IN COLLEGE STUDENTS**

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**Introduction:** Trans-theoretical Model (TTM) is an appropriate framework for understanding behaviors as well as planning programs to change unhealthy behaviors such as smoking. A process of change is one of the important constructs of this model that refers to motives that facilitate movement through stages of behavior change. Present study was performed to determine processes of change for smoking cessation through stages of change based on Transtheoretical Model among students of Shahid Beheshti University in 2011.

**Materials & Methods:** In this cross-sectional study, 393 students from Shahid Beheshti University selected by convenience sampling method. Data gathering questionnaires that used in this study were; process of change for smoking cessation-short form, stages of smoking cessation, Fagerstrom test for nicotine dependence, and self efficacy. Validity and reliability of questionnaires confirmed by appropriate methods. Data was analyzed using SPSS 17 (central indexes, independent t-test, one way ANOVA, Chi-square, Pearson correlation).

**Results:** In this survey, 197 males (50.1%) and 196 females (49.9%) participated. It was found that 60 males (30.4%) and 14 females (7.1%) had history of smoking. The age mean of smoking initiation was 18.55±2.7. There was significant difference about processes of change scores in individuals that were in different stages of smoking cessation (p<0.001), that is, it was more in active stages compared with inactive stages. Also, results showed that behavioral and cognitive processes (two main sub-scales of change processes) had significant difference in stages of smoking cessation (p=0.003 and p=0.028 respectively). Scores mean of change processes were significantly more in those had higher self efficacy and lower nicotine dependence (p<0.001).

**Discussion & conclusion:** Based on findings of this study, the rate of understanding cognitive processes and application of behavioral processes in inactive stages of smoking cessation (pre-contemplation and contemplation) was lower than active ones (action and maintenance). Thus, educational interventions for promoting these processes is necessary. Also, regarding to positive relationship between self efficacy and processes of change for smoking cessation, designing and conducting educational programs that promote self efficacy in smokers is urgent.

**Keywords:** Trans-theoretical Model, Processes of Change, Smoking, Students.

**THE RELATIONSHIP BETWEEN SELF EFFICACY, PERCEIVED BEHAVIORAL CONTROL AND ANABOLIC STEROID USE AMONG GYM USERS**

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**Introduction:** The use of anabolic steroids (AAS) has been associated with serious side effects including hypertension, alterations in lipid profiles, liver dysfunction, clotting abnormalities, and psychological effects including changes in mood, behavior, and depression. In addition, adverse effects include acne and deepening of the voice and aggressiveness. AASs abuse increasingly is wide-spread among professionals and amateurs taking part in sporting events gym salons. Awareness of why athletes and gym users taking such substances that may help health educators for develop appropriate intervention. In this regard perceived behavioural control (PBC) is defined as “a person’s estimate of how easy or difficult it will be for him or her to carry out the behaviour”, and Self-efficacy (SE) is defined as “people’s beliefs about their capabilities to produce performances that influence events affecting their lives”. Both refer to peoples’ beliefs that they are capable of performing a given behaviour. The aim of this study was to determine the role of SE and PBC in predicting AS use among body builders.

**Materials and Methods:** In a cross-sectional study, total of 300 body builders in Hamadan, was randomly selected. The data collected using a self-report questionnaire included demographic characteristics, self-efficacy to not use AASs, and PBC to not use AASs. Logistic regression analysis was applied to assess association between SE and PBC with AASs use.

**Results:** Based on the results, 24.3% (n = 73) of athletes reported that they have used AS and 38% of them reported history of using AS. Logistic regression model showed SE (OR= 0.851 and p = 0.000) and PBC (OR= 0.711 and p = 0.000) that indicated the association between low PBC and Low SE to not use AAS using these components.

**Conclusion:** High self-efficacy to not use AASs and high perceived behavioral control have effective potential to protect adolescents against high risk behaviors. Comprehensive preventative health education programs needed to emphasize on psychological factors that mediate and predict adolescents’ health-related behaviors.

**Keywords:** Anabolic steroid, Perceived behavioral control, Body building.
DISTINCTION BETWEEN TWO CONTROL CONSTRUCTS: AN APPLICATION OF THE THEORY OF PLANNED BEHAVIOR FOR SUBSTANCE ABUSE AVOIDANCE IN ADOLESCENTS

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Introduction: The aim of this project was to distinguish between self-efficacy (S-E) and perceived behavior control (PBC) in an application of Theory of Planned Behavior (TPB) for the prevention of substance abuse in male adolescents.

Materials and Methods: A measure consisting of TPB and control constructs for substance abuse avoidance which contained 34 developed items, administered to a sample of adolescents (N=303) in Tehran, Iran. After estimating reliability and validity, exploratory factor analysis and path analysis were carried out to examine the study objectives.

Results: All 303 young male adolescents, aged between 15 and 19, were entered into the study and completed the questionnaires. The exploratory factor analysis led the control items to two factors: PBC and S-E. Path analysis indicated a good fitness for TPB while distinguishing between the two controls constructs. Moreover, S-E becomes the most powerful predictor for intention, (with non-significantly prediction of behavior) [ß= 0.29], and PBC becomes the most powerful predictor for behavior (with the most weakness prediction of intention) [ß= 0.36].

Discussion and conclusion: The results of this research provide another document for distinguishing between perceived behavioral control and self-efficacy.

Keywords: Theory of planned behavior (TPB), Control constructs, Substance abuse, Adolescent

Working Population Health

HEALTH PROMOTION PROGRAM AT BAHRAIN PETROLEUM CO (BAPCO)

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Introduction: As part of its commitment to the well-being of all employees and their families, BAPCO management has established Health Promotion Committee (HPC) in February 2009. The HPC in performing its legal corporate mandates, having been vested with the appropriate authorities and responsibilities for promoting the health and general well being of all Bapco employees and their families to achieve the optimal health. This paper defines Health according to World Health Organization (WHO), and explains what are the stages of development in health promotion (HP) reached so far by WHO. It also describes the differences between the HP & Health Education, the ways to change the life style to reach the optimal health, the ways to any organization to establish a well organized HP program.

Materials & Methods: Survey about employees’ needs & interest for Health Promotion Program in BAPCO was distributed to 750 employees on March, 2010 who randomly selected from across the organization representing all levels of employees. The questionnaire was in the form of preventive and curative goals.

Results: From analysis of the questionnaires, it was found that the most 3 needs & interest in curative goals were: Cardiovascular diseases, DM & Respiratory diseases. The most 3 needs & interest in prophylactic goals were: Healthy eating, Weight management & Cancer prevention.

Discussion and conclusion: Bapco has put a long term plan focusing on these goals which also falls in line with Ministry of Health initiatives for Bahrain citizens. Bapco experience in Health Promotion will be described also, future plans, details about the progress made since the implementation of Health Promotion and success stories as well.

Keywords: Health Promotion, Work, BAPCO

WHAT IS THE LIMITATIONS OF THEORY BASED EDUCATIONAL INTERVENTIONS IN REDUCING MUSCULOSKELETAL DISORDERS? RECOMMENDATIONS FOR HEALTH PROVIDERS

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Introduction: Computer users are susceptible to the development of musculoskeletal symptoms, with prevalence as high as 50% The association between musculoskeletal disorders especially low back pain and sitting posture in the occupational setting has been confirmed in available studies. The main aim of this study was to determine the effectiveness of an educational intervention on body posture modification and psychosocial mediating variables based on the Theory of Planned Behavior (TPB).

Materials and Methods: in this Quasi experimental study, 75 computer users from Qazvin university of medical science who spent at least 20 hours per week at a Video display terminals were selected to receive the ergonomic intervention, whereas 75 from Qazvin international university were assigned to a control group randomly. Both groups were evaluated at the beginning of the study and at a follow-up 3 and 6 months later. The following tools were used: the Rapid upper limb Assessment (RULA) method to assess upper-extremity work-related posture, self administered questionnaire that evaluated TPB constructs and ergonomic knowledge quiz. The tool’s
THE EFFECT OF EXERCISE ON MUSCULOSKELETAL DISORDERS IN SURGEONS

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Introduction: Work related musculoskeletal disorders (MSDs) refer to injuries that are related to occupational factors. The prevalence of MSDs is high in some occupations such as health care practitioners. Use of special instruments and inappropriate position during work deposes medical professionals to musculoskeletal pains that impair the work efficiency and concentration. In this study the effect of exercise on surgeons, MSDs was assessed.

Materials & Methods: This clinical trial study was done in Sari. Following an epidemiological study 60 surgeons with MSDs was divided into 2 groups with random allocation, including exercise (33) and control (27) group. Inclusion criteria were: low back and neck pain and at least one year work as a surgeon. Exclusion criteria were: treatment for MSDs in the time of study, history of surgery, fraction or anomaly in spinal column, multiple sclerosis and osteoporosis. After giving information sheet and consent form, demographic and job factors were recorded. Exercise group was given a pamphlet including back and neck exercises for 8 weeks. The control group didn’t receive any intervention. Visual analogue scale was used for estimating pain intensity. Disability was estimated by Oswestry Disability Questionnaire and neck disability scale. Statistic analysis was done by Kolmogorov-Smirnov test, descriptive statistic and t Test.

Results: Twenty-seven participants in exercise group were compared with 24 in control group. Initially there were no significant differences in intensity of pain and disability between groups. After 2 months the differences were significant, so that the pain and disability had decreased in exercise group and increased in control. The mean differences in pain intensity was -8.85 and 4.37(p=0.003), back pain disability was -13.33 and 8.40(p=0.0001) and neck pain disability was -5.73 and 6.50(p=0.008) in exercise and control group, respectively. Limited time because of hard work, difficulty in changing the routines and occurring pain following to exercise were the most reasons for doing exercises incompletely. The most encouraging factors to doing exercises were: pain relief, mobility, aware of benefits and hope to treatment.

Discussion and conclusion: Although most surgeons hadn’t done exercises completely, but the improvement in pain and disability was considerable. Therefore it seems such exercise programs can improve MSDs in surgeons. Doing exercise completely and increasing the duration of it may have more effects in improving MSDs.

Keywords: Musculoskeletal disorders, Surgeons, Exercise, Back pain, Neck pain

A COMPREHENSIVE ERGONOMIC RISK ASSESSMENT AND CONTROL PROGRAM FOR THE MANAGEMENT OF MUSCULOSKELETAL DISORDERS IN AN AUTO-MAKING INDUSTRY

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Introduction: Design and implementation of ergonomic risk assessment programs have a critical role in health education needs assessment and also evaluation of ergonomics activities in organization. In the previous studies done in auto-making industries, according to worker’s health profiles, the most prevalent complaints among the working population were work related musculoskeletal disorders. Therefore, an ergonomic risk assessment program were implemented in the selected workstations to identify risk level among workers and to estimate required resources to removal or reduction of risk factors including educational interventions and also improving physical working environment.

Materials & Methods: In this study, cross-functional teams were formed from representatives of health and safety, production, maintenance and engineering departments. In order to facilitate the project supervision, a steering committee mostly from top managers and a technical committee mostly from ergonomics experts from inside and outside of the
factory were formed. All the team members were qualified and trained in ergonomics assessment techniques. To unify the assessment results, a screening software program was designed and according to this screening tool, the workstations after assessment were tagged with a colored flag system; green (acceptable), yellow (low risk) and red (risky).

**Results:** In total 972 assessed workstations, 203 workstations were red, 102 workstations were yellow and 667 workstations were green. The financial resources required to alleviate the conditions were estimated more than 70,000,000 Rials.

**Discussion and conclusion:** In order to continue ergonomics efforts in the future at company level, training in-house trainers to support the program and also establishment of an ergonomic department to manage required ergonomic training and also other physical interventions was proposed.

**Keywords:** Ergonomics, Educational intervention, Risk assessment, Musculoskeletal disorders

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**EFFECTS OF INTERVENTION BASED ON HEALTH ACTION MODEL TO PROMOTE WORKER’S SAFE BEHAVIOR IN ISFAHAN STEEL COMPANY**

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**Introduction:** The worldwide concern for safety has created a need for new and effective methods to improve safety in the workplace. The aim of this study was to promote safe behavior in Isfahan Steel Company workers by theory based intervention.

**Materials and Methods:** This Randomized Control Trial consists of two experimental and control groups. The experimental group received intervention based on Health Action Model. Control group did not receive any intervention except participating in the current safety courses of company. The sample size was 270 worker who were randomly selected and divided into two experimental (n=135) and control groups (n=135). Data were collected using a questionnaire and a checklist after and before of intervention and were analyzed based on distribution of variables, parametric (t-test, paired t-test) or nonparametric (Chi-Square, Wilcoxon) tests were utilized to analyze data.

**Results:** The result indicated that the mean scores of knowledge, attitude and behaviors of safe behaviors in case group increased statistically significant and the observed difference in control group was not significant. The result also indicated that unsafe behaviors in the case group decreased, following the educational intervention. The difference, again, was not statistically significant in the control group.

**Discussion and conclusion:** The results showed that application of Health Action Model has an acceptable and positive influence on promoting safe behaviors of workers in Isfahan steel Company. It is, therefore, recommended that same theory based intervention can be useful for other and similar industries.

**Keywords:** Intervention study, Health Action Model, Safe behavior, Steel Making, Roll Mill

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**THE NEGLECTED ROLE OF OCCUPATIONAL THERAPY IN HEALTH PROMOTION**

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**Introduction:** According to the world health organization (WHO), health promotion is the process that enables individuals to increase control over and improve their health. In order to meet a complete physical, mental and psychosocial health, one needs to be adapted with the environment within the physiological capabilities. Thus, health functions as a physical, social, and personal resource for everyday life; and therefore health promotion should be considered a key responsibility of any health system, which is normally referred to as well-being.

Occupational therapy is a profession that attempts to establish a link between occupation and well-being. The primary goal of occupational therapy is to enable clients to participate in the activities of everyday life. This can be mainly done by involving clients to participate in community-based activities as well as modifying their environment to meet the clients’ needs and desires. However, the role of occupation therapy from the health promotion perspective is usually neglected and the clients are therefore deprived of this important well-being service.

**Purpose:** The purpose of this study is to introduce a neglected role of occupational therapy to enhance knowledge of people who engage in health promotion programs such as lawmakers, health specialists, and educators.

**Materials and Methods:** To meet the study objective, a review methodology and evidence-based health promotion were used as an effective way to collect and present the data.

**Results:** There was a significant positive relationship between the purposeful activities and well-being in clients who received occupational therapy services.

**Discussion and conclusion:** The results of this study indicate that occupational therapy play an important role in enabling individuals with a variety of disabilities to participate in purposeful activities. Involving clients in occupational therapy designed activities not only improves the symptoms in sensory-motor and psychosocial patients, but also enhances the social health, which in turn possibly lead to an improvement in quality of life and well-being. This places the clients in a better position to perform desired tasks and achieve the occupational therapy goals. Occupational therapy, a well-known rehabilitation discipline, plays an important role to adapt clients functional patterns to improve the quality of life and health promotion through occupation.

**Keywords:** Occupational Therapy, Well-being, Health promotion
poster
Adolescent health

EVALUATION OF INTERNET DEPENDENCY ON NURSING AND MIDWIFERY STUDENTS IRANSHARE 1388

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Introduction & Objectives: Nowadays, crises related to technology issues is a very important consideration located in behavioral science experts. Internet addiction is a problem common to the improper use of computer and Internet information is defined. The study to determine the dependence on the Internet in Nursing and Midwifery Student Iranshahr was done in 88 years.

Materials and Methods: In a cross-sectional study, 355 patients were enrolled with the census method. In this study to collect information from questionnaires were used. This questionnaire is in two parts which include: The first part consisted of 15 demographic questions (age, sex, marital status, academic degree, academic year, residence, occupation, number of family members, previous use of the Internet, where common Using the Internet, having a personal computer, restrictions on use, type of Internet use, Internet use time), the second part about information related to Internet addiction, which involved a question is 20. and after data entry computer software spss were calculated. Of descriptive and inferential statistics to analyze the data was used.

Results: Results showed that 57% (203) of mild addiction college students and 30% (107) students from moderate to severe addiction to the Internet was. Chi-square test significant differences (p <0.00) between academic disciplines and addiction has shown.

Discussion and conclusion: Although the Internet with multiple spaces can estimate many of the needs of students, but the possibility of addiction is high. Due to the increasing academic centers, so must From professionals, prevention programs it, should be presented

Key words: dependency, the Internet,

THE EXPERIENCE OF PUBERTY IN ADOLESCENT GIRLS: A QUALITATIVE STUDY

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Introduction: Puberty is a significant period of transition from childhood to adolescence. While there is a great deal of variation in the rate of such changes, some adolescents experience puberty sooner or later than the others. Usually it is difficult for a child girl to deal with these changes. Existing research shows that puberty is significantly associated with health and behavioral problems such as physiological, emotional and psychological changes; however, previous studies have largely applied quantitative research methods to explore the issue. Little research on the experience of adolescences is supported by qualitative research designs. This qualitative study aimed to explore the experience of adolescent girls on puberty in Zahedan.

Materials and Methods: A qualitative research design was used. We recruited a sample of 56 interviewees including 48 female students (N=24) and their mothers (N=24) as well as eight principals and teachers of secondary schools to participate in focus groups and in-depth interviews. Full text transcripts of interviews were coded and analyzed using principles of content analysis.

Results: In total 56 interviews were available for analysis. Findings showed that the experience of puberty among Zahedan adolescent girls is divided into two major categories: I) psychological and emotional reactions including fear, worryiness, anxiety, humbleness, happiness, shame, and normal reactions II) Objective and functional reactions including aggressiveness and arrogance, seclusion and or reasonable behavior.

Discussion and conclusion: These findings provided evidence that there are many different undesirable experiences that distress adolescent girls. Families, schools and communities and their interactions play a significant role in reducing limitations associated with psychological and objective reactions.

Keywords: Experience of puberty, adolescent girls, qualitative study

COMMUNITY EMPOWERMENT IN ADOLESCENCE NUTRITIONAL HEALTH PROMOTION

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Introduction: Adolescence consider as a transitional stage of physical and mental human development that occurs between childhood and adulthood which involves biological social and psychological changes. A national study in Iran showed that few interventional programs concentrated on adolescents’ health. For adolescents health promotion, complementary plans are the essential requirements which is achieved through community partnership, health training development, capacity building, safe and supportive environment and appropriate and accessible health counseling services. In this regards, we conducted an intervention participatory study in partnership with adolescents’ mothers and
In this interventional study, homesickness among Data was analyzed using SPSS17 software (descriptive stages questionnaire and for Fagerstrom test respectively. Methods were used for reliability of smoking cessation content method. Test retest and internal consistency of questionnaires, their validity was done by face and Fagerstrom test for nicotine dependence. After translation English questionnaire for smoking cessation stages and gathering instrument in this study was Standard method was used for selection of participants. Data in Shahid Beheshti University. Convenience sampling.

**Materials & Methods:** This was a cross-sectional study based on transtheoretical model among student of Shahid Beheshti University in 2011.

**Introduction:** Smoking is one of the high risk behaviors that play important role in many diseases such as: cancers, pulmonary obstructive diseases, cardiovascular diseases, and stroke. In educational intervention for changing smoking behavior, it is necessary that smokers be categorized from cessation stages view. Since each stage requires special messages, thus, present research was conducted to determine smoking cessation stages based on transtheoretical model among student of Shahid Beheshti University in 2011.

Materials & Methods: this was a cross-sectional study that was performed with participation of 393 students in Shahid Beheshti University. Convenience sampling method was used for selection of participants. Data gathering instrument in this study was Standard English questionnaire for smoking cessation stages and fagerstrom test for nicotine dependence. After translation of questionnaires, their validity was done by face and content method. Test retest and internal consistency methods were used for reliability of smoking cessation stages questionnaire and for fagerstrom test respectively. Data was analyzed using SPSS17 software (descriptive statistics and chi-square). Participation of individuals in this research was voluntary and with informed consent.

**Results:** findings of the current study showed that 30.4 percent of male students and 7.1 percent of female students have smoking history, that difference in this aspect was meaningful (p<0.0001), but there was no significant difference in stages of smoking cessation between males and females. Based on smoking cessation stages, 63.5%, 16.2%, 6.8%, 10.8%, and 2.7% of smokers were in precontemplation, contemplation, preparation, action, and maintenance stages respectively. Also, results demonstrated that nicotine dependence in preparation stage is less than precontemplation and contemplation ones.

**Discussion & conclusion:** According to the findings of this study, majority of smoker students (79.9%) were in inactive stages of cessation, on the other hand, they have no intention for cessation at least in next 6 months. Therefore, regarding to significant difference between male and female from smoking view, and no significant difference in stage of changes between them, it is seriously necessary that appropriate educational programs, especially theory based intervention, be designed.

**Keywords:** Stage of Change Model, Smoking, University students

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**SMOKING CESSATION STAGES AMONG STUDENT OF SHAHID BEHESHTI UNIVERSITY USING TRANSTHEORETICAL MODEL: A CROSS-SECTIONAL STUDY**

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**Introduction:** Homesickness among Non-Iranian students may cause educational problems between them such as: absent-minding, Low confidence or obsessive manners. So paying attention to this phenomenon and its reviewing may be effective in preventing from those cases.

**Keywords:** Homesickness, Boys, Non-Iranian students
EXPERIENCES AND VIEWS OF JUNIOR MEDICAL STUDENTS ABOUT PUBERTY PROBLEMS AND CHANGES – TABRIZ 2010

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Introduction: Puberty is the time of a person's life when his/her body changes from child to adult, accompanied by the process of sexual maturation. Puberty is caused by changes in hormones and includes both physical and emotional growth. It has different effects on adolescent and youth. The aim of this study was to determine the effect of puberty period on medical students' life.

Materials and Methods: Participants of the study were 100 junior medical students. They were asked about their experiences, problems and their opinions about the solutions of these problems by an open-ended questionnaire. Data were categorized and coded and analyzed by SPSS 13.

Results: Half of the participants were male. To be grown up, freedom and independency were the most important feeling in 48% and 43% of male and female students respectively. The most common problems of puberty in female and male students were as follow respectively: Not being understood by parents: 53% and 17%, emotional and affective problems: 48% and 13%, feeling shame: 40% and 23%, sexual needs: 3% and 14%, curiosity about opposite sex: 7% and 26%. The main aspects of puberty were mental and psychological growth to 65% of male and 72% of female students. The most important characteristic of puberty to male and female students were: physical changes (48% and 52%), sexual growth (15% and 5%), respectively. The main solution to reduce puberty problems were: informing and educating for 28% of male students and understanding adolescents for 34% of females.

Discussion and conclusion: Puberty is an important phase of life. Not to be understood by parents, need to be free and independent, tendency to opposite sex, curiosity about sexual matters, concerns about physical and emotional changes are all the problems which should be considered by understanding and educating the adolescents.

Keywords: Puberty, Adolescent, Health education

EVALUATION ATTITUDE AND PRACTICE OF SELF-MEDICATION WITH ANALGESICS AMONG NORTH-WESTERN UNIVERSITY STUDENTS

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Introduction: Self-medication is defined as using drugs for treatment of self-diagnosed disorders. It is influenced by the factors, such as education, family, society, law, availability of drugs and exposure to advertisements. There are a lot of problems such as side effects for the patient and some socioeconomic problems with self-medication. High levels of self-medication practices have been reported in Iran and comparable countries with analgesics which most of them are available as OTC drugs, so we decided to evaluate this problem in Kordestan East Azarbayjan and west Azarbayjan states.

Materials and Methods: The target population of this study was about 684 students attending medical and non-medical sciences universities in Kordestan, East Azarbayjan and west Azarbayjan states in 2010.

Results: 85.8% (n=592) of students have used analgesics via self-medication in the past 3 months. Analgesic use frequency was once in 18.3% (n=99) of the participants, twice in 23.3% (n=126) three times in 15.9% (n=86) and more than three times in 42.4% (n=229) of the participants in the study period. Headache was reported by about 33.4% all respondents and was the most common problem followed by dysmenorrhea (17.4%), stomachache (6.2), pain in joints and bones (5.4%) that were the most major problems which led respondents to practice analgesic self-medication. The most commonly used source of information for self-medication with analgesics was previously prescribed medication by the doctor (27.5%), friends or family advices (42%) and their medical knowledge (15.9%) was the other sources of information in self-medication with analgesics.

Discussion and conclusion: Analgesic self-therapy is a common practice among university students. Health care providers need to be aware of the students’ self-therapy practices and academics need to consider offering courses about analgesics to students in both the medical and non-medical faculties.

Keywords: Self-medication-Analgesics-Student-University

DEVELOPMENT AND EVALUATION OF PROTECTION/RISK MODEL-BASED EDUCATION TO PREVENT ADOLESCENT BEHAVIORAL PROBLEMS

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Introduction: Research Findings indicate that behavioral problems are growing among Iranian students. Prevention Programs aren’t effective approaches on prevention of behavioral problems without identification its structure. An educational program without understanding of behavioral problems structure could not be an effective
approach. The main goal of the current study was development and evaluation of protection-risk model based education for prevention of problem behaviors among male high school students.

**Materials and Methods:** At first, the research team conducted a multi-staged preliminary study. The aim of the first study was to assess the psychometric properties of Persian version of tools and a new model to explain behavioral problems using calibrated and validated samples of adolescents. For evaluation new model, a pretest-posttest study with randomized control group was designed and implemented. Follow-up assessments of outcomes took place 5 months after the intervention. The intervention group (49 students) received prevention education program. Intervention variables (basic social skills, identifying risk factors, avoidance problem behavior, problem-solving...) include the predictors of problem behaviors in individual level that were identified by the new model. The intervention comprised of approximately 10 weekly hour-long sessions. The main tools were multiple problem behavior indexes (MPBI) and Social Skills Rating System – student form (SSRS-S). The control group (57 students) did not receive any intervention. This study applied exploratory and confirmatory factor analysis procedures to development of model, and the analysis of variance and t-test procedures were used to analyzing data.

**Results:** The findings of educational intervention indicated that variation of mean scores of SSRS in the experimental group was significant (*P* < 0.001). In addition, significant difference was founded between groups on SSRS at posttest (*P* = 0.026). Compared to the control group, the intervention group reported Lower levels of MPBI and its subscales at posttest and follow-up. Significant differences in delinquency (*P* = 0.003), cigarette use (*P* = 0.048) and hashish use (*P* = 0.036) were found between groups at follow-up. However, these differences were non-significant at post-intervention. Also, Intervention had no significant effect on the use of hookah and opium.

**Discussion and conclusion:** Educational intervention based on Social competence enhancement can be effective in promoting social competence and prevention of these behavioral problems among male students. Future researches should be examined the role of the peer and more long-term services or interventions.

**Keywords:** Problem behaviors, Social competence, Social Skills Rating System, High school students

**PREVALENCE OF OBESITY IN DIABETIC PATIENTS REFERRED TO HAMEDAN DIABETES CENTER-2009**

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**Introduction:** WHO estimates that more than 220 million people worldwide have diabetes. This number is likely more than double by 2030 without intervention. With 61% of the U.S. adult population considered overweight or obese. Type 2 diabetes is primarily a disease that affects late middle aged and elderly individuals. Due to increasing affluence lifestyle changes and obesity, however, it is also affecting younger age groups. The aim of this study was to evaluate the prevalence of obesity in diabetic patients referred to Hamedan diabetes center 2009.

**Materials and Methods:** This was a descriptive study which 139 patients referred to Hamedan diabetes center were simple randomly selected and assessed with interview form including demographic data & BMI measurement. Information gathering tool was a questionnaire form with content validity and same assessed with 2 researcher reability. Subjects with (BMI) greater than 30 kg/m2 were classified into an obese group while those with BMI between 18.5 and 24.9 kg/m2 were included into a normal weight group.

**Results:** About 40% was more than 55 years old, 90% lived with family, 50% had variety level of physical activity who 43% was walking which 37.4% less than 1 hour & 41% had another disease. Only 7.2% of patients had normal weight, 65.5% were overweight and 8% had type 1 obesity.

**Discussion and conclusion:** As obesity is a major factor in a number of chronic diseases, including diabetes, treatments that reduce the burden of obesity would be beneficial. the National Heart, Lung, and Blood Institute has released a new practical guide to help doctors treat their overweight patients which consists of a 10-step plan to help the nation’s 97 million obese or overweight adults to lose weight and thereby reduce their risk of illness or death from hypertension, diabetes and so on.

**Keywords:** Prevalence, Obesity, Diabetic patients

**STUDY OF FILM WATCHING RATE (CINEMATIC,DRAMATIC,DOCUMENTARIES AND TV SERIES), RELIGIOUS BEHAVIORS AND MENTAL HEALTH STATUS AMONG STUDENTS IN SHAHID SADOUGHI UNIVERSITY OF MEDICAL SCIENCES**

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**Introduction:** Films are one of the most effective tools for transmission of thoughts and feelings. There are some evidences that peoples’ mood especially youths and adolescents changes after watching films. Some psychologist’s believe that horror films affect the mental health of their addressees. Also there are some evidences that religious behaviors are one of the most effective strategies for improving mental health. So this study was carried out with the aim of examining the relations...
between film watching rate, religious behaviors and mental health status among students.

**Materials and Methods:** In this cross-sectional study, total numbers of 300 students from shahid Sadoughi University of Medical Sciences were selected with a systematic random sampling. A four part questionnaire was used for data collection. Part 1 was for measuring demographic information, second part was a researchers designed scale for measuring film watching status, third part was for measuring religious behaviors and the fourth part was the Persian version of GHQ28 (General Health questionnaire) the cronbach alpha for the third and fourth part of the questionnaire were 0.81 and 0.92 respectively.

**Results:** 36.2% of the students, received a score of ≥23 in GHQ and were recognized as doubtful to mental disorders. There was a significant difference in mental health status by marriage status and sex. Also there was a significant relation between mental health status and religious behaviors and film watching rate.

**Discussion and conclusion:** regarding the association between rate of watching religious films and religious behaviors and also the association of religious behaviors and mental health status, more efforts in producing good religious film is recommended.

**Keywords:** Mental Health, Film, Religious Behaviors, Student, GHQ

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**Comparing two educational methods (lecture and educational package methods) in knowledge and attitude of teenage girls on puberty health, in Kish Island, Iran**

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**Introduction:** The aim of this study was to compare two educational methods (lecture – educational package) were effective for improving girls’ knowledge and attitude about puberty health. However, the lecture method was more effective in promoting knowledge than educational package, but in attitude aspect educational package was more effective than lecture presentation.

**Keywords:** Attitude, Educational methods, Educational package, Knowledge, Lecture, Puberty health.

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**The relationship between Internet addiction and general health among student dormitories in Tehran University of Medical Sciences in 2010**

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**Introduction:** Internet is a potentially useful instrument; however, its excessive and inappropriate use poses the risk of being addicted to it. Internet should be considered a system that is so far the largest human-design, engineering. Internet information resources and services involve a broad prominent World Wide Web and e-mail. This study was conducted to assess the relationship between internet addiction and general health among students of Tehran University of Medical Science.

**Materials and Methods:** This cross-sectional study was conducted in residence halls of Tehran University of Medical Sciences in 2010. In this study, 235 students (125 female and 110 male) were selected using stratified random sampling. Two standard questionnaires, YANG internet Addiction and general health scale (GHQ) were used for data collection. Data were analyzed using SPSS 11.5 and t-tests. The results were considered significant at P<0.05 level.

**Results:** The results revealed 32.8% of the students were addicted to internet. The general health of internet-addicted users was at a higher risk in comparison with ordinary users (P<0.05). But there was no significant difference between physical function and social function of the two groups in general health scales. On the other
According to the results, there were significant associations between Internet Addiction and students' education level. The place, frequency and kind of internet usage, and more internet skills were all significant (P<0.05).

**Discussion and conclusion:** According to the results, there is a need for designing and implementing educational projects which demonstrate useful and effective means to reduce internet addiction and provision of practical counseling for appropriate use of internet.

**Keywords:** Internet addiction, General health, student dormitories, Tehran University of Medical Sciences.

**KNOWLEDGE, ATTITUDE AND SELF-REPORTED BEHAVIORS RELATED TO INTERNET USAGE IN COLLEGE STUDENTS IN TEHRAN**

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**Introduction:** In recent years, internet has been used more and more by Iranian young adults. However, there are not many studies which have focused on the relationship between internet usage and health in this area. In this study, we are looking for assessing the knowledge, attitude and self-reported behaviors related to internet among college students in Tehran, Iran.

**Materials and Methods:** In this cross-sectional study, college students of Tehran University of Medical Sciences (TUMS) who were using the internet frequently were included. Multistage sampling method was used and data were collected by a questionnaire which developed by the authors and had been valid and reliable. Fisher, Mann-Whitney and Kurskalwallis tests used for analyzing the data.

**Results:** Study of life style related to the internet usage showed that more than half of students had unhealthy life style. About four behaviors, most of participants said that internet didn’t have any effect on them (90.8% for nutrition, 54.3% for physical activity, 63.5% for smoking and 86.2% for drug abuse). Most of participants announced that using of internet cause some feelings like fatigue, boredom, isolation, and loneliness in them. 25% announced after using internet they have had more unsafe sexual behaviors. Only 4.4 % of students had desired knowledge about internet effects on their health. 70 % of students believed that using internet lead to decrease physical activity. 47% of students did not believe that smoking can be affected by using of internet.

**Discussion and conclusion:** Poor knowledge about internet effects on health status must be considered in designing and implementing educational programs and campaigns. Professional internet users such as college students are the most important segments in these interventions.

**Keywords:** Internet, Knowledge, Attitude, Lifestyle, Health, Students

**THE PREDICTIVE HEALTHY BEHAVIORS OF PUBERTY AMONG FEMALE ADOLESCENTS OF GONABAD BASED ON BEHAVIORAL INTENTION MODEL**

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**Introduction:** The aim of this study was to investigate the Predictive Healthy Behaviors of Puberty among Female Adolescents of Gonabad based on Behavioral Intention Model.: Puberty is most important stage of life with physical and psychological changes. If is not considering issues of puberty girl's health and self-confidence they will be difficulty. Preparation and planning for adolescent girls should be done with mature relationship based on training needs. This study aimed to determine training needs of girls in high school Gonabad puberty health plans based on behavioral intention model (BIM) was performed.

**Materials and Methods:** In this cross-sectional study 200 high school girl students of gonabad city were surveyed. Samples as a cluster randomized were selected. They were selected based on multi-stage clustering. A questionnaire that was designed based on BIM (Behavioral Intention Model) used for data collection including demographic data knowledge and attitude questions and subjective norms

**Results:** The average score of knowledge was 56.23± 2.67 and for attitude it was 63.25±5.77. Pearson correlation coefficient showed a significant relationship between knowledge and attitude (P<0.001 & r= .477) .There was a significant relationship between knowledge and attitude with by analyst variation Analyzing the questions of subjective norms showed that the most important attitude norm at school was %15.63 by the teachers and it was %67.18 at home by mothers impact on students 34.4 percent of these individuals had a weak knowledge

**Discussion and conclusion:** To perform health behaviors by girls we should pay special attention to three factors including knowledge, attitudes, and abstract norms. Also health education about puberty should be continued in high schools.

**Keywords:** Behavioral Intention Model; Girl Adolescent; Puberty

**KNOWLEDGE AND ATTITUDE OF 18 – 35 YEARS OLD BOYS AND GIRLS IN DAMGHAN ABOUT COMMUNICATIONS SKILLS, SELECTING LIFE PARTNER, AND PARTNER SELECTION FACTORS IN 1388**

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**Introduction:** Society can have a great role in establishing successful marriages. Successful marriages can be a base of healthy family which can lead to healthy society. But
today we are facing physical and emotional divorces more and more which are because of inability of boys and girls, being unaware of partner selection skills and right criteria for partner selection. This research shows the measurement of knowledge, attitude and behavior of people mentioned in the research.

Goals: Knowing the rate of knowledge in 18-35 year old boys and girls in Damghan about marriage, marriage processes and right criteria and factors of partner selection.

Knowing the priority of right criteria for partner selection.

Knowing the marriage process tensions.

Materials and Methods: This was a descriptive-analytical research in which 1230 samples in the range of 18-35 years old were selected from 26150 people of damghan small province. Also, 11000 student populations were selected from the same range of age. Data were collected via questionnaires which the researcher had designed himself and was passed out to professional experts and questioners.

Results: The results of the research showed that 30% of people marry to satisfy sex desire and 29% to reach to more mental peace. In this research, people knew about the following cases: techniques of knowing people, difference between the age of boy and girl, people’s thought about street friendship, people’s goal from street friendship, role of beauty, being engaged with each other, parents’ idea about marriage, and criteria of partner selection.

Discussion and conclusion: According to the results, the importance of consulting is being clear before marriage especially in final years of high school and start of university. Effective techniques should be implemented and life skills should be trained so as to help youths learn the structure of healthy behavior.

Keywords: Marriage, Partner elements, Street friendship, Communication skills

PREVALENCE OF CHRONIC HEADACHE, LOW BACK PAIN AND ANALGESIC USAGE AMONG ADOLESCENTS IN QAZVIN.

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Introduction: Pain among adolescents and children has been identified as an important public health problem. Chronic headache and low back pain in adolescents leads to disability in physical activity, anxiety, sleep disturbance, and school absence and social withdrawal. Parents report severe parenting stress and dysfunctional family roles. This study investigated the prevalence of chronic headache and low back pain and Frequency of analgesic usage among adolescents in Qazvin.

Materials and Methods: This research was descriptive analytical and we studied the prevalence of pain in adolescents aged from 12 to 15 years in open population and the relationship with age, gender and related factor of pain. In a random sample of 200 adolescents aged 12 to 15 years of population in Qazvin. Data were collected by questionnaire and analyzed by spss software, and Statistical analysis was carried out by Q-square test and fisher Test.

Results: Prevalence of headache in adolescents was (36%) and low back pain was (12%). The most of samples (24%/4) registered headache as the most bothersome pain. Prevalence of pain within the previous 3 months was 78%. Prevalence of chronic pain increased with age and was significantly higher for girls (p<0/001). Severity of pain in the most of samples based on VAS was 4-6, the most common analgesic pill used during pain was acetaminophen codeine (19.4%).

Discussion and conclusion: More than two-thirds of the respondents reported restrictions in daily living activities attributable to pain, and %80 of adolescents with pain reported sever effects of their pain on school attendance, participation in hobbies and sleep problems and appetite. Our results underscore the relevance of adolescent pain for public health policy. Additional studies are necessary and may enhance our knowledge about adolescent pain, to enable parents, teachers, and health care professionals to assist young people and adolescents with pain management.

Keywords: Headache - Low back pain - Adolescents-Analgesic use

THE PATTERN OF MOBILE PHONE USAGE AMONG STUDENTS OF YAZD SHAHID SADOOGHI UNIVERSITY OF MEDICAL SCIENCES 2010

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Introduction: The mobile phone usage is one of the modern phenomena of the electronic century that had increased between the families especially youth in world and Iran in recent decade. The number of mobile usage increased from 1.2 million to 4.6 billion from 1990 to 2009 in the world. It is estimated that more than 85% of Iranian will be mobile owner until 2012. The mobile has positive, negative, social and moral effects, but all of the families don’t attend to negative aspects of this technology. The aim of this study was determining the pattern of mobile phone usage among students of Shahid Sadoghi university of medical sciences 2010.

Materials and Methods: This was cross sectional study subjects were selected by simple random sampling from 245 students that were living in university dormitories. Data was collected and approved with a questionnaire that it’s reliability and validity was determined by calculating the Cronbach alpha (α=0.835) and test- retest. The questionnaire had two sections, the demographic data and some questions for determination of the pattern of
This study showed all student attitude was good and practice (p=0.03). About 14% of girls and 24% of boys after buying the mobile had sleep disturbance. There was significant difference by sex and sleep disturbance (p=0.03). There was a decreasing in communication with family and increasing in communication with friends after using the mobile (5% and 8%) respectively. Discussion and conclusion: in according to the results of this study, it is important to educate the Students about the advantages and disadvantages effects of mobile usage.

Keywords: Mobile, Student, Usage pattern, Yazd

ATITUDE AND PRACTICE OF STUDENTS IN YAZD SHAHID SADOGHI UNIVERSITY OF MEDICAL SCIENCES ABOUT THE MOBILE PHONE USAGE IN 2010

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Introduction: The mobile phone usage is one of the modern phenomena of the electronic century that had increased between the families especially youth in world and Iran in recent decade. The number of mobile usage increased from 1.2 million to 4.6 billion from 1990 to 2009 in the word. It is estimated that more than 85% of Iranian will be mobile owner until 2012. The mobile has positive, negative, social and moral effects, but all of the families don’t attend to negative aspects of this technology. The aim of this study attitude and practice of students in Yazd shahid Sadoghi University of medical science about the mobile phone usage in 2010.

Materials and Methods: This was cross sectional study subjects were selected by simple random sampling from 245 students that were living in university dormitories. Data was collected and approved with a questionnaire that it’s reliability and validity was determined by calculating the Coronbach Alfa (α=0.835) and test-retest. The questionnaire had three sectional demographic data and 11 question five spectrums Likert related to attitude estimation, 10 questions were related to practice estimation. The data were analyzed with SPSS and Chi-square test, ANOVA and Pearson correlation tests.

Results: The mean score of attitude female and male of students were 41.8±4.3 and 40±4.4 respectively and the mean score of practice scores of them were 6±4 and7.7±3.8 respectively, this result shows a significant difference(p=0.003, p=0.002 respectively). The girls were disagree about of 20% more than boys about mobile phone advantages that this difference was significant (p=0.014) also there was significant correlation between attitude and practice (p=0.03) practice and average grades (p=0.014), attitude and average grades (p=0.01)

Discussion and conclusion: student attitude was good and their practice were middle to weak. Regarding to this results middle to week so introducing the advantage of mobile phone and negative effects use of this technology has an important role in health promotion of the students.

Keywords: Attitude, Practice, Mobile phone, Students

HEALTH PROMOTING BEHAVIORS OF A SAMPLE OF IRANIAN ADOLESCENTS

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Introduction: Health promotion of adolescents has became a research priority worldwide and life in school offers a good opportunity to establish health promoting behavior among this age group. This study aimed to investigate the health promoting behaviors of high school students who live in Bandar Abbass, Iran.

Materials and Methods: This was a cross sectional study conducted among high school students of Bandar Abbas from November 1 to December 31 in 2009. The target population of this study included adolescents who were studying in the high schools of Bandar Abbas. Bandar Abbas, a city in south of Iran. A self-administered questionnaire regarding demographic characteristics, and Adolescent Health Promotion (AHP) scale were used as data collection instruments for this study. Demographic characteristics included age, sex, and grade. Health promoting behaviors were assessed by the AHP scale.

Results: Totally, 410 students including 204 male and 206 female students studying in grades 9 to 12 and aged between 15 – 18 years old were studied. The instruments used to collect data were a self administered demographic questionnaire and the scale of AHP. The mean age of participants was 16.5 (SD = 1.34) years. The mean score of AHP scale was 64.8 (SD = 8.9) ranging from 34.3 to 89.9. Female students scored significantly higher on health-responsibility, life-appreciation, and stress-management than male students (P < 0.05). In contrast, male students scored higher than female on exercise behavior (P < 0.05).

Discussion and conclusion: This study showed all dimensions of AHP scale except for nutrition behavior and social support was associated with gender and, also, nutrition behavior was associated with age.

Keywords: Health promoting behavior, Adolescents, High school students, Cross sectional study, Iran
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Introduction: World Health Organization (WHO) reported that at least 60% of the world's population fails to complete the recommended amount of physical activity required to induce health benefits and each year at least 1.9 million people die as a result of physical inactivity. It is necessary to assess health status for designing and programming about exercise activities. In this study the effectiveness of Transtheoretical Model (TTM) in predicting exercise activities among the students of Islamic Azad University of Sabzevar was examined.

Materials and Methods: This cross-sectional, analytical-descriptive study included 230 students of Azad University of Sabzevar. The subjects were selected through cluster-sampling method. The instrument for data collection was a questionnaire that its reliability and validity were accepted by a panel of experts and cronbach alpha (N=30, α=0.83-0.97). The data were analyzed by spss 16.00 statically software using path analysis based regression, chi square, t test and ANOVA.

Results: In this study, 58 males (24.8%) and 176 females (75.2%) with an average age of 22.5±3.8 years were selected. According to the results, stages of overall exercise behavior distribution showed that 30% of the subjects were in precontemplation, 29.5% contemplation stages, 21.5% preparation stages, 5% action stages and 14% were in maintenance stages. The results also indicated significant differences among TTM constructs and stages of change (P=0.000). Also findings indicated that behavioral process of change and self efficacy are the most important variables for improving levels of exercise.

Discussion and conclusion: The results indicated that Transtheoretical Model (TTM) could be used as a theoretical framework in the instructional programs in predicting exercise activities in the students. As, the majority of the students (.81) were at precontemplation, contemplation and preparation stages and the results showed that behavioral process of change perceived barriers and self efficacy are the most important predictors for improving levels of exercise. Thus, policies and programs to strengthen these factors to promote exercise activities among students are recommended.

Keywords: Transtheoretical Model, Exercise, Student

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**Factors Related to Physical Activity in Female Dormitory Students of Isfahan University of Medical Sciences: An Application of BASNEF Model**

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Introduction: Sedentary life style is a very serious problem, nowadays. Reducing deaths from chronic diseases and anxiety is one of the benefits of physical activity. The purpose of this study was to determine the factors related to physical activity based on BASNEF model.

Materials and Methods: This was a descriptive – analytical cross sectional study in which 289 female students living in dormitories of Isfahan University of Medical Sciences, were examined. Convenience, non probability sampling was used. Data were collected through a 36-item questionnaire that was prepared based on BASNEF model. Validity of the questionnaire through content validity and its reliability through internal consistency (Cronbach’s alpha test α=0.8) were accepted. SPSS 18 for windows was used for statistical analysis. T-test, one way ANOVA, Spearman and Pearson correlation were used for analysis. P-value less than 0.05 were considered statistically significant.

Results: The mean age of participants was 21.51 ± 2.49. Fifty six per cent of participants were undergraduate students, 11.46% master students and 32.6% professional doctorate. The mean score of behavioral intention was 53.64 ± 30.30. Pearson correlation test showed that there was a significant relationship between attitude and behavioral intention scores (r= 0.48, P<0.001), subjective norm and behavioral intention scores (r= 0.305, P<0.001) and also between enabling factors and behavioral intention scores (r= 0.152, P< 0.05).

Discussion and conclusion: The above-mentioned results indicate that there is a direct relationship between BASNEF model components (attitude, subjective norms) and intention to do physical activities. However, the present study is a descriptive investigation. Therefore, interventional studies are suggested for future researches.

Keywords: Attitude, BASNEF model, Physical activity, Students

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**Physical Activity among Faculty of Health and Nutrition Students in Tabriz University of Medical Sciences**

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Introduction: One of the main aspects of life style is physical activity in leisure times that affect people’s
A cross-sectional study was conducted with 173 students from different departments of Faculty of Health and Nutrition, in Tabriz University of Medical Sciences in 2011. Data was collected using a reliable and validated researcher developed questionnaire. SPSS software, version 16 was used to analyze collected data. P value less than 0.05 was considered as the significant level.

Results: Ten indicators measured physical activity in leisure times. Findings related to the four of them revealed that the majority of students stayed at home or hostel (57%) and listened to music (79.5%) rather than physical activity. Also, nearly half of them (44%) reported having cultural and artistic activities. Almost a quarter reported physical activities during leisure times.

Discussion and conclusion: Results showed that students mostly stayed at home and listened to music; and spent very little time for physical and cultural activities. Thus there is a significant room to pay more attention to students’ physical activities during study at the university.

Keywords: Physical Activity, Leisure Time, Leisure Activities

GENERAL HEALTH AMONGST STUDENTS LIVING IN UNIVERSITY DORMITORIES, TABRIZ, IRAN

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Introduction: Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. It is the most fundamental rights of every human being regardless of race, religion, political belief, economic situation or social status. Since most elite students are related to young population, healthy condition makes their academic more success. This study carried out to investigate the status of public health amongst students who living in dormitories of Tabriz University.

Materials and Methods: This study was a descriptive study that statistical population included all students who were resident in dormitories of Tabriz University. Due to its large sample size, by using Cochrane test the number of 189 students was selected. In order to evaluate general health condition, questionnaire of Goldberg was applied. Regarding to reliability and validity, the questionnaire is a standard tool which measures four dimensions of health including physical health, anxiety, social dysfunction and depression. Questionnaires were randomly distributed among students living in dormitories. Data were analysed by SPSS using parametric tests.

Results: In this study 50.3 percent of the students were male. The results revealed that the public health of the majority were not good (66.1 percent) as participants suspected of having dimensions of difficulties in physical health, depression, social performance, and anxiety. There was no significant relationship between public health and variables such as gender, marital status, educational level, average score of students in the University, father's occupation, family size and birth (P ≥ 0.05).

Discussion and conclusion: These findings indicated that the general health status of students is not too satisfactory; therefore educational and cultural officials of the university including welfare consulting services should provide the necessary facilities in order to maintain an appropriate environment for increasing scientific spirit and mental health. Otherwise, with increasing problems and the forces of society, appropriate growth and development of participants will not be possible.

Keywords: Public health, Student dormitory, Tabriz University

ADOLESCENTS IN THE FIRST LINE OF CIGARETTE SMOKING AND OTHER HEALTH BEHAVIOR PROBLEMS

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Introduction: Over 1.1 billion people smoke cigarette in the world. Prevalence rate is 10 percent in Iran. Cigarette is a risk factor for cancers, tuberculosis, coronary diseases, periodontal diseases, cataract, and impaired social adaptation.

Materials and Methods: This paper is a part of PhD thesis. We reviewed 79 articles in this paper. Electronic journals were searched in Science Direct, Scopus, PubMed, SID, and Nursing Index databases by qualitative research. Cigarette, smoking, Adolescents, health behavior, phenomenology, and grounded theory were our key words.

Results: tobacco industry will target adolescents and try to sell their products to them by innovating new methods. The people start cigarette smoking under 18 years. Adolescents’ parents usually don’t like their children involvement in risky behaviors. Adolescents, who start smoking under 18 years, have low chance for cessation.

Discussion and conclusion: prevention has priority to treatments, therefore plans and strategies focus on primary prevention. Planning for community oriented interventions and attention towards starting of cigarette smoking in adolescents are essential. Planning should be performed from childhood and adolescence periods until reducing adolescents’ tendency to smoking and promote their healthy performance. Health behaviors are acquired, trainable, and changeable. Health education about cigarette’s harmfulness is a suitable way to prevention
and reduction of cigarette smoking in adolescents and youths. Confronting with smoking should be systematic and based on national model. Cigarette prevention plans may reduce other health behavior problems such as alcohol consumption and drug abuse.

Key word: Qualitative research, Cigarette, Smoking, Adolescents, Health behavior

**Alternative Medicine**

**THE ROLE OF COMPLEMENTARY-SUPPLEMENTARY MEDICINE IN HEALTH PROMOTION**

Mostaghimi A

**Introduction:** Nowadays, complementary-supplementary medicine has achieved an important role in health and medical sciences. More patients benefit from complementary-supplementary medicine. Considering the different pattern of diseases in 21 century, and positive evidence for effectiveness of complementary-supplementary medicine, there are significant implications for general practitioners and health professional to get familiar with various non-medical approaches to health and diseases.

**Materials and Methods:** A comprehensive review of literature regarding complementary-supplementary medicine methods both in international level as well as national level was conducted. A critical comparative analysis was implemented to compare the relations between different schools of thought and also to identify the most comprehensive approach. In addition, a review of literature regarding the perspectives of medical students as well as people towards complementary-supplementary medicine was conducted to identify the trends in perceived needs of medical students in regards to training in complementary-supplementary.

**Results:** Comparing the different complementary-supplementary medicine methods shows that there is a high potential for recently emerging Iranian-supplementary medicine to achieve significant success in promoting patients and healthy people’s health with little or no adverse effect. In addition, there has been an increase in demand for training in Iranian-supplementary medicine as well as utilisation of these methods among medical students and people. The global estimations show 65-85 percent of people worldwide is using some kind of complementary-supplementary medicine.

**Discussion and conclusion:** The limited experimental research regarding Iranian-supplementary medicine indicates significant success. However, still there is a great need to more experimental research. In addition, the lack of official organization for this alternative medicine, not only creates obstacles in conducting research, it also increase the risk of faulty practice of this medicine. Hence, it is suggested that the relevant authorities support official research and training for this method and develop regulations to improve monitoring strategies for those practicing this alternative medicine.

**Keywords:** Complementary-Supplementary medicine, Health promotion

**ATTITUDE OF PREGNANT WOMEN ABOUT HERBAL MEDICINE IN VALIASR HOSPITAL IN KAZEROON**

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**Introduction:** Despite the fact that available data are insufficient to justify herbal use during pregnancy, exposure to herbal products is frequent in these subjects. The present study was conducted to evaluate the attitude of pregnant women about herbal medicines in Kazeroon, south of Iran.

**Materials and Methods:** The study was conducted at the Valiasr hospital in Kazeroon, Fars, south of Iran, which is the only hospital in this city. In all 513 women were interviewed within 2 months after childbirth from September to October 2009. Data were collected through a face-to-face survey on the basis of a structured questionnaire.

**Results:** More than one-third of respondents (33.8%) had used herbal medicines during pregnancy. Almost 59.1% who were using herbal medicine believed that the use of herbal medicines during pregnancy is safe. Respondents’ reasons for taking herbal medications were varied and included reasons such as herbs having better efficacy than conventional medicines (22.4%), herbs being natural, are safer to use during pregnancy than conventional medicines (70.5%), easier access to herbal medicines (22.8%), and comparatively low cost of herbal medicines (13.6%). About 59.1% of the respondents believed herbal medicines possess no adverse side effects while 27.3% were of the opinion that adverse side effects of some herbal medicines could be dangerous. Place of living and educational qualification of respondents had statistically significant correlation with respondents views on side effects of herbal medicines [p<0.05] while urban and educational qualifications seemed to have influence on respondents’ opinion on the harmful effects of herbal medicines to the fetus [p<0.05].

**Discussion and conclusion:** The study emphasized the wide spread use of herbal medicines by pregnant women in Kazeroon. This frequent use is worrisome. In fact, while pregnant women recognize the potential risks of drug consumption, they do not realize that herbal products, if taken incorrectly, could also be toxic. So an urgent need for health care practitioners and other health care givers to be aware of this practice and make efforts in obtaining information about herb use during ante-natal care.

**Keywords:** Pregnancy, Herbal medicine
Cancer Prevention

MEASURING HEALTH BELIEF MODEL COMPONENTS IN ADOPTING PREVENTIVE BEHAVIORS OF CERVICAL CANCER IN JAHROM 2010

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Introduction: Cervical cancer is the second prevalent women cancer in the world. This cancer is found preventable because of having the prolong time before the appearance, its complications and the available proper screening program and possibility of the primary lesion treatment. The aim of this investigation was to determine Health Belief Model components in adopting preventive behaviors in cervical cancer in women aged 20-65 in Jahrom/Fars province/ of Iran was conducted.

Materials and Methods: This descriptive-analytical and cross-sectional study was carried out on 213 married 20-65 years-old women chosen by a cluster sampling method. The data was gathered by a valid and reliable questionnaire including demographic variables and Health Belief Model components and interview method. The data were analyzed by using descriptive and analytical statistics (Chi square test, in-depended T-Test, Pearson correlation coefficient and Regression) by SPSS-16. Probability values less than 0.05 were considered significant.

Results: The results showed that the mean age of the study group was 40.42± 12.22 and only 5.9% of them had a good knowledge about the cervical cancer and preventive behaviors of it. 31.6% of the studied women had at least one time examined for Pap smear test and only 7.9% of them with the test performed this test on a regular intervals. Test regression analysis showed that all components of the HBM have an effective role in behavior and self-efficacy had the most impact (P=0.001). In addition, there was a significant difference between the mean HBM components (perceived barriers, perceived benefits, behavior and knowledge) in women who have a history of papsmear test with them who had not. (P=0.027, P=0.035, P=0.003, P=0.01).

Discussion and conclusion: The results of this study indicated that there is little knowledge about cervical cancer among women in Jahrom that needs to be increased. Long-term educational programs is recommended based on the HBM with particular notice on preventive behaviors of cervical cancer.

Keywords: Cervical cancer, Health Belief Model, preventive behaviors, Jahrom

PERCEIVED THREAT TO BREAST CANCER IN GORGAN CITY, 2010

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Introduction: Breast cancer is the most common type of cancer in women. Perceived risk is a principal variable in theoretical models that attempt to predict the adoption of health-protective behaviors. The objective of the current study was to assess Perceiver Threat to Breast Cancer in Gorgan, northern part of Islamic Republic of Iran.

Materials and Methods: In a cross sectional study data were collected from a clustered sample of 300 women, attending two health centers in Gorgan city, using an adapted version of perceived threat section of Champion’s revised Health Belief Model Scale. The questionnaire obtained information about the participants’ socio-demographic characteristics. Descriptive statistics, Kruskal Wallis, Mann–Whitney U test were used for data analysis. SPSS 17 statistical package for Windows was used for statistical analyses. Alpha levels were set at p<0.05.

Results: The sample were ranging in age from 18 to 60 years, with a mean age of 30.3 years (SD = 7.3). Almost all of them (99%) married. less than half of the women (41.7%) had attended school for 12 years, more than one-quarter (27.3%) had academic education. Most of them (89%) were home worker. The mean and SD score for perceived threat was 26.5±6.8 from 50. Mere 8.35 of the participants had high perceived threat to breast cancer. Perceived threat is not influenced by age, job, and having a positive family history but, influenced by education level (x2 =12.891, p=0.024).

Discussion and conclusion: the result indicated that perceived threat to breast cancer was low in the current study. Because the compliance with recommended breast cancer screening behaviors is influenced by individual perceived risk it is necessity to development of effective interventions for improving perceived risk of breast cancer.

Keywords: Breast Cancer, Perceived threat, Health Belief Model

THE EFFECT OF HEALTH EDUCATION PROGRAM REGARDING BREAST CANCER, CERVICAL CANCER AND CURRENT WOMEN’S GYNECOLOGICAL INFECTIONS ON KNOWLEDGE OF FEMALE STUDENTS IN NEHZAT-E-SAVADAMOUZI IN FARSI PROVINCE,1386

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Introduction: Health education through printed media is the most extensive method in improving healthy knowledge and behavior. This study attempts to investigate the effect of this method on health knowledge
and behavior of Nehzat’s students regarding cervical and breast cancer and common female genital tract infections. Materials & Methods: This interventional study was carried out on female students of Nehzat that randomly selected. Health knowledge and behavior before and after education was evaluated by means of a questionnaire that its validity and reliability was confirmed by statistical consultant .Then the results were analyzed by Mcnemar analytical test by means of spss software.

Results: The study showed that education through printed media significantly increased the health knowledge and behaviors in cervical and breast cancer but it has not the same effect on common female genital infections significantly. Also increase in health knowledge and behaviour doesn’t have any significant relationship with degree, residence, marital status and husband’s literary level.

Discussion and conclusion: This study showed that education through printed media is useful for increasing knowledge and promoting behavior among nehzat’s women. As this method of education is not too expensive it is recommended that this method of health education should spread in all women.

Keywords: Printed media, Education, Breast acancer, Cervical cancer

RISK ASSESSMENT OF DEVELOPING BREAST CANCER UTILIZING GAIL MODEL

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Introduction: Breast cancer is the most common form of cancer among women and the second highest cause of cancer death. Gail model is widely used to quantify an individual woman’s risk of developing breast cancer utilizing important clinical parameters usually for clinical counseling purposes or to determine eligibility by radiographic and genetic trials. The aim was to estimate the 5-year and life time breast cancer risk among women in Rasht.

Materials and Methods: This study was cross-sectional descriptive and 314 women were studied at Alzahra Women Hospital, Rasht, Iran in 2007. Participant’s age was ≥ 35 without history of breast cancer. Data was collected by interviewing the subjects using a questionnaire designed on basis of Gail software items including the patient’s age, age at menarche, age at first live birth, number of first-degree relatives with breast cancer , number of breast biopsies and number of breast biopsies diagnosed as atypical hyperplasia. Risk estimation was performed utilizing the computerized Gail model provided by the National Cancer Institute (U.S.). A 5-year risk >1.66%, was considered high-risk, Data was analyzed with spss version 10.

Results: The study showed that education through printed media significantly increased the health knowledge and behaviors in cervical and breast cancer but it has not the same effect on common female genital infections significantly. Also increase in health knowledge and behaviour doesn’t have any significant relationship with degree, residence, marital status and husband’s literary level.

Discussion and conclusion: This study showed that education through printed media is useful for increasing knowledge and promoting behavior among nehzat’s women. As this method of education is not too expensive it is recommended that this method of health education should spread in all women.

Keywords: Printed media, Education, Breast acancer, Cervical cancer

KNOWLEDGE, ATTITUDE AND BEHAVIOR OF WOMEN REGARDING CERVICAL CANCER SCREENING TEST IN ISLAMIC AZAD UNIVERSITY_TABRIZ BRANCH, 1389

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Introduction: Cervical cancer is the second most common gynecologic cancer in women. This cancer is easily diagnosed by Pap test. Pap test detects most cervical neoplasia during the usually prolonged premalignant or early occult malignant phases when treatment outcome is optimized. This study has been performed to determine women’s knowledge, attitude and practice working in the Islamic Azad University_Tabriz branch in cervical cancer screening test.

Materials and Methods: A descriptive study, with census sampling, was conducted among 204 women including employees and faculty members. Respondents completed a questionnaire consisting four sections: socio_demographic characteristics, knowledge, attitude and practice questions. Obtained data were analyzed using SPSS version 16. (one_way ANOVA, chi square test, Pearson correlation and regression)

Results: Mean of knowledge was 48.6±26.5 in participants, their attitude was desirable (72.7 ± 10.2) and most of them had poor practice (61.2 %). Mean of knowledge and attitude in the medical group was significantly higher than nonmedical patients (t=9.218, p<0.00), but the practice of both medical and nonmedical groups was identical (p=0.327, t=0.463). There was a weak correlation between knowledge and attitude (p=0.00, r=0.339) and women who have a higher awareness have had a better practice, too. Knowledge and attitude can predict only 12% of the performance state(R= 0.118).

Discussion and conclusion: Although Pap smear is important in reducing morbidity and mortality of cervical...
INTRODUCTION: Breast cancer is the most prevalent cancer in women. Knowledge of young female, about screening examination of these cancers, is very helpful on early detection and improving prognosis of such diseases. This research has been carried out with the aim of examining the effect of education through pamphlet on knowledge of girl students in dormitories of Shiraz and medical sciences universities. 

MATERIAL AND METHODS: This experimental study has been done on 400 individuals. We use simple random sampling from girl dormitory students. Samples consist of 200 individuals of intervention group and 200 individuals of control group. Intervention instrument was educational pamphlet which has been given to intervention group. Data were collected through a questionnaire which had maximum knowledge score of 19.00. To analysis the data, statistical methods of paired t-test, independent t-test, and chi square were used. For statistical judgement we used confidence intervals of 95%.

RESULTS: In controls the mean point in pre-test was 10.54 and in post-test was 11.50 which was not statistically significant (P=0.12). In intervention group, the mean point before intervention (pamphlet)was 8.96 which after intervention in creased up to 13.96 that was statistically highly significant (P<0.001). Medical sciences students (both in interventions and controls, also in before and after intervention). Most important gaining information sources, in controls were magazines and newspapers (25%), and in intervention group were pamphlets (57%).

DISCUSSION AND CONCLUSION: We observed the effect of education on promotion of student's knowledge. So expansion of appropriate education to aimed group, especially non-medical sciences students is offered. In addition, to promotion of Knowledge, attitude and practice of whole population, regarding health behaviors, the health education programs corresponding to needs of aimed individuals would be worthwhile.

KEYWORDS: Breast cancer, Screening, Intervention, Education, Knowledge

APPLICATION OF THEORY OF PLANNED BEHAVIOR TO PREDICT OBTAIN A PAP SMEAR AMONG IRANIAN WOMEN

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INTRODUCTION: Cervical cancer is the second most common cancer among women in the world and the most common in developing countries. Secondary prevention, achieved through Pap smear testing, is the single most effective tool in reducing deaths due to cervical cancer. State that between 20-60% of all cervical cancer deaths could be avoided by improving screening programs. The purpose of this study was to determine the empirical adequacy test theory of planned behavior to explain obtain a Pap smear among marriage women's refer to health centers in Hamadan, Iran. 

MATERIALS AND METHODS: A cross-sectional study, total of 400 woman’s aged 20-65 years, was randomly selected for participation in this study. Participants responded to the standard questionnaire. A questionnaire was developed to measure each of the expanded theory of planned behavior components.

RESULTS: 63.8% of sample obtain Pap smear test at least one time. 28.3% of sample reported their systematic obtaining pap smear. Their was a significant correlation (p < 0.05) between cervix cancer history in family and obtain systematic pap smear test. Also their was a significant correlation (p < 0.05) between age and obtain systematic pap smear test. A logic model for response variable was conducted and the best predictor of obtain a pap smear test was subjective norm (OR= 1.35 &p-value = 0.003).

DISCUSSION AND CONCLUSION: As it was revealed by statistical analysis, subjective norm was the most effective factor between women for obtain systematic Pap smear test. It is important to pay attention to education for women and their relatives by medics and educational health personals.

KEYWORDS: Pap smear, Cervical Cancer, Theory of Planned Behavior

FACTORS ASSOCIATED WITH THE DECISION TO OBTAIN AN PAP SMEAR TEST AMONG URBAN WOMEN IN ZARANDIEH, IRAN: AN APPLICATION OF HEALTH BELIEF MODEL


INTRODUCTION: Well-organized screening programs can substantially reduce mortality from cervical cancer and the incidence of invasive disease in the target populations. Cervical cancer is the most common malignancy among women in developing countries. Popsmear is only one...
proven strategy for the prevention by diagnosis of cervical cancer. The purpose of this study was determining factors associated with the decision to obtain an pop smear test among urban women in Zarandieh via Health Belief Model (HBM).

Materials and Methods: This is a cross-sectional analytical study which was carried out on 265 urban women in Zarandieh Iran. This survey was done by completing a questionnaire based on health belief model. Data was analyzed using chi-square tests, independent samples t-test, logistic regression and descriptive statistics.

Results: A total of 25.9% reported having Popsmear test. The most common reasons for testing was recommendation of health workers (71%). Among those who were never tested, low levels of perceived susceptibility (79%) were the most common barriers. Significant differences were detected between those tested and not tested in mean of score of all the variables Health Belief Model (sensitivity, benefits, barriers, threat and intensity perceived) (<0.001).

Discussion and conclusion: Based on findings of this study, health care professionals must design educational program about cervical cancer and the benefits of participating in cervical cancer screening programs with using the HBM constructs also Health education programs needed in order to use of the theories and models of changing of behavior in individual and organization levels for Helping to Plan Effective Programs as the uptake of cervical cancer screening (Pop smear).

Keywords: Pap smear, Women, Health Belief Model

IMPROVING BREAST SELF-EXAMINATION: AN EDUCATIONAL INTERVENTION BASED ON HEALTH BELIEF MODEL FROM BANDAR ABBAS, IRAN

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Introduction: Breast cancer remains a major public health problem worldwide. It is the most common type of cancer among women in all over the world. The incidence of breast cancer varies from the highest rate in the United States to the lowest rate in Asia. In Iran, the incidence of the disease is increasing, patients present with advanced stage of disease and they are relatively younger [about 10 y] than their western counterparts. Although, there are no precise statistics on breast cancer in Iran, but informal data indicate that the crude incidence rate of the disease is about 20 new cases per 100000 women per year. This study evaluated the effect of an educational program on breast self-examination [BSE] among women living in Bandar Abbas, Iran.

Materials and Methods: This interventional study was conducted in eight health centers of Bandar Abbas in Iran in 2008. The study population consisted of women attending at these eight health centers. Each health center 30 women were selected randomly. In total, in this trial studied 240 eligible women attending at eight health centers of Bandar Abass who were randomly divided into intervention [n = 120] or control [n=120] group. Data regarding belief on breast self examination were collected through the Champion’s Health Belief Model Scale [CHBMS].

Results: At the initial of the study, there were no differences between two groups in terms of socio demographic data, the mean scores of Champion’s Health Belief Model [CHBMI] sub-scales and breast self-examination rate. At follow up time the intervention group compared to control group has obtained significant higher mean score of CHBM in terms of all sub-scales except for the subscale of BSE benefit.

Discussion and conclusion: This study indicated that the designed program could improve Breast Self Examination among studied women.

Keywords: Breast self examination, Breast cancer, Health Belief Model

EFFECTS OF EDUCATION BASED ON HEALTH BELIEF MODEL ON KNOWLEDGE AND ATTITUDE REGARDING PAP SMEAR AMONG HEALTH WORKERS

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Introduction: Cervical cancer is the second common cancer after breast cancer in the world. It causes for 18% of total death among women. This study was conducted to determine the effects of education based on Health Belief Model (HBM) on knowledge and attitude of voluntary health workers regarding Pap smear in the selected hospitals of Tabriz in 2009.

Materials and Methods: This study was a quasi experimental design. The study samples consisted of 180 nurses working in the selected hospitals of Tabriz. Data collection instrument was a questionnaire. Content method and cronbach coefficient Alpha were applied for validity and reliability of the questionnaire respectively. First a pre-test was administered to the groups then the training plan based on Health Belief Model was executed. Then after one month the subjects completed the questionnaire as post test. The data were analyzed by SPSS software (version 14) using descriptive and inferential statistics such as independent T-test, ANOVA, and Chi Square.

Results: Mean scores of knowledge and HBM variables (perceived sensitivity, benefits, barriers and severity) about Pap smear test in the subjects before and after intervention and within the variables showed a significant correlation(p<0.05). Also there were statistically...
significant correlation among some demographic characteristics and variables of HBM (p<0.05).

Discussion and conclusion: This study indicated that health education programs based on Health Belief Model can lead to increase health knowledge and improving attitude regarding Pap smear test among voluntary health workers. Therefore the necessity of execution of effective instructional programs to increase the knowledge and attitude of health workers regarding Pap smear is emphasized.

Keywords: Health Belief Model, Knowledge, Attitude, Pap smear

EFFECT OF EDUCATION ON HEALTH BELIEFS AND PRACTICE OF WOMEN ELIGIBLE FOR CERVICAL CANCER SCREENING USING HEALTH BELIEF MODEL

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Introduction: Cervical cancer after breast cancer is the second most common cancer among women. Cervical cancer screening program leads to early diagnosis and effective treatment of it. This study was conducted to assess the effect of education using the Health Belief Model on health beliefs and practice of women eligible for Pap smear.

Materials and Methods: In this quasi-experimental intervention study, 70 women aged 16 to 54 years were enrolled who had never done Pap smear test until the date of this study. A self-administered questionnaire based on Health Belief Model was used for data collection. The intervention was done in two two-hour sessions for groups of 10 persons based on Health Belief Model components and specified behavioral goals. Health beliefs and practice of the target group were evaluated and compared before intervention and four months later.

Results: The results of this study indicated that the educational intervention based on Health Belief Model had significant effect on knowledge of the subjects under study so that the knowledge mean score of 32% before intervention increased to 92% after the intervention (P <0.001). In addition, the intervention increased the mean scores obtained from the contracts of the Health Belief Model. Accordingly, the perceived susceptibility mean score increased from 62% to 94%, perceived severity from 69% to 94%, perceived benefits from 75% to 96%, and perceived barriers from 60% to 90%. Furthermore, as the result of the intervention, 81.4% (57/70) of the subjects were motivated to do Pap smear test. Moreover, knowledge had positive effect on contracts of Health Belief Model so that per one unit increase in knowledge, the perceived susceptibility increased 0.7 unit, the perceived severity 0.4 unit, the perceived benefits 0.3 unit, and perceived barriers 0.6 unit. Age and education level had no significant effect on results.

Discussion and conclusion: This study indicated that educational interventions based on Health Belief Model can revolutionize the health beliefs of the society and make a considerable effect on health behaviors such as cervical cancer screening

Keywords: Cervical cancer, Pap smear, Health Belief Model, Knowledge, Belief, Practice

EFFECT OF EDUCATION ON KNOWLEDGE, ATTITUDE AND PRACTICE OF FEMALE STUDENTS OF YAZD CITY REGARDING SKIN CANCER

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Introduction: Cancer is the second cause of mortality in industrialized countries. Skin cancer is the most prevalent kind of cancer. One of the most important strategies of WHO in controlling cancers is improving the knowledge of people. Also because dissemination of information about basic diseases is considered as health education, changing attitudes and practices are the main aims of health education. One of the important factors in the prophylaxis of the diseases is educating the students at risk or those who play an important role in controlling the problem. The aim of this study was to assess the effects of education on the Knowledge, Attitude and Practice (KAP) of female students regarding skin cancer in Yazd.

Material and Methods: In this self-controlled quasi-experimental intervention study, random sampling was employed to recruit 75 female students of the universities throughout the city of Yazd. Data were gathered by a researcher-made questionnaire comprising of demographic characteristics, and questions related to knowledge, attitude and performance. Validity and reliability of the scales were approved. Data were analyzed using descriptive and inferential statistics.

Results: Knowledge and attitude were statistically significant predictors of Behavior and were accounted for 25.1% of the variation. After implementing the educational program, the respondents' knowledge, attitude and practice were significantly increased.

Discussion and conclusion: Considering the higher priority of prevention in proportion to treatment specially
regarding cancers, implementing such an educational programs which results in improving knowledge, increasing the susceptibility of society and employing perfect and cost-effective strategies to prevent and control skin cancer is necessary.

**Keywords:** Education, Skin cancer, Students

**EFFECTS OF HOPE PROMOTING INTERVENTIONS ON CANCER PATIENTS: A CASE STUDY IN SANANDAJ**

**Abdi N**

**Introduction:** Cancer occurs when cells divide uncontrollably. These abnormal cells can invade nearby tissues or travel to distant sites by entering the bloodstream or lymphatic system. Hope is a significant factor and essential element in cancer disease which has many effects in compatibility with conditions, especially in suffering and disappointment periods. Hope has a significant role in increasing quality of life, and effects on different disease stages. the aim of this study was to increase and promote hope in cancer patients.

**Materials and Methods:** This study was a randomized controlled trial, which HHI questionnaire was completed before and after intervention in two case and control groups patients (each group 25 person) .The hope promoting intervention for patient in case groups as a face to face method and individually with PBL method was accomplished. Data was analyzed by use of spss and Chi square tests and co-variance analyze.

**Results:** The knowledge mean score in case group patients significantly was more than control group (P<0.008).

**Discussion and conclusion:** Educational interventions affected on improving knowledge and attitude and also increasing hope in cancer patients and their family, so implementing such programs may effect on cancer patients quality of life.

**Keywords:** Cancer, Hope, Promoting Interventions

**HEALTHY LIFESTYLE , A NEW APPROACH TO PROMOTING HEALTH OF PATIENT WITH CANCER : USING OF SYSTEMATIC APPROACH, SANANDAJ, IRAN.**

**Abdi N**

**Introduction:** Cancer occurs when cells divide uncontrollably. These abnormal cells can invade nearby tissues or travel to distant sites by entering the bloodstream or lymphatic system. Incidence Rate in cancer during 50 years ago has increased constantly. Nutrition, Physical activity and Hope are significant factors in cancer disease that unfortunately patients don’t have correct Knowledge and attitude about these important factors. Purpose: The health promoting setting approach in this study aimed at promoting the health of patients with cancer in the community treated as a complex social system. It is not merely aimed at the patients’ health but focuses the whole environment and all aspects of patients with cancer and their family.

**Materials and Methods:** This study is a Randomized controlled trial, which Knowledge and attitude questionnaires in basnef model and HHI questionnaire was completed before and after intervention in two case and control groups patients (each group 25 person) and knowledge and attitude questionnaire in patients family in two case and control groups (each group 25 person). The educational and promotional intervention for patient and their families in case groups as a face to face method and individually with PBL method was accomplished. Data analyzed using SPSS and Chi –square tests and co-variance analyzes were used.

**Results:** The knowledge mean score in case group patients significantly was more than controls group (P<0.008).

**Discussion and conclusion:** Educational interventions affected on improving knowledge and attitude and also increasing hope in cancer patients and their family, so implementing such promgrams may effect on cancer patients quality of life.

**Keywords:** Cancer, Hope, Promoting Interventions

**EFFECT OF EDUCATION BASED ON HEALTH BELIEF MODEL ON BREAST SELF- EXAMINATION AMONG FEMALE TEACHERS IN SARI-IRAN**

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**Introduction:** All women at any age are at risk of breast cancer and the risk will increase by aging. Rapid diagnosis of breast cancer and prompt treatment will survive the lives of more than 90 percent of patients. There are definite documents that indicate breast self-examination (BSE) is an effective method for prevention of death, but many women do not perform it regularly based on recommended screening programs.

**Materials and Methods:** In this quasi experimental study, 644 of teacher were involved. Data were collected by using self administered questionnaire which include demographic characteristic and health belief model scale, the reliability and validity of the questionnair were examined and approved. Then the training program started using speech methods, group discussion, video presentation and practice program using an artificial model (mulaj). After 2 months of training, the second test was performed using the primary questionnair. The data analysis was performed by SPSS software.

**Results:** Finding indicates that knowledge and susceptibility have strong influences on BSE. Higher education in female teachers was associated with increasing the rate of knowledge, susceptibility, benefit and seriousness. In
addition, the finding revealed that the mean of knowledge about BSE after educational intervention compare to prior study were significantly increased.

**Discussion and conclusion:** The education was effective in increasing breast cancer/early screening-related knowledge and modifying beliefs. Finding from this study indicated that knowledge and susceptibility have strong influences of BSE behavior among the female, therefore BSE training programs that emphasize to benefit, cues to action and address perceived barriers are recommended.

**Keywords:** Breast self examination, Teacher, Health Belief Model.

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**APPLICATION OF REASONED ACTION THEORY TO PREDICT INTENTION TO PAP SMEAR SCREENING TEST AMONG FEMALE TEACHERS IN DASHTI DISTRICT, IRAN**

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**Introduction:** Cervical cancer is an important public health problem. It is the second most common cancer in women worldwide and the most common in developing countries. Cervical screening is acknowledged as currently the most effective approach for cervical cancer control. Papanicolaou (Pap) smears have been shown to detect early cervical cellular abnormalities, thereby reducing morbidity and mortality from cervical cancer. This study designed to determine the factors associated with participation in Pap smear screening using the Reasoned Action Theory (RAT) in female teachers in Dashti District, Iran.

**Material & Methods:** Using census, total number of 174 married female teachers working in guidance and high schools of Dashti district entered in this analytical cross-sectional study in 2008. The data collection instrument was a self-administered questionnaire which asked Subjects' demographic variables and measured Reasoned Action Theory constructs including attitude, subjective norms, Behavior intention and practice of women regarding Pap Smear screening Test. Validity and reliability of the questionnaire was assessed and approved.

**Results:** Mean age of women was 36.28±5.91 years, Most of them were married and 39.1% had a history of 2 pregnancies. Nearly 50% had minimum of one Pap smear test which 51.2% of them had the test at health centers. 98.3% believed that Pap smear test makes women informed about their health status. 24.7% intended to screen each 3 years regularly. More than 80% women referred the medical and health personnel as the most important indicators of normative beliefs and motivation to comply. There was a positive significant correlation between intention to do Pap smear and the subjects’ attitude and subjective norms.

Additionally, attitude accounted for 43% of variances in intention to do Pap smear.

**Discussion and conclusion:** Reasoned Action Theory is a useful conceptual framework for designing interventional programs for promotion of Pap smear screening.

**Keywords:** Vaginal Smear, Cervical Cancer, reasoned action theory

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**SURVEY OF CERVIX CANCER SCREENING DETERMINANTS AMONG 20-65 YEARS OLD WOMEN BASED ON HEALTH BELIEF MODEL**

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**Introduction:** cervix cancer is the second most common cancer among women which can be prevented. Health Belief Model (HBM) has been used as an exploratory model to assess why people do not use preventive health services. The aim of this study was to survey cervix cancer screening determinants in 20-65 years old women based on health belief model.

**Materials and Methods:** In a cross-sectional design, total number of 300 women entered in the study using cluster random sampling. Data were collected by a questionnaire which was designed based on HBM. A test-retest approved reliability of the questionnaire and data were analyzed via SPSS software.

**Results:** Means and standard deviations of HBM constructs were as follow: knowledge (7.12±2.75), perceived susceptibility (3.45±1.09), perceived severity (5.92±1.54), perceived benefits (2.33±1.22), perceived barriers (14.14±3.6) and cues to action (1.04±1.05). Only 37 percent had been done pap smear test. Regression analysis revealed that knowledge and perceived barriers significantly predict the practicing of pap smear test. moreover, number of doing pap smear was predicted significantly by perceived benefits.

**Discussion and conclusion:** As, the number of doing pap smear test was predicted only by perceived benefits and the status of doing that was predicted only by knowledge and perceived barriers, and the other constructs of HBM were weak in predicting the behavior, investigating the application of other education models in future studies is recommended.

**Keywords:** Health belief model, Pap smear, Cervix cancer.

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**KNOWLEDGE, ATTITUDE AND PRACTICE OF ZABOLIAN WOMEN REGARDING BREAST SELF-EXAMINATION: AN APPLICATION OF HEALTH BELIEF MODEL, 2009**

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**Introduction:** Breast cancer is the most common cause of cancer related deaths among women worldwide. Recent global cancer statistics indicate rising global incidence of breast cancer and the increase is occurring at a faster rate in population of the developing countries. It seems that early breast cancer detection may be followed by better treatment. The aim of this study was to find the factors related with Breast self-examination practice using of Health Belief Model.

**Materials and Methods:** This was a cross-sectional, descriptive study carried out on 246 women in Zabol who referred to health care centers. We used a questionnaire according to Champion health belief model to get information. Data analysis was carried out using spss statistical analysis software and Descriptive and analytical statistics T test, One Way ANOVA and χ² test and P value was set at≤0.05.

**Results:** Knowledge and breast self-examination practice of the participants was rather low. They were at a medium level of perception on six health belief model subscales. There was significant differentate on health belief subscale hatwing participant who had knowledge and performed breast self-examination and the participant who did not. There was significant correlation between positive family history of breast cancer and performance for breast self-examination. There was no significant correlation between scholarships and performance for breast self-examination.

**Discussion and conclusion:** We can conclude that good information and correct health perception about a disease and its effect can lead to adequate health behavior and educating all women at risk is the most important health approach.

**Keywords:** Health belief model, Health belief factors, Breast self-examination

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**EFFECTIVENESS OF HEALTH EDUCATION INTERVENTIONS TO IMPROVE BSE BEHAVIOR AMONG WOMEN: A REVIEW STUDY**

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**Introduction:** Breast cancer is the most well-known type of cancer and the second cause of mortality among women. To date a lot of training has been done to encourage women to perform breast self-examination aimed at early detection of breast cancer. This study aimed to review the effectiveness of educational interventions on breast self-examination behavior among women.

**Materials and Methods:** Systematic search was carried out inside the ISI database (SID, MAGIRAN, IRAN MEDEX) to obtain titles and abstracts containing the results of educational interventions related to BSE in women. Among them, articles pertaining to the effectiveness of educational interventions were selected and ultimately examined. Consequently, 14 full-text articles were analyzed.

**Results:** About 84% of educational programs had been presented as skill training, 64% of educators were health system employees and the remaining 36% included peer groups and the patients’ families. There was high variation with regard to the characteristics of the groups under study such as age, race, educational level and occupation in the above-mentioned studies. In some cases, the immediate families of these patients as the vulnerable group had been trained.

**Discussion and conclusion:** BSE education in the areas of knowledge, attitude and behavior play a major role in increasing the number of early breast cancer detection and treatment. More and effective education are done by nurses and other medical staff compared with that of physicians. It should be mentioned that selecting the appropriate place for education including health centers and work-place ultimately will contribute to greater success.

**Keywords:** Breast cancer, Breast self-examination, Health education, Prevention

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**SURVEY OF KNOWLEDGE AND PRACTICE OF WOMEN (15-55 YEARS) ABOUT BREAST CANCER AND SCREENING METHODS IN KASHAN-2010**

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**Introduction:** prevention and screening programs are the main elements of reduction of breast cancer and its mortality. The purpose of this study was to determine the level of knowledge and performance of 15-55 aged women regarding breast cancer and its screening programs.

**Materials and Methods:** This was a descriptive, cross-sectional study. The study population included 15-55 aged women of Kashan who selected by random sampling. Data Collection was performed through a questionnaire in one stage and the analysis of data was performed using the statistical software SPSS K-square tests, Fisher precise tests, T test and one way variance analysis.

**Results:** A total of 359 woman participated in this study. 34.5% of woman had secondary education, 79.6% were married, 73.5 housewife.They had a family history of grade 1 and 2, with a positive breast cancer (84%).The knowledge level of breast cancer patients and its screening
programs has been good in 27%, moderate in 56/8% and weak in 16.2%. 40.4% women over 15 years were doing BSE during a year and about 23.4% of them had confidence on the examination of their breast properly by themselves. 78.3% of 15 years women and above never had consulted to a doctor for breast examination during the past two years and 9.5% had done the mammography during the past two years.

Discussion and conclusion: The results showed that the performance in the studied population was much less than what was expected, and therefore providing the essential training about the screening methods of breast cancer by health workers is necessary.

Keywords: Knowledge, Performance, Breast cancer, Breast self-examination, Mammography

THE EFFECT OF EDUCATIONAL PROGRAM ON WOMEN'S PRACTICE BASED ON HEALTH BELIEF MODEL ABOUT PAP SMEAR TEST IN KOUHDASHT

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Introduction: Cervical cancer is the second prevalent cancer after breast cancer in the world and 18 percent of total women deaths are due to the cervical cancer. Cervical cancer is a preventable disease. The detection and early diagnosis of cervical cancer can improve the quality of treatment. Pap smear test is an effective screening method to diagnose the cervical cancer. The aim of this study was to determine the effect of education on women's practice based on the Health Belief Model about pap smear test.

Materials and Methods: It was a quasi-experimental study on 70 women in Kouhdasht health centers who randomly divided into two case and control groups. Data Collection instrument included a questionnaire with four parts (demographic factors, knowledge, Health Belief Model variable and practice). After gathering information, the case group participated in two health education session. One month after intervention, data were collected again. Then paired t-tests and independent t-test were used to analyze data.

Results: According to results, the mean scores of knowledge was significantly different in the two groups after intervention (P<0.001). The mean scores of the model variables (perceived susceptibility and severity, perceived benefits and barriers) had no significant difference in the two groups before intervention, but after intervention had significantly difference between the two groups (P<0.001). Before the intervention, 51 percent of women knew health Centre staff as a cue to action, after the intervention was 100 percent. In relation to the practice of the case group before the intervention, 7 people (20 percent) had a Pap smear test, but after the intervention this number was 34 (97.4 percent).

Discussion and conclusion: Based on these results, design and implementation of training programs based on Health Belief Model may increase the practice of women about Pap smear tests.

Keywords: Cervical cancer - Health Belief Model - Pap smear

EFFECTS OF EDUCATION ON THE PREVENTION OF CERVICAL CANCER AMONG WOMEN BASED ON HEALTH BELIEF MODEL IN ZARANDIEH, IRAN

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Introduction: Despite cervical cancer is highly preventable, yet it continues to occur, even among women who have access to cancer screening and treatment services. Cervical cancer is also a common type of cancer among women, especially in women 20–39 years of age. In several developed countries, the incidence of invasive cervical cancer has declined, which is largely attributed to early detection efforts. The purpose of this study was to determine the effect of Health Education Program Based on Health Belief Model on the Performance Pap Smear Test.

Materials and Methods: This quasi-experimental interventional study was carried out on 120 women in Zarandieh Iran. Data was collected using a questionnaire Based on Health Belief Model and all group completed the questionnaire. After the analysis of pre-test results, educational content was designed and experimental group participated in 3 educational sessions during the one week. 2 months after the intervention, the post test was performed using that just primary questionnaire and was analyzed by SPSS software.

Results: our findings indicated that mean scores of HBM Model constructs (self-efficacy, susceptibility, severity, benefit and barriers perceived, were significantly increased in the experimental group compared to controls after intervention. Also, performance Pap smear test rate increased significantly among the experimental group compared to controls after intervention (P<0.01) (before intervention 30%, after intervention 53.9% in the experimental group).

Discussion and conclusion: Health education programs needed use of the Theories and models of changing of behavior in individual and organization levels for to help plan effective programs as the uptake of cervical cancer screening (Pap smear).

Keywords: Health Belief Model, Pap smear, women
HEALTH BELIEFS AND INTENTION FOR BREAST SELF-EXAMINATION AMONG HEALTH VOLUNTEERS OF ZARANDIEH IRAN: A TEST OF PERCEIVED BENEFITS AND BARRIERS

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Introduction: Despite advances in screening and treatment during the past several decades, breast cancer remains a major health problem for women and many women have never had a Papanicolaou smear, or are not tested regularly. Breast self-examination (BSE) is an important screening practice for early diagnosis of breast cancer and much cancer is diagnosed by women themselves during self-examination. This study was carried out with the aim of determining Relationship of Breast self-examination with Self-efficacy and Perceived Benefits/Barriers of Self-efficacy among Health Volunteers of Zarandieh city.

Materials and Methods: This was a cross-sectional study and 106 health liaisons of Zarandieh city were involved. Data were collected using a multi-section questionnaire including demographic characteristics, Self-esteem, Perceived Benefits/Barriers of Self-efficacy and Breast self-examination behavior. The data analysis was performed by SPSS software.

Results: The rate of breast self-examination was 19 percent. Perceived benefits score among the patients was 46 percent and perceived barriers score was 83 percent and fear of the test results were the main barriers of self-examination. Regression analysis showed that age, Education level, self-esteem and Perceived Benefits/Barriers, self-efficacy, all together explain 38.5% of breast self-examination variance and among them, perceived barriers and self-esteem, was the most important predicting factor.

Discussion and conclusion: The results of this study showed the relationship of Perceived Benefits/Barriers, self-efficacy and self-esteem with breast self-examination. It is suggested that the findings of present study be used as a basis for interventions designed to enhance better performance in the concerned area.

Keywords: Perceived Benefits/Barriers, breast self-examination

SUN PROTECTION PROMOTION IN CHILDREN: THEORY BASED INTERVENTION FOR SKIN CANCER PREVENTION THROUGH MOTHER EDUCATION

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Introduction: Children are at particular risk for sun exposure, a major cause of skin cancer. Parents and caregivers can help protect children by educating them about performing safe sun habits, and providing supportive environments. The aim of this study was to promote sun protection behaviors in 1-8 years old children through mother education based on Social...
Cognitive Theory (SCT).

**Materials and Methods:** One hundred and sixty five mothers of 1-8 years old children referring to Emamshahr health care center of Yazd city participated in this study. The study subjects were randomized to either an intervention (70 subjects) or control (90 subjects) group. Data was gathered by using Parental Sun Protection Scale (PSPS), via face to face interview, before and two months after performing the educational intervention program and were analyzed by using SPSS 11.5 software and suitable statistic tests.

**Results:** Findings of this study showed that the significant increases were found in mean scores of self efficacy (P≤0.001), norms (P≤0.001), impediments (P≤0.01), and expectancies (P≤0.001), in intervention group at two month after performing the educational intervention program. Significant increases were also found in behaviors of using the sun protection devices such as sun screen (P≤0.001), sun glass (P≤0.007), and protective clothing (P≤0.01). There was no significant variation in mean scores of the variables in the control group.

**Discussion and conclusion:** The results of this study showed the efficacy of educational interventions based on Social Cognitive Theory for the promotion of sun protection behaviors in children via education of their mothers.

**Keywords:** Sun protection, Educational intervention, Social Cognitive Theory

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**BEHAVIORAL RISK FACTORS OF PROSTATE CANCER IN YAZD**

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**Introduction:** Prostate cancer is the most frequently diagnosed malignancy of men and the second leading cause of cancer death among them in the world. This study carried out to determine behavioral risk factors of prostate cancer in Yazd.

**Materials and Methods:** A matched case-control study was conducted on 45 prostate cancer patients and 45 controls (matched group) in Yazd during 2010. Data collected using a questionnaire which completed with private interview. Validity and reliability of the questionnaire approved. Data were analyzed using univariate and logistic regression analysis in the SPSS software 13.

**Results:** Univariate logistic regression showed that, age, history of prostate inflammation, hookah usage, cigarette smoking and cardiovascular disease, family history of prostate cancer, personality type, frequency of sexual activity, red meat, dairy and tea consumption, and also kind of eaten dishes (melamine) are the significant risk factors for prostate cancer. In multivariate analysis, after adjusting the effects of the confounders, history of prostate inflammation, frequency of tea and dairy consumption, family history of prostate cancer, history of hookah usage and cigarette smoking, frequency of sexual activity and personality type were found to be the
This study confirmed low rates of knowledge and also provided evidence to the contribution of other hypothesized risk factors. Findings, along with confirmatory studies, can help guided efforts for early detection, treatment, and prevention for this common malignancy that is set to increase in Iran in future decades. 

Keywords: Prostate cancer; Behavioral risk factors

COMPARING OF HEALTH EDUCATION METHODS ON PROMOTING BREAST SELF-EXAMINATION (BSE).

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Introduction: Breast cancer is the most prevalent cancer among women. One out of every seven women is expected to develop breast cancer. Early diagnosis has an effective role in treatment. Breast self Examination (BSE) is an important method for breast cancer screening. If women are educated about this simple program, they can find malignant tumors in 90 percents of cases.

Materials and Methods: In these study 90 ladies over 40 years were organized in three groups. First group (30 women) was selected as control group and two groups separately have been educated with group discussion method and the other one with combination of methods (Lecture, film, face to face). Data collection tools were questionnaire consisted of demographic information, KAP (knowledge, attitude, and practice) questions and a check list for performing BSE.

Results: This research indicated that education by both methods (group discussion and combination) raises the level of Knowledge, attitude and practice in ladies (t-test P=0.000). Also analysis of variances indicated that KAP level had a significant difference comparing with post test between educated groups and control group (P=0.000) There were no significant correlation between demographic characteristics and level of KAP.

Discussion and conclusion: Considering the findings about the effect of instruction, using each of existing facilities such as individual education as well as audio-visual methods in health care centers are useful.

Keywords: BSE (Breast Self Examination); Health education; Screening; Knowledge; Attitude; Practice

THE KNOWLEDGE AND ATTITUDE OF AL’ZAHRA UNIVERSITY STUDENTS ABOUT BREAST SELF EXAMINATION (BSE)

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Introduction: Breast cancer is the most common cancer among women and can cause mortality. Despite its many known risk factors, little primary prevention can be done, and consequently, there is a lot of emphasis on early detection. There are three methods for early detection of breast cancer; breast self-examination (BSE), physical
exam and mammography; amongst them BSE is the easiest. Thus, we decided to conduct a study about the knowledge and attitude toward breast self examination among the students of Al’zahra university, Iran.

**Materials and Methods:** This was a cross-sectional study with simple random sampling in which 135 female students aged 18 to 26 years were enrolled. Data was collected by 3 separate questionnaires about demographics, knowledge and attitude.

**Results:** Most of the students (45.9%) had «average» knowledge about BSE. Married students had significantly more knowledge (p<0.007). Most of the students (68.1%) had «positive» attitude about BSE. Older students, married students, and students with a positive history of breast cancer had slightly more positives attitudes. The most popular way of gaining information among students was mass media. Students who gained information from the university books had significantly (P<0.001) more knowledge than others, and those who gained information from mass media had more positive attitudes than others (P<0.04). Also, students with more knowledge had significantly more attitude (P<0.001).

**Discussion and conclusion:** The knowledge and attitude about BSE in less than satisfactory among Al’zahra university students and probably even less than this among the general female population in Iran. Proper and more intense educational programs should be scheduled about BSE for women in Iran.

**Keywords:** Knowledge, Attitude, Breast self examination.

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**CANCER SCREENING IN MIDDLE-AGE WOMEN: A MIXED METHOD APPROACH**

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**Introduction:** Cancer is one of the common causes of incidence and mortality in the world. Each year more than 10 million new cases of cancer and more than 6 million deaths due to cancer occur, worldwide. Now, cancer is the third cause of death in Iran and annually contributed in 30,000 cases of death in Iran. Although cause of cancers is cellular mutations but the most of the mutations are the result of interactions with the environment and therefore more than half of deaths are preventable. Early screening can prevent cancers and their mortality. In middle age increased incidence of many cancers including breast, cervical and colon. The present studies investigated the amount of screening for cancer in middle-aged women and explain the factors influencing with sequential mixed method approach.

**Materials and Methods:** Four hundred eighty three middle-age women was selected with cluster random sampling in the quantitative phase and 12 middle-age women was selected with purposive sampling in the qualitative phase. In the first stage data gathering was done with questionnaire and analyzed with descriptive statistics and in the qualitative stage semi-structured interviews and observations, and having in the field notes were done and data were analyzed with content analysis.

**Results:** The results showed that of 483 middle-aged women with a mean age of about 46 years old, the majority of women were housewives (%85.1), the average years of women’s education was 6 years and the majority (%59.4) have educated under diploma. %64, %67.3, %78.7, 62.4% and 94.4% respectively never have done BSE, CBE, mammograms, Pap test, fecal occult blood test. Qualitative research results also showed that, lack of knowledge, the cost of the screening examinations, lack of financial independence of women and neglect their spouse, fear of cancer, embarrassment and the belief with want of God of the main obstacles to cancer screening and knowledge and observation of cancer in familiar persons were the most of the motives of cancer screening.

**Discussion and conclusion:** Considering the prevalence of cancers in this age group, there is a need to proper planning in order to increase awareness and need to training for spouses and to provide screening services in the healthy policies

**Keywords:** Cancer screening, Pap smear, BSE, CBE, Mammography, Fecal occult blood test, Middle-age women

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**STAGE OF CANCER AT THE TIME OF DIAGNOSIS AND SEEKING HELP AMONG WOMEN WITH BREAST CANCER IN DELHI**

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**Introduction:** Cancer patients in developing countries often delay seeking medical services. It can adversely influence the out-come of the disease. The purpose of this study was to describe demographic and social profile and to determine the stage of cancer at the time of diagnosis and seeking help of women with breast cancer in Delhi.

**Materials and Methods:** This was a cross sectional study. All the new cases (172) of breast cancer detected during the study period in 2006 - 2008, at Lok Nayak Hospital, Delhi and interviewed using a questionnaire. Statistical Analysis of data was conducted.

**Results:** Mean age of subjects was 46.99 (range 25 - 80) years. 38.4% of the subjects were ≤40 years. Majority of study subjects (61%) were in stage IV of cancer at the time of diagnosis. 70.9% of the subjects were aware of the fact that they were suffering from breast cancer. The mean duration of the gap between knowing the problem and consultation a doctor (patients delay) was 10.90 months. There was no significant association between stage of cancer and consultation gap. Significant association was found between the stage of breast cancer and income. 71.5 % subjects sought treatment from doctor belonging to allopathic system of medicine.
Discussion and conclusion: A negative relationship was found between the monthly income of the subjects and stage of breast cancer. There was no significant association between stage of cancer and consultation gap. Keywords: Breast Cancer, Socio-demographic, Women, health seeking behavior

KNOWLEDGE, HEALTH BELIEFS AND BREAST CANCER SCREENING BEHAVIORS OF WOMEN REFERRING TO HEALTH CENTERS OF TABRIZ, 2010

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Introduction: Breast cancer is the most common cancer among women in Iran and worldwide. It is the second cause of death due to women’s cancer after lung cancer. Early detection in improvement of outcomes and survival rates is very crucial. The purpose of this study was to determine women’s health beliefs based on HBM and also population needs in order to design appropriate educational programs in promotion of breast cancer screening behaviors.

Materials and Methods: The study design was a descriptive cross-sectional, in which 219 women referring to Health Centers of Tabriz were selected through cluster random sampling. Data were collected using a self-administered questionnaire consisted of 4 sections: demographic characteristics, knowledge of breast self examination, health beliefs and behaviors of breast cancer screening. Health beliefs questions derived from Champion’s Health Belief Model Scales (CHBMS). The data were analyzed by SPSS, version 17.

Results: Five percent of participants had adequate knowledge regarding breast cancer and breast self examination (BSE). The percentage of women who performed BSE was 41.6%, while regular performance was 8.2%. Sixteen percent and 8.5% of eligible people reported having had a clinical breast exam and mammogram, respectively. Severity perceptions of women who had a screening mammogram was significantly higher than those who did not have (p=0.008).

Discussion and conclusion: Low rates of knowledge and breast cancer screening behaviors of participants in this study showed importance of continues education and focus on early detection. Educational programs should be designed in the ways that affect performance in order to improve early detection in the population.

Keywords: Breast Cancer, Screening, Health Belief Model

CHILDREN’S GROWTH CHART: BREAST MILK OR FORMULA MILK

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Introduction: Controversial effects of formula milk on children’s growth chart and valuable impact of breast milk on maternal and child health led international organizations to recognize different ways to analyze these methods. This study carried out to compare growth curves amongst breastfed and bottle fed babies in Tabriz, Iran.

Materials and Methods: A cross-sectional descriptive survey was designed to compare growth of 0-12 months children referred to health centres in Tabriz. Based on a reliable and valid self designed checklist, the records of 30 breastfed and 30 bottle fed children were investigated. Data was analysed by using SPSS and applying descriptive statistics and T-tests to determine the relationship between nutritional conditions and child development.

Results: The results of the study revealed that the mean weight, height, and head circumference of participants at ages 6 and 12 months were approximately equal in two groups. Interestingly, at age 12 months the mean of weight in the group of bottle fed babies was a little more than other group.

Discussion and conclusion: Although the effectiveness of breast milk on health of children and mothers has been approved, many factors such as social, cultural, and economic status of family affect growth and development of children as well as mother’s intention to feed their children by breast milk. In order to find out these contributions, further research is recommended.

Keywords: Breast milk, Formula milk, Growth chart, Tabriz

THE RELATIONSHIP BETWEEN JUNK FOOD CONSUMPTION AND GROWTH CURVE STATUS OF 6-24 MONTHS OLD CHILDREN IN THE CITY OF MASHHAD

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Introduction: The aim of this study was to determine the relationship between junk food consumption and growth status of children under two years in Mashhad.

Materials and methods: This study was cross-sectional interview with 300 mothers with children from 24 to 6 months referred to health centers selected and questionnaires have been completed.

Results: Results showed that 35 percent of children aged less than six months have received supplementary feeding. Results also showed significant correlation

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Introduction: Despite socio-economic differences, there are similar demographic changes in all Iran's provinces. Assessing these indices in Bushehr rural areas between 1993 and 2008, and comparing them to the country will help us to have a better understanding of the population and fertility trends in Bushehr province. This trend can assist in improving health indices in future.

Materials and Methods: the recorded data in vital horoscopes of health houses was used; which included demographic data of the covered population. The district health centers gather data from health houses every year and transfer them to the provincial level. Population and mortality indices are calculated by data using software.

Results: There was a decrease of 22%, 43%, and 44% in the population of under one, five and 15 years old in rural areas from 1993 to 2008, compared to 32%, 42% and 40% in country, respectively. The 65 years and over had increased 36.5% and 33% in Bushehr and Iran, respectively. Population of married women has declined 13% in Bushehr and 19% in Iran during this period. Birth rate reduction was 20.7% in Bushehr, while was 26% in country. Although there was a decline of 45.8% in general fertility rate in Bushehr compared to 50% in Iran, total fertility rate was decreased to 2 in both areas since 2000. There was a decrease of 42%, 52.5% and 71% in infant, under five and one to 59 months old mortality rates in Bushehr. These numbers were 46.7%, 50% and 64% on national level, respectively.

Discussion and conclusion: The decrease in fertility indices in Bushehr was less than those in national level in the past 15 years. The highest decrease was in the one to 59 months old mortality rate. WHO defines «a population is young when the percentage of under 15 years old is 40% or more». Therefore, the young population in Bushehr and Iran in 2000 has changed to an aging in 2008. It is for the decrease in fertility rate and migration of young people to the cities. This aging population arouses increasing demands such as education, recreation, employment, housing and marriage. Although the decreased population of married 15-49 year old women shows the changes in the age of marriage; which decrease fertility rate, it can also cause increasing social problems. Total fertility rate has reached to replacement level of 2.2 since 1999; but the general fertility rate has increased in rural areas, which can be for population momentum.

Keywords: Rural areas- population- demographic indices - mortality rate - fertility indices

THE EVALUATION OF MOTHERS' PARTICIPATION PROJECT IN IMPROVEMENT OF NUTRITION AND GROWTH PROMOTION OF CHILDREN BY THE CIPP MODEL AFTER 2 YEARS

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Introduction: Assessment of national children's growth has shown that a large percent of country’s children are afflicted with growth failure. There is a lot of projects in growth and nutrition of children in the past but none of them had been evaluated. This study aims to evaluate the mothers’ participation project after passing two years.

Materials and Methods: This study was a case –control study and summative evaluation that was confirmed in Azadegan center in isfahan. Target population was mothers(n=90) who participated in “Mother’s Participation Projects” in 2003 (Case) and Control group were mothers in Dastgerd center who had been matched with case group and were not participated in this program. The data collection tools in this study were questionnaire used in the project. The collected data was analyzed by SPSS software and nonparametric statistical tests.

Results: The results showed significant differences between two groups in mean self-esteem (p<0.001), Maternal performance in training others (p=0.006), weekly study time (p=0.004), and frequency of mothers’ participation in education programs (p=0.002), knowledge of the growth monitoring card (p=0.03), Just drawing growth curves (p<0.001), Mothers’ awareness of the types of growth curves (p=0.001), mothers awareness of the objectives of growth monitoring (p<0.001). Discussion and Conclusion: Considerable improvement of knowledge and function of mothers were other considered indices and its sustainability after 2 years showed the efficacy of this Model. Systemic approach and the capability of step by step evaluation were other characteristics of the Model. As the present Model is designed on the basis of cultural and social background of the country and in accordance with its Health System, it can be also used in other regions and for development of other Health Services.

Keywords: Evaluation, Education, CIPP evaluation models, Children's Growth, Mothers’ Participation
THE EFFECT OF BREASTFEEDING EDUCATIONAL PROGRAM ON EXCLUSIVE BREASTFEEDING DURATION

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Introduction: Breastfeeding has long been recognized as the preferred method of feeding in the first year of life and WHO has recommended exclusive breastfeeding by 6 months. Research has shown that mothers’ information about advantages of breastfeeding may be one of the predicting factors affecting exclusive breastfeeding duration, so the aim of this study was to assess the effect of breastfeeding educational program on exclusive breastfeeding duration.

Materials & Methods: A quasi-Experimental study design was used to test the effect of breastfeeding educational program on exclusive breastfeeding duration. A convenience sample of 120 pregnant women referred to health centers of Ahvaz were selected and divided randomly in two groups. All women were primiparous and indicated their intent to breastfeed their infant. In their last month of pregnancy case group received breastfeeding educational program. Six month after delivery duration of exclusive breastfeeding in two groups was determined by researchers.

Results: Findings of this study showed that the difference between means of exclusive breastfeeding duration between the two groups was statistically significant. The mean duration of exclusive breastfeeding was 5.2 month in case group compared to 2.05 for control group.

Discussion and Conclusion: The results of this study suggested that breastfeeding education in last trimester of pregnancy may increase the duration of exclusive breastfeeding and it seems that compilation of educational program in prenatal care of pregnant women is necessary.

Keywords: Children, Growth problems, Dental problems, Nutrition problems

ASSESSING THE CONDITION OF SOME HEALTH PROBLEMS RELATED TO BEHAVIOR IN THE FIELD OF GROWTH, SIGHT AND TEETH OF CHILDREN LESS THAN 5 YEARS OF AGE IN KOHGILOUYEH PROVINCE IN 1388-1389


Introduction: Growth and development is one of the most fundamental health issues in children. This study conducted with the aim of determining the health problems related to behavior regarding growth, sight and teeth in children less than 5 years of age in Kohkilouyeh province.

Materials and Methods: This study was a descriptive-analytic cross-sectional study on all children who referred to urban or suburban health clinics in 1388 and the first 6 months of 1389.

Results: In 1388, out of 50169 children less than five years of age who referred to these clinics, 0.69% were severely under weight, 4% had growth disorders, 0.28% were severely short, 1.14% had unsuitable growth regarding their height, 0.24% had abnormal size around their head, 1.56% had nutritional problems, 0.53% had severe dental problems, 0.09% had sight problems, and 0.15% had severe growth problems. In the first six months of 1389, out of 9697 children who were less than 5 years of age, 0.95% were severely under weight, 5.05% had growth disorders, 0.46% were severely short, 1.22% had unsuitable growth regarding their height, 0.44% had abnormal size around their head, 3.07% had nutritional problems, 0.96% had severe dental problems, 0.39% had sight problems, and 0.39% had severe growth problems.

Discussion and conclusion: Considering the large sample size, we can rely on the findings of the present study. Based on the findings, severe or relative deviation from health could be seen in all assessed fields. Since the mentioned problems are rooted in the behaviors obtained by families and other educational systems, as well as health service providers, therefore, the results of this study emphasize on creating a suitable health culture through healthy socialization in different organizations.

Keywords: Children, Growth problems, Dental problems, Sight problems

EFFECTS OF CONSUMING DAILY HOT MEAL ON CHILDREN GROWTH IN ABADEH KINDERGARTENS-1388

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Introduction: The aim of this study was to assess the effects of eating daily hot meal on children growth in Abadeh kindergartens in 1388.

Materials and Methods: This was a descriptive study. At the first of educational year the weight and height of the children between 3 to 5 years old were evaluated. Then feed them 1 hot meal every day during 6 months at 11 a.m, also during this period all treatment and feeding effects of eating daily hot meal on children growth in 1388 Analytic cross-sectional study on all children who referred to urban and suburban health clinics in 1388 and the first 6 months of 1389. All these achievements shows that serving 1 hot meal every day has an important role in feeding improvement in these groups of children.

Discussion and conclusion: The results shows that serving 1 hot meal every day has an important role in feeding improvement in these groups of children.

Keywords: Growth problems, Dental problems, Sight problems
Introduction: Mothers and children's health promotion and their tranquility is the main goals of breastfeeding. Exclusive breastfeeding to 6 months, continuum breastfeeding to 2 years, breastfeeding adherence to the first 12 months as the main feed, and use of the home food as the main feed at second 12 months were challenges facing breastfeeding women in Yasuj City. Knowledge and attitude concern the above problem were very weak. Current health education methods are including mainly interpersonal one-way communication and using brochure by chance. The goal of this study was to comparison of the effect of focus group discussion on knowledge and attitude with current methods of health education.

Materials & Methods: This field experimental study conducted to increase knowledge and attitude by focus group discussion. The intervention and nonexperimental members (258) were selected randomly and divided in two groups. The intervention group divided in 11 subgroups contains 12 members. Each subgroup trained by 4 sessions and duration of each session was 1.5 hours.

Results: Mean of experimental group knowledge before and after the intervention was 23.2 and 45.3 respectively and for untrained group it was 28.7 and 33.5 respectively and the differences was significant (p<0.001). Mean of experimental group attitude before and after the intervention was 9.7 and 22.7 respectively and for untrained group it was 12.6 and 13.3 respectively however the differences was not significant.

Discussion and conclusion: As interpersonal two-way communication, combination of group members experience about breastfeeding and growth increase self-reliance among breastfeeding women, particularly young mothers, it is recommended to apply focus group as a method for achieving successful breastfeeding.

Keywords: Focus group, Breastfeeding, Pregnant women

THE ROLE OF BABY FRIENDLY-HOSPITALS IN TABRIZ UNIVERSITY OF MEDICAL SCIENCES IN BREAST-FEEDING 1389

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Introduction: Breastfeeding is the best way to feed babies and children under two years old. Starting with breastfeeding immediately after birth has many advantages for mothers and babies. WHO and UNICEF introduced friendly hospitals in 1989. In where, they educate mothers about the advantages of breastfeeding and correct breastfeeding positions, both before and after birth.

Materials and Methods: This was a descriptive and analytical method within which a questionnaire was designed and 15 mothers with 6 month aged children from BFH-non BFH were selected randomly. After calling the mentioned mothers and fulfilling the questionnaires, data analyzed by EXCEL software.

Results: It was proved that the knowledge of mothers...
SUPPLEMENTARY NUTRITION AMONG UNDER 2 YEARS OLD CHILDREN IN MASHHAD AMIR

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Introduction: The aim of this study was to evaluate the quality and supplementary feeding of children in Mashhad.

Materials and Methods: A descriptive study with a sample size of 300 mothers with children from 6 to 24 months in health centers in Mashhad was done. The data were analyzed by SPSS.

Results: 35 percent of the mothers, supplementary feeding earlier than six months have begun. 55.3 percent of the snacks used to feed children, 80.3 percent of the mothers were using oil in complementary feeding children .80.7 percent were used iron and multivitamin. Significant correlation between the variables of age and supplementary feeding unit type variables residential, the distance between children, BMI mother, exclusive breast feeding, taking snacks for children, go to health centers for monitoring growth and oil consumption in food was available, and mothers with normal BMI in homes rented lived and the distance their children less than 3 years and snacks for children of less oil use and to visit health centers for monitoring the growth of supplementary feeding were starting to have early

Discussions and Conclusion: Results showed that 35% of mothers start the supplementary nutrition before the age of 6 months. Therefore, it is necessary to do wider range of education and training more effective in order to promote children's nutrition knowledge, attitude and behavior of mothers by health care personnel be given to them.

Keywords: Supplementary feeding - Template - Children - City of Mashhad

BREASTFEEDING STATUS IN THE NORTH OF IRAN: A RETROSPECTIVE STUDY

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Introduction: The recent studies have shown that mother’s milk is beneficial for both physical and mental health of children. The socio-demographic factors influence it. The main aim of this study was to identify the breastfeeding status and some related factors before the age of two years among primary school children in Golestan province (north of Iran).

Material and Methods: This retrospective study was enrolled on the 6891 primary school children (3542=boy and 3349=girl) from 112 schools in urban and rural

EFFECTS OF EDUCATIONAL INTERVENTION AND PARENT PARTICIPATION ON INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS IN A RURAL REGION IN EAST AZARBIJAN PROVINCE IRAN 2009

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Introduction: Integrated Management of Childhood Illness (IMCI) is an integrated approach to child health that focus on the well-being of all children. One of the most important goals of IMCI is developing supportive mechanism within community for helping families to care their children as well as reducing death illness and disability among children for achieving these goals. WHO has thought of a strategy which improve family and community health key practices this key practices include providing good home care for children in 12 realms.

Materials and Methods: This was a descriptive and semi-trial study that was done in 2 phases separately. Behaviors of 50 mothers who had under 5 years old children were studied about 8 key practice before and after intervention finding were analyzed by descriptive statistical and paired comparisons precisely

Results: According to the results, the effect of interventions on improving related indicator such as cure of diarrhea ARI , decrease of accident for children not only about fathers but also mothers were significant (p≤0.005) in addition the effect of intervention about socio economic development

Discussion and conclusion: changes in indicators related to fathers’ participation was considerably high. So we can consider fathers capability in learning and performing well about children care as well as mothers drawing up interventions and educational plans in order to attract parents participation.

Keywords: health education , child hood illness , parent participation.

about advantages of mother’s milk and breast feeding in BFH in cities around Tabriz (except Tabriz) was 77.5% and also 46.7% in non BFH. Their awareness about correct breast feeding positions was 74.2%. Their awareness about correct ways of making Milk and its saving was 39.2% in BFH and 0% in non BFH. In friendly hospitals, the help of personnel for mothers about breastfeeding was 70%. This index was about 30% in non BFHs. 100% of mothers claim that they want to give their own milk to their children up to 2 years old.

Discussion and conclusion: Education plays a significant role in performing the correct way of breast-feeding.

Keywords: BFH, baby friendly hospitals
areas that has been chosen by stratified cluster sampling. Interviewers recorded the data from student mothers by using a multidimensional questionnaire, including breastfeeding status and socio-demographic factors. Data were analyzed by SPSS software. Chi-2 test was used for analysis and P-value under 0.05 considered statistical significance. Breastfeeding classified based on WHO definition.

**Results:** Duration of BF for 6, 12, 18 and 24 months was shown among 4.6%, 9.2%, 26.7% and 57.5% of children, respectively. The duration of BF in male was 15.8% more than female, and it has a positive correlation with mother's educational level. Breastfeeding during the first two years was showing up to 64.6%, 55.6% and 49.2% in Turkman, Fars and Sisstani ethnic groups, respectively. Statistical significant differences were found between the duration of breastfeeding by gender, ethnicity and mothers educational level (P=0.001). There was no correlation between duration of breastfeeding and residential area and mother's job.

**Discussion and conclusion:** Education, ethnicity and gender has been associated with breastfeeding duration in the Iranian northern children. For promotion of breastfeeding in this area, troublemaker factors such as illiteracy should be solved.

**Keywords:** Breastfeeding- Ethnicity – Education

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**EFFECTS OF MOTHER'S TRAINING ABOUT COMPLEMENTARY FEEDING ON ENABLING, PREDISPOSING AND REINFORCING FACTORS BASED ON PRECEDE MODEL**

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**Introduction:** Childhood malnutrition rates rises significantly at 6 months of age when complementary foods starts by mother. The problematic complementary feeding practices are associated with mother's poor knowledge, lack of information and being restricted by traditional beliefs. It is essential to give necessary knowledge and information to alter their inappropriate feeding behaviors. The aim of the study was to determine the effect of mothers training on enabling, predisposing and reinforcing factors based on PRECEDE model on complementary feeding in infant 6 to 12 months.

**Materials and Methods:** This was a quasi-experimental study within which 62 mothers with infant 6-12 months selected randomly among the documents in health centers, NOOR city. Data were collected by a questionnaire that contain demographical and predisposing, enabling, reinforcing factor based on PRECEDE model. The validity and reliability of the scale were approved. A self prepared questionnaire was completed by the mothers before and after the educational program that implemented through group discussion, lectures and pamphlet. Data were analyzed using pair t-test and independent t-test in the SPSS software.

**Results:** the results demonstrated that the mean scores of predisposing factor before the educational intervention was 75±21.3 that after intervention the mean score (84±8.87) increased significantly (p<0.001). And, also, the mean scores of enabling factors before intervention was 64.7±21.3 which increased significantly (p<0.001) after intervention. But no differences were found in reinforcing factor before and after intervention.

**Discussion and conclusion:** Predisposing and enabling factors in mothers were found to be the important factors in the complementary feeding in infants that need to be considered carefully in designing the educational program.

**Keywords:** Complementary feeding, PRECEDE, Infant

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**THE EFFECTS OF EDUCATION ON FORMULA AND BOTTLE-FEEDING BEHAVIORS IN SUCKLING MOTHERS BASED ON PRECEDE MODEL**

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**Introduction:** Although there may be find a lot of interventional studies which has investigated the effects of education on suckling mothers regarding advantages of breast-feeding behavior, but very few studies in developing countries have examined whether mothers are conscious of the risks associated with formula and bottle-feeding on children. Knowing that Breast-feeding Index has decreased in Iran and feeding behaviors are not suitable and adequate in suckling mothers, we studied the effect of education based on PRECEDE Model on improving mothers’ breast-feeding behaviors in Yazd.

**Materials and Methods:** Cluster stage sampling was employed to recruit 60 pregnant mothers who had one month to the time of their delivery. Before and 3 months after implementing the educational program through group discussion, lectures and pamphlets, the self-prepared questionnaire, were completed by the respondents. Validity and reliability of the scales approved. SPSS software was used for data analysis.

**Results:** After implementing the educational program, mothers’ knowledge (38%) and attitude (12.3%) were significantly increased (P=0.001). 85% of the mothers fed their children with exclusively mother's milk and 15% used both, breast-feeding and formula-feeding. The children, who were formula-fed, were breast-fed 4.5 times daily as well. Moreover, none of them were formula-fed from the time of birth and formula-feeding
was used as a result of improper weight getting in these children.

Discussion and conclusion: In order to design effective educational programs, healthcare professionals should better understand the determinants of feeding behaviors in suckling mothers and develop stage-specific interventions, within which, promoting predisposing factors like knowledge and attitude are priorities of the program. The PRECEDE Model, as a basic model for programming, was found to be helpful in addressing the effects of education on formula and bottle-feeding behaviors and their predisposing factors in suckling mothers.

Keywords: Formula and bottle-feeding behaviors, Suckling mothers, PRECEDE model, Education.

**COMPARING THE EFFECT OF LEARNING KANGAROO CARE AND BREAST FEEDING ON IMMUNIZATION INJECTION PAIN IN INFANTS**

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Introduction: Infants routinely undergo painful procedures; such as immunization injection and heel lancing. Therefore, recognition and application of pain control strategies by health care workers is necessary. Kangaroo care and breast-feeding as means of mother infant interaction are beneficial. The objective of this study was to assess the effect of teaching kangaroo care and breast-feeding to infants’ mother on immunization injection pain.

Materials and Methods: In this randomized controlled trial, 180 infants undergoing DPT vaccination divided into three groups, randomly. In breast-feeding group, two minutes before injection, during, and one minute after the injection breast-fed. And in kangaroo care (KC) group, mothers were educated to care infants in Kangaroo method for ten minutes before the injection, during, and one minute after the injection. Symptoms assessed by NIPS scale and cry time and latency of cry.

Results: The mean severity of pain in breast-feeding, kangaroo care and control groups were 3.5±1.55, 4.38±1.37, 5.43±0.96, respectively; which were significantly different (p<0.001). The mean cry time for breast-feeding, kangaroo care and control groups were 4.38±1.37, 5.43±0.96, respectively; which were significantly different (p<0.001). The mean latency of cry in three groups shows that there are not significantly different.

Discussion and conclusion: Both breast-feeding and kangaroo care showed an analgesic effect on infants but breast-feeding more than kangaroo care. Health care workers are recommended to encourage parents to use pain reduction simple methods during immunization for relieving pain in infant and promoting the quality of health care.

Keywords: Infant, Pain, Kangaroo care, Breast Feeding

**THE PATTERN OF SUPPLEMENTARY FEEDING AMONG INFANTS (4 TO 24 MONTHS OF AGE) IN KHALILABAD, 2009**

Makarem H*, Raee Z, Rajabloo M, Rasooli A

Introduction: The optimum growth and development of children is related to having accurate nutrition and nutritional behavior. Mother's unawareness of infants' nutrition and their inaccurate behaviors in this field is one of the important malnutrition causes among infants. The infants' basic needs are not satisfied by breastfeeding after six month of age and there is a need for soft meals.

Materials and Methods: This is an analytic-descriptive study which has partly been implemented with the objective of studying the patterns of supplementary nutrition among infants of 4 to 24 month of age. The samples were 300 infants. All questionnaires were filled up; data was gathered and analyzed via the SPSS software.

Results: The results of this study showed that the time of start in supplementary feeding is over six months of age (47.3%). About 71% of those started supplementary feeding was rural and 28.88% were urban residents. There was a meaningful correlation between the point of start in giving supplementary nutrition and resident place. Urban residents started supplementary nutrition by giving oatmeal (63.82%), rice syrup (12.76%), meal of the day (12.76%), soup (9.57%), Mamana (powdered milk) and mashed potato (1.06%). Rural residents started supplementary nutrition by giving oatmeal (75.24%), rice syrup (12.19%), meal of the day (1.45%), soup (9.22%), Mamana (powdered milk) (0.97%) and mashed potato (0.97%).

Discussion and conclusion: There has been a meaningful relationship between residents place, starting point of giving supplementary nutrition, mother’s age, level of father’s education, father’s job, birth degree, type of delivery, breastfeed after birth, and the source of finding information about supplementary nutrition. Based on the results it can be concluded that although the order of starting supplementary nutrition in Khalilabad is in coordination with infant’s nutritional program but half of the mothers deployed this pattern.

Keywords: Supplementary feeding, Infants, Malnutrition, Growth and development, Khalilabad

**KNOWLEDGE AND PERFORMANCE OF MOTHERS REGARDING CHILDREN’S SURVEILLANCE (UNDER 6 YEARS OF AGE) IN KHALILABAD, 2008**

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**Introduction:** Surveillance covers a collection of family and society’s activities to boost the effect of two factors; sufficient nutrients and access to health services which leads to growth optimization. Considering the current facts and the decreased process in children’s mortality during the recent couple of decades in our country, it is the time to take a deep look at the quality pattern of growth among children and to benefit from the nation’s findings and physical experiences to upgrade the physical and mental potentials of Iranian children. The main objective of this study was to particularly clarify for mothers the methods of behaving infant (under six yrs).

**Materials and Methods:** Two hundred seventy questionnaires were distributed by health experts in 20 days. They went to the people’s door, did the interviews and recorded the information.

**Results:** Studies revealed that 98.1% of children were under surveillance. 77.4% of mothers knew the dangerous symptoms. 90.6% of children had appropriate nutrition, 90.2% of them had the optimum brunch, and 92.2% used recognized junk foods. 77.9% of children had active nutrition. 68.9% of mothers had appropriate information about injury prevention among children. 74.4% of children had complete six month breast feeding. The most recorded cases of not being exclusively breastfeed (55.3%) and feeding by powdered milk (45.8%) were regarded as breastfeed insufficiency. There is a correlation between mother’s resident place and her level of awareness of injury prevention (sig=0.012) as well as awareness of childhood dangers. Mothers in rural areas were more conversant than mothers in urban regions. There is no correlation between resident place and exclusive breastfeeding, though (sig=0.270). Correlation between mother's literacy, having growth card, accurately expressing growth curve, and goal clarification since the beginning phases of growth is witnessed. The more mother is literate, the more accurate goal clarification since the beginning phases of growth is witnessed. The more mother is literate, the more accurate will be her stated information. But this is to mention that there is no correlation between mother's awareness of injury prevention and childhood dangers.

**Discussion and conclusion:** Considering the above mentioned findings we can conclude that to upgrade children's health level, accurate training to mothers specifically in urban areas who have less contact with health centers is indispensable. To achieve this goal mass media and health volunteers should greatly be involved in the process.

**Keywords:** Surveillance, Children, Khalilabad

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**HEALTH EDUCATION IS THE BEST METHOD TO PREVENT MALNUTRITION AMONG 2-6 YEARS OLD CHILDREN**

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**Introduction:** Periodical evaluation of anthropometric indicators is one of the best methods for monitoring children’s nutritional status and also suitable information resource as a reference for the health system of the country and a criterion for justice. The purpose of this study was the survey of underweighting, stunting and wasting predictors among 2-6 years old children in Zahedan, southeastern Iran.

**Materials and Methods:** In this cross sectional study, 1012 children aging 2-6 years old were surveyed in 2008, in Zahedan. The sample was selected from health centers of 5 districts in Zahedan. The data were collected using records and interview with mothers. In this study weight to height (as a wasting), height to age (as a stunting) and weight to age (as an underweighting) of children based on Z score, -2.5, was evaluated. The data were analyzed in SPSS,15 and Anthro 2000 softwares using Independent T test, ANOVA, Chi square and linear logistic regression.

**Results:** In this study the prevalence of wasting, stunting and underweighting were 4.2%, 7.6% and 3.4%, respectively. In univariate analysis, the wasting related to low birth weight and low birth interval, stunting related to low birth weight, low mothers’ educational level, infection history, low birth interval and low mothers’ age during pregnancy and underweighting related to low birth weight, infection history, low birth interval and low mothers’ age during pregnancy (P<0.05). The prevalence of stunting among children with unemployed father and absence of exclusively breast feeding and prevalence of underweighting among females and children with absence of exclusively breast feeding was significantly more than others (P<0.05). In multiple analysis, low birth interval related to wasting, low birth weight and low mothers’ age during pregnancy related to stunting and low birth weight, low birth interval and low mothers’ age during pregnancy related to underweighting (P<0.05).

**Discussion and conclusion:** Based on the results of this study the best method to prevent malnutrition among children is arising educational level of mothers and health education about importance of appropriate age for pregnancy and birth interval. In addition, mothers’ nutritional statues especially during pregnancy (that is related to birth weight) and exclusively breast feeding are tow important factors. It seems that health promotion and prenatal period is as important as post neonatal period.

**Keywords:** Underweighting, Stunting, Wasting

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**PREVENTION OF CHILD GROWTH RETARDATION THROUGH A PRECEDE-BASED EDUCATIONAL PROGRAMME IN SHIRAZ**

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**Introduction:** child development disorders can be caused by nutritional ignorance, and lack of proper care and growth monitoring. This study was performed to evaluate the effect of mothers’ education on growth retardation prevention using a precede-based model.

**Materials and Methods:** in this quasi experimental study, 120 mothers were recruited (60 as cases and 60 as control) with their breast feed children registered by health centers in Shiraz. Data including demographic characteristics, mothers’ knowledge, and attitude, enabling and reinforcing factors, maternal function (PRECEDE model components) and child weight were collected via questionnaire. The educational intervention was performed in 6 sessions (each 55 to 60 minutes). The questionnaire was also completed in the control group before and 4 months after the education program.

**Results:** The results showed that interventional educational program caused significant increase in the means of knowledge score (P<0.001), attitude score (P<0.001), enabling and reinforcing factors (use of training resources), performance score of mothers as well as weight of child among case subjects as compared to control individuals.

**Discussion and conclusion:** Results of this study indicated that the interventional educational program about growth retardation monitoring based on precedes model has a positive effect to prevent child growth retardation in the studied population.

**Keywords:** Health education, PRECEDE model, Growth retardation, Children

**STUDY OF GENERAL HEALTH FOLLOWING CHILD SENSES CONTROLLING IN PRESCHOOL AGES**

Parhizgar M

**Introduction:** Childhood period is the period of growth and perceptual systems and senses completion. This completion needs the mutual sensitive and performance interaction with environment. However, this is a critical era regarding the damages of general performances. These damages can affect growing process and make it so challengeable. But, is the health and check up requirements for health controlling has been provided for this period? The current study is a review of general health and child senses and talents controlling by their parents.

**Materials and Methods:** The investigations have been conducted during the testing period of pre-school era for child. Results are based on the collected questionnaires from child parents. The parents have to report that whether their child have been examined previously. The obtained results are based on these collected data through questionnaires.

**Results:** Depending on the statistical results, the seeing and general health had the greatest controlling rate with
PREVALENCE OF ACCIDENT AND RELATED DEATHS AMONG CHILDREN AGED 1-5 YEARS IN ARDEBIL

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Introduction: Accident is unexpected incidents that adversely affect human health and economy of the society. The causes for accident are human errors and lack of the safety. The prevalent types of accidents that lead to death among children includes traffic related accidents, falls, suffocations, drawings, and intoxications. Forty percent of deaths occurred among children is currently due to accident in Ardabil province.

Materials and Methods: Data were collected from 404 children admitted to hospitals due to accidents using a questionnaire. Data analysis was performed using SPSS software.

Results: Males accounted for 60% of all accidents. 63, 35.1 and 1.5% of accidents occurred inside cities, villages and outside these areas, respectively. Burns were identified to be the most prevalent one, accounting for 36% of the accidents. While traffic related accidents, trauma and falls were higher in urban areas, animal attacks; scorpion and snake bites were prevalent in rural areas. The rate of burns and intoxication were relatively similar for both rural and urban areas. Out of the 28 deaths recorded, 42.9, 21.4, 7.1, 17.9 and 10.7% were caused by traffic, suffocation, fall, burn and drawing, respectively. Out of 12 deaths related to the traffic accidents, 58.3, 25 and 16.7% were caused by road vehicles, tractors and motorcycles, respectively.

Discussions and conclusions: Considering the active nature of boys coupled with the high prevalence of accidents among males, education is essential to increase awareness of parents. Due to availability of health services and being literate, high incidence of accident in urban areas is unexpected. Hence, inter and intra organizational measures should be considered in order to implement safety regulation to provide safe environments in this area. High prevalence of burns at home requires improving mothers’ awareness. About 12% of accidents were related to road vehicles; as 23.5% of the cases have resulted in death. This fact highlights the importance of traffic safety.

Keywords: Accident, Safety, Children

STUDY THE PROCEDURE OF INFANT’S BREASTFEEDING IN KHALILABD HEALTH CENTER IN 2007

Makarem H*, Rajabloo M, Rasooli A, Raee Z

Introduction: Breast milk is of utmost importance in upgrading mother and infant’s level of health. Its innumerable advantages for mother includes: lowering the danger of breast cancer, undo meter and ovary, womb return to its original position, as well as subsequent

Keywords: Breastfeeding, Infant, Health, Procedure.
decrease in the amount of bleeding and Anomie spread, and etc… The advantages for infant include: decrease diarrhea spread and respiratory system putrefaction, intelligence upgrade, immune from some diseases like urine system putrefaction and acute inflammable of tympanum and etc… It is also of great help to the country’s economy by decreasing mother and child's medical expenses and imports of powdered milk and etc… Now considering the above mentioned data, studies on the new born babies in the city were implemented.

**Materials and Methods:** This study was implemented on new born babies who have had contact with the health centers for treatment in the first 10 days of birth. They were asked to fill in the questionnaires covering some interviews and observation of breast feed procedure. The questionnaire's data were then recorded in SPSS software to be analyzed.

**Results:** 96/3 of mothers were in appropriate breast feeding status. 1/4 of the babies refused to be fed by milk. 2/4 of mothers said that they didn’t have milk. Breast feeding intervals among 98/6% of children were once for every two or three hours. 98% of the babies were astute and often expressed their own will of breast feeding. 95/9% of mothers felt fullness in their breast before breast feeding. 98% of infants needed to change their nappies three times a day. 97/7% of children urinated 6 times in a day. 20/9% of mothers had used bottles to feed their babies. 88/5% of mothers had healthy and painless nipples. 4/1% had the problem of nipple’s parting and 1/4% the problem of nipple's dipping.

**Results:** Breast feeding status is ideal and about 21% of babies are fed by bottle. 11% have used dummy. Considering the effects of using bottles and dummies in decreasing the nutritional indicator of breast feeding, continuous training for mothers during pregnancy and after pregnancy can be one of the top priorities of health for children.

**Keywords:** Nutrition, Breast milk, Baby, Khalilabad

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**THE RELATIONSHIP BETWEEN BIRTH WEIGHT, LENGTH AND HEAD CIRCUMFERENCE AMONG CHILDREN**

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**Introduction:** Neonatal weight, length and head circumference at birth are important indexes of newborn health which can show not only the quality of intrauterine growth of the fetus but also the quality of maternal prenatal care. So for getting the appropriate results of nutrition education to pregnant women, there is a need to determine the weight, length and head circumference status of the infants at birth. Also according to importance of head circumferences at birth in future development of children, the correlation between birth weight and head circumferences was evaluated.

**Materials and Methods:** A cross-sectional study was performed on 150 children (75 boys and 75 girls) who referred to paediatrician for growth check up. The information about age, sex, birth weight, length and head circumference was obtained by related questionnaire. Means, standard deviations (SDs), and frequencies were calculated The Pearson correlation test was used to analyze the correlation between birth weight, length and head circumferences.

**Results:** The mean birth weight, length and head circumferences of children were 2860±536 gram, 48.80±1.45 cm and 34.15±2.1 cm respectively. Birth weight, length and head circumference of 50.8%, 30.5% and 18% of children were less than percentile 50 for age, respectively. Mean birth weight was significantly correlate with mean birth length \( R=0.54, P=0.007 \), however the correlation between the mean birth weight and head circumference was not statistically significant \( R=0.072, P=0.623 \).

**Discussion and conclusion:** According to high prevalence of low birth weight, length and head circumference in children and considering their impact on child’s future development, providing the appropriate nutrition education for pregnant women seems to be necessary.

**Keywords:** Birth weight, Length, Head circumference, Correlation

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**CHILDBIRTH SITUATION AND PHYSIOLOGIC JAUNDICE**

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**Introduction:** Jaundice refers to yellow coloration of the skin and the sclera and is caused by a raised level of bilirubin in the circulation, a condition known as hyperbilirubinaemia. Childbirth situation is one of the epidemiological factors that may relate to neonatal jaundice. This study was designed and performed to investigate the contribution of childbirth situation and physiologic jaundice in Tabriz, Iran.

**Materials and Methods:** This descriptive study was carried out amongst all mothers hospitalized due to physiological neonatal jaundice in Children’s Medical Centre. All relative information was extracted from archive. A total of 278 cases were studied. Data were analyzed by using SPSS and applying One-way ANOVA and T-tests.

**Results:** The frequency of mothers admitted for labour revealed that 55.4 percent of participants had a caesarean section while 44.6 percent had experienced vaginal delivery. There was a significant correlation between childbirth situation and neonatal jaundice as the mean level of bilirubin in two groups with 95% confidence level was different \( P \)-value = 0.049). Furthermore, the results showed that 78.8 percent of infants admitted were full term and the level of bilirubin was statistically different
between full and premature babies (P-value = 0.016).

**Discussion and conclusion:** Findings of the study showed that there was a significant relationship between childbirth style and neonatal jaundice, further research is recommended for exact and scientific judgment.

**Keywords:** Neonatal jaundice, Childbirth situation, Tabriz Children’s Medical Centre.

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**CHILDREN’S GROWTH CHART: BREAST MILK OR FORMULA MILK**

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**Introduction:** Controversial effects of formula milk on children’s growth chart and valuable impact of breast milk on maternal and child health led international organizations to recognize different ways to analyze these methods. This study carried out to compare growth curves amongst breastfed and bottle fed babies in Tabriz, Iran.

**Materials and Methods:** A cross-sectional descriptive survey was designed to compare growth of 0-12 months children referred to health centres in Tabriz. Based on a reliable and valid self designed checklist, the records of 30 breastfeeding and 30 bottle fed children were investigated. Data was analysed by using SPSS and applying descriptive statistics and T-tests to determine the relationship between nutritional conditions and child development.

**Results:** The results of the study revealed that the mean weight, height, and head circumference of participants at ages 6 and 12 months were approximately equal in two groups. Interestingly, at age 12 months the mean of weight in the group of bottle fed babies was a little more than other group.

**Discussion and conclusion:** Although the effectiveness of breast milk on health of children and mothers has been approved, many factors such as social, cultural, and economic status of family affect growth and development of children as well as mother’s intention to feed their children by breast milk. In order to find out these contributions, further research is recommended.

**Keywords:** Breast milk, Formula milk, Growth chart, Tabriz

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**RELATIONSHIP BETWEEN MATERNAL USE OF NUTRITIONAL SUPPLEMENTS DURING PREGNANCY AND ITS EFFECT ON GROWTH OF CHILDREN IN MASHHAD**

Vahedian M*, Saeidi M, Vakili R

**Introduction:** Every year about 21 million infants weighing less than normal in the world are born in mortality compared with infants who die from other causes have less chance of survival. Every child growth and development depends on the quality of maternal nutrition during pregnancy and child nutritional adequacy is. Considering the vulnerability of this group to evaluate their quality and nutritional status is very important aim of this study was associated nutrients (nutritional supplements) during pregnancy, maternal growth status of children.

**Materials and Methods:** A descriptive study Cross sectional analytical method with a sample size of 300 mothers with children from 24 to 6 months referred to health centers is. Information obtained by the SPSS computer software was analyzed.

**Results:** Results showed 72 percent of mothers during pregnancy nutritional supplements used and in terms of educational level: 15.3 percent of mothers literate primary, 3.16 percent guidance, 50 percent high school diploma and 18.3 percent of university education had. The other hand, 13.3 percent fathers with primary education, 7.20 percent guidance, 7.48 percent and 0.317 percent diploma had university education. In terms of family income level: 13.7 percent of inadequate income, 82.7 percent and 3.7 percent of median income have a good income. Results showed that 1.3 percent of household structure of families and 1.3 percent of marriage there is polygamy 0.1 percent of parents addicted to smoking among women and 0.7 percent and 15.3 percent prevalence among fathers had. Results also showed significant correlation between variables in supplementation during pregnancy, family structure (polygamy - divorce - remarriage), parental education, family income, parental drug addiction and parental smoking status variable Child development is available, so children in their mothers during pregnancy, nutritional supplements and frequently used as parents with children who have good income and high education had better growth than other children and parents of children with one hand addicted smokers and unstable family structure and children with poor growth in children than are their same age (p <0.05).

**Discussion and conclusion:** Maternal use of nutritional supplements during pregnancy and their effective education in this regard by health personnel and the active participation of mothers and child care training in classes significant impact on child development and health promotion will be.

Key words: Nutritional Supplements - Mothers - Pregnancy - Child Growth

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**PRACTICE OF MOTHERS WITH CHILDREN UNDER ONE YEAR ON EXCLUSIVE BREAST FEEDING IN YAZD IN 1389**

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**Introduction:** Breastfeeding for all infants and should be
preferred in the first time possible after birth to 6 months old and started as a monopoly continues. Unfortunately, in recent years notwithstanding the many efforts to promote exclusive breast feeding in first 6 months of life in the country’s health system networks has been done however enough information from the prevalence and practice of feeding infants and mothers in the country, especially in Yazd not available.

Methods: In this study, 190 mothers with children under one year of health centers of Yazd, the research instrument that includes demographic information and questionnaire about the practice of mothers feeding their infants with breast milk was, completed. Data analysis by SPSS computer software and using statistical tests (descriptive - analytic) took appropriate.

Results: The mean age of participating mothers 26 years and minimum age 17 years and maximum age was 43 years old. 50.5 percent level of education of mothers as well as diploma and 8.5 percent had primary education. Fathers in education 8.6 percent and 37.4 percent of elementary and high school diploma 26.3 percent and 29.5 percent of academic guidance 83.7 percent of mothers were housewives, and 65.8 percent had fathers were employed. The average yield in mothers breast feeding 0.83±3.35 Of the total score was 2. Results showed a significant correlation between the variables father education, child gender, birth order, family economic status and growth status in children with mothers practice exclusive breast feeding has been educated as possible so that more parents, birth children less, and economic status and growth performance was better in children of mothers in breast feeding was better. (P<0.05).

Conclusion: The practice of mothers about breast feeding children with moderate and should be holding educational classes on health centers and considering variables in this case the function is associated with mothers, causing them to improve performance by breast feeding were feeding on.

Key words: Practice - mothers - children under one year - exclusive

**Chronic and Degenerative Disease Prevention**

**KNOWLEDGE OF PATIENTS ABOUT THE SYMPTOMS, COMPLICATIONS AND SEVERITY OF HIGH BLOOD PRESSURE IN HEART CLINICS**

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**Introduction:** One of the basic problems of patients with hypertension is controlling their high blood pressure. Awareness of patients can be an important factor in complying the treatment of this disease. This study reviews high blood pressure and awareness of patients about the symptoms, complications and severity of disease, in Urmia Taleghani and Seyed-Al-shohada hospitals.

**Materials and Methods:** Tow hundred patients with hypertension who referred to heart clinic in Taleghani and SeyedAlshohada hospitals were randomly selected. Information about patients has been collected by a questionnaire. Then the data analyzed in SPSS version 16.

**Results:** In this study, patients’ age ranged from 25-84 years with a mean age of 57.17 ± 12.7 years. About 61% were female, 37% had elementary education. About 82.5% of the patients knew hypertension as a disease. Fifty four percent were informed of their high blood pressure. They knew Complications of untreated high blood pressure were: heart problems (81.5%), kidney problems (45.5%), vision problems (44.5%), and brain problems (79.5%). Awareness of 22.5% of patients was poor, 47.5% moderate, and 28.5% good and 1.5% was excellent.

**Discussion and conclusion:** The low level of education was one of the main causes of low awareness. Fewer people were aware about proper use of the drugs and the factors reducing high blood pressure. Therefore, we recommended educational programs to increase awareness of individuals with hypertension and its complications.

**Keywords:** Hypertension, Knowledge, Symptoms, Severity of illness.

**EFFECT OF EDUCATION AND FOLLOW UP ON ADHERENCE RATE OF PATIENTS WITH MILD- TO MODERATE PERSISTENT ASTHMA**

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**Introduction:** Asthma treatment has been improved excellently in recent decades and this is mainly due to access to inhaled Corticosteroids. It should be considered that desired outcomes depends on not only access to drugs but also to suitable use of it.

**Material and Methods:** This study was aimed to survey the effect of education and follow up on adherence rate of patients with mild- to moderate persistent Asthma. In a semi-experimental study (before and after) two groups of patients underwent study. Group one consisted of 200 patients treated traditionally and group two included 400 patients with the same severity and age. All of these patients were treated and followed up with a comprehensive program for one year.

**Results:** The results indicated that in group one 50% and in group two 87.5% of the patients have had and adherence rate of 50%.

**Discussion and conclusion:** This study indicates that education and scheduled follow up can result in higher...
One hundred patients from This is an interventional The results of this study on 90 health center staffs. Data collection tool is quasiexperimental (before and after) study conducted Materials and Methods: One hundred patients from those attending rheumatology unit in our hospital with the complaint of heel pain were studied for the presence of radiological changes, its relationship with age, gender and body weight. Results: Seventy-three females with 27 male patients were included in the study, with female-to-male ratio of 2.7:1.3. Mean age was 40.64 years. There were 62 out of 100 cases with positive radiographic finding of calcaneal spur, as follows: 21 of them had unilateral spur and 41 had bilateral spur. The prevalence of heel pain with calcaneal spur is more in females due to prolonged standing and over work specially at home. Discussion and conclusion: Heel pain is more in females than males and it is bilateral more than unilateral. There is some positive correlation between the duration of symptoms, body weight and radiological spur formation. Keywords: Clinical, Radiological, Heel Pain, Kirkuk

**EFFECT OF EDUCATION BASED ON HEALTH BELIEF MODEL ON KNOWLEDGE AND ATTITUDE OF HEALTH CENTER STAFF IN KERMANSHAH ABOUT CARDIOVASCULAR DISEASES PREVENTION**

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Introduction: Cardiovascular diseases have become as the main cause of human's death and disabilities. In the past, communicable infectious had been the main cause of human's death, but with changing in life style non-communicable diseases were headed the causes of death. This study has done determine the impact of the health education based on Health Belief Model on knowledge and attitude of health center staff in Kermanshah province. Materials and Methods: This is an interventional quasieperimental (before and after) study conducted on 90 health center staffs. Data collection tool is questionnaire included 11 questions about general information, 15 questions about knowledge and 28 questions for assessing attitude based on HBM model. Results: Before educational intervention, the rate about knowledge and attitude of preventing cardiovascular diseases was in the intermediate level. After the education all variables were significantly changed by educational intervention. The analysis showed that after the intervention there was a significant increasing in the score of knowledge and attitude based on HBM model. The mean score of knowledge before education=17.42 and after education=28.02 and the mean score of attitude before education = 44.42 and after education = 51.85. That means p value<0.05. Discussion and conclusion: The results of this study confirm the effect of education on knowledge and attitude based on HBM model. Recommendation: training carried out in other health centers for preventing cardiovascular diseases.

**THE EFFECT OF CORONARY ARTERY BYPASS GRAFT PREOPERATIVE EDUCATION ON PATIENTS ANXIETY**

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Introduction: Coronary Artery Bypass (CABG) is one of the most common surgeries in both developed and developing countries. Due to surgery anxiety, heart rate, cardiac output and oxygen demand will rise. Then any attempt to decrease patients' preoperational anxiety would be beneficial. One of the efforts to decrease the anxiety level is patient education. The purpose of this study was determining the effects of education by using VCD and booklet on pre-operative anxiety of CABG candidates in two different times. Materials and Methods: This review study of literature was to evaluate the the effect of coronary artery bypass graft preoperative education on patients anxiety. CINAHL nursing journals in the site between 2000 and 2010 using key search terms were related. Study of 40 countries of America, France and china, Indiana, Iran found. Results: The result indicated that the late trait anxiety level significantly decreased in the experimental group compared to the control group at the 6th day before CABG (t=3.79, P<0.001) (t=4.53, P=0.00) respectively. According to the study results, use of visual information by VCD at sixth day before surgery was more effective in clinical setting that the first day. Education using booklet, 6 ¬day before surgery has had the least effect on reducing the state anxiety of participants . Discussion and conclusion: Regarding the results of this study, education using VCD, 6 ¬days before CABG and booklet, one day before CABG has the most effect on reducing pre-operative anxiety. Therefore, nurses can use this educational cost-effective beneficial intervention,
The respondents acquired 17.72% of total hypertension self-monitoring behavior score, 47.03% of attitude, 12.37% of subjective norms, 33.46% of intention and 50.95% of enabling factors. After intervention there were significant increases in self-monitoring behavior (173.31%), attitude (62.60%), subjective norms (54.70%), intention (129.93%) and enabling factors (46.62%) in intervention group. There was no significant difference between the constructs of BASNEF model in control group after intervention compared to the baseline values (p>0.05).

Discussion and conclusion: The results of this study showed that the level of self-monitoring behavior in the patients was low. Educational programs, in order to improve self-monitoring behavior in patients with hypertension are helpful and necessary.

Keywords: Education, Self-monitoring, Hypertension, BASNEF Model.

APPLICATION OF HEALTH BELIEF MODEL TO PROMOTE PREVENTIVE BEHAVIORS IN HIGH RISK INDIVIDUALS FOR TYPE II DIABETES

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Introduction: prevention of type II diabetes mellitus is an important step to reduce prevalence and burden of diabetes mellitus. Planning of theory based educational intervention could be useful for this purpose. The aim of this study is the application of Health Belief Model (HBM) to promote the preventive behaviors in at high risk individuals for developing type II diabetes mellitus in Taft city.

Materials and Methods: Ninety-eight subjects by three criteria (BMI>30kg/m2, Age≥30 years and first-degree relatives of patients with type II diabetes mellitus) were randomized to either a control and intervention group. Educational intervention program was performed to intervention group during the two sessions. Data were gathered by using self administered questionnaire via face to face interview, before and two months after educational intervention program and were analyzed using SPSS 11.5 software and suitable statistical tests.

Results: The findings showed that two months after educational intervention program, the mean scores of perceived susceptibility, perceived severity, perceived benefits, perceived self efficacy and preventive behaviors in intervention group significantly increased (P<0.001, P<0.01, P<0.001, P<0.001, P<0.01, respectively). Findings also showed the significant decrease in mean scores of perceived barriers in intervention group (P<0.001), but results did not show the significant variation in mean score of HBM subscales and preventive behaviors in control group.

Discussion and conclusion: The findings of this study showed efficacy of intervention program in HBM framework to promote the preventive behaviors in high risk individuals for type II diabetes.

Keywords: Preventive behaviors, Type2 diabetes, Health Belief Model

THE ROLE OF HEALTH BELIEFS IN PERFORMING PREVENTIVE BEHAVIORS IN HIGH-RISK INDIVIDUALS FOR TYPE II DIABETES

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**Introduction:** Diabetes mellitus is an important health problem and leads to severe complications. Development of positive health behaviors is extremely important to prevent diabetes in high-risk individuals. This study aims at identifying the relationship of health beliefs and diabetes preventive behaviors among individuals at high-risk for developing type II diabetes mellitus in Taft city.

**Materials and Methods:** A study using the Health Belief Model (HBM) was undertaken with 114 high-risk subjects for type 2 Diabetes of both genders, by 30 and higher years old, from three urban health centers, which diagnosed as high-risk for type 2 diabetes during the screening program, were recruited in this study. Research tool was a 66-item questionnaire. Data were analyzed with descriptive statistics, Spearman correlation and Mann–Whitney U-test.

**Results:** 29.8% of the subjects were male and 70.2% were female. 68.4% of the subjects had less than diploma of formal education and 89.4% of them were married. Mean score of knowledge and preventive behaviors was 5.80 ± 2.87, and 5.41 ± 2.83, respectively. Therefore, subjects obtained 30.05% of maximum obtainable score of preventive behaviors. There were significant correlations between preventive behaviors and perceived susceptibility, (r=0.243) (P< 0.009), perceived severity, (r=0.312)(P<0.001), perceived barrier, (r=0.245) (P=0.006) and perceived self-efficacy (r=0.497) (P<0.001).

**Discussion and conclusion:** Despite the presence of risk factors, preventive behaviors among high-risk subjects for developing type II diabetes was poor as a result of lack of susceptibility, severity, barriers and self-efficacy perception.

**Keywords:** At high-risk individuals, Type2 diabetes, Health Belief Model

**EFFECTS OF EDUCATION ON HOSPITALIZED PATIENTS' KNOWLEDGE AND ATTITUDE ABOUT RISK FACTORS OF CARDIOVASCULAR DISEASES IN CCU AND POST CCU WARDS OF SHAHID MUSTAFA KHOMEINI HOSPITAL IN ILAM**

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**Introduction:** One of the most important causes of mortality and life-threatening problems are cardiovascular diseases. American Heart Association (AHA) has estimated that approximately 25 million deaths will occur due to cardiovascular disease till 2020 and makes these diseases the prime cause of mortality worldwide. Researches show that controlling and decreasing of risk factors lead to the decrease of incidence and prevalence of Ischemic Heart Disease (IHD). The purpose of the present study is to determine the effects of education on patients' knowledge and attitude; those who were hospitalized in CCU and Post CCU of shahid Mustafa Khomeini hospital in Ilam in 2007.

**Materials and Methods:** This was a semi-experimental study based on the election of 96 patients, both males and females of CCU and Post CCU in Shahid Mustafa Khomeini Hospital in Ilam in accessible sampling method. At first data collected by researcher-made questionnaire which consisted of three parts: Demographic characteristics, questions on knowledge and questions on attitude. After face to face education, the patients’ knowledge and attitude were reassessed with regarding to cardiovascular risk factors. Finally, collected data analyzed by SPSS package, Chi – square, Fisher exact and Paired T– tests.

**Results:** There was a significant difference between knowledge mean score about cardiovascular disease in pre (25.93) and post(36.19) test(p<0.01). Also patient's attitude had been changed after the educational period(p=0.00). There was significant correlation between patient’s knowledge about cardiovascular disease with educational level in partner (P<0.03) and sex (P<0.05). Suitable attitude in patient were associated with age (P<0.05), educational level of patient (P<0.01), education level of intimate partner (P<0.05) and monthly income of family(p<0.01). There was significant statistical correlation between effect of education with age (P<0.05), education level of patient (P<0.01), education level of intimate partner (P<0.05) and monthly income of family (P<0.05)

**Discussion and conclusion:** Cardiovascular diseases and their risk factors have an increasing trend in prevalence. Patients’ knowledge and attitude towards them are relatively inappropriate. Noticing the effective role of education in decreasing recurrent hospitalizations, training cardiac patients should be considered as main performance priorities of personnel, clinical trainers and nursing student.

**Keywords:** Cardiovascular diseases, Risk factors, Knowledge, Attitude

**EVALUATION THE EFFECT OF EDUCATIONAL INTERVENTION ON MYTH OF PATIENTS WITH TYPE 2 DIABETES**

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**Introduction:** There are many Myths about diabetes, which leads to some problems in control of the disease in some patients. Diabetes is a disease that affects different body systems. Therefore, correcting Myths about diabetes would facilitate prevention and treatment of the disease. The current study was carried out to evaluate the effect of education on correction of Myths in patients with type 2 diabetes.

**Materials and Methods:** This pre- and post, quasi-
The findings support the quasi-experimental study, carried out on 78 patients with type 2 diabetes referred to diabetes clinic of Minoodasht. First, the Myths existed in the living area of the patients were identified. Then, the educational program was designed and its content was devised according to the needs of patient. Before carrying out the intervention, a questionnaire contained six items on Lickert scale were filled for the patients. The educational intervention was done in five sessions, each lasted 25 to 30 minutes. Four weeks later, the effect of the educational intervention was evaluated. The findings were analyzed using SPSS software and pair t-test at the significance level of 5%.

**Results:** The findings showed that the false beliefs of the participants had a statistically significant difference in pre- and post-test (p<0.001). The overall score of false beliefs of patients decreased from 20.23±1.16 in the pre-test to 18.57±1.34 in the post-test.

**Discussion and conclusion:** The findings support the efficiency of educational interventions on correction of Myths of the patients with type 2 diabetes.

**Keywords:** Education, Myth , Type 2 diabetes.

**EVALUATIONTHE EFFECT OF EDUCATIONAL INTERVENTION ON EMPOWERMENT OF PATIENTS WITH TYPE 2 DIABETES**

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**Introduction:** Diabetes is one of the most important health problems. It is the most common chronic metabolic disorder, which requires continuous care. Thus, the major portion of treatment and control of disease is on the patient. Empowerment of diabetic patients in control of the disease and prevention of its complications is possible by appropriate and continuous education. The aim of the current study is to design and evaluate an educational program on empowerment of patients with type 2 diabetes.

**Materials and Methods:** This was a pre- and post-test, quasi-experimental study, carried out on 78 patients with type 2 diabetes referred to diabetes clinic of Minoodasht. Before performing the educational intervention, the patients filled a questionnaire to help us design the contents of the program according to their educational needs. Considering the role and importance of family in improvement of life quality in the patients, we considered a role for family members of the patients in the educational program and asked them to participate in the program with the patients. The program was carried out in five sessions. One month later, the effect of the intervention on empowerment of patients (sufficient skill for control of blood glucose, blood pressure, and weight, and also following the diet, exercise, family support, and having access to educational resources and courses) was assessed using a questionnaire. The findings were analyzed using SPSS software, and McNemar’s test at the significance level of 5%.

**Results:** The findings indicated a statistically significant difference between the pre- and post-test scores of empowerment factors (p<0.001), such that the mean overall score of empowerment in patients under study was 4.64±1.09 in pre-test and 5.29±0.94 in post-test.

**Discussion and conclusion:** The findings support the efficiency of educational intervention on empowerment of patients with type 2 diabetes.

**Keywords:** Education, Empowerment, Type 2 diabetes.

**INFLUENCE OF WALKING EDUCATION ON GLUCOSILIZED HAEMOGLOBIN AND FASTING BLOOD SUGAR LEVELS IN WOMEN WITH TYPE 2 DIABETES**

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**Introduction:** Physical activity is a basic elements for curing diabetes. Walking can be considered as one of the physical activities, which it doesn’t need any special equipments and can be part of daily life of those have diabetes. Therefore, the aim of this research was to examine the effects of walking training on haemoglobin glucosil and fasting blood sugar levels in women with type 2 diabetes.

**Materials and Methods:** This quasi-experimental interventional study was carried out on 88 women who suffered from type 2 diabetes. The data was collected using a questionnaire including demographic information, performance regarding the appropriate or correct walking and also a checklist about the amount of walking and also levels of fasting blood sugar (FBS) and hemoglobin glycosides (HbA1c) of the patients. The data was collected prior to starting interfering training. Then the interfering training was applied for the intervention group in 4 educational sessions and each one for 60 minutes during one month. Three months following the training, the data and levels of FBS and HbA1c were again collected and measured from the patients.

**Results:** Before training, the intervention and control groups scores of cooest walking performance was less than average and the most part of their walking was a type of light walking (%77.86 and %74.4 in intervention and control groups, respectively). In addition, the levels of FBS and HbA1c in the patient were higher than the normal levels. Following the intervention, mean of correct walking performance and also the times spent on walking with average and heavy extents were significantly increased in the intervention group as compared with control one (P<0.0001). Moreover, levels of of FBS and HbA1c of the intervention group group were significantly reduced as compared with the control group (P<0.0001).
**Discussion and conclusion:** Our findings indicate that walking education is an important method for control of FBS and HbA1c levels in patients with type 2 diabetes.

**Keywords:** Type 2 diabetes, Walking, Woman, Hemoglobin glycosides, Fasting blood sugar

**RELATIONSHIP BETWEEN SATISFACTION WITH TREATMENT AND ADHERENCE IN PATIENTS WITH TYPE II DIABETES.**

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**Introduction:** Adherence to prescribed therapeutic program is an important challenge in patients with chronic diseases, especially diabetes because these patients if don’t adhere to their treatment programs they would confront harsh consequences, including relapse, exacerbation of disability, the need for immediate treatment and hospitalization. This study was performed to assess the relationship between satisfaction of treatment with adherence.

**Materials and Methods:** To carry out this research, 115 adults with type II diabetes (men and women) who had referred to Sina Hospital Endocrinology Clinic of Tabriz during the period June – August 2010, completed the following five research questionnaires: demographic information questions, patient satisfaction questionnaire (PSQ-18) and General Adherence Scale (GAS). Data were analyzed through Pearsons correlation coefficient and multiple regression analysis methods.

**Results:** The results showed that there is positive significant relation among components of satisfaction of treatment like, public satisfaction, quality and type of specialist physician care and type of therapeutic relationship with adherence in patients with type II diabetes. Also among the predictor variables, quality and type of specialist physician care have significant power on prediction of adherence.

**Discussion and conclusion:** Based on the research results, type II diabetic patients who reported in general more satisfaction of their treatment, assessed the quality of care received from their physician acceptable and had a desired relationship with their physicians, showed more adherence. In the other hand, it can be predicted that the patient who assessed the quality of care received from their physician more acceptable, may have more adherence.

**Keywords:** type II diabetes, satisfaction of treatment, adherence.

**THE RELATIONSHIP BETWEEN PHYSICAL ACTIVITY AND RISK OF TYPE 2 DIABETES IN RESIDENTS OF SOUTH OF TEHRAN: A POPULATION-BASED STUDY**

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**Introduction:** Physical activity has shown to prevent type 2 diabetes. However, the type, intensity and time of effective physical activity as well as individuals needs based on the level of their risk for type 2 diabetes have not been clarified comprehensively. This study investigated the relation between moderate aerobic physical activity ≥150 minuets/week with decreased risk of type 2 diabetes among obese and non-obese residents of south of Tehran.

**Materials and Methods:** This study which was a part of the Cardiovascular Risk Factors Survey in Tehran population Lab region was designed and conducted based on MONICA/WHO project. 1552 adult inhabitants of 17th district of Tehran were enrolled in this cross-sectional study. Physical activity was assessed by MONICA Optional Study of Physical Activity questionnaire. Diabetes was defined as a history of a prior diagnosis of diabetes or fasting serum glucose ≥126 mg/dl.

**Results:** In a multivariate model, moderate aerobic physical activity ≥150 minuets/week was significantly associated with decreased risk of type 2 diabetes in all and non-obese subjects [OR=0.56; 95%CI: 0.35-0.91 and OR=0.50; 95%CI: 0.26-0.94, respectively]. There was no significant relation between the physical activity and type 2 diabetes risk in obese subjects [OR=0.64; 95%CI: 0.30-1.39].

**Discussion and conclusion:** Moderate aerobic physical activity ≥150 minuets/week was significantly associated with decreased risk of type 2 diabetes in non-obese people and could be an acceptable exercise goal for these individuals. However, obese people should be investigated more to produce a tailored exercise guideline to this population at high risk of type 2 diabetes.

**Keywords:** physical activity, diabetes mellitus

**THE EFFECT OF EDUCATIONAL PROGRAM BASED ON PRECEDE MODEL ON QUALITY OF LIFE IN PATIENTS WITH TYPE2 DIABETES**

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**Introduction:** The Problems caused by diabetes have direct and indirect impacts on quality of life of diabetic patients. Increasing these problems causes decrease in the quality of life of these patients. This study is conducted...
to assess the effect of educational program based on PRECEED model on promoting quality of life of patients with type2 diabetes.

Materials and Methods: This Pre- and post-intervention quasi-experimental study was conducted on 78 patients with type 2 diabetes referred to diabetes clinic in Minoodasht. The educational program based on PRECEDE Model & patients educational needs was designed. The data were collected using two questionnaires including life-quality WHOQOL- BREF questionnaire & PRECEDE Model-based educational questionnaire. Patients and their families and health personnel received the intended intervention. The subjects were followed one month after intervention to identify the role of educational intervention on patients' outcomes. The data was analyzed by Paired Sample T Test, Variance Analysis Test and Bivariate Correlation Test using SPSS ver 15.

Results: After intervention, the mean score of quality of life increased from 80.39±11.35 to 81.35 ± 8.31. No significant difference was existed in the total score of quality of life after intervention but there were significant differences in the physical health (p-value <0.05), self-evaluation of quality of life of patients (p-value <0.01) and self-assessment of health of patients after educational intervention. In addition, no significant differences were observed between demographic parameters and quality of life, except in the number of children.

Discussion and conclusion: The educational program based on PRECEDE model was effective in improving quality of life of patients regarding physical health and self-assessment of their health status.

Keywords: PRECEED model, quality of life, type2 diabetes

**UTILIZING THE INFORMATION–MOTIVATION–BEHAVIORAL SKILLS MODEL IN DETERMINING DIABETES SELF-CARE PREDICTORS IN PATIENTS REFERRING TO YAZD DIABETES RESEARCH CENTER**

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Introduction: More than 171 million people suffer from diabetes in the world and this number is expected to reach up to 366 million in 2030. Diabetes self-management training is an important aspect of diabetes care. Self-management training improved diabetes knowledge, frequency and accuracy of self-monitoring of blood glucose, self-reported dietary habits, and glycemic control. The current trend in diabetes self-management is to use theory-based health behavior change models to inform educational efforts. The purpose of this study was to use the Information–Motivation–Behavioral Skills (IMB) model of health behavior change to conceptualize the determinants of diabetes self-care behavior and glycemic control in a sample of patients with T2DM.

Materials and Methods: This cross-sectional study carried out on 151 patients with diabetes who referred to Yazd diabetes research center. Gathered information included demographics, diabetes knowledge (information), diabetes fatalism (personal motivation), social support (social motivation), and diabetes self-care (behavior). Hemoglobin A1C values were extracted from the patient medical record. Descriptive statistics were performed using SPSS 16.0. Structural equation modeling was used for testing the IMB framework using LISREL 8.7 Student.

Results: A total of 151 men and women with type 2 diabetes completed all measures. The mean age of participants was, 50 years old. The majority were female (63.4%), housewife (52.2%), and insured (73.9%). There was a significant correlation between diabetes knowledge (r = 0.16 p < 0.05) and self care behaviors. There was not any significant correlation between other constructs. Also the association of self-care behaviors and Hemoglobin A1C was not statistically significant.

Discussion and conclusion: Consistent with the IMB model, having more information (more diabetes knowledge) was associated with behavior, but personal motivation and social motivation was not associated with behavior; and also behavior was not the predictor of glycemic control. The IMB model is not an appropriate, comprehensive health behavior change framework for diabetes self-care. Testing other health education models for diabetes self care behaviors is recommended.

Keywords: Diabetes Self-care, Behavior change, Social support, Motivation

**EFFECT OF EDUCATION ON KNOWLEDGE AND ATTITUDE OF HOSPITALIZED PATIENTS IN CCU AND POST CCU OF MUSTAFA KHOMEINI HOSPITAL OF ILAM CITY ABOUT RISK FACTORS OF CARDIO-VASCULAR DISEASE IN 2009**

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Introduction: One of the most important causes of mortality and life threatening problems is cardiovascular diseases. American Heart Association (AHA) estimated that, approximately 25 million death occurs because of cardiovascular diseases till 2020, and this will be recognized as first cause of mortality. Studies show that control of risk factors, decreases the Ischemic Heart Diseases (IHD). The aim of this study is to determine the effect of education on knowledge and attitude of hospitalized patients in CCU and Post CCU of Mustafa Khomeini hospital of Ilam city in 2009.

Materials and Methods: This is a Descriptive- Analytical and Interventional study that 96 patients of CCU and Post CCU of Mustafa Khomeini hospital of Ilam were selected by Simple Random sampling. Due to identify
COMPARING THE EFFECT OF CURRENT EDUCATION AND PEER-EDUCATION ON WALKING IN TYPE 2 DIABETIC PATIENTS BASED ON HEALTH BELIEF MODEL

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Introduction: Diabetes is a disease with long cardiovascular, renal, eye and neural complications. Regular physical activities are one of the basic elements for curing diabetes. Walking can be considered as one of the physical activities especially on control sugar in diabetic patients. Research shows that educational strategies provide an appropriate situation in order to form proper health behaviors. According to the application of theories and models of health education, the purpose of this study is comparing the Effect of Current Education and Peer-Education on Walking in Type 2 Diabetic Patients based on Health Belief Model.

Material and Method: This quasi-experimental interventional study was carried out on 80 people who suffered from type 2 diabetes. Data was collected using a questionnaire based on the health belief model, a checklist related to patient practices and recording fasting blood sugar (FBS) and 2-hours Postprandial (2hpp) and hematoglobin glycosides (HbA1c) of the patients. All group completed the questionnaire and checklist. Results were documented before and three months after intervention. The patients of the experimental group participated in 2 educational classes during the three month of intervention, as the follow up of the intervention. Data were collected and analyzed.

Results: Our findings indicated that mean scores of health belief model variables, i.e perceived susceptibility, severity, benefit and self-efficacy, were significantly increased in the peer education group compared to current education group after intervention. Also, behavioral walking, rates of HbA1c and FBS and 2HPP levels improved significantly among the peer education group, compared to current education group.
Discussion and conclusion: Applying walking training program developed for diabetic patients and its implementation by the peer in order to control blood sugar using the health belief model is very useful and effective, in the implementation of these control programs, monitoring and follow-up training is recommended.

Keywords: Type 2 DM, Current Education, Peer-Education, Walking, Health Belief Model

EFFECT OF AN 8-WEEK PHYSICAL ACTIVITY PROGRAM ON METABOLIC CONTROL IN TYPE 2 DIABETIC WOMEN IN HAMADAN BASED ON TRANSTHEORETICAL MODEL (TTM)

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Introduction: despite of the importance of physical activity (PA) in improving metabolic control in type 2 diabetic patients, many of them do not perform this behavior adequately, which highlights the need to design and implement effective physical activity interventions for this patients based on theories of behavior change. The aim of this study was to investigate the effect of an 8-week physical activity program on metabolic control in type 2 diabetic women in Hamadan based on Trans Theoretical Model (TTM).

Materials and Methods: In this experimental study, Fifty women with Type 2 diabetes who were inactive (based on International Physical Activity Questionnaire or IPAQ) and in pre-action stage of change model at baseline completed the Trans Theoretical Model questionnaire and measurement of metabolic control factors (HbA1C, TG, Total Cholesterol, HDL and LDL). Participants randomly divided into control (n=25) and intervention groups (n=25). PA consultations were delivered for 8 weeks to intervention groups and control group received routine education. after 3 month participants completed IPAQ, Trans Theoretical Model questionnaire and metabolic control factors were evaluated.

Results: No differences were found between groups in metabolic factors and Trans Theoretical Model constructs at baseline. After education, interventional group showed significant decrease in total Cholesterol (17mg/dl) and HbA1C (.66) comparing with control group (P < 0.05). PA level and stage of change was significantly increased in interventional group comparing with control group (P < 0.05). Also interventional group showed significant increase in cognitive Process, behavioral process of change and self-efficacy (P < 0.05).

Discussion and conclusion: results showed that physical activity program based on Trans Theoretical model is effective in increasing stage of change transition to adopt regular physical activity and improve metabolic control in patients with type 2 diabetes. Therefore, designing and implementing physical activity programs based on theories of behavior change to increase the metabolic control in type 2 diabetic patients is recommended.

Keywords: Women, Type 2 diabetes, Metabolic control, Physical activity, Trans Theoretical Model

EFFECT OF DIET EDUCATION ON QUALITY OF LIFE IN TYPE 2 DIABETIC PATIENTS

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Introduction: Estimation tells that 285 million people have diabetes and its prevalence is predicted to increase to 439 million by 2030. For the year 2010, it is estimated that 3.96 million excess deaths in the age group 20-79 years are attributable to diabetes around the world. Quality of life is important for people with diabetes and their health care providers. Quality of life is also increasingly recognized as an important health outcome in its own right, representing the ultimate goal of all health interventions. Due to high incidence of diabetes and the importance of nutritional education, the effect of diet training on quality of life was studied in Urmia, west Azerbaijan.

Materials and Methods: The present research intended to evaluate the effect of correct diet education on quality of life in type 2 diabetic patients. Sampling was based on objective, and data was gathered by a questionnaire consisting of 2 parts: socio-demographic characteristics and quality of life. The tool for the evaluation of quality of life was SF36 standard form. There were 20 diabetic patients in each of intervention and control group. Data were collected in two stages, before intervention and a month after intervention.

Results: Fifty percent of patients were male. The mean age of subjects was 46.44, and 46% of them were illiterate and 84% were married. Paired t test was used to determine the impact of nutritional education on quality of life. Statistical test results showed significant differences between nutritional education and the mean scores of fatigue, level of vitality, energy status before and after nutrition education (P< 0.05). There were not significant differences between nutritional education and physical functioning, physical role, general health, emotional role, general health perception.

Discussion and conclusion: This study and other studies showed similar effects of nutritional training on improving quality of life of patients. Researchers believe
that this research showed diagnose of risky patients can reduce health problems, psychological and other issues through the training they received. This study and other studies showed similar effects of nutrition education on improving quality of life of patients. However, the lack of significant differences before and after training in this study can be poorly educated and most likely forgotten subjects or doing recommended due to difficulty or poverty. Positive outcomes were observed in adults receiving nutrition intervention for type 2 diabetes. Ongoing intervention is needed to be supported by continued clinical researches.

**Keywords:** Education, Quality of life, Diabetic patients

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**DETERMINING THE PREDICTORS OF WALKING BEHAVIOR IN PATIENTS WITH TYPE2 DIABETES IN CITY OF YAZD BASED ON HEALTH BELIEF MODEL**

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**Introduction:** Diabetes is a common disease that can lead to metabolic abnormalities and chronic complications. Today, the positive role of physical activity and exercise, especially walking in the health of human society has been approved.

**Materials and Methods:** In this cross-sectional study 111 type 2 diabetes patients referring to Yazd Diabetes Research Center were selected randomly. Data collected by a questionnaire with Health Belief Model structures (knowledge, perceived susceptibility, severity, benefits, barriers, self efficaicy & cues of action) and demographic variables and questions about walking behaviors. Reliability and validity were assessed and approved. Data analyzed using SPSS and making descriptive statistics, the correlation coefficient and regression testes.

**Results:** One hundred and eleven individuals with type 2 diabetes of both genders (78 females and 33 males) with the mean age of 44 / 7 ± 18/49 were participated in this study. 102 (9 / 91%) were married, 49/5% of them were educated under the diploma. Average score of knowledge and walking behavior were, 22 / 3 ± 93 / 6 and 73 / 3 ± 46 / / 4, showing that subjects only 43/12% of maximum score Consumer awareness and gain 31/85% of the maximum score won the walking behavior. The results of this study show were correlation between walking behavior and knowledge (p<0/02) and r=0/221, behavior and perceived severity (P<0/03) and r=0/201, behavior and perceived benefits (P<0/01) and r=0/234.

**Discussion and conclusion:** According to this study behavior of walking was weak & it seems that the use of theoretical based models such as Health Belief Model can be effective on predicting walking and as a framework can be used for the implementation of educational interventions to control diabetes.

**Keywords:** Health Belief Model-Walking-Type 2 Diabetes

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**EFFECT OF EDUCATIONAL PROGRAM BASED ON HEALTH BELIEF MODEL ON SELF-CARE OF DIABETIC TYPE II PATIENTS IN BORUJEN-2009.**

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**Introduction:** Diabetes is one of the main complications of public health in contemporary world. Death rates and heavy economic burden of late complications of diabetes are increasing daily. Diabetes complications are one of the major causes of morbidity and physical and emotional problems for diabetic patients. Current strategy in controlling diabetes and reducing its complications is health education. This strategy should be based on educational need-assessment and should be performed proper to patents, requirements. Some activities are done currently and repeatedly in level of health centers; Unfortunately these activities have not been followed by expected efficiency, because of ignoring some principles of education. If educational measure is designed principally and aimfully it will be followed by high degrees of effectiveness and so can have the most efficiency in controlling diabetes and reducing diabetes complications and as researchers state it can reduce lower limb amputations by 85%. This study was performed in order to assess efficiency of educational program based on Health Belief Model (HBM) on self-care behavior of diabetic patients, compared with current educational programs in health and treatment system.

**Material and Methods:** This is an interventional study in which 66 diabetic type II patients supported by health centers of borujen city were engaged. Educational intervention was done for case group based on HBM Model.

**Results:** The results showed that the mean grades of knowledge, perceived susceptibility, perceived severity, perceived benefits, perceived barriers and self-care of diabetic patients were less than moderate before educational intervention, in spite of conducting multiple educational programs in health centers. But after intervention based upon HBM in conditions similar to control group, the results of this study showed that the mean score of knowledge, perceived susceptibility, perceived severity, perceived benefits, perceived barriers and self-care of diabetic type II patients increased significantly in comparison with control group.

**Discussion and conclusion:** The findings of this study showed that self-care behaviors were elevated by elevation of knowledge and perceived susceptibility, severity, benefits and barriers. So the results of this study
proven and confirm the effectiveness and influence of HBM in improvement of performance and self-care in diabetic type II patients.

**Keywords:** Knowledge, Perceived susceptibility, Perceived severity, Perceived benefits, Perceived barriers, Self-care, Diabetes mellitus.

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**THE EFFECTS OF APPLYING CONTINUES CARE MODEL ON QUALITY OF LIFE IN PATIENT WITH RENAL TRANSPLANTATION IN TEHRAN.**

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**Introduction:** With changing the health status, the experiences, relations and roles are getting changed. Chronic kidney disease and its replacement therapies cause some problems in useful activity and interests in the patients that contribute with her/him quality of life. Objectives: The aim of this study was to evaluate the effects of applying Continues Care Model on quality of life in patient with renal transplantation.

**Material and Methods:** In this randomized clinical trial study, 90 patient with renal transplantation referring to Bagyatallah, Labafinejad, hasheminejad and Modares Hospitals according to including criteria were selected then divided into experimental and control groups randomly. After applying Continues Care Model in experimental group in three months, quality of life were evaluated and comprised with disease specific questionnaire in renal transplantation (Kidney Transplant Questionaire-25) after the end of each month in both groups.

**Results:** Data analysis showed increase in quality of life scores in both groups and the mean of quality of life scores (total and sub dimension) in experimental group were significantly more than control group in all stages (P<0.05).

**Discussion and conclusion:** Applying Continues Care Model can increase quality of life in patients with renal transplantation significantly.

**Keywords:** Continues Care Model, Quality of life, Renal transplantation, Disease specific questionnaire, Kidney Transplant Questionaire (KTQ-25).

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**EFFECT OF DIET EDUCATION ON QUALITY OF LIFE IN TYPE 2 DIABETIC PATIENTS**

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**Introduction:** An estimated 285 million people worldwide have diabetes and its prevalence is predicted to increase to 439 million by 2030. For the year 2010, it is estimated that 3.96 million excess deaths in the age group 20-79 years are attributable to diabetes around the world. Quality of life is important for people with diabetes and their health care providers. Quality of life is also increasingly recognized as an important health outcome in its own right, representing the ultimate goal of all health interventions. More than 50 years ago, the World Health Organization stated that health was defined not only by the absence of disease and infirmity, but also by the presence of physical, mental, and social well-being. Recent developments in the fields of health outcomes research and health technology assessment have also stimulated interest in quality-of-life evaluation as a clinical research tool. Researches show that educational programs on diabetic diet reduce the complications from the disease. Due to high incidence

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**PROMOTION AND MAINTENANCE OF PREVENTIVE BEHAVIORS FROM HIV, HBV AND HCV INFECTIONS IN HEALTH CARE WORKERS USING CONSTRUCTS OF HEALTH BELIEF MODEL AND PRECEDE – PROCEED MODEL**

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**Introduction:** Despite many benefits of universal (standard) precautions and implementation of different educational interventions, this precautions compliance is low and is one of health problems among nurses at risk and their patients. Therefore, the purpose of this study was to investigate the effect of educational intervention for promotion and maintenance of preventive behaviors from HIV, HBV and HCV infections in health care workers using constructs of Health Belief Model and Precede – Proceed Model.

**Materials and Methods:** This study is a quasi-experimental research. Data collection instruments after validity and reliability were given to the samples. One group of 91 nurses received educational intervention based on Health Belief Model and Precede – Proceed Model constructs. Post and 6 months after intervention evaluation was conducted by Data collection instruments and results was analyzed.

**Results:** The study findings with statistical analyzes showed significant differences in before, post and 6 months after educational intervention Health Belief Model and Precede – Proceed Model constructs and preventive behaviors (p<0.001).

**Discussion and conclusion:** Educational intervention based on Health Belief Model and Precede – Proceed Model constructs for promotion and maintenance of preventive behaviors from HIV, HBV and HCV infections in health care workers in Rafsanjan University of Medical Sciences was useful.

**Keywords:** Health Belief Model, Precede – Proceed Model, Preventive Behavior, HIV, HBV and HCV Infections, Health Care Worker.
of diabetes and the importance of nutritional education, the effect of diet training on quality of life was studied in urmia, west Azerbaijan.

Materials and Methods: The present research was intended to evaluate effect of diet education on quality of life in type 2 diabetic patients. Sampling was based on objective, and data was gathered by a questionnaire consisting of 2 parts: socio–demographic characteristics and quality of life. The tool for the evaluation of quality of life was SF36 standard from. There were 20 diabetic patients in intervention and control group. Data were collected in two stages, before intervention and a month after intervention.

Results: About 50% of the patients were male. The mean age of subjects was 46/44, 46% were illiterate and 84% were married. Paired t test was used to determine the impact of nutritional education on quality of life. Statistical test results showed significant differences between nutritional education and the mean scores of fatigue, level of vitality, energy status before and after nutrition education ($P<0.05$). There were not significant differences between nutritional education and physical functioning, physical role, physical pain, general health, emotional role, general health perception.

Discussion and conclusion: This study and other studies showed similar effects of Nutritional training on improving quality of life of patients. Positive outcomes were observed in adults receiving nutrition intervention for type 2 diabetes. Ongoing intervention is needed to support continued clinical progress.

Keywords: Education, Quality of life, Diabetic patients

Communication and Technology

EFFECT OF COMMUNICATION SKILLS TRAINING PROGRAM ON PATIENT SATISFACTION IN IRAN

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Introduction: Effective communication is widely regarded as a crucial component of patient care that can determine patient satisfaction, compliance and recovery. For patients under surgical operations, opportunities for expressed concern occur primarily during communication with staff, and these interactions have been found to be limited. The present study aims at determining the effect of training communication skills on satisfaction of patients under surgical operations.

Materials and Methods: This quasi-experimental study classified into two non dominant group in equal size($n=50$). The training intervention hold as an one-day workshop(8 hours) about training of communication skills for nurses worked at surgery wards in medical-training center of Firouzgar. Satisfaction of under-operation patients for nurses’ communication on discharge time has been assessed by Patient Satisfaction with nurses’ communication skills before and after workshop. The analysis was inductive by SPSS (version 14).
**DESIGNING A MOBILE HEALTH EDUCATION ANIMATION FOR STUDENTS**

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**Introduction:** Studies indicate the application of digital technology in school health promotion programs for the students in 9-13 years old age and those interested in contents provided for mobile phones. In this experience, we tried to design a mobile health education animation for students with the name of Heart.

**Materials & Methods:** An Adobe flash cs tool, in four minutes with mp4 format animation in two-dimensional form, as an educational software, containing attractive colors, sound and music, about heart function and risk factors was created.

**Results:** This media contained valuable educational contents for health care workers, school health care providers, science teachers and was a useful step toward supporting the communication between health and education.

**Discussion and conclusion:** In total, 83 percent of the students believed that existence of teaching materials in mobile phones are very useful. Portable educational tools, forms a new way to educate health contents to the students. The mobile teaching tool is an opportunity to prevent high risk behaviors among students.

**Keywords:** Mobile Learning - Health students - Mobile Devices

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**DESIGNING A MOBILE LEARNING SOFTWARE FOR HEALTH STUDENTS**

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**Introduction:** The availability of educational content at any time and place in the form of a systematic training program can reinforce the quality improvement strategies. Studies indicate increasing growth in mobile learning in world academic centers. The aim of this study was to produce an educational media regarding health education and communication lessons with the ability to run in mobile phones.

**Materials & Methods:** Consistent with the Supreme Council Planning headlines two unit curriculum’s in Java format and the ability to run at high speed even in touch phones, independent support of Persian font and the ability to upgrade in performing test section was produced.

**Results:** This software which uses available technology and the existing capacities in the field of learning and creates an attractive and enjoyable experience for more effective and stable learning is a useful and valuable resource for students, teachers, health workers in the country, and other interested people with all the advantages associated with mobile learning.

**Discussion and conclusion:** Mobile phones are technically very complex. They have capability of creating and distributing multimedia content and high quality color pages. Universities in Japan, Malaysia and the Philippines attempted to use the educational content designed specifically for mobile phone to train in master and doctoral levels.

Knowledge in the cognitive domain is the level of recall information, ideas and laws and the first step of learning. So producing mobile lesson resources is very practical. Therefore it is recommended to move towards producing mobile educational media and the subject of interactive materials based on the learning principles.

**Keywords:** Nurses Communication Skills, Patient Satisfaction

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**MOBILE EDUCATIONAL PACKAGES FOR FAMILY PHYSICIANS**

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**Introduction:** The use of portable devices in transferring educational concepts in both the developed and developing countries is increasing. These tools focus on supporting education and also are promoting medical education. The empowerment of family physicians in Ministry of Health from 1388 with the proposal developed in educational module packages is pending. The purpose of this experience were designing digital media with health educational contents specific for family physicians and with the ability to be run on mobile phones.

**Materials and Methods:** This health educational software with contents including program and tables of Immunization in different age groups and types of vaccines, administration and storage conditions at 21 title and in jar format was produced. Unlimited highlight and marking, sending text via SMS and email, storage
Disease Prevention

THE IMPORTANCE OF CONTINUOUS BLOOD PRESSURE SCREENING AMONG YOUNG POPULATION

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Introduction: High blood pressure is increasing in the developing countries. Surveillance of blood pressure in population provides vital feedback for hypertension prevention and control efforts. Since persons who want to change their behaviors to improve their health must first be aware of their current physical condition. Hypertension often goes undiscovered in young adults; therefore this study was determined prevalence of blood pressure among young population.

Materials and Methods: In this Cross-sectional study, height, weight and blood pressure of 638 male university students (18-24 years) who referred to university health center were measured during 2007-2009 in Ardabil. Repeat measurements were obtained on two subsequent occasions in persons with elevated blood pressure. Subjects completed the questionnaire on history of hypertension, use of antihypertensive drugs and measurement of blood pressure in the past.

Results: The mean age was 19.62 ± 1.75 years. 3.29 % and 8.62% of subjects were obese and overweight respectively. The prevalence of hypertension based on systolic and diastolic blood pressure were 2.3% (stage I :1.4% and stage II :0.9%) and 2.2 % (only stage I ) respectively .88.8% of hypertensive persons reported that they had not measured their blood pressure at least once in the previous year and they were unaware of their condition.

Discussion and conclusion: The results of this study indicated the necessity of health education for screening and monitoring of blood pressure in all age groups especially in young adults by health care providers and health planner.

Keywords: Screening, Hypertension and Young adults

RELATED FACTORS TO PREVENTIVE BEHAVIORS OF H1N1 IN STUDENTS BASED ON PROTECTION MOTIVATION THEORY (PMT) IN YAZD, IRAN

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Introduction: Influenza is an important disease because of its rapid epidemic diffusion, high morbidity rate and complications. Also, its prevention and control is difficult because of its short incubation period. Influenza virus is one of three viruses which could causes epidemics. H1N1 is a very important communicable disease which its pandemic was occurred in 2009. This study was carried out with the aim of determining the related factors of preventive behaviors of H1N1 based on PMT.

Materials and Methods: It was a cross-sectional study in which a cluster sampling was employed to recruit 200 guidance school students. The data were collected by interview, using a questionnaire which was developed by the researchers. Validity and reliability of the scales were examined and approved. SPSS software was used for the purpose of data analysis. Data were analyzed using descriptive and inferential statistics.

Results: The respondents acquired 84.73% of total protection motivation score and 76.16% of preventive behaviors of H1N1. There was a significant correlation between the PMT constructs and expect perceived severity and perceived costs with preventive behaviors. Components of PMT accounted for 49.6 of the variation in protection motivation. Protection motivation accounted for 11.3% of the variation in behaviors. Other constructs of PMT accounted for 12.1% of the variation of behavior.

Discussion and conclusion: Regarding the significant correlation between the most of the PMT constructs and preventive behaviors of H1N1 and potential of PMT in predicting the behavior, designing educational program based on PMT for preventing H1N1 spread in possible future pandemics is recommended.

Keywords: Preventive Behaviors, H1N1, Students, Protection Motivation Theory

REPORT OF THE GLOBAL SURVEY ON THE PROGRESS OF PREVENTION AND CONTROL OF CHRONIC DISEASES: A REVIEW STUDY

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**Introduction:** Despite the rapidly growing prevalence of chronic noncommunicable diseases in developing countries, notably in Asians with an ethnic predisposition to insulin resistance and adverse body fat patterning seen in the metabolic syndrome, limited data exist on national estimates of such disorders. These nations have the highest dietary energy uptake of all developing countries and one of the highest prevalence rates of overweight; the region is expected to show one of the world’s greatest increases in the absolute burden of diabetes in the next two decades. The aim of this study was to review the progress in prevention and control of chronic diseases.

**Materials and Methods:** All regional offices were involved in coordinating data collection. They mailed or emailed the quantitative questionnaires to Member States and were the first to check the survey responses. The WHO HQ survey team double checked the responses. These were then organized into a database using Epi-Info 6.04d and Excel 2003. The responses to the survey conducted in 2004 in WPR combined with those from the other regions, which were collected in 2005-2006, give a global perspective. For the qualitative component, with the exception of EMR and EUR, WHO HQ interviewers interacted with key informants using a semi-structured questionnaire, similar to that used in 2000-2001, and prepared notes.

The regional advisors for NCD recommended key informants to the WHO HQ research team on the basis of the informants’ knowledge of NCD situations in their respective countries, their English language capacity and their technical background. Interviews were not conducted in EUR. Information was collected for 26 countries, from low income, lower middle income and higher middle income groupings. Most often, there was one key informant per country, interviewed during April, May, June or July of 2006. For the most part, interviews occurred over the telephone. The data and information collected were not validated by independent sources. Depending on the number of key informants interviewed in a region, it may be possible to generalize their information to the region. But overall, the interview information cannot be generalized across regions.

**Results:** The World Health Assembly (WHA) endorsed the Global Strategy for prevention and Control of Noncommunicable Diseases (NCDs) in May 2000. In 2001 and as a follow-up to the Global Strategy, WHO conducted a survey to assess its Member States’ capacity to respond to NCDs, and to learn how best to assist them. Since then, WHO has prompted actions targeted at NCDs, which culminated in a series of vital WHO documents. The World Health Report 2002, Reducing Risk, Promoting Healthy Life, raised awareness of risk factors. In 2003 and 2004, the WHA endorsed, respectively, the Framework Convention on Tobacco Control (FCTC) and the WHO Global Strategy on Diet, Physical Activity and Health (DPAS). In October 2005, the WHO Global Report on “Preventing chronic diseases: a vital investment” was launched. This report makes the case for urgent action to halt and turn back the growing threat of chronic diseases. WHO has at all times been actively supporting partnerships and networking among Member States committed to NCD prevention and control.

Progress is apparent in the group of 118 countries that responded to both surveys. The proportion with a national act, law, legislation or ministerial decree for tobacco control increased from 61% to 84%, varying from 67% in the African Region to 100% in the European and South-East Asian regions. The proportion with a national act, law, legislation or ministerial decree for food and nutrition related to chronic diseases prevention and control increased from 70% to 86%. The existence of budgets specific to NCD increased from 39% of countries to 68%. In a group of 97 countries that excludes WPR, the proportion with a national policy for chronic diseases prevention and control rose from 42% to 70% between the two surveys, varying from 46% in the Africa Region to 83% in the European Region. The proportion with an NCD unit or department in the Ministry of Health increased from 60% to 84%. In 2005, 64% of all 133 countries reported having a national integrated programme for prevention and control of chronic diseases.

**Keywords:** Chronic diseases, Noncommunicable, Metabolic syndrome, Hypertantion, Diabetes, Obesity

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**EFFECT OF EDUCATION ON PROMOTING PREVENTIVE BEHAVIORS OF COETANEOUS LEISHMANIASIS IN SHAHID BABAIE AIRBASE**

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**Introduction:** Shahid Babaie Airbase is one of the most important centers of Leishmania in Isfahan province because of proximity to hyper endemic regions of Leishmania and also for urbanizing in this region and residency of migrant militaries and their families. The aim of this study was to examine the effect of health education based on Health Belief Model (HBM), BAZNEF and PRECEDE in promoting preventive behaviors of Coetaneous leishmaniasis.

**Materials and Methods:** In this quasi-experimenta study, the inhabitants from Shahid Babaie airbase in Isfahan were participated and sampling method was census of all guidance and high school students and their mothers. Three educational sessions and a questionnaire was designed based on the HBM, BAZNEF, PRECEDE models, Which was completed before training and 2 months after training by interview. A checklist is prepared and at the end they are completed by educational persons, hygienic stuff in the region and teachers with
training programs checklist divided to three levels (good, intermediate, well) for analyzing data. Data was analyzed using SPSS 15 software and paired T-test.

Results: About 450 students and 200 mothers participated in this study. There were significant differences between all scores of model components and knowledge before and after educational intervention. There was a significant correlation between sex and the knowledge score and whole component of model. Female students' got higher scores than males. Those students and mother who infected before with Coetaneous leishmaniasis was gotten higher scores in whole variable of model but the knowledge score was not different with those who weren’t infected. Evaluation score was considering well.

Keywords: Education, Preventive behavior, Coetaneous leishmanias

HEPATITIS E ENDEMICITY AND NECESSITY OF EDUCATION ABOUT THAT

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Introduction: The Hepatitis E is a kind of viral infectious diseases that involves the liver and can be variable from a simple and asymptomatic to a fulminant and lethal disease. The cause of this disease is HEV and its prevalence was 10-35% in developing countries and Iran is in endemic area. HEV can cause mortality in pregnant women. As there was no study about prevalence of HBV in Lorestan province yet and according to the importance of HEV prevalence and history of being epidemic in neighborhood provinces, this study was performed to evaluate the seroprevalence of HEV in Khorrmanbad city in 2009.

Materials and Methods: This study was a cross sectional research which was done in 2009. in total, 400 people who referred to the health centers of Khorrmanbad city were selected as the subjects of study using multiphase sampling method. After getting informed consents from all cases as well as getting 5 milliliters of blood sample, the intended demographic data was collected by a questionnaire. Then ELISA test was performed for evaluate the samples.

Results: In this study, the result was positive for 31 cases that showed the prevalence of 7.8% for HEV in Khorrmanbad city. The mean age of cases was 36 years that ranged from 20 to 97 years. The mean age of positive cases was 49.7 years that was higher than the mean age of negative cases (34.8 years). Our research showed that highest prevalence was in age range of 40-59 (61.2%). The positive cases (31 people) included 14 females and 17 males, 7.5% and 8% respectively, that there was no significant relationship between sex and HEV positive test. In our study from 400 cases, 16 cases had blood transfusion history that 3 cases was positive that there was no significant relationship between blood transfusion and HEV positive test.

Discussion and conclusion: According to the prevalence of HEV (7.8%), Khorrmanbad city is endemic for this disease, probably this prevalence is higher in people with the range of 40-59 years old. Both sex had the same involvement. We suggest that hepatic patients should be evaluated for HEV, routinely in Lorestan province that pregnant women have special importance. We recommend that more studies should be performed in Lorestan province especially in rural communities.

Keywords: HEV, Seroprevalence

KNOWLEDGE OF STUDENTS ABOUT INFLUENZA H1N1 IN BIRJAND-2009

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Introduction: During epidemiology of Influenza H1N1 in 2009 we observed a new course of viral spreading after school opening in the society. Considering the role of students for transition of virus to their family from society, it is important that they have information about signs of disease, transitional ways of virus and its precautionary procedures. The goal of this study was finding the information and knowledge level of Birjand's high school students in 2009-10 educational seasons.

Materials and Methods: This is a cross-sectional descriptive analytical study. Multistage cluster sampling was performed between Birjand’s high school students. We used self-made questionnaire (designed based on objectives) for gathering data. After collecting data we used SPSS16 for analyzing them. Descriptive statistics provided by the Chi-square test at alpha equal to 0.5 were studied

Results: 595 students participated in this study. 286 (48.1%) were male and others were female. Most of students (39%) were studying in the first year of high school. In this study most of students (66.9%) had weak knowledge about Influenza H1N1 virus as a whole. Significantly, girls had more information about Influenza H1N1 than boys. Significantly, students with parents having higher educational level had more information about influenza H1N1 than whom with parents having lower educational level.

Discussion and conclusion: In this study, we saw weak information state in students about Influenza H1N1. With considering the possibility of reoccurrence of this pandemic’s situation in the next years; we must have big effort in increasing the state of student's information about this virus to prevent the high spread of virus in the society.

Keywords: Influenza H1N1, Schoolchildren, Knowledge
EFFECT OF HEALTH BELIEF MODEL-BASED INTERVENTION ON PROMOTING PREVENTIVE BEHAVIORS ABOUT OSTEOPOOROSIS AMONG THE SECOND GRADE MIDDLE SCHOOL GIRL STUDENTS IN ISFAHAN (2010)

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Introduction: Osteoporosis is a systemic skeletal disorder, characterized by reduction of bone mass, deterioration of bone structure, increasing bone fragility, and increasing fracture risk. Prevention of osteoporosis in during childhood and adolescence is one of the most important issues in World Health Organization. The purpose of this study was to determine Effect of health belief model based intervention on promoting preventive behaviors about osteoporosis among the second grade middle school girl students.

Materials and Methods: This is an experimental intervention study, the research population being 130 students that were randomly divided to groups, experimental (66) and controls (64). Before the educational program, standard questionnaire based on Health Belief Model and physical activity questionnaire were filled out for both groups. The standard questionnaire was completed 3 times (before, immediately and 2 months after education) and physical activity questionnaire was completed 2 times (before and 2 months after education) by students. After pre-test, 6 educational session classes in experimental group were performed. Finally data collected and analyzed by SPSS18 computer software.

Results: The result of this study, showed a significant increasing in the mean score of the knowledge, perceived susceptibility, seriousness, benefits, barriers as well as taking health action among girl students in experimental group.

Discussion and conclusion: The findings of current study confirmed the practicability and effectiveness of the Health Belief Model - Based educational program on the students protective behavior related on osteoporosis.

Keywords: Education, Osteoporosis, Health Belief Model, Student, Calcium intake, Physical activity

EFFECT OF EXERCISE REHABILITATION ON BLOOD PRESSURE OF PATIENTS AFTER MYOCARDIAL INFARCTION

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Introduction: Supervised exercise cardiac rehabilitation programs have been suggested to all patients specially patients with post myocardial infarction (MI) for many years. However, limited information is available on the usefulness of exercise rehabilitation programs in chronic MI. The aim of this study was to evaluate the outcome of supervised exercise training on MI patients by measuring both physical and physiological factors.

Materials and Methods: This was a quazi-experimental randomized study. It included seventy tow (35 cases, 37 controls) post-MI patients age 40 to 67 years. They were randomly selected from those with MI based on WHO criteria that were referred to cardiac rehabilitation unit of Isfahan shahid chamran cardiovascular research center. After initial measurements including weight, height, functional capacity, diastolic blood pressure (DBP) and systolic blood pressure (SBP) in both resting and exercise states, patients were randomized into either training group (n=35) or the control group (n=37). The training group had supervised aerobic training program, three times a week, with 60-70% of the maximal heart rate (HR) reserve for two months. After the training program was completed, all measurements were repeated in both groups. Data were analyzed using one-way analysis of variance (ANOVA) with repeated measures.

Results: Patients in exercise group showed statistically significant improvement in resting HR (81.27±7.75 bpm vs. 74.17±10.11 bpm, p≤0.001), resting SBP (125.92±9.30 mmHg vs. 123.54±6.82 mmHg, p≤0.01), SBP peak (150.22±7.12 mmHg vs. 133.54±6.82 mmHg, p≤0.001), HR peak (132.51±3.06 bpm vs. 142.00±3.14 bpm, p≤0.001), and exercise capacity (8.49±1.18 METs vs. 9.42±1.19 METs, p≤0.001).

Discussion and conclusion: The results from the study showed that a 2-months exercise rehabilitation program in post-MI patients is useful for improving both blood pressure and exercise capacity and should be encouraged more commonly.

Keywords: Myocardial infarction; Exercise cardiac rehabilitation; Blood pressure; Functional capacity.

THE EFFECT OF HEALTH EDUCATION ON KNOWLEDGE AND PRACTICE OF HEALTH VOLUNTEERS ABOUT PREVENTION OF LEISHMANIASIS IN YAZD CITY

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Introduction: one of the most important health priorities
Materials and Methods: This was an interventional study that its subjects were 74 health volunteers in Yazd city. The samples were selected by simple random sampling and data were collected by researchers' made questionnaire. Validity & reliability of questionnaire were approved. Data were transferred directly into SPSS. For data analysis, pair T-test, and ANOVA test were used.

Results: Results showed that the knowledge and practice of the sample increased about 44% and 56%, respectively, after intervention. The knowledge of samples with diploma increased more than the others. The effects of intervention on samples who were workers and housewife were more than the other samples. The knowledge and practice of samples with the age less than 35 years old increased more than the samples in other age groups.

Discussion and conclusion: The data of this study showed that the knowledge and practice of samples increased after intervention and health volunteers could increase the knowledge and practice of people to prevent and control leishmaniasis.

Keywords: Health education, volunteers, leishmaniasis
Discussion and conclusion: Regarding to the fact that about 48% of all screened infants had referred to the screening centers after 6 days of old which is much higher than the country incidence (20%), it is recommended that face to face and group education be done for pregnant women in their late pregnancies. On the other hand, the prevalence of the disease is higher in Isfahan compared to the other areas so diagnosing, screening and controlling of the disease should be continuously done.

Keywords: Screening, TSH, Recall, Congenital Hypothyroidism.

EFFECT OF EDUCATION (BASED ON THE HBM MODEL) IN CUTANEOUS LEISHMANIASIS CONTROL IN VARZANE DISTRICT (ONE OF THE MAJOR FIELD OF CUTANEOUS LEISHMANIASIS OF ISFAHAN)-2009-2010

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Introduction: Cutaneous leishmaniasis is one of the increasing public health problems in Iran. Currently ISFAHAN province in one of the most infected centers of zcl* in IRAN. The annual incidence of 2000 cases in Isfahan district made health center no.1 of Isfahan to apply appropriate and effective programs applicable to control and prevention of the spread of disease.

Considering the vast range of spread of vector and reservoir of disease and provide health care services resources limitation such as human and financial resources it is recommended to use low-cost methods and environment management through peoples help and public activities as the fundamental principles we take action to control the disease. Hence the major part of at risk population of varzaneh (with total population of 11000) was taken under consideration and by holding educational classes based on HBM MODEL and using mosquito nets which is one of the most suitable methods to prevent the disease were recommended.

Materials and Methods: experimental study on 200 families residing Varzaneh district implemented. One person from each household that had no history of leishmaniasis were selected and curriculum based educational model HBM was designed and Target group trained during the three-hour session in health centers. They trained with in a number of theoretical and practical necessary subject and Awareness and performance target group using questionnaires and visiting homes before and after the performances were evaluated.

Results: Perceived susceptibility before running the program 32% to 83% and reached 51% progress has. Perceived severity of 23% to 73% reached 50% progress there. Perceived benefits from 20% to 74% of the control reached 54% progress has been. Manual operation from 31% to 65% reached 34% progress there. In initial tests the knowledge of people (21%) was administered after the training (75%) increased, indicating that this educational program to promote awareness of people is 54% effective. 2 percent target group before running the program have taken action after the intervention and education, which was 44 percent successful this training was proven.

Discussion and conclusion: The results of this study show it that education programs leading to the promotion 54 percent of in knowledge and 44% of people finally have to change behavior, so do public education prevention for high risk groups and draw popular participation as the best strategy to control disease Leishmaniasis. This study is emphasized.

Keywords: Leishmaniasis, Educational Model HBM, Public Participation, Mosquito Nets Health

CARDIOVASCULAR DISEASE RISK FACTORS IN BLUE-COLLAR FACTORY WORKERS, TABRIZ, IRAN

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Introduction: Cardiovascular disease and atherosclerosis are the leading causes of morbidity and mortality worldwide; hyperlipidemia & obesity are important independent risk factors for coronary heart disease. Considering the increasing rate of cardiovascular disease, the present study was conducted to determine the status of hyperlipidemia and obesity as major CVD risk factors in healthy blue-collar factory workers in Tabriz, Iran.

Materials and Methods: In this cross-sectional (descriptive-analytical) study, serum lipid levels (TG, Total Chol, LDL and HDL) and also anthropometric indices were measured by standard methods in 169 healthy blue-collar men, with a mean age of 33.61 ± 0.3 years who were recruited by simple sampling method. Classification of overweight & obesity was based on Body Mass Index (BMI) higher than 24.9 & 29.9 Kg/m² respectively.

Results: Based on the results of the present study, the prevalence of hypertriglyceridemia (TG>150 mg/dl) and hypercholesterolemia (Chol>200 mg/dl) were 23.66 % and 20.71%. Combination of hypertriglyceridemia & hypercholesterolemia was observed in 18.34% of the population. The Mean ± SE for BMI was 28.55±0.23 Kg/m²; the prevalences of obesity (BMI > 30) and overweight (BMI: 25-29.9) were 31.2 % & 57.8 % respectively.

Discussion and conclusion: Considering the high rate of hyperlipidemia and obesity, as two major risk factors for CVD, in this young population of apparently healthy blue-collar workers, screening of CVD risk factors...
and also nutritional education programs for healthy population might have a positive effect on cardiovascular disease prevention.

**Keywords:** Cardiovascular Disease Risk Factors, Body Mass Index, Hyperlipidemia

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**THE NECESSARY FOR OBSERVANCE OF STANDARD CAUTIONS AND NURSING CONTROLS IN WORKING AREA AND ENVIRONMENT AND IMPROVE HEALTH IN REDUCING OF NOSOCOMIAL INFECTIONS, RESULTING RESISTANT «ACINTO BACTERIA» IN PATIENTS WHO HAVE NUMEROUS TROOMAS IN 1388**

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**Introduction:** Negative gram Acinto bacteria’s are one of the factors environmental dirtiness and infections in hospital. At the present time high resistance of these «micro organism» to anti biotics has been case that if we spend vast expense to care hospitals infections , resulting from that. The other hands it is case to draw out the time of bedridden of patient and out break taxes of treatment .One of the most important measures is standard procedures observing and nursing managements for control nosocomial infections that results from «acin to bacteria».Infection control group pay attention to increase acintobacter infection in the first 3 months of year 1388 and they decided to planning for second 3 month . In the survey that made in the 1388 first six month and compare between first 3 month and second 3 month and survey the cases of Acintobacter and perform standard percussion received agood result .

. unfortunately reported that this hospital infection that creat with micro organism .Was resistance against a lot of antibiotic .so they decided that identity causes and factors and sources of this infection and then made intervention in second 3 mounts and they Follow very serios status of Acintobacter infection and extremely reported 3 case of Acintobacter infection in second 3 mounts.

**Results:** In the first 3 months 22 nosocomial infections was reported that result from asinto bacter in hospital pationes that they were resistant in front of many of anti biotics such as «pipracilin and sephalosporins» to rate until 100% .at the first they searched by doing one epidemiologic examination by cultther from that. The other hands it is case to draw out the time of bedridden of patient and out break taxes of treatment. Finally rate of nosocomial infection that creat by acintobacter in the second 3 month decreas to 6 cases (to compare with 22 cases in first 3 months).

The results showed there correct disinfectant process for laryngoscopes and the other critical equipments. 4) delete of brush of hands that use several time in operation rooms and correct disinfect hands in operation rooms. 5) Increase inspections supervising , continuously , from wards. Finally rate of nosocomial infection that creat by acintobacter in the second 3 month decreas to 6 cases (to compare with 22 cases in first 3 months).

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**Elderly health**

**NEEDS ASSESSMENT FROM THE VIEWPOINT OF AGE-FRIENDLY CITY FEATURES OVER 60 YEARS’ IN TWO HEALTH CENTERS OF TABRIZ CITY IN 2010**

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**Introduction:** The world Elderly population in the cities increased from 45% in 1975 to 57% in 1995. Necessary is need to elderly people having a healthy environment and providing this needs in the world, many studies have been done in this area. WHO is named this year (2011) «urbanization and health» and during an international project titled «Age-friendly cities» has clear priorities.

**Materials and Methods:** There were a few reports on seniors in Iran, so this research was conducted based on elderly and their caregivers. Qualitative research method was used. Based on «purposeful sampling» method elderly people over 60 years were selected in two Shahid Montazeri and Shahid Monem Pour health centers of Tabriz. They arranged in eight-person groups and characteristics of age-friendly cities by the operator discuss proposed and the obtained comments of focus group discussions and recorded and wrote down line by line. The information analyzed as a «content analysis» and results were extracted.

**Results:** The participants comments of Shahid Montazeri focus group discussion were as follows: the most common complaints were about sewer rats and non-existence of moral security in the park, the second, leading cause of poor neighborhoods and parking lights on, the third was: trees are in front of lights. They said» station location is inappropriate and the toilet seat in the park does not exist». Most complain were about of sewer rats, stray dogs, the lack of shelter in bus station, a bad positions of bus station, the lack of chairs in the station, bus delays and crowded shopping center and in the second were: sewage problems, bad bus route, bad bus and bad traffic culture.

**Discussion and conclusion:** The results showed there...
are required to intervention and collaboration of city organization for providing elder people needs.

*Keywords:* age-friendly city - focus group discussions

**FREQUENCY AND DETERMINANTS OF SUCCESSFUL AGING: OPINIONS OF RETIRED PEOPLE IN TABRIZ CITY.**

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**Introduction:** There is not a fixed definition for successful aging. Different scientists have presented variable definitions in the recent century. The more popular and acceptable definitions contain three main elements: 1. Not having any disease, or any disease related disability 2. Maintenance of high cognitive and physical function 3. Active engagement with life. The positive effect of having positive view of aging by elderly people themselves on physical health has been showed by previous studies. Therefore, it is necessary to understand the criteria of successful aging by elder people and fulfill them.

**Materials and Methods:** In this cross-sectional study, 170 people over 60 years were selected among the retirees of university and workers in the city of Tabriz. The prevalence of successful aging was studied by the criteria of retired people. The prevalence of successful aging is studied by asking how you agree by “I am aging successfully” the interviews were done on phone or by face to face interview.

**Results:** 72.9% of people have considered themselves as aging successfully. There was a meaningful relationship between income and marital status and ADL (Activities of Daily Living) with successful aging. There was not any significant relation between sex, education and successful aging. The people who have been interviewed, presented social health (60%), physical health (46.5%), mental health (44.1%) functional health (22.4%) and economical status (45.1%) as the criteria of successful aging.

**Discussion and Conclusion:** Like previous studies, there is a great difference in prevalence of successful aging by the views of elder people and the criteria. Maybe people do not care the disease which is important for scientists and this, increases the difference of prevalence by the definition of elders and scientists.

*Keywords:* Successful aging, Retired, Elderly health

**TRANSPORTATION AS AN IMPORTANT FACTOR FOR AGE-FRIENDLY CITY IN TABRIZ**

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**Introduction:** The world is rapidly ageing. The number of people aged 60 and over as a proportion of the global population will be doubled from 11% in 2006 to 22% by 2050. Need is simply the distance between the current situation and what it should be. Need assessment process collecting and analyzing information that leads to identifying the needs of individuals, groups and community.

**Materials and Methods:** Qualitative research method was used. Based on «purposeful sampling» method in two Manzarieh and Jamshid health centers of Tabriz, elderly people over 60 years selected. They arranged in eight-person groups and characteristics of age-friendly cities by the operator discuss proposed and the obtained comments of focus group discussions and recorded and wrote down line by line. The information analyzed as a «content analysis» and results were extracted.

**Results:** Comments of participants in focus group discussion health care centers in Manzarieh were as follows: there are holes in bus stops, and buses have too delays. Seat places in bus stops are high from floor and we have difficulties in sitting. In Jamshid health center the participants said « Bus drivers drive badly. For passenger boarding other passenger doesn't fit.»

**Discussion and conclusion:** Population ageing and urbanization are two global trends that together comprise major forces shaping the 21st century. An age-friendly city encourages active aging by optimizing opportunities for health, participation and security in order to enhance quality of life as people age. Transportation, including accessible and affordable public transport, is a key factor influencing active aging. In particular, being able to move about the city determines social participation and access to community and health services.

*Keywords:* Age-friendly city - Transportation

**EFFECT OF EDUCATION ON NUTRITIONAL KNOWLEDGE AND STAGES OF FRUIT AND VEGETABLE CONSUMPTION CHANGE OF ELDERS, BASED ON STAGES OF CHANGE MODEL (TRANSTHEORETICAL MODEL)**

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**Introduction:** This study was conducted to determine the effect of education on nutritional knowledge and stages of fruit and vegetable consumption change of elders, based on Stages of Change Model (Transtheoretical Model) in Gilan-Gharb county in 2010.
Based on findings of this study, this study was a descriptive- a cross sectional study conducted on a representative sample of 312 blind war survivors aged over 40-year attended a recreational program in Mashhad, Iran in 2008. HRQOL, ADL and health related quality of life, Activities of daily living, Blind, training

ASSESSMENT OF FUNCTION TRAINING NEEDS TO IMPROVE THE HRQOL AMONG THE BLIND SURVIVORS OF THE IMPOSED WAR


Introduction: To find the training needs to improve the HRQOL according to ADL among middle aged and old blind war survivors.

Materials and Methods: A cross sectional study conducted on a representative sample of 312 blind war survivors aged over 40-year attended a recreational program in Mashhad, Iran in 2008. HRQOL, ADL and instrumental ADL measured using SF36, Barthel and Lawton-Bordy respectively.

Results: 312 blind war survivors (mean age of 47.3±6.71) participated in this study. The HRQOL score differences between 40-49 and over 50 were statistically significant while they were not significant between 50-59 and over 60. There was significant correlation between moving on uneven surfaces and stepping with PCS in the 40-49 age group whereas just stepping stayed in the model among over 50. Bed or chair transfer and stepping had a significant correlation with MCS in the first group, but stepping remained in the model among over 50 year.

Discussion and conclusion: As the blind war survivors became older, HRQOL scores decreased and they were more likely to be dependent in ADL and IADL. The results showed considerable decreased HRQOL and independency in ADL which may start earlier among blind war survivors (age 50) compared with the normal population. Some functional training and education in daily activities can make them more active and improve their HRQOL. They need different training and education courses in terms of function at different age groups. The blind war survivors in the age of 40-49 years need to be trained for moving on uneven surfaces and stepping. The blind war survivors, who are over 50 years old, need some training on bed or chair transfer.

Keywords: Health related quality of life, Activities of daily living, Blind, training

THE SURVEY OF GENERAL HEALTH IN ELDERLY PERIOD

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Introduction: Increasing long-lived of human and add of elderly population is a critical consequence, and resulted by hygiene condition improvement. Elderly is a hygiene succeed and countless blessing of god. Physical and psychological changes in elderly period is needy of correct and proper education in this circulation. Determining education needs is the first step at collection of education programs. Aim of this study was to determine of General Health in elderly period of elderly in elderly period in referring to Dezful health centers in 1389.

Materials and Methods: This study was a descriptive-cross-sectional study carried out in 1389 year and sampling method was using quota sampling. 17o elderly participated that had research characteristics. The research data were collected using demographic feature questionnaire, were collected using demographic feature questionnaire and The SF-36-item General Health Questionnaire. Questionnaire confirmed with content validity and test- retest. Data were compared using spss software. The p value of less than 0.05 was considered significant.

Results: Results showed that Mean age of women and men were 23.45±2/4 and 23.45±2/4. Elderly regarding healthy life improvement is in domain bodily exercises with mean of 84.6%. Subsequent preferences of education needs are how teeth and mouth care with mean of 78.2% , knee care with mean of 75.7% , back care with mean of 73.7% , prevention from bone emptiness with mean of 68.9% , prevention from accident with mean of 64.5% , visual care with mean of 58.9% , hearing care with mean of 51.9% .

Discussion and conclusion: Quality of life at postpartum period is inducing physiological, mental and social changes, which are influenced on mothers’ Quality of life
and their child. Thus, the recognition and assessment of these women, support of their husbands, other family’s members and health care personnel are necessary, and these improve the mother’s health and their quality of life in all stages of life.

**Keywords:** Education needs, elderly, healthy life improvement

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**THE SURVEY OF EDUCATION NEEDS OF ELDERLY EXERCISE REGARDING HEALTHY LIFE IMPROVEMENT**

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**Introduction:** Hygiene condition improvement caused increasing long-lived of human and add of elderly population. Increasing long-lived of human and add of elderly population is a 21 century consequence. Physical and psychological changes in elderly period is needy of correct and proper education in this circulation. Determining education needs is the first step at collection of education programs. Exercise in elderly is very important by body exercise needs change. Elderly exercise needs results biological change. Aim of this study was to determine of exercise education needs of elderly regarding healthy life improvement in elderly in referring to Dezful health centers in 1388.

**Materials and Methods:** This study was a descriptive cross-sectional study carried out in 1388 year and sampling method was using quota sampling. 450 elderly participated that had research characteristics. The research data were collected using demographic feature questionnaire, exercise education needs of elderly and their problem questionnaire. Questionnaire confirmed with content validity and test-retest. Data were compared using SPSS software. The p value of less than 0.05 was considered significant.

**Results:** Results showed that most education needs of elderly regarding healthy life improvement is in domain correct bodily exercises with mean of 84.6%. Subsequent preferences of education needs are relaxation practice with mean of 76.4%, how knee care with mean of 75.7%, back care with mean of 73.7%, prevention and exercises at osteoporosis with mean of 70.8%, prevention from bone emptiness with mean of 68.9%, prevention from accident with mean of 64.5%.

**Discussion and conclusion:** Increasing long-lived of human and add of elderly population is very important. Thus, needs survey is the first step at collection of education programs. Exercise in elderly is very important by body exercise needs change and influence on elderly.

**Keywords:** Education need, elderly, exercise, healthy life improvement.

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**THE RELATIONSHIP BETWEEN SOCIAL AND DEMOGRAPHIC FACTORS AND PREVALENCE OF DEPRESSION AMONG OVER 60 YEARS OLD PEOPLE IN SHIRAZ.**

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**Introduction:** Depression is one of the prevalent disorders of present century and is the forth expensive disorder in the world and no doubt it will be the second expensive world disorder in 2015. Some demographic and social characteristics among the elderly reduce or increase their depression. This study reviews the relationship between social and demographic factors and prevalence of depression among the elderly aged over 60 years in elderly centers under the Social Welfare Center in Shiraz in 2009.

**Materials and Methods:** This was a cross-sectional study on 120 patients (100 women and 20 men) aged over 60 years under the Social Welfare center, in shiraz 2008-2009 and 60 people from each center were selected randomly. Research tools were reviewed depression questionnaire (Beck) and a questionnaire that was considered the age, marital status, literacy status, activity status, number of children, annual income. To analyzing data in this study was used the Pearson correlation tests and independent T groups.

**Results:** Of the total cases studied, 65 percent had (78 patients) mild depression and 25.83 percent (31 people) had medium and 9.17 percent (11 cases) had severe depression. Between marital status, age, activity status, income and depression, there was a significant relationship. But no connection between depression and state of literacy and the total number of children were found.

**Discussion and conclusion:** Findings indicate that some demographic and social characteristics among the elderly can increase or decrease the possibility of their depression and this can be determine the rank and depression levels and identification of these factors, and appropriate solutions will affected on reducing of their depression.

**Keywords:** Depression - Elderly - demographic and social factors.

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**THE STATE OF “NUTRITION EDUCATION” AMONG ELDERLY PEOPLE IN RURAL AREAS OF TWO CITIES IN KERMANSHAH PROVINCE**

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**Introduction:** In the next forty years, the number of over 65 year olds will be doubled, in the way that 52% of this population will live in Asian countries. Based on
Investigation of Health Demography Program in 2000, 7.3% of the population in Kermanshah are over 65 years old.

Materials and Methods: This study was a descriptive one and participants were all 60 to 65 year olds in the rural areas of two cities (Kangavar and Ravansar) in Kermanshah.

Results: There were 640 people in the target group. 85.3% of them participated in the classes and were educated well. Participants’ knowledge were studied two months after the classes, 71.9% of them had the constant knowledge. Then their constant behavior was studied four months later, and it was found that 94.9% of them had relatively constant behavior.

Discussion and conclusion: Since, provision, protection and improvement of old people’s health should be considered primarily, and because of the old people’s new nourishing needs, new feeding patterns, planning sufficient strategies to educate the old people with “food habits” in order to improve and revise their diets seems really workful.

Keywords: Lifetime-Health-Population

INVESTIGATION OF BODY MASS INDEX AMONG PREGNANT WOMEN IN NOWSHAHR CITY– 2009

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Introduction: BMI is one of the factors, affecting pregnancy. In different studies, primitive BMI of mothers and side effects of neonatal period has been investigated. This study aimed at determining the BMI of pregnant women of Nowshahr, also determine the relationship of BMI with factors like; age, number of pregnancy, residential places, job and education in 2009.

Materials and Methods: This study was a descriptive cross sectional analytical investigation. In this study we gathered information of 2240 pregnant women, which their files were recorded in prenatal care office, and health care centers. Investigated factors were age of mother, job, education status, number of pregnancy and residential place and the BMI. Datum were analyzed with (chi square) and SPSS software.

Results: According to our studies with increasing of age the number of pregnant women with BMI>30 increased in women aged under 18, number of BMI>30 was 10.34 %. And in pregnant women over 35 the number of BMI>30 was 35.48%. Also percentage of pregnant women with BMI<19.8 was 15.51% and in pregnant women over 35, number of BMI<19.8 was 0.8%. With increasing the number of pregnancy the number of BMI>30 increased. Maximum number of BMI>30 was in third pregnancy with percentage of 35.9 and minimum number of BMI>30 belonged to the first pregnancy with 10.49%. Maximum number of BMI<19.8 was in first pregnancy with 6.4% and minimum BMI<19.8 was in third pregnancy with 1.67 %. There was no significant relationship between residential place, job or education status of mothers with BMI.

Discussion and conclusion: According to the results, with increasing of the age, the risk of high BMI will increase. Pregnancy in early ages has the risk of low BMI, on the other hand with increasing the number of pregnancy, the risk of BMI will increase. Based on studies, education about proper age of pregnancy and necessity of proper period of pregnancy is very important. Also educating couples in premarriage classes should not be neglected. Health centers and health care workers in small cities play very important role about this issue.

Keywords: BMI, Pregnant women

THE CONTRIBUTION OF HOME-BASED TECHNOLOGY TO ELDERLY PEOPLE’S QUALITY OF LIFE IN U.K: SPECIFIC EXTRA CARE HOUSING

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Introduction: British government policy for older people focuses on a vision of active ageing and independent living. In the face of diminishing personal capacities, the use of appropriate home-based technology devices could potentially meet a wide range of needs and consequently improve many aspects of elderly people’s quality of life such as physical health, psychosocial well-being, social relationships, and their physical or living environment. This study aimed to examine the contribution that Home-Based Technology (HBT) can make to older people’s lives in Extra Care Housing (ECH).

Materials and Methods: A quantitative-designed and structured questionnaire was administered for this study. Using purposive sampling method 160 elderly people living in extra-care housing schemes were selected from 23 schemes in England. A face-to-face interview was conducted in each participant’s living unit. In order to measure quality of life, instruments such as SEIQoL-Adapted and CASP-19 were used. Descriptive statistics, chi-squared tests, independent samples t-test and linear regression were employed to describe and analyse the data.

Results: Although most basic appliances and emergency call systems were used in the living units, communally-provided facilities such as personal computers, washing machines, and assisted bathing equipment in the schemes were not well utilised. The CASP-19 and SEIQoL-Adapted scores were significantly different between high and low users of HBT devices. Regression analysis also showed that number of devices used and scores of quality of life scales were positively correlated.

Discussion and conclusion: Elderly people are more likely to use household technology devices. The frequency of observed relative non-use suggests that there is an opportunity for interdisciplinary team members to
THE EFFECT OF HOME-BASED CARDIAC REHABILITATION PROGRAM ON SELF EFFICACY OF PATIENTS REFERRED TO CARDIAC REHABILITATION CENTER.

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Introduction: The prevalence of coronary heart disease is increasing worldwide. Cardiac rehabilitation is an interdisciplinary activity with the aim of facilitating and improving the physical, psychological and emotional state and empowering patients. This study aimed to determine whether continuing cardiac rehabilitation programs at home have positive effects on self efficacy of the participants in comparison with control group or not.

Materials and Methods: 80 patients referred to rehabilitation center from Feb 2009 to Jan 2010 were randomly divided into case and control groups. Both groups received routine cardiac rehabilitation program in rehabilitation center. In addition, the case group received education and practical training in various rehabilitation measures along with home visits of a community health nurse in follow-up period. General Self Efficacy Scale (GSES) was used to assess self efficacy between the two groups at baseline and on follow-up period. Collected data from General Self Efficacy Scale were analyzed using Minitab software and repeated measurement analysis model.

Results: In this study 75 percent (60 people) of participants were male and 25 percent (20 patients) female with the age range of 57.41±1.01 (Mean± SE). Results showed statistical significant difference in Self Efficacy (P= 0.000) between two groups and in different measurements (P= 0.000).

Discussion and conclusion: Home-based cardiac rehabilitation has a positive effect on patients’ self efficacy thus referring patients who suffer from heart diseases is recommended.

Keywords: Rehabilitation, Heart Disease, Self Efficacy
We conducted a systematic
This quasi-experimental study
through and maintenance, which will guide the creation
based self assessment and planning process, with follow-
intended to guide future work:1. Develop a community-
Advantage Initiative). The following recommendations are
and (4) Supporting Independence (modified from the
Well-being (3) Promoting Social/Civic Engagement
A framework was identified that includes four components:
Optimizing Health and Well-being, Promoting Social
community is one that is: Addressing Basic Needs,
well-being and function in older adults. A healthy aging
intake. Four weeks follow-up data were collected after
implementing the intervention.
Results: The mean age of participants was 64.06 ±
4.48 years and overall two-third of participants were
female. At baseline total FV intake was not differed
between two groups but it was significantly increased
in the intervention group at posttest assessment (mean
serving/day in intervention group 3.08± 1.35 vs. 1.79±
1.08 in control group; P = 0.001). Further analysis also
indicated that elderly in intervention arm had higher FV
intake, perceived benefits and self-efficacy, and lower
perceived barriers. Compared with control group, greater
proportions of elderly in intervention group moved
from pre contemplation to contemplation/preparation
and action/maintenance stages (P <0.0001), and from
contemplation /preparation to action/maintenance stages (P= 0.004) from pretest to posttest measurement
occasions.
Discussions and Conclusion: This study suggests that
TTM is a useful model that can be applied to dietary
behavior change, more specifically FV consumption
among Iranian’s elderly.
Keywords: Stage of change , Fruit and vegetable , Elderly

**TOWARD HEALTHY AGING**

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**Introduction:** Healthy aging is the development and
maintenance of optimal mental, social and physical well-
being and function in older adults. This most likely to be
achieved when communities are safe, promote health
and well-being, and use health services and community
programs to prevent or minimize disease. Between now and
2030, the percentage of Minnesota’s population aged 65
and older will grow from 12.1 (in 2000) to 23 percent of the
state’s total population. Between 2030 and 2050, dramatic
growth will occur in the 85+ age group as the last of the baby
boomers turns 85. A basic definition of “healthy aging” was
adapted to use as a starting point for discussion. “Healthy
aging is the development and maintenance of optimal
mental, social, and physical well-being and function in older
adults. This will most likely be achieved when communities
are safe, promote health and well-being and use health
services and community programs to prevent or minimize
disease.” The literature review for this article provides a
clear and complete context: Definition of Healthy Aging;
Demographics of Aging; Broad Terminology for Aging;
A Working Definition and Framework for Healthy Aging;
Creating Healthy Communities for an Aging Population;
Four Dimensions of a Healthy Aging Community.

**Materials and Methods:** We conducted a systematic
review of the website digital library, who website,
conference proceedings, clinical practice guidelines, and
other sources using a comprehensive strategy to identify
randomized controlled trials and quasi-experimental studies
of aging and health. We searched the Cochrane Library,
MEDLINE,pubmed. WHO site, and google using the
search terms 'Aging’ or ‘Healthy Aging’ or or “Health
Promotion” . we reviewed published practice guidelines
healthy advocacy and searched websites containing details.

**Results:** Healthy aging is the development and
maintenance of optimal mental, social and physical well-being and function in older adults. A healthy aging
community is one that is: Addressing Basic Needs ,
Optimizing Health and Well-being , Promoting Social and Civic Engagement , Supporting Independence.
A framework was identified that includes four components:
(1) Addressing Basic Needs (2) Optimizing Health and
Well-being (3) Promoting Social/Civic Engagement and
(4) Supporting Independence (modified from the
Advantage Initiative). The following recommendations are
intended to guide future work:1. Develop a community-
based self assessment and planning process, with follow-
through and maintenance, which will guide the creation
of healthy and elder-friendly communities in Minnesota.
2. Improve transportation options for elders by identifying
barriers, gaps and assets and by implementing collaborative
efforts on the local, regional and state levels.

**Keywords:** Aging - Healthy aging – Health Promotiom

**FRUIT AND VEGETABLES INTAKE AMONG ELDERLY IRANIANS: AN INTERVENTIONAL STUDY USING THE FIVE–A-DAY PROGRAM**

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**Introduction:** The benefit of Fruit and vegetables (FV)
intake in old age is well documented. However, there is
evidence that old people do not consume enough FV. The
purpose of this study was to evaluate the effectiveness of
a tailored nutrition intervention that aimed to increase the
FV intake among elderly Iranians.

**Materials and Methods:** This quasi-experimental study
was performed among a community-based sample of
elderly in Tehran, Iran in year 2008 to 2009. Data were
collected at baseline and 4 weeks follow-up. At baseline
face-to-face interviews were conducted with the whole
sample using a structured questionnaire including items on demographic information, stage of change,
self-efficacy, decisional balance, daily servings of FV
intake. Four weeks follow-up data were collected after
implementing the intervention.

**Results:** The mean age of participants was 64.06 ±
4.48 years and overall two-third of participants were
female. At baseline total FV intake was not differed
between two groups but it was significantly increased
in the intervention group at posttest assessment (mean
serving/day in intervention group 3.08± 1.35 vs. 1.79±
1.08 in control group; P = 0.001). Further analysis also
indicated that elderly in intervention arm had higher FV
intake, perceived benefits and self-efficacy, and lower
perceived barriers. Compared with control group, greater
proportions of elderly in intervention group moved
from pre contemplation to contemplation/preparation
and action/maintenance stages (P <0.0001), and from
contemplation /preparation to action/maintenance stages (P= 0.004) from pretest to posttest measurement
occasions.

Discussions and Conclusion: This study suggests that
TTM is a useful model that can be applied to dietary
behavior change, more specifically FV consumption
among Iranian’s elderly.

**Keywords:** Stage of change , Fruit and vegetable , Elderly

**RECREATIONAL ACTIVITIES AMONG AGED PEOPLE OF AHAR CITY IN 1389**

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**Keywords:** fish oil, n-3 fatty acids, leukocytes, granulocytes, lymphocytes, platelet count
Introduction: The people around the world is getting old and it is accompanied with prevalence of depression. This study was done to assess the recreational activities among aged people in the city of Ahar.

Materials and Methods: and methods: the recent study was descriptive and its statistic sample includes 80 aged people of Ahar city in 1389 and subjects were selected by random sampling and using the questionnaire adopted from permissible and stable external source, data collecting tool is established which include 10 question packs and 6 questions on demographic information. Also SPSS software is used for analyzing and doing Kruskal Wallis test in order to making the data to be normal and doing the T test.

Results: the results suggest that the average of recreational activities of aged people was below the standard average thus aged people of this city are less engaged in recreational activities. Also the average of recreational activities of men in this study was equal with standard average. Average of recreational activities of females were below the standard average thus aged females of this city are less engaged in recreational activities. Based on the results, most of the subjects had no sportive activity during the week. Their relationship with family, friends, and neighbors is relatively good and they spend most of their time in front of TV.

Discussion and conclusion: according to the previous studies and the results of this study, aged people are less engaged in recreational activities. In order to prevent this vulnerable group from being social solitude and depression and also to appeal them in social associations and utilizing their capabilities in different fields, it is necessary to have especial attention in developing welfare and recreational facilities including building sportive and recreational centers which have the minimum distance with residential areas which also can cover the maximum population of aged people especially females.

Keywords: Aged people, Recreational activity, Free times,

PHYSICAL HEALTH STATUS OF ELDERLY IN TEHRAN METROPOLITAN AREA

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Introduction: The present study explores the impact of Socio-economic determinants on physical health status among elderly who live in Tehran city. These findings contribute to the enrichment of health policy, social fairness, and equity for aged people. The aim of the study was to achieve to the physical health status of the Iranian elderly in Tehran province.

Materials and Methods: This was a quantitative study which done in 2010. The number of 402 elderly people aged 60 years and over who have lived in Tehran city province. The participants collected by simple random sample. The data were collected by using completed written survey instrument by face-to-face interviews. The Questionnaire which used in this survey, originally risen from the “older people’s health survey” of ministry of health and wellbeing in Australia. The applied instruments were ADL (Activity of Daily Living) and SF-36 short form as a physical function.

Results: The majority of elderly in Tehran city (59%) were independent in daily living activities. From aspect of physical function (30%) elderly participants had sever limitation level of physical function, however, 38% elderly had no limitation. The medical conditions among elderly population were eyesight (69%), teeth and mouth (66%) followed by Masco skeletal (56%). There were significant associations between ADL and all medical common diseases or disorders at (P<0.002). Except of communicable diseases, the rest of other medical conditions have significant effect on SF-36/ physical function at (P<0.003). The predictor variables of Socio-demographic and economic; age and earning money were strong significant variables in ADL status of the elderly participants at (P<0.000 and P<0.008) respectively. Regarding physical function predictors, age (P<0.000), sex in female (P<0.004), and earning money (P<0.008) were significant variables in SF-36 / physical function status of the elderly participants in Tehran city.

Discussion and conclusion: Chronic medical conditions, age, sex, and earning money situation predicted physical health status of elderly respondents in Tehran capital city in this study.

Keywords: Elderly, Physical functioning /SF-36, Activities of Daily Living /ADL, Socio-demographic, Medical condition

PREDICTORS OF SELF-MEDICATION AND ITS RELATIVE FACTORS AMONG ELDERLY PEOPLE BASED ON HEALTH BELIEF MODEL IN ZARANDIEH, IRAN

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Introduction: Self medication is one of the most important problems in the treatment cycle of patients. Drug use and its side-effects are increased amongst elderly people. Self medication refers to drug consumption without the diagnosis or prescription of a physician leading to side effect and over usage of drugs. The purpose of this study was to assess prevalence of self-medication and its effective factors among elderly people in Zarandieh via Health Belief Model (HBM).

Materials and Methods: This research was a descriptive cross-sectional study; the study population was 180
elderly (95 females and 85 males) over 60 years. Data collection tool was a questionnaire designed based on Health Belief Model (susceptibility, severity, benefit and barriers perceived) and self-medication. Data analyzed by SPSS software and using parametric and non-parametric statistics.

**Results:** In total, 42% of the participants had good knowledge level and prevalence of self-medication was 31% (women 33% men and 29%). The most common for self-medication were previous experience of the disease and its recognition (61%), availability of drugs (60.5%), good result their previous treatment (56.7%). There was a significant difference among awareness, sensitivity, severity, perceived benefits and barriers to people with or without self-medication history (p<001). The correlation coefficient test also showed a significant relation between self-medication and HBM constructs.

**Discussion and conclusion:** Considering the side effect of drugs and high prevalence of self-medication among elderly people, designing of educational program for changing the knowledge and beliefs about self-medication is recommended.

**Keywords:** Self-medication, Elderly, Health Belief Model

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**AGING, SLEEP DISORDER AND EXERCISE**

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**Introduction:** Menopause decreases ovarian activity and is associated with impaired sleep patterns. The most common treatment is using drugs. Regular physical activity leads to greater comfort and increased core body temperature. The aim of this study was to assess the effects of aerobic exercise on sleep quality in elderly women suffering from sleep disorder.

**Materials and Methods:** Forty old women, who didn’t have cardiovascular disease, physical and depression problems were chosen among 370 volunteers and were randomly selected and divided to two groups (walking group and control group). The number of participants in each group was twenty. The quality of sleep was measured by Pittsburgh questionnaire at the base line, the end of first month and the end of training program. The walking group exercised an aerobic training for ten week, each week three section and each section 25-45 minutes. The intensity of the exercise was 60-75% of maximum heart rate of the subjects on treadmill set. The control group didn’t have any regular exercise. Data analyzed by covariance test.

**Results:** The findings of this research showed that sleep quality of subjects in walking group improved by 43% and this improvement was statistically significant (p=0.031). Therefore, it can be concluded that ten – week of walking have improved the quality of the sleep in old menopause women.

**Discussion and conclusion:** Regular physical activity programs in the prevention and treatment of sleep disorder, is effective. Results showed a significant relationship between aerobic exercise and improved sleep quality in postmenopausal women and elderly patients with sleep disorders.

**Keywords:** Aerobic training, Quality of sleep, Old women, Menopause.

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**EFFECT OF PHYSICAL ACTIVITY ON MENTAL HEALTH AMONG ELDERLY**

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**Introduction:** The world population is aging rapidly. With increasing loneliness, it's social, financial and health consequences can not be ignored. In addition to an increase of many age related physical illnesses, this demographic change will also lead to an increase in a number of mental health problems in older adults. Therefore, any health promotion approach that could facilitate introduction of effective primary, secondary and even tertiary prevention strategies in old age psychiatry would be of significant importance. This paper explores physical activity as one of possible health promotion strategies and has positive effect on mental health in later life.

**Materials and Methods:** In this field trial, 400 male and female aged 60 years and older were randomly allocated into case and control group. The subjects were excluded if they exercised regularly or had some problems that couldn’t do exercise or be absent more than 3 sessions during the intervention. Twenty eight were excluded and 372 (181 case, 191 control) involved the study. Exercise program (two 30-45 minute sessions weekly for 2 months) was assigned for case group. Some practical problems made subjects into two groups, individual physical activity (n=96) and group physical activity (n=85). 28-item General Health Questionnaire (GHQ-28) was administered in order to obtain information on mental health. The results were followed up for 3 months. The data was analyzed with SPSS (version 11.5) statistical software and chi-square, paired-t test, independent- t test and wilcoxon test was used.

**Results:** The mean of GHQ total scale decreased in case group (before=8, after=5.6) and this changes remained significant after 3 months (The mean after 3 months = 5.6, p < .001), GHQ subscales Somatization (before=2.2, after=1.5), Anxiety (before=2, after=1.5), social dysfunction (before=1.9 , after=1.4) and Depression (before=1.8 , after=1.3) decreased in case group and as we said in tables all of these changes remained significant after 3 months. In addition there were significant difference between Mental health benefits in Subjects with group physical activity and individual physical activity and doing exercise with a group is more
effective.

Discussion and conclusion: This study showed Physical activity is an effective intervention and significantly improved mental health in older adults, but if be done with a group especially in same age it has more benefits.

Keywords: Mental Health, Aging, Physical activity, GHQ-28

ASSESSING THE MENTAL HEALTH STATUS OF ELDERLY IN SHAHREKORD AND ITS RELATIONSHIP WITH SOCIODEMOGRAPHIC FACTORS

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Introduction:
The world population is aging rapidly. With increasing longevity, it's social, financial and health consequences cannot be ignored. In addition to an increase in many age related physical illnesses, this demographic change will also lead to an increase in a number of mental health problems in older adults. This paper assessed mental health and relationship with demographic factors in later life.

Materials and Methods: In this cross-sectional study 400 individual aged 60 or more living in Shahrekord were selected by random sampling. Mental health was evaluated by General Health Questionnaire (GHQ-28) which was standardized for Iranian elderly population. The data were analyzed by SPSS-software program and descriptive statistics and chi-square test were used for data analysis.

Results: The GHQ-28 scale revealed that 53% of elderly were with somatization, 55.5% with anxiety, 37.8% with social dysfunction and 45% with depression signs. A significant association was found between gender, level of education, marital status, life status, social participation and total dysfunction (p<0.05).

Discussion and conclusion: According to the result of this study the prevalence of mental problems in the aged group is high. Therefore, any health promotion approach that could facilitate introduction of effective primary, secondary and even tertiary prevention strategies in old age psychiatry would be of significant importance.

Keywords: Mental Health, Aging, GHQ-28

OVERWEIGHT AS A PROTECTIVE FACTOR IN DEMENTIA INCIDENT IN OCTOGENARIANS AND OLDER: KAHRIZAK ELDERLY STUDY

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Introduction:
Although according to previous studies overweight in midlife is a potential risk factor for developing dementia in the forthcoming years; this study shows that overweight in the elderly subjects is a protective factor against dementia later in life. This finding is in concordance with few other investigations in the elderly population.

Keywords: Dementia, Body mass index, Waist circumference, Elderly

EFFECTS OF A REGULAR EXERCISE PROGRAM ON THE HAPPINESS OF ELDERLY PEOPLE IN NOWSHAHR

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Introduction: Senility is a life-sensitive period that is often accompanied by weakness and decrease in body weight. Sport is an important factor to improve quality of life, spiritual safety and self-esteem in elderly persons. This study reports on the effects of regular exercise program on happiness of elderly people in nowshahr, Iran.

Materials and Methods: This was a quasi-experimental study. An available-randomized sample of 70 elderly people was recruited to participate in the study. The sample, randomly, divided into experimental (n=35) and control (n=35) groups. The data were analyzed by SPSS-17 software program and descriptive statistics and chi-square test were used for data analysis.

Results: Overall prevalence of depression was 38%. 65.4% had mild and moderate depression whereas 5.6% had severe depression. Multivariate logistic regression analysis of the association between BMI and risk of depression showed that late-life overweight was an independent and significant protective factor against developing depression [Odd Ratio (OR): 0.24, 95% Confidence Interval (CI): 0.06-0.93]. There was no significant association between waist circumference and risk of depression in multiple logistic regression models.

Discussion and conclusion: Although according to previous studies over eating in midlife is a potential risk factor for developing dementia in the forthcoming years; this study shows that overweight in the elderly subjects is a protective factor against dementia later in life. This finding is in concordance with few other investigations in the elderly population.

Keywords: Dementia, Body mass index, Waist circumference, Elderly
It was concluded that Ten focus groups, each one according to this study, given the importance of healthy eating and physical activity through 4 themes: Results: This study was performed on 70 elderly persons. About 57% were men and 43% were women. The mean age of case group was 70.38±6.11 and control group was 71.14±8.03 year. There was no significant relation between age and case group in demographic information (P>0.05). We found a negative correlation between age and sponsorhip with happiness in case group before implementing the exercise program but this negative relation was removed after the exercise program. There was no significant relation between happiness scale and literacy before the exercise program but after the exercise program this relation was a significant positive. Before implementing the exercise program, Average of happiness scale in case group was 46.64±16.39 that has not a significant but after implementing exercise program, Average of happiness scale was 52.07±13.28 and that correlation was significantly improved in the experimental group (P=0.001). While the happiness scale was no significant in control group (P=0.18). Discussion and conclusion: It was concluded that implementing the regular exercise program have positive effects on the happiness scale of elderly person and spiritual safety. Planning and implementing such exercise programs for Ageing can help them improve their self-esteem and merry-making and can help them move toward healthy ageing.

Keywords: Happiness, Regular exercise program, Ageing

EXPLORING PERSPECTIVES OF IRANIAN ELDERLY REGARDING HEALTHY EATING AND PHYSICAL ACTIVITY: A QUALITATIVE STUDY

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Introduction: The aim of this qualitative study was to explore the perspectives of Iranian elderly regarding healthy eating and physical activity.

Materials and Methods: Ten focus groups, each one consisted of 6 participants (N = 60) were conducted in elderly centers in Tehran. Convenience purposeful sampling was used from 3 elderly centers. Inclusion criteria were: aged 60 years and over, caring in elderly centers, not hospitalization in past four weeks. The Ethics committee of Tehran university of Medical Sciences approved the study.

Results: Participants articulated their beliefs regarding healthy eating and physical activity through 4 themes: Meaning of healthy aging, Meaning of healthy eating and regular physical activity behaviors, Perceived benefits of and barriers to healthy eating behaviors and Perceived benefits of and barriers to physical activity.

Discussion and conclusion: Given the importance of healthy eating and physical activity in old people, understanding

Keywords: Elderly, Healthy ageing, Healthy eating, Iran, Qualitative study, Physical activity

PHYSICAL ACTIVITY AMONG A SAMPLE OF IRANIANS AGED OVER 60 YEARS: AN APPLICATION OF THE TRANSTHEORETICAL MODEL.

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Introduction: Physical inactivity is one of the leading causes of major chronic disease, which contributes substantially to the global burden of disease, death and disability. This study examined physical activity in a randomly selected sample of elderly people in Tehran, Iran.

Materials and Methods: A random sample of 400 elderly people aged 60 years and over was selected through multistage sampling. A multi-sectional questionnaire that contained demographic characteristics, physical activity knowledge, benefits, barriers, self-efficacy, and readiness stage was used. Physical activity was measured by questions retrieved from the Physical Activity Scale for the elderly.

Results: This study showed knowledge, perceived benefits, and self-efficacy could predict physical activity stage of change (P<0.001). Sixty-two percent of participants reported laziness as the most important barrier for not engaging in physical activity. Meeting new people (74%), having fun (71.8%), and contacting friends (67.73%) were the most prevalent reasons for participating in physical activity.

Discussion and conclusion: According to this study, individuals with higher knowledge, perceived benefits and self-efficacy were more likely to engage in physical activity. Furthermore, those who perceived lower barriers towards this behavior were more physically active.

Keywords: Barrier, Benefit, Elderly, Knowledge, Physical activity

THE EFFECTS OF AEROBIC TRAINING ON HOMOCYSTEIN AND CRP SERUM LEVELS IN ELDERLY WOMAN

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**Introduction:** Several novel risk factors have been proposed as potential criteria for improved detection of sub clinical atherosclerosis. In particular on inflammatory biomarkers such as C-reactive protein (CRP) and on nutritional markers associated with premature atherothrombosis, such as total plasma homocysteine. Plasma HCY levels increase with natural menopause suggesting a close relationship between HCY levels and increased CVD risk in older age women. Moreover, it has been suggested that CRP directly and indirectly mediates inflammatory processes in atherosclerosis. It is well established that physical activity is a key component of good health and disease prevention. The purpose of this study was to determine the effect of aerobic exercise on homocystein and CRP serum levels in 60-75 years old women.

**Materials and Methods:** In this research was selected 20 aged women (age 60 - 75 yr) after medical examination and divided into training and control groups. Weight and Body fat percentage were measured using the body composition analyzer. To measure the homocystein and CRP levels using ELISA Technique, their blood samples were taken before breakfast. The experimental group performed an aerobic training including 30 minutes of running with 55-65% of the individual’s maximum heart rate on treadmill three times a week for three months. After three months of training all parameters in both groups were measured again. Data were analyzed by using paired t test and covariance.

**Results:** The results showed that the aerobic training, decreased weight( F=7/21 , P=0/01),fat percentage( F=5/82, P=0/02) and plasma levels of homocystein (F=11/2 , P=0/004) and CRP( F=5/66 , P=0/02). 

**Discussion and conclusion:** The results showed that the aerobic training is effective in reducing homocystein, CRP, weight and fat percentage in elderly women. Exercise training was associated with weight loss. In fact, exercise training concomitant with weight loss may be necessary to observe reductions in CRP. In response to training, the basal as well as exercise-induced level of IL-6 is down regulated, which secondarily reduces circulating CRP levels. It has been proposed that adipose tissue–secreted IL-6 and tumor necrosis factor - α may contribute to the elevated CRP levels observed in obesity. Thus, exercise training may reduce CRP levels adequately by reducing adiposity. Duration, intensity, and mode of exercise could impact on blood homocysteine levels divergently, and may be dependent on individual fitness levels. It seems that short term circuit resistance training can be used as a method of preventing cardiovascular disease in women, and it can be recommended as a lifestyle intervention to promote health.

**Keywords:** homocysteine , CRP , aerobic training , Elderly woman

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**PREVALENCE OF SELF-MEDICATION AND ITS EFFECTIVE AND ALTERABLE FACTORS BASED ON THE HEALTH BELIEF MODEL AMONG THE ELDERLY ADULTS IN GONABAD IN 2009**

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**Introduction:** Maintaining health is one of the main and old concerns for man and is under the influence of various factors. In this regard, the universal declarations and strategies related to health put emphasis on the provision and proper consumption of drugs and the use of effective treatment. In Iran, self–medication is one of the controversial health issues and not only does exist three times more than the world average record but also have the second ranking in Asia. Investigating the causes of self-medication based on Health Belief Model (HBM) is one of the scientific and effective remedies to control this problem. Thus, this study is an attempt to identify the factors associated with self-medication through determining their extent of influence.

**Materials and Methods:** In this cross-sectional descriptive-analytic study, 380 elderly adults were selected based on stratified random sampling with proper ratios. The data were collected through structured interview using a 47 item questionnaire which covered the HBM subsections. The validity and reliability of the questionnaire were calculated. The data were analyzed through SPSS software version16.

**Results:** Having analyzed the data, the following results emerged: the age average of the elderly adults was 66±5.31, 36.10% of them were retired, 29.40% had an education of primary school level, 53.90% were under the support of social insurance, 77.60% consumed over-the-counter drugs, 85.30% kept drugs at home, 42.30% took sedative drugs, and 15.10% consumed psychiatric drugs. The score for perceived sensitivity and barriers were 50.21 and 70.23, respectively. The results indicated that there was a significant relationship between gender, marital status, and schooling. Also, having previous experience and considering the drugs as harmless were found to be the main cause of self-medication. Further, the mass media were discovered to be the most effective solution to prevent self-medication.

**Discussion and conclusion:** In this study, the self-medication prevalence was high, and the alterable factors were in undesirable conditions. The subjects did not show a minimum score of 50% in the different subsections of HBM, but the self-efficacy average was significant, a finding which caused a kind of false supposition which, in turn, led to an increase in self-medication.

**Keywords:** Self-medication, Elderly adults, HBM Model, Gonabad
**EFFECTIVENESS OF AN EDUCATIONAL PROGRAM ON QUALITY OF LIFE AMONG ELDERS IN TEHRAN BASED ON PRECEDE MODEL**

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**Introduction**: The elderly population is growing in the world, even in developing countries. Elderly population will increase in the next 50 years to 2 billion people. Increase of the number of elderly people, has created an international tendency to improve their quality of life. The aim of this study was to survey the effect of educational intervention based on the PRECEDE Model to promote quality of life in the elderly.

**Materials and Methods**: This study was implemented on 54 elderly people - members of elderly Cultural Center in Tehran (2009). Elders were selected in both experimental and control groups through continuum sampling method. For educational intervention, PRECEDE Model questionnaire was used and according to the components of PRECEDE theory, WHOQOL questionnaire was used to measure quality of life. Then, the mean total score was surveyed in elders of both groups before and one month after the intervention.

**Results**: After the educational intervention, a significant difference (P<0.05) was observed in the mean total scores of predisposing factors (knowledge & attitude), enabling factors (skills), reinforcing factors (self acquiescence & others persuasion) and behavioral factors (healthy behaviors) in the test group compared with the control group. Consequently, quality of life in elderly people in experimental group improved in comparison to control group after the educational intervention (P<0.05).

**Discussion and conclusion**: It seems that the quality of life in the elderly gets promoted after the educational intervention based on PRECEDE model.

**Keywords**: PRECEDE Model, Elderly, Quality of life

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**ASSESSMENT OF NUTRITIONAL KNOWLEDGE AMONG AGING PEOPLE, ISFAHAN, IRAN, 2009-2010**

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**Introduction**: Increased life expectancy and elderly population is an achievement of the 21st century. In Iran, based on Population and Housing census in 2006, ages over 60, are included 7.3% of the total population. It is predicted that this will reach 24.9% by 2050. In Isfahan, the elderly constitutes 12.8% of the province total population. According to these, we should properly deal with the aging phenomenon and growing population’s comprehensive needs. The overall program goals included reducing burden of diseases and common illnesses and disabilities and promote a healthy lifestyle in the elderly. Accordingly, the Ministry of Health and Medical Education (MoH) will follow «integrate elderly care», and «promote healthy lifestyle during aging» programs. More than 50% of burden of diseases are related to cardiovascular risk factors, therefore, educational priorities in the elderly was devoted to nutrition since 2009.

**Materials and Methods**: A book about healthy lifestyle was prepared by the MoH and was sent to all districts. Three health care workers in each district received the necessary training in Provincial Health Center and then, they had transferred the trainings in their own district to other health care workers. Ages 60-69 years were considered in the study. Lecture methods and techniques of play and repeat questions and answers were presented and practiced. Evaluation was done verbally with evaluation forms prepared by the MoH. Lasting knowledge and behavior changes were assessed two and 4 months after training respectively. SPSS software and descriptive statistics were used for data analysis.

**Results**: Between 127,544 elderly in need of training, a total of 28,485 ones (22.34%) received the necessary trainings, which 15.7% of the urban and 52.2% of rural, were trained. Lasting knowledge was seen in 21,068 patients (73.96%) which did not differ in urban and rural areas (74.16% in urban vs. 73.7% in rural). Behavior changes were seen in a total of 18,795 (65.98%) which was 66% in both urban and rural areas.

**Discussion and conclusion**: Overall, the number of educated elderly is low, especially in urban areas that require more activities. But their lasting information and behavior changes were in an appropriate level (more than half of cases), which shows the fact that the elderly are still able to accept trainings and understand the content. Therefore, it’s necessary to pay more attention to them.

**Keywords**: Elderly, Education

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**SOCIAL WELL-BEING STATUS AMONG ESFAHAN ELDERLY PEOPLE**

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**Introduction**: In the recent years improvement in health policies has led changes in pattern of diseases which increased population of elderly particularly in developing countries such as Iran. Therefore, improvement of quality of life and health status of elderly people needs more attention. This is obvious that health assessment is the first step of elderly health promotion program which social well- being is One of the important aspects of health in this group. Social well-being is described as the degree of functioning, adjusting, and adapting of social aspects of life which consisted of five domains including social actualization, social acceptance, social coherence, social integration, and social contribution. This study designed to determine social well-being status among
Esfahan elderly people.

**Materials and Methods:** This cross-sectional study was conducted on 230 Esfahan elderly people aged 60 and over. By simple randomized sampling subjects were chosen from urban elderly people. Data was gathered by a questionnaire consisting of demographic characteristics and Keyes’s Scale of Social well-Being and then data were analyzed using descriptive statistics and correlation.

**Results:** Findings showed that 70.9% of participants were male. Participants mean age was 67.5. Mean score of Social well-Being was 36.55 with 51.4% less than mean score. Significant relationship was found between educational levels and social well-being (P<0.001). Furthermore, a significant relationship was found between subscales of social well-being and demographic characteristics.

**Discussion and conclusion:** As results showed elderly people’s social well being was less than average level. Considering older people as a vulnerable group, educational planning and consulting services in this domain is recommended.

**Keywords:** Social well-being, Elderly people, Health assessment

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**EASY-CARE: A HOLISTIC GERIATRIC ASSESSMENT**

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**Introduction:** Older people are a heterogenous group with special needs in terms of physical, mental and social needs. To address their requirements, a holistic assessment system is required to be able to identify their needs. Elderly Assessment System and Care (EASY-Care) is an instrument provides a comprehensive assessment of main problems of older people in primary and social care. Also produces independence score, risk of breaking down in care and risk of falling. EASY-Care showed a good acceptability for practitioners and service users in some countries. In current study, the Farsi version of EASY-Care instrument provided and also the validity and reliability of this instrument is going to be investigated.

**Materials and Methods:** This study is a validation study conducting among 200 communities dwelling older people. The Farsi version developed using forward-backward translation method and an expert panel, based on WHO recommendations for translation and adaptation of instruments. Quality assessment carried out by an expert panel to assess translation difficulty, clarity, conceptual equivalence, common language use and total quality. A Pilot testing carried out on about 50 elderly who were able to speak dialects of the same language including low and middle education levels or social class by the Farsi version of EASY-Care. In the main study the participants are going to recruit from three health centers in Tehran to substantiate the acceptability (by a short questionnaire), reliability (by test-retest and inter-rater reliability testing) and validity (in a concurrent way) of Farsi version of EASY-Care.

**Results and Discussion:** This project is an ongoing study which is a part of the main international project aiming to improve the lives of older people through a better assessment and response to their health and care needs. The results and different aspects of the Farsi version of EASY-Care including seeing, hearing, communicating, safety, getting around, staying healthy, accommodation, finance, mental health and well-being is going to be presented in the congress.

**Keywords:** EASY-Care, Older People, Comprehensive Assessment

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**EXERCISE AS A HEALTH PROMOTING BEHAVIOR AMONG OLDER AND DISABLE PEOPLE**

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**Introduction:** Today, Health Promotion in Older People and those with disabilities is one of the important health issues in societies. It contributes to risk factors including high blood pressure, obesity, a low level of HDL or appropriate Cholesterol level and diabetes. Older adults and people with disabilities can get significant health benefits with a modest quantity of physical activity, if possible daily.

**Materials & Methods:** A systematic review was conducted by searching relevant educational databases, journal articles, written in English, from 2005 to June 2010. Studies related to exercise and health promotion, which have been published in Pubmed, identified by a systematic search and were studied. Lots of articles in this field of study in the case of types, methods and subjects and their results were compared.

**Results:** For older adults, moderate amount of activity including longer sessions of moderately intense activities such as walking or swimming or shorter sessions of more vigorous activities such as fast walking or stair-climbing. Larger amounts of physical activity can bring more profits. But it shouldn't be done excessively because the risk of injury will increase. People with disabilities are less likely to engage in regular moderate physical activity. Still, they can benefit from reasonably strong activities, for instance 30–40 minutes on a wheelchair as well as shorter sessions of more intense movement such as 20 minutes of wheelchair basketball. Physical activity doesn't need to be exhausting to bring health benefits. What's important is to include physical activity as part of a usual habit. Scientific evidence supports the idea that even moderate-intensity activities, like walking for pleasure, housework, yard work, farming, dancing and prescribed home exercise, when performed daily, can have long-term health benefits.
They help lower the risk of cardiovascular diseases  

**Discussion and conclusion:** For the elderly, walking, gardening and yard work are the most popular moderate-intensity free time activities. Muscle-strengthening activities are also significant for older people. These activities decrease the danger of falling and improve the skill to perform daily tasks. The loss of strength and energy attributed to aging is due, in part, to reduced physical activity.

**Keywords:** Health Promotion, Exercise, Older People

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**THE SURVEY OF COMPARATIVE QUALITY OF LIFE IN WOMEN AFTER DELIVERY**

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**Introduction:** Mothers experience many physiological, mental and social changes at postpartum period. Quality of life has a major impact on the mother, and it influences on their Quality of life of postpartum. Quality of life is the context of the multi-item, that it including physical, emotional, mental, social and virtual function of an individual, evaluation of quality life has an important role in assessment of health systems.

The Aim of this study was comparison the Quality of life of Women with vaginal and cesarean delivery, referring to Dezful Health Centers in 1388.

**Materials and Methods:** This study is a prospective cohort study carried out in 138. Quaoto sampling was used for sampling. The research data were collected using two questionnaire including demographic feature questionnaire and The 12-item Quality of life Questionnaire (GHQ-12), that were completed by 120 women, 60 women with vaginal delivery and 60 women with cesarean delivery in 10-12 weeks postpartum. Data were compared using t test, chi-square test, Paired – Sample T Test and Mann-Whitney U. The p value of less than 0.05 was considered significant.

**Results:** The Mean age of group with Normal Vaginal Delivery was 23/45±2/4 and group with Cesarean delivery was 23/1±3/4. Results showed that the mean score of Quality of life in women was 23/45±2/4. Results showed that the mean score of Quality of life in women with vaginal delivery were significantly higher than women who had cesarean delivery (p<0.001).

**Discussion and conclusion:** Quality of life at postpartum period is induced physiological, mental and social changes, which is influenced on Quality of life mother and her child. Thus, the recognition and assessment of this woman, support of their husbands, other family members and health care personnel is necessary and improve the health of mothers and the quality of life in all stages of life.

**Keywords:** General Health, Postpartum period, Type delivery

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**THE SURVEY OF EDUCATION NEEDS OF ELDERLY EXERCISE REGARDING HEALTHY LIFE IMPROVEMENT**

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**Introduction:** Hygiene condition improvement caused increasing long-lived of human and adds of elderly population. Increasing long-lived of human and add of elderly population is a 21 century consequence. Physical and psychological changes in elderly period are needy of correct and proper education in this circulation. Determining education needs is the first step at collection of education programs. Exercise in elderly is very important by body exercise needs change. Elderly exercise needs results biological change. Aim of this study was to determine of exercise education needs of elderly regarding healthy life improvement in elderly in referring to Dezful health centers in 1388.

**Materials and Methods:** This study was a descriptive-cross-sectional study carried out in 1388 year and sampling method was using quota sampling. 45o elderly participated that had research characteristics. The research data were collected using demographic feature questionnaire, exercise education needs of elderly and their problem questionnaire. Questionnaire confirmed with content validity and test-retest. Data were compared using SPSS software. The p value of less than 0.05 was considered significant.

**Results:** Results showed that most education needs of elderly regarding healthy life improvement is in domain correct bodily exercises with mean of 84.6%. Subsequent preferences of education needs are relaxation practice with mean of 76.4%, how knee care with mean of 75.7%, back care with mean of 73.7%, prevention and exercises at osteoporosis with mean of 70.8%, prevention from bone emptiness with mean of 68.9%, prevention from accident with mean of 64.5%.

**Conclusion and Discussion:** Increasing long-lived of human and add of elderly population is very important. Thus, needs survey is the first step at collection of education programs. Exercise in elderly is very important by body exercise needs change and influence on elderly.

**Keywords:** Education need, elderly, exercise, healthy life improvement

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**Environmental Health**

**COMPARING THE EFFECTS OF TWO METHODS OF VERBAL AND DISTANCE (PRESENTING EDUCATIONAL BOOKLET) EDUCATION ON PROMOTING THE AWARENESS AND PRACTICE OF WORKERS IN FOODSTUFFS DISTRIBUTION AND PREPARATION CENTERS IN SEMNAN**

Farzianpour F1, Batabi F, Jahead Gh.R, Youneasian M, Mahvi A.H
Introduction: One of the important activities to access the foodstuffs security is performing educational programs in order to promote knowledge of foodstuffs distributors. Merchant academies as private sectors have effective and important role in this manner. The aim of this study was to compare the output of merchant academies (verbal education) and the method of education from a distance education (presenting educational booklet), to promote awareness and performance of this group.

Materials and Methods: In this analytical – interventional study, target population was incumbents of food stuffs exhibition centers in Semnan city. The knowledge of three groups (merchant academy group –distance education group and control) were compared and determined with a questionnaire in the field of health care subjects before and after the educational intervention.

Results: The results of unidirectional variance analysis showed the meaningful statistical variance between educated and control group after intervention. But there was no meaningful difference between two educated groups. Also the results showed that the difference of awareness level was meaningful in two educated groups before and after intervention. The higher increase in knowledge scores was observed in butchers and vegetable and fruits sellers. Comparing the knowledge score of different age groups showed that the participants with less than 21 years old had higher knowledge.

Discussion and conclusion: Education had the best effects on those with secondary level of education. The average score of knowledge in those who were employed less than 5 years was higher than those whose employment was higher.

Keywords: Knowledge, Merchant academy, Foodstuffs, Verbal education, Distance education

KAP STUDY IN CONTROL AND PREVENTION DISEASE EXPORT YAZD HEALTH CENTER, DUE FOOD BORNE SISEASES BEFORE AND AFTER TRAINING.

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Introduction: Now a days food borne diseases are increase in world cause death every years, even in Industrial country more than 30% of people to be attacked by food borne diseases. World appearance Increase and developed traveling and also used a diet outside in different comprehensive, now a day’s food borne diseases is a main world health problem. Training of health’s control staff for diagnosis and treatment a food borne diseases patient, store a liquid therapy, training to used ORS and to refer for treat when diarrhea begging to prevent so many death cause by this diseases.

Materials and Methods: This study are intervention model, and with used a national guideline of food borne diseases surveillance, put a treading classes of food borne disease for all expert and pretest and posttest done alone in yield at epidemiology, diagnosis, threat meant and contort of food borne disease of KAP level of expert

Results: The average age is 37/5% years, and the limited age between 25-50 years. The average records are 13 years. Knowledge is according to good. Middle and weak In group of control disease before training 7/4 good. 77/1 middle and 14/8 are weak. The attitude situation before training is 44/4% good 44/4% middle and 11/2% is weak Discussion and conclusion: Practice after and before training is weak. So need a training program the changing in training program is affective in knowledge and attitude but ineffective in practice

Keywords: Knowledge, attitude, control disease.

EFFECTS OF EDUCATION ON KNOWLEDGE AND SELF-EFFICACY OF HEALTH VOLUNTEERS REGARDING THE NECESSITY OF SEPARATING MOULDY BREAD FROM OTHER WASTED BREAD

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Introduction: Wasted breds are consumed as a food in the livestock, however moldy breds have harmful effects on human and animals health. Since health volunteers can convey health knowledge simply to people, this study was aimed to assess the effect of education on knowledge of health volunteers of Abkoo Sugar Factory, Mashhad health center, about the necessity of moldy bread separation from other wasted bread.

Materials and Methods: In this Quasi-Experimental study, 39 active health volunteers of Abkoo Sugar Factory, Mashhad health center, were included. They are selected with easy (available) sampling method and were divided randomly in to two groups: 21 people in case group and 18 people in control group. Data collected through questionnaire and training was performed using group education with providing a CD (educational video). After two months data were collected again. Data were analyzed using the SPSS 16 software and t-test, one way ANOVA. P-values of less than 0.05 were considered statistically significant

Results: After training, volunteers awareness scores in the intervention group was increased from 22.86±4.8 to 26.36±4.9. T-test showed significant difference between before and after education (p=0.03).

Discussion and conclusion: The results of the present study indicated the effect of education on knowledge of health volunteers about the necessity of moldy bread separation from other wasted bread.

Keywords: Bread mold, Education, volunteers, Knowledge
THE PERFORMANCE OF NUTRITION DEPARTMENT IN HOSPITALS AFFILIATED TO TEHRAN UNIVERSITY OF MEDICAL SCIENCES ABOUT HACCP IMPLEMENTATION REQUIREMENTS

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Introduction: Undoubtedly, the nutrition department is one of the most important departments in hospitals and the performance of this department has a dramatic effect on patient satisfaction and improves the therapeutic process. The current study was carried out to assess the nutrition department of selected hospitals affiliated to Tehran University of Medical Sciences about HACCP implementation requirements in 2009.

Material and Methods: In this cross-sectional study, nutrition department of the three hospitals affiliated to Tehran University of Medical Sciences examined in 2009. Data collection was done by employing a valid and reliable questionnaire in 156 questions and five main dimensions through interviews and observations. Data was analyzed by SPSS 16, Kruskal-Wallis and Mann-Whitney test.

Results: Hospital A with mean score of 3.90±1.37 and 78% of the HACCP requirements had better condition than the two hospitals B and C, with the mean score of 3.18±1.50 and 2.97±1.46 score and 63.6% and 59.4% requirements, respectively. In general, regarding the compliance of HACCP requirements, hospital A is considered desirable and hospitals B and C were moderate. Kruskal-Wallis test showed no significant difference between the five main dimensions (p>0/51). But significant difference between hospital scores was observed (p<0.01).

Discussion and conclusion: Based on the results, to establish the HACCP, the nutrition department of these hospitals should have more effort in the engineering and construction status, status of staff and training, supervision of production and distribution of food and with establishment of necessary educational courses and strengthen prerequisite, while the establishment of this system, guarantees food safety of their hospital.

Keywords: Nutrition department, Hospital, HACCP

THE EFFECT OF HEALTH EDUCATION BASED ON HACCP MANAGEMENT MODEL ON HANDS MICROBIAL CONTAMINATION AMONG FAST FOOD RESTAURANTS WORKERS

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Introduction: Fast food market has grown in recent years and society tendency toward fast food consumption necessitates a special attention toward personal and environmental health of workers of fast food restaurant. They are subjected to environmental contaminations especially hand contamination and transmission of pathogenesis from hand to nutrients. New production in the food market represents a change in content and method of health education of the providers in these centers. Here, we studied the effect of health education according to HACCP model on reduction of microbial Contamination of the fast food workers in Jahrom.

Materials and Methods: In this experimental study, all of 35 Jahrom’s fast food workers participated in the Hazard Analysis of Critical Control Point (HACCP) management system instructional program in 2010. In this method, all critical points apt to pollute nutrients from arrival to providing the food were determined and analyzed. The workers were trained how to control these critical points. The hand is determined as an important critical point in this occupation. Contamination of workers’ hands with staphylococcus aurous, Escherichia coli and fungi were evaluated before and after the education process. Paired t-test, Wilcoxon, and correlation tests were used for data analysis.

Results: The hand microbial contamination after the education program in the case group was significantly less than pre-education (P<0.05). The mean of fast food worker hand contamination after education (%11) declined compared with before education (%31).

Discussion and conclusion: Health education according to HACCP model contributes to a change in attitude and health behavior of the fast food workers.

Keywords: Health Education, Microbial Contamination, HACCP, Fast Food, Jahrom

INCORPORATE DISASTER RISK REDUCTION TRAINING MATERIALS IN PRIMARY EDUCATION

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Introduction: Numerous examples across the globe show that children are more vulnerable to disasters. But at the same time they can be influential and effective communicators about disasters. Often, lesson learnt at school are later transmitted to the home. Disaster Risk Reduction is a means of bridging the gap between development and humanitarian programs and can be seen as a means of strengthening livelihood security. Many of RCC member countries such as WHO have either already integrated DRR into the school curriculum or are in process of completing the integration, or are initiating.
But depending on the policy decision of the country, often the method of integrating differs from country to country. For that reason, this study has been developed in order to Iran's disaster and policy educations.

**Materials and Methods:** After evaluating the existing materials and activities, the comprehensive literature review and then a textural-pictured manual developed. Five grades were found for integrated the curricula in school. After the implementation the expert panel, we decided that only the last three grades be used. The Grade III, IV and V have been selected for integration of Disaster risk reduction materials.

**Results:** Accordance to agreement with the authorship of mission of Ministry of Education, the sciences book of these grades preferred. Six steps suggested for DRR integration in curricula. The Department of Curriculum (or Pedagogy) within the Ministry of Education and Ministry of Health are responsible for implementation of integration.

**Discussion and conclusion:** Considering to this fact that the children are the most affected group in disasters, integration the disaster risk reduction manual in primary school curricula could be the best program for learning and disseminating of reduction materials.

**Keywords:** Disaster, Children, School, Curriculum

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**USERS’ PERFORMANCE AND AWARENESS OF HOME WATER SOFTENERS IN QOM**

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**Introduction:** Appropriate use of home water softeners plays a key role in the quality of water treated by them. Therefore, the users’ awareness of these systems turns into an issue of paramount importance. The main objective of this study was to examine the users’ performance and awareness of home water softeners in Qom city. Identifying the points of strength and weakness, providing the necessary strategies to increase the users’ awareness of quality of treated water, and using water softeners appropriately were the other objectives.

**Materials and Methods:** This descriptive-cross sectional study carried out in the city of Qom in 1388. One-hundred and twenty families with home water softeners were selected as samples based on randomized multi-session method. (30 families from each of four areas in Qom). Data were gathered by means of questionnaires, which were then analyzed by SPSS software program.

**Results:** Regarding methods of using water softeners by home owners, 88% of the users obtained their information from the sellers and installers, which comprised the maximum information source. User guides with only 4% of reference was the minimum source of information. In addition, 52% of the systems lacked mixer taps and water quality control through mixing salty and sweet water, while 96% of users did not use this tap to improve water quality in their systems. Half of the users did not have correct knowledge of water treatment mechanism and use of home water softeners; 62% did not know how and when to clean and replace the filters in the systems, and none of the users was aware of the nutritional value of water and the health risks caused by the consumption of water lacking the necessary nutrients.

**Discussion and conclusion:** People’s awareness of the quality of treated water and the correct use of home water softeners was low and sometimes incorrect. Therefore, it is recommended that users be informed about the quality of treated water, nutritional value of drinking water, and the correct use of home water softeners.

**Keywords:** Awareness, Water softener, Users, Qom.

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**ENVIRONMENT, HEALTH AND WOMEN**

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**Introduction:** The highest increase in human health is resulted from recognition and changing disease risk factors in human ecosystems, including human natural environment. Environment is always known as a source for improving human physical and mental health. However, its pollution, especially during recent decades, has threatened human health in many ways. Addressing women’s health issue as the most vulnerable groups in communities, who comprise half of the world’s population, makes inevitable and essential the exploring necessity about specific effects of environmental pollution on women's physical and mental health and providing effective and efficient solutions by experts and researchers in the field of community health. Environment can affect directly and indirectly on health status of women who have the most key roles in family and community health. Pollution resulting from industrialization of societies, such as dumping of industrial and chemical plants waste in rivers and current water and sewage networks, being buried the wastes in underground pits and contaminating groundwater channels, issuing the radioactive rays from nuclear explosions, floods, storms, earthquakes, droughts, uncontrolled population increase and non-standard urban planning systems directly effect on the health of women in different periods of their life. Indirect effects of environmental pollution is manifested in more complex and complicated forms and cause to various diseases by viruses, bacteria, fungi and protozoa in women and their babies. Stress and psychological crises, disorders in multiple organ systems and immune system in women are the other consequences of unbalanced and inharmonious environmental contamination. Environment should be controlled by humans. In this regard, effective international management, partnership of people and governments in health policy making and global persistence can be utilized for environmental improvement in all areas. this paper with the aim of understanding environmental effects on women health, is
engaged in discussing about direct and indirect outcomes of different types of environmental pollution on the health of women, new strategies for combating with this global pollution, the role of community health nurses in the controlling and reduction of the effects and preservation natural and proper conditions of environment.

**Keywords:** Environment- Health – Woman

**IMPROVING URBAN HEALTH AND HUMAN CAPITAL THROUGH DEVELOPING AN EFFECTIVE PRIMARY CARE SYSTEM.**

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**Introduction:** To improve population health, one must put emphasis on reducing health inequities, enhancing health protection, disease prevention, early diagnosis and treatment of diseases by tackling the determinants of health at the downstream, midstream, and upstream levels. Setting approach to promote health like healthy schools, healthy cities also aims at addressing the determinants of health and build the capacity of individuals, families, and communities to create strong human and social capitals.

**Materials and Methods:** This article has been analyzed through systematic review of international articles and books in high levels.

**Results:** There is strong theoretical and empirical evidence for the association between strong national primary care systems and improved health indicators. The intervention strategy recommended in this paper was developing a model of comprehensive primary health care system by joining up different settings integrating the efforts of different parties within and outside the health sector. This synergistic effect would help strengthening human and social capital development. This model can then combine the efforts of upstream, midstream, and downstream approaches to improve population health and reduce health inequity. Otherwise, health would easily be jeopardized as a result of rapid urbanization.

**Discussion and conclusion:** The notion of human and social capitals offers this explanation that why a certain community is unable to achieve better health than other communities with similar demography. In this paper, the review of studies done in different countries illustrated that how a well-developed primary health care system would reduce all causes of mortalities, improve health status, reduce hospitalization, and be cost saving, despite the disparity in socioeconomic conditions.

**Keywords:** Urban health, Human capital, Primary health care Health

**HEALTH EDUCATION NEED ASSESSMENT TO PROMOTE INFECTION CONTROL AND ENVIRONMENTAL HEALTH SITUATION IN DENTAL OFFICES OF TABRIZ**

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**Introduction:** This study aimed to specify the priorities of health education via determining the current situation of infection control, environmental health and the implementation of the principals of prevention in dental offices of Tabriz.

**Materials and Methods:** During the study, 130 dental offices were selected randomly from different regions of Tabriz city, and a checklist was completed for each office during the visiting. The collected data was analyzed using SPSS. Based on the results, the priorities of health education were selected and ranked.

**Results:** According to the results, more than 90% of dental offices had good conditions in terms of structural status, access to safe water, sanitation, lighting and room temperature. Dentists were most compliant with the wearing of disposable gloves (90.8%), face masks (90.8%) and protective garments (96.9%) and least compliant with wearing eye shields (69.2%). Vaccination rate of personals against the hepatitis B was more than 90%. However, disposal condition of sharps and medical wastes as hazardous wastes were undesirable.

**Discussion and conclusion:** The most important challenge in the surveyed dental offices was the improper disposal of medical wastes. This may indicate the weakness of medical and hospital wastes management in the country and need for educational programs in this area. So, the infectious waste management can have the highest priority for educational programs. Also, developing the educational programs to promote the personal hygiene, radiation protection and use sterile instruments are the next priorities to achieve the health promotion goals.

**Keywords:** Health education, Dental offices, Environmental health, Infection control, Tabriz

**Family Health**

**WHICH ONE CAN PRESERVE FAMILY HEALTH; KNOWN OR UNKNOWN SURROGATE MOTHER?**

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**Introduction:** The relationship between the commissioning couple and the surrogate mother is crucial to the success of the arrangement and also preserve
family health. Some argue that gestational surrogacy with unknown surrogate mother is potentially problematic and others believe that the possibility of complications is accompanied by known surrogate mother. These various ideas become more important when disclosure or non-disclosure is mentioned in the process of pregnancy. This study was done to find out what is preferable from the view of married people in Gorgan.

Materials and Methods: This qualitative research was performed using semi-structured individual interview on 22 female and 26 men who worked at educational office of Golestan University of Medical Sciences. They recruited by theoretical sampling and saturation of data determined the number of them. Each interview recorded and transcribed. The content of the participants’ responses were analyzed.

Results: Results showed that most of participants agree on gestational surrogacy if it is their relatives or friends. Their reasons were adequate information about the person, more empathy, appropriate monitoring during this process and gradual discoursing of the situation to the child. But others who agreed with unknown surrogate mother explained that it is necessary to keep secret this process to the relatives and child because it can protect the child from negative social effects such as belittling of friends and forming of less emotional relationship between child and surrogate mother after birth.

Discussion and conclusion: As some countries have chosen one or the other (relatives or non-relatives), it is necessary to find out about various opinions before passing a legislation of whether to have known or unknown surrogate mother and also secrecy or openness.

Keywords: Surrogate mother, Unknown, Health.

THE Role of Individual Counseling in Increasing Sex Satisfaction and Decreasing Sexual Disorders in Married Referents of Damghian Counseling Center (SAYA) 1386 - 1389

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Introduction: According to the definition of WHO, humans nature has sexual instincts; this instinct will be completed during maturity. God has inspired the love into the mature of human being. A part of sexual hygiene is the balance between mind, feeling and body. Unfortunately, we have many problems, disorders and deviations in our society because of lack of knowledge and teaching about sex. The only way to overcome this problem is to increase the rate of knowledge and teaching. Research aims:

1. Knowing the rate of decreased sexual dangerous disorders due to consulting individually for referents to the mentioned center
2. Considering the rate of decreased sexual disorders in trained people at first aim.

Results: The study was done on married women who referred to saya consulting center which had experienced sex out of the family focus for different reasons. Because of this problem, a comparison was done for individual teaching (86/1/1 till 89/1/1).

Results: In this research, the following cases were considered: people’s education and dangerous behaviors about having sex with partner, self-satisfying after sex with partner in private, gay or lesbian homogeneity, the rate of people’s knowledge about safe sexual behaviors and its feedback, considering the orgasm state, seminal effusion, satisfaction from sex with life partner, orgasm disorders, painful intercourse, ability in enjoying sex, etc.

Discussion and conclusion: After the research, it was clear that all of disorder, deviations and dangerous sexual behaviors can decrease up to 85% by consulting and teaching and can be depleted up to 98% by the help of medicines and surgery due to consulting and teaching at the same time.

Keywords: Dangerous sexual behaviors, satisfaction, sexual deviations

STUDY OF MALE INVOLVEMENT IN PRENATAL CARE IN SHAHRROOD AND SABZEVAR

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Introduction: Male involvement is a principal strategy for achieving three of the ten millennium development goals: women empowerment, gender equality and maternal health. This descriptive study examines the degree and forms of male involvement in maternal health with the aim of contributing to the promotion and enhancement of male involvement in antenatal care.

Materials and Methods: This was a descriptive - analytic study. Samples consisted of women hospitalized for delivery in Shahrood and Sabzevar hospitals. Inclusion criteria were alive and healthy fetus and living in Shahrood or Sabzevar. Exclusion criteria were illegal delivery in Shahrood and Sabsevar hospitals. Inclusion criteria were alive and healthy fetus and living in Shahrood or Sabzevar. Exclusion criteria were illegal pregnancy. Sampling was conducted in postpartum or admission wards. Questionnaire completed by 507 women and 420 husbands. Data were analyzed using Spss version 15.

Results: Low level of husband’s companionship to health centers, low male involvement in household tasks and receiving low health recommendation from husbands were reported by 25%, 33% and 61% of women respectively. Seventy-seven men had a low level of knowledge about pregnancy problems but 93% of them knew their wives’ problems in pregnancy. All kinds of male involvement had positive relationships with wanted pregnancy and couples education. Escorting women to
health centers was inversely related to couples age and women’s gravida. Male involvement in household tasks was higher in multiparos than primiparos women.

Discussion and conclusion: Men’s proper awareness of wives’ problems in pregnancy and companionship for receiving prenatal care indicates that they are very interested in pregnancy health however; low level of knowledge concerning pregnancy problems, women’s physical and psychological needs and appropriate health behaviors are important barriers to male involvement like giving health recommendations and sharing household tasks. Designing reproductive health education programs for men is essential.

Keywords: Male Involvement, Pregnant Women, Prenatal Care

Family planning

CONTINUATION RATES OF USING CYCLOFEM AND DEPO-PROVERA IN RURAL AREAS OF EAST AZARBAIJAN PROVINCE, IRAN

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Introduction: Depo-provera and Cyclofem are only available injectable methods in Iran that are used by 2.6% of married women in Iran. Cyclofem has been provided by the public health system since 2007 However there is no published study about its continuation in Iran, and all of published studies about DMPA in Iran were in urban areas. The aim of this study was to compare continuation rate and reasons of discontinuation of Depo-provera and Cyclofem.

Materials and Methods: A retrospective cohort study was conducted on 422 women who had been started using Cyclofem (202 women) or Depo-provera (220 women) from selected Azarbaijan health houses 12-24 month before data collection. Data were collected by a questionnaire by interviewing. then data were analyzed by SPSS software using Kaplan Mayer.

Results: The mean age of participants was 33 (SD=7). One tenth of participants had high school education or higher. 92.5% were housewife. Continuation rate for Cyclofem over first 24 months was less than Depo-provera, significantly. The 3, 6, 9, 12 months continuation rate were 56%, 37%, 30%, 27% for cyclofem versus 75%, 59.5%, 48%, 42.5% for Depo-provera. The most common reason for discontinuation was menstural changes (as a combined reason) in the both groups (85% for Depo-provera versus 72% for cyclofem) with amenorrhea (as a individual reason) among Depo-provera users about twice as cyclofem users (50% versus 22%).

Discussion and conclusion: The continuation rate of using Depo-provera was higher than Cyclofem. As the menstural changes and the other reported reasons for the discontinuation are not health threating effects, health providers can help to improve continuation rate by appropriate consultation.

Keywords: Discontinuation reason, Depo-provera, Cyclofem.

THE EFFECT OF EDUCATION ON THE KNOWLEDGE OF MARRIED MEN REGARDING FAMILY PLANNING PROGRAMS

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Introduction: The aim of this study was to investigate the effect of education on men’s knowledge regarding family planning programs.

Materials and Methods: This research was designed as a quasi- experimental pre-Post test study. Subjects of this study were 80 men from Shiraz telecommunication manufactureries which recruited using random sampling method and allocated to two groups of experimental and control. Tool of data collection was researcher made questionnaire.

Results: The results showed that the most common method used was condom (42.5 percent in cases and 30 percent in the control group) and the Minimum frequency belonged to the sterilization (0 in both case and control groups) and 2.5 percent of the men did not use any method. Comparison of the men knowledge regarding family planning methods revealed that the men’s post test knowledge scores of the experimental group is significantly higher than pre test (P<0.001). This difference was not found in control group (P=0.16).

Discussions and Conclusion: Considering that only 12.5 percent of the sample had good knowledge about family planning, public education programs on family planning for men in workplaces, health centers and through the media to raise awareness of men and their involvement in family planning programs seems necessary.

Keywords: Family planning education, Men, Knowledge.

THE STUDY OF PREGNANT WOMEN’S PERCEPTION ABOUT RECEIVING SERVICES RELATED TO PREGNANCY

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Introduction: In recent decade, social changes, and promotion of technology, knowledge, and awareness caused to improve the level of reproductive health of women in developed countries but there are many problems about reproductive health in developing
countries for low awareness in women. Therefore, the aim of this study was to determine women’s viewpoint about receiving pregnancy cares about the quality of reproductive health services.

**Materials and Methods:** In a descriptive study, perception of 361 pregnant women was investigated by using a questionnaire included demographic status and cares related to pregnancy. Data were analyzed using SPSS.

**Results:** Mean of maternal and gestational age were 28.5±5.07y, 24.54±10.92w, respectively. About 336(95.5%) participants liked to receive care related to pregnancy. Over of 65% of them had heard something about preconception care. Major source of acquisition of that information was public primary health care. Nearly 80% of them intended to receive cares related to pregnancy by specialist obstetrics in their private clinics.

**Discussion and conclusion:** Regarding to the importance of preconception cares in preventing adverse pregnancy outcomes and insufficient knowledge of women about time of initiating pregnancy cares in this study and also considering that over 95% of them intended to receive prenatal care, instruction of mothers about what and where of care centers are necessary.

**Keywords:** Pregnancy care; Intend; Preconception; Perception

**DETERMINANTS OF ORAL PILL USE BASED ON THEORY OF PLANNED BEHAVIOR AMONG WITHDRAWAL USERS**

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**Introduction:** Although, the modern methods for family planning are easily available, and families do not want to have a pregnancy, families still use withdrawal methods after oral contraceptives (OCs), which are the most popular method. The proportion of unwanted pregnancies is high among those who use withdrawal in this province as well. The aim of this study was to detect correlation between intend of OCs use among withdrawal users.

**Material and Methods:** Both qualitative and quantitative methods were used in this study. Questionnaire was designed based on qualitative elicitation study among 50 women withdrawal users who discussed their beliefs about OCs. In the quantitative method, participants were 181 women who recruited from women attending family planning clinics of Tehran’s public health services in the Eastern district of Tehran city in Iran. They were withdrawal users, not currently pregnant and not desiring pregnancy.

In the analysis, statistical tests such as correlation analysis, explanatory factor analysis and linear regression analysis were employed.

**Results:** The mean age of the women was 32.5 (Standard Deviation = 6.8) years; 33.1% were 35 or more years old. All of the constructs of TPB included attitude, subjective norm and perceived behavior control presented significant bivariate association with intended contraception, within which perceived behavior control showed the highest correlation. Theory of Planned Behavior can be accounted for 30% of the variance in stated intent to use OCs.

**Discussion and conclusion:** Improvement of quality of intervention related to OCs must be respectively increased perceived behavior control, attitude and subjective norm due to promote contraception among withdrawal users.

**Keywords:** Contraception, Health Behavior, withdrawal, Iran

**EFFECT OF EDUCATION BASED ON HEALTH BELIEF MODEL ON USAGE OF WITHDRAWAL AS A CONTRACEPTION METHOD IN MOBAREKE, ESFAHAN.**

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**Introduction:** Use of contraception methods which have high failure rate results in unwanted pregnancies. Educational interventions for modifying these behaviors can promote women’s health. Health Belief Model, one of the common behavior change models which is used in health field, applies for describing the relationship between believes and practice. In this research, we assessed the effect of this model to change behaviors of the women who used withdrawal as a contraception method in family planning in Mobareke- Esfahan.

**Materials and Methods:** An interventional study was designed and 27 women from Ghahnavie in Mobareke- Esfahan were selected randomly among the women who used withdrawal as a contraception method. They were considered as case group and compared with 27 similar women lived in Dehno as control group. By using a Health Belief Model questionnaire, we extracted beliefs and attitudes of these groups and designed an educational program based on results of these completed questionnaires and implemented it. After 6 weeks, we completed the same questionnaires in both groups and analyzed the data from 20 women as cases and 23 women as controls by Chi-square and t tests.

**Results:** We found a significant difference between belief scores in the case and control groups and between cases before and after intervention. Additionally, 8 women of the case group change their contraception method to a more effective method. We did not see these changes in the control group.

**Discussion and conclusion:** Health Belief Model could result in belief and behavior changes in our cases, similar to previous studies.

**Keywords:** Health Belief Model, withdrawal method, contraception, health education.
PERCEIVED CONTROL OF BIRTH OUTCOME AMONG PREGNANT WOMEN

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Introduction: Improving the health of women during or before pregnancy is an important strategy for reducing adverse pregnancy outcomes for mother and child. Internal control is a belief about whether the outcomes of our actions are contingent on what we do or on events outside our personal control. To investigate perceived control of birth outcome among pregnant women in Iran.

Materials and Methods: In a descriptive study perceived internal control of birth outcomes among women were estimated using a self-designed questionnaire containing demographic characteristics (5 questions) and internal control status (5 question). Reliability of questionnaire was determined by measuring Alpha Chronbach (0.65).

Results: The mean age of women was 26.62 ± 5. The majority was housewives and they had more than 8 year's education. The mean of gestational age was 24.26 ± 10.60 week. Sixty five (18%) participants had a low-level of internal control, 234(64.8%) persons had a moderate internal control, and 62 (17.2%) persons had a good level of internal control. There were significant relationships between internal control and education and parity in a way that women with 8 years of education and more or nullipars had good internal control than others (p=0/0001).

Discussion and conclusion: In this study most of women had a moderate to good internal control of birth outcomes. It could be a predisposing factor for improving health-related behaviors in pregnant women and may help them to control adverse outcomes of their pregnancy or to use prenatal care.

Keywords: Pregnancy; Internal control; Birth outcomes.

COMPARE OF CONTINUATION RATE AND REASONS FOR DISCONTINUATION OF DMPA CONTRACEPTIVE AMONG WOMEN REFERRED TO TABRIZ AND ARDEBIL HEALTH CENTERS IN 2007

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Introduction: Depot-Medroxy Progesterone Acetate (DMPA) is an ingestible contraceptive that is widely used by 68 million women in over 100 countries. However, different medical and non medical reasons have been reported for discontinuation of DMPA use.

Due to little information about continuation rate and reasons for discontinuation of DMPA in our rejoin and because of the different results of the researches in other countries this study was designed. The objectives of this study were to evaluate the use of DMPA including continuation rate and reasons for discontinuation in Tabriz & Ardebil cities.

Materials and Methods: In this cross-sectional retrospective study 396 and 484 DMPA user women referring to health care centers in Ardabil & Tabriz, respectively, were selected through stratified random sampling. The data was collected in questionnaire by interview and analyzed by SPSS software using Analysis of Variance (ANOVA) and Correlation.

Results: The results in Ardebil showed that the mean age of the study population was 32±7.8 years, the majority of the users were housewives (95%) and only 20 (5%) were employed. Six, nine, twelve and twenty four months cumulative continuation rate of DMPA were recorded as 44.5%, 26.5%, 18.2% and 2.3%, respectively. The most common reason (69.7%) for discontinuation among all groups was amenorrhea. The results in Tabriz showed that the mean age of the study population was 33±6±2 years. The majority of the users were housewives (89.9%). Six, nine, twelve and twenty four months cumulative continuation rate of DMPA were recorded as 58.8%, 35.1%, 21.6% and 9.1%, respectively. The most common reason for discontinuation was amenorrhea and spotting (%14.8 and 4.8%, respectively). In total the mean of continuation were 2.6 and 6.52 months in Tabriz and Ardebil, respectively.

Discussion and conclusion: The results of this study could help health education and promotion, personal capabilities development, and also care givers in terms of counseling of women desiring DMPA injection and their follow up. This factor could result in more satisfaction use and improve continuation rate of DMPA.

Keywords: DMPA, Continuation Rate, Discontinuation, Contraceptive

THE RATE OF AWARENESS ABOUT IUD AND ITS SIDE EFFECTS AMONG FEMALE VISITORS IN FERTILITY AGES REFERING TO MEDICAL CENTERS IN SOUTHERN TEHRAN

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Introduction: The purpose of this study was to assess the awareness of female visitors of 36 medical centers in southern Tehran who have IUD and are in their fertility age about the IUD method and its side effects in the year 1387.

Materials and Methods: This study was descriptive-analytical and periodic and 231 women with IUD were surveyed and their awareness about IUD and its side effects was examined and parameters like age, education, job, race, length of marriage, number of children and
length of using IUD as well as education, job and race of the husband was considered. The information was collected through a questionnaire with 45 questions. Considering the quantitative and qualitative nature of the parameters, the data was described through a plentitude table and then Anova and Chi-square (X2) tests were applied. After completion of the questionnaires, the data was encrypted and saved in computer and the SPSS (ver.15) software was used for Statistical Analysis.

Results: Among the 231 persons surveyed in this study, 56 persons had minimum awareness and 100 persons had maximum awareness. The average awareness was 80.59 with 8.03 S.D. According to the results, when awareness in considered as a qualitative parameter, awareness level has a meaningful relation with woman's education (P=0.05), job (P=0.044) and husband education (P=0) and job (P=0.019). On the other hand, when awareness was considered as a quantitative parameter, average awareness level had a meaningful relation only with the husband's education level: Elementary Education (P= 0.047), Guidance School (P= 0.015), Diploma (P= 0.011).

Discussion and conclusion: It is recommended that there should be another study about educational intervention in this regard with pointing out prominent and temporary effects of IUD.

Keywords: Awareness, Fertility age women, IUD

EXAMINATION OF IUD CONTINUANCE LEVEL IN WOMEN REFERRING TO HEALTH AND MEDICAL CENTERS IN KHALILABAD,1384-1387

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Introduction: IUD is one of the most useable and common instrument devices among contraceptives. IUD as a contraceptive is a reversible instrument which put into uterus by agents of health services. many factors such as age ,number of delivery(childbirth) ,social and economical circumstances, literacy, culture, ethnicity and the type of IUD that is prescribed and also the skill of person who put the IUD are affect the likelihood of pregnancy.

Materials and Methods:This is a descriptive-analytical study. The population included married women between 15-49 years old who referred to obstetrics centers in city. According to the recent research we can say that most of the women who referred and were in age group between18-35 resident of village, all of them had rate 1 in delivery rating when they pulled out IUD and more than 50% of them had primary education or less. Due to low literacy of people in these regions, education and counseling should be presented with higher quality. Also the result showed that only 7% of referring women has used IUD for more than 7 years and 31.2% duration of using IUD was less than one year and this is a high percent .attempt to take out IUD was due to their own willing and the reason mostly was due to displacement of IUD and then great bleeding. This case both in rural and urban areas was high and in all mothers with delivery rating of 1 to 6 and higher was the like. There should be necessary educations in this field. With respect to shortness of average continuance time in methods to contraception, it seems that we need an unremitting effort in designing and performing of family planning' plans, and we should emphasize to continuous education of health staff.

Keywords: Continuance of IUD, Women, Health centers, Khalilabad
Health literacy and Education

ROLE OF MANAGEMENT CONTRACT IN HEALTH QUALITY IMPROVEMENT

Barati O\textsuperscript{1}
1. Health Services Management, Tehran University of Medical Science Role of Management contract in health quality improvement

Introduction: In recent years the way health systems are organized has changed significantly and most countries have undertaken reforms that have resulted in decentralization of health administrative services and autonomy for service provision. Contractual relations based on delegation of responsibility are set up so that rather than directly managing the health services it owns or undertaking to develop health coverage itself, the state delegates an entity to take over this task. Contracting is one of the tools being used to enhance the health systems performance in developing and developed countries.

Material and method: This is a descriptive, cross sectional study in which we have searched through TUMS electronic library. In this way we could find 12 relative articles that consequently we sorted them by the topic we have aimed to study. The collected information from selected articles gathered and the results came out of them.

Discussion and conclusion: contracting in health care is extremely diverse in terms of actors who use it and the purposes thereof. However, contracting should not be reduced to a mere management tool used to cut health costs. It is an approach that should lead the various actors to offer the health services that are increasingly efficient, effective, superior and fair. There is a need for strong capacity development to manage more effectively the process of management contract development within the health sector in order to ensure health policy goals are realized.

Keywords: management contract, health system, efficiency, effectiveness, fair.

EFFECTS OF LIFE SKILLS EDUCATION ON THE GUIDELINES OF DEALING WITH STRESS

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Introduction: The purpose of this research was to survey the effect of life skills on the guidelines of dealing with stress and social growth among high school students in Bardaskan city during 1387-88.

Materials and Methods: the method used in this research was a quazi-experimental with control group. For this purpose, about 77 students (42 persons in control group and 35 persons in experiment group) of the under-

study society in the age range of 15-19 were selected using the method of multi-stage cluster sampling. For data collection, the scales of Vineland Social Growth, guidelines of dealing with stress and class-average were used. To answer to the research hypothesis, we used the T-test for the comparison between two independent groups and analysis of bilateral variance.

Results: The results showed that the average grade of guidelines of dealing with stress and social growth of the experiment group is considerably more than the same parameters in control group. But the average grade of guidelines of dealing with stress and average grade of social growth are the same between male and female

Conclusion: According to the values of T and F as well as the meaningful level, it is obvious that the teaching of life skills influences on the social growth of experiment group members. But, teaching these skills seems to be less effected by gender.

Keywords: Student Skills, Stress

REVIEWING HEALTH PROMOTING HOSPITALS – NECESSITY, STRUCTURE, STANDARDS AND STRATEGIES

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Introduction: Health promoting hospital is a new concept introduced by the European office of the world health organization and its network now includes 770 members from all around the world. This study aims to introduce this concept to the policy makers and health care managers and paving the way for the localization of these concepts by discussing the needs, standards and strategies.

Data sources and source selection methods: For conducting this review article, we used library method and web-based search of documents, evidences and scientific articles. For English articles, we used Pubmed, Google search and online library of the health promoting hospitals’ website. We used SID and Iranmedex websites and translated books as a source of Persian references.

Combination of topics and Results: The most important topics of this study were the reasons for health promotion in the hospitals, its importance in the health care centers, developing perspectives, goals and structures related to health by HPH, general standards and strategies of health promotion in each of the beneficiaries (patients, workers and society), ways of supporting hospitals for health promotion.

Discussion and conclusion: There are reliable documents and evidence for health promotion in hospitals and developing HPH network in Iran. We recommend planning for localizing the standards and strategies of health promotion in hospitals and further studies on this subject and developing the first health promoting hospital network in the Iranian health care system.

Keywords: Health Promotion, Hospital, World Health Organization, Health Promoting Hospitals Networks
**HEALTH ADVOCACY**

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**Introduction:** Good health is a major resource for social, economic and personal development and an important dimension of quality of life. Political, economic, social, cultural, environmental, behavioural and biological factors can all favour health or be harmful to it. Health promotion action aims at making conditions favourable through advocacy for health. The literature review for this article provides a clear and complete context: Advocacy terminology, Defining health advocacy, What is advocacy and why is it important?, What is public health advocacy?, Health promotion practitioners and health advocacy, The principal elements of advocacy: Advocacy actions, How ministries of health can support advocacy?, Barriers and solutions to supporting advocacy, Roles of different groups in advocacy such as family groups and nongovernmental organizations.

**Materials and Methods:** We conducted a systematic review of the website digital library, WHO website, conference proceedings, clinical practice guidelines, and other sources using a comprehensive strategy to identify randomized controlled trials and quasi-perimental studies of advocacy and health. We searched the Cochrane Library, MEDLINE (1995–2007) and google using the search terms (“advocacy” or “health advocacy” or “health promotion”). We reviewed published practice guidelines, health advocacy and searched websites containing details.

**Results:** Advocacy for the public’s health and for the profession are widely recognized as responsibilities of health educators. Increasing emphasis on advocacy by professional

**Discussion and conclusion:** organizations has peaked the interest of health educators, yet knowing where to begin as an advocate is a mystifying process. Advocating for health promoting social change is also an inherently political activity, public health professionals attempting to advocate for health promoting social change may find this work limited by institutional restrictions and a lack of organizational support for advocacy activities. Yet public health advocacy also has the potential to result in important public health benefits, given its upstream focus and potential for addressing the impact of non-medical determinants of health rather than merely dealing with the symptoms.

**Keywords:** Advocacy, Policy, Health, Education

**PARENT AWARENESS REGARDING CARRYING SCHOOL BAGS AMONG PRIMARY SCHOOL STUDENTS IN TABRIZ**

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**Introduction:** School children usually use school bags to carry their school materials. Carrying heavy school bags or inappropriate carriage can cause several problems such as musculoskeletal problems among school children. However, selection of appropriate school bags is one of the considerations to reduce such problems among this age group. As there are limited studies in our country to address such a problem, the present study was conducted to find out how school bags are selected for school children.

**Materials & Methods:** This cross-sectional, descriptive study was conducted in Tabriz city using self-reported questionnaires with easy «yes» and «no» questions to investigate parent awareness about the use of school bags by their children. A total of 250 parents were randomly selected from different educational regions in Tabriz city as participants in the study. Statistical analysis of the results was conducted using SPSS software.

**Results:** The results of the study indicated that only 10% of participants had knowledge about carrying school bags. Approximately, 40% of the respondents in this study were not aware of the recommended weight limit for carrying school bags and 48% were not aware about the fitness between school bag and upper back region. Awareness about school bag carriage among parents was significantly higher in males than in females (p < 0.001).

**Discussion & Conclusions:** The findings of the current study suggest that parent’s awareness about school bag carriage should be promoted. Also, adequate measures should be taken by authorities and through appropriate media to control over production or import of school bags to ensure children health and safety.

**Keywords:** Awareness; School bag; Parents

**KNOWLEDGE, ATTITUDE AND PRACTICE OF STUDENTS IN UNIVERSITIES OF ISFAHAN ABOUT SELF MEDICATION**

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**Introduction:** Self medication is one of the most common problems in the world. The purpose of this study was to determine the knowledge, attitude and practice of students in universities of Isfahan about self medication.

**Materials and Methods:** In this descriptive – analytical study, 600 students of universities of Isfahan have been chosen. Regarding that there are 3 public universities
Based on findings, a total number of 100 students in this research 504 married. Results: The average score of knowledge (83.93±17.9) and practice (97.58±6.49) of students was high but attitude of students in regard to self medication was average. In current study, about 14.2% of students had experienced self medication, at least once in last two months. The most frequency of self medication, by the kind of diseases was in Cold, in the kind of medicine were in calmatives. The most common causes of self medication were previous analysis of disease and availability of medicines. The most important reason of preventing self medication was lack of belief in self medication.

Discussion and conclusion: Based on findings, the attitude of students was in an average level. By considering the important role of students in society, the necessity of providing instructions for students for changing their attitude is more than before.

Keywords: Knowledge, Attitude, Practice, Self medication, Students

STUDY OF KNOWLEDGE AND ATTITUDE OF MEN TOWARD VASECTOMY OPERATION IN BOUSHEHR PROVINCE

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Introduction: Development of every society is affiliated to correct programming of every fields of the population and birth control. Sterilization (Tubal Ligation in men and women), is one of the common methods of preventing pregnancy. Recently 223 million individuals worldwide are using this method. Although vasectomy is easier and less costly than tubectomy, but still its rightful place in our country has not been achieved. This study aimed to determine the knowledge and attitudes of men towards tubectomy and use the results of the study for having a basic and proper program to encourage the families to use those methods of family planning in order to promote the women health.

Materials and Methods: In this research 504 married men were selected randomly by stratified sampling method. A questionnaire which was formerly used by different researchers was used to determine awareness and attitude of men toward vasectomy. The questionnaire included 3 parts: demographic data, knowledge and attitude. Descriptive statistic was applied and SPSS software program were used to analyze the data.

Results: The total of amount of 45.8 % of individuals under the study had some basic information about vasectomy. They expressed that the most adverse effect of this operation was testicular swelling (8.6%). The total amount of 89.5% of individuals agreed with family planning program and 88.31% believed the main reason of having family planning is due to economic problems. 63.4% of them were partially or completely against the idea that family planning is the women's duty. 14.8% considered vasectomy religiously Unlawful. Generally the attitude of individuals towards side effects of vasectomy was weak. 70.4% of volunteers didn't know about obesity after operation nor had positive attitude about it and 51.7% of men didn't know about the possibility of increased cardiovascular disease after the operation.

Discussion and conclusion: 94. 6% of men under the study agreed with family planning program and 63.4% of them believed that family planning is the duty of both spouse, which provides good atmosphere for applying the family planning program. It seems that lack of enough information about vasectomy leads to unacceptability of this method among men. Therefore providing proper information about vasectomy can increase the acceptability of this method and change the attitude of the men significantly.

Keywords: Vasectomy- Family planning

HEALTH LITERACY AMONG NURSING STUDENTS IN TABRIZ UNIVERSITY OF MEDICAL SCIENCES

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Introduction: Health literacy is the quantity to which persons have the ability to get, process, and understand basic health information and services needed to make suitable health decisions. Based on the official report of the American National Adult Literacy Survey (NALS) nearly half of the U.S. adult population (90 million people) has low efficient health literacy. We are aware that Medical science literacy progresses quickly. What students may have learned about health literacy during their school years is often omitted, and there are little evidences to show the awareness of health literacy among nursing students in Iran. The main purpose of current study is to determine and evaluate the health information literacy among nursing students at the faculty of nursing & midwifery in Tabriz University of Medical Sciences.

Material and Methods: A total number of 100 students were chosen among nursing students and a structured questionnaire was administered among them.

Results: The study indicated that the awareness about health Literacy among the majority of students was poor or under intermediate level, only 10% had high level of
EVALUATION OF KNOWLEDGE ABOUT TUBERCULOSIS AMONG THE NOMADS AND HERDERS IN KERMANSHAH DURING 2008

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Introduction: Tuberculosis is still known as the major cause of death and it is due to a mycobacterium. After many years, it is known as a re-born disease and a health problem for the whole world. Today, about one third of global population (1.9 billion people) is infected with mycobacterium tuberculosis and more than 10 million people with HIV+ are also suffering from tuberculosis.

Materials and Methods: It was a cross-sectional study. The subjects were selected randomly by simple sampling from Kurd nomads in Kermanshah. Data gathering was through questionnaires including 35 questions based on the objectives. Questionnaires were filled by the questioners in a verbal interview. The collected data was analyzed by SPSS-16 software and related statistical test. Data was classified into three knowledge levels of good, average and weak.

Results: The mean age was 19 years with standard deviation of 15, while 57% were between 19-34 years and 43% were over 40 years. Among women 69.7% were literate, 29 subjects (23%) could read and write and 12 subjects (8.9%) had diploma and higher degrees. Among men 81 people were illiterate, 14 subjects (14%) could read and write and 8 subject (7.8%) had diploma and higher degrees. In the case of total knowledge about TB, 134 subjects (56.3%) had weak, 63 subjects (26.5%) had average and just 41 subjects (17%) had good knowledge. Knowledge about the symptoms of TB in 145 subjects (61 %) was weak, in 84 subjects (35.3%) was average and just 41 subjects (17%) had good knowledge. Knowledge about the symptoms of TB in 145 subjects (61 %) was weak, in 84 subjects (35.3%) was average and just 41 subjects (17%) had good knowledge. Knowledge about the symptoms of TB in 145 subjects (61 %) was weak, in 84 subjects (35.3%) was average and just 41 subjects (17%) had good knowledge.

Discussion and conclusion: Considering the low level of knowledge about TB, its transmission ways, prevention, control and treatment, it is necessary to plan and implement educating programs on TB for this group.

Keywords: Bruselosis, Nomad

THE EFFECT OF MOTHERS’ EDUCATIONAL PROGRAM ON PARTICIPATING IN HYPOTHYROID SCREENING TEST FOR 3 TO 5 DAY INFANTS BASED ON HEALTH BELIEF MODEL IN CHADEGAN 2008

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Introduction: Since, the congenital hypothyroidism has no sign at the birth time and late diagnosis and postponing treatment (after 28 days at birth) can causes mental retardation, short height, and so on, all infants need to be screened at 3 to 5 days after birth for diagnosis and hypothyroid prevention. The purpose of this study was to develop and implement pregnant mothers’ educational intervention program based on Health Belief Model (HBM) in order to affect the mothers to participate their children in this screening test.

Materials and Methods: Ninety pregnant mothers who are in last month of their pregnancy participated voluntarily in this study. All mother randomly divided in two group; experimental (45 mother) and control groups (8 of 45 mothers drop out of the study). The experimental group attended in 5 educational sessions classes. The control group (37 mother) has participated in routine educational education and care program as well as concerning hypothyroid screening test. The questionnaire for measuring and evaluating knowledge, and HBM components scores (perceive susceptibility, severity, benefit, and barrier; and cues to action) was used among two group and the questionnaire completed before and after intervention. Also, the data related to the mothers attended for hypothyroid screening test during the 3 to 5 day at birth was recorded. All data was collected and analyzed using statistics software.

Results: The data showed that the average scores of mothers knowledge related to hypothyroidism and thnessery of infants screening among two group was very low (lower that 50%), but the average scores of HBM components were higher that 50% and there was no significant deference between the tow groups. The mean scores of knowledge as well as HBM components significantly were different between experimental and control group and before intervention. The result of independent T-test showed significantly deference between all HBM components among two group (p<0.001). Furthermore, comparison of average days of mothers attended for screening of their infants indicated the experimental group (mean= 3.60) were significantly lower that control group (mean=6.75).

Discussion and conclusion: The knowledge of mothers related to the series of hypothyroidism and its prevention were lower than we expected. In conclusion, the mothers need to be educated in relation with their infant hypothyroidism prevention, and applying HBM as a conceptual frame work for educational program is highly recommended.

Keywords: Health Belief Model, Pregnant Mother, Congenital hypothyroidism.
PERCEPTIONS OF OLDER PEOPLE REGARDING PHYSICAL ACTIVITY

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Introduction: Physical activity is a low cost and non-pharmacologic intervention which has low side effects and is accessible for the majority of people. Existing evidence suggests older adults and people with disabilities can gain significant health benefits with a regular physical activity, especially at the recommended level of physical activity. Also, Physical inactivity is a major risk factor for developing coronary artery disease, stroke, diabetes mellitus and high blood pressure. However, despite existing evidence regarding the beneficial effects of physical activity on mental and physical health and also efforts to promote physical activity by experts and authorities, sedentary behavior is very prevalent among older people. While recent research has explored the barriers and facilitators to physical activity among older people, less attention has been paid to the perceptions of older people regarding physical activity.

Materials and Methods: This qualitative study aimed to explore the perceptions of older people living in Tehran about physical activity in 2009. The sample comprised 40 community-dwelling older people aged 60 years and over. Data were collected via face-to-face in-depth interviews and analyzed with the assistance of NVivo software.

Results: The findings revealed that the concept of physical activity was not understood clearly. Furthermore, participants were uncertain about the kind or level of physical activity was appropriate for them. Many participants were aware of the advantages of physical activity and disadvantages of physical inactivity. Some participants have concerned about the negative and even serious consequences of physical activity such as heart problems, collapse, stroke and even death, or other consequences like falling, injury, or muscle and joint problems.

Discussion and Conclusion: While further researches are needed, based on these exploratory findings we need to teach older people about the concept of physical activity and the recommended level of physical activity to be able to increase the level of knowledge and understanding about physical activity among older people.

Keywords: Lifestyle, Cancer, Knowledge, Attitude, Practice

PERCEPTION OF PEOPLE ABOUT LIFESTYLE AND CANCER

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Introduction: Life style refers to the way people live their lives and involves their working, playing, eating, sleeping and communicating patterns. Life style and personal habits including dietary habits; exercise, smoking, stress coping and etc, are major factors in the cause of illness and death. Many cancer deaths have been related to both poor dietary habits and chewing and smoking of tobacco. It is now generally accepted that through modification of individual behavior and environmental factors, the development of some cancers can be prevented.

Materials and Methods: We conducted a descriptive study to determine the knowledge, attitude and practice (KAP) of people about lifestyle and cancer in Tabriz. The sample consisted of 200 men and women which were selected by «easy sampling method» from the patients who refers to clinic of Emam Reza (1389). Data collecting tool was a self-developed questionnaire that includes information on demographic characteristic and questions about level of perception of people about lifestyle and cancer. The data have been analyzed with descriptive statistical methods, using SPSS 13.

Results: The sample consisted of 90 women and 110 men, most of them were 18-28 years old. Majority of them were married. The findings showed that most of participants had moderate level of knowledge and positive attitude but most of them had poor practice.

Discussion and conclusion: Lifestyle modification is a more comprehensive approach to effective changes in health promotion behaviors. The role of health education is to help people to identify their risk factors and modify their «faulty» behavior. It is therefore imperative that nurses use a variety of means to increase public awareness of those factors that have an impact on the prevention and control of cancers.

Keywords: Lifestyle, Cancer, Knowledge, Attitude, Practice
According to the results, it seems that to educate people about non self-medication we should focus on barriers and also improving perceived severity may reduce self-medication. Also, doctors may have an important role in this regard.

Keywords: Self-medication, Drug, Knowledge, Practice, Health Belief Model

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11.5 and Kruskal–Wallis, Wilcoxon on, Mann-Whitney and Pierson correlation tests were used, while the confident interval was 95%.

**Results:** The mean age of samples was 22.93 years. Findings showed that 51.5% samples had low knowledge and only 9.1% had high knowledge in pretest.

**Discussion and conclusion:** According to the results, implementing educational program for pregnant mothers to increase their nutritional knowledge and attitudes is necessary. Promotion of knowledge and attitude of pregnant women can be affected their health and healthy generation.

**Keywords:** Knowledge, Attitude, Women Pregnant, Nutrition

**KNOWLEDGE AND PRACTICE REGARDING SELF-MEDICATION BASED ON HEALTH BELIEF MODEL AMONG WOMEN IN ISFAHAN**

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**Introduction:** The purpose of this study was to assess the knowledge and practice regarding self-medication based on Health Belief Model among women in Isfahan.

**Materials and Methods:** This was a cross-sectional study that carried out on 385 women referred to health centers. Data were collected by a questionnaire in 4 parts (knowledge, practice and H.B.M Variables). Finally data were collected and analyzed by descriptive statistics.

**Results:** The mean score of knowledge was 82.97±13.80 and mean score of perceived susceptibility (72.48±17.11), severity (71.60±14.73), benefits (68.29±17.13) and barriers (61.64±19.67) were moderate. 86% of the women have done self-medication at least in 1 disease in 6 months ago, included: catching cold 225(57.6%), headache 28(53.7%), anemia 51(13.2%), menstrual disorder 45(11.6%), digestive diseases 25(6.5%), muscle diseases 23(5.9%), osteoporosis 10(2.6%) and joint diseases 25(6.5%). Most drug used included Adult Cold:208(53.7%), pain killers 184(47.5%), herbal medicines 78(20.2), folic acid 68(17.6%), antibiotics 67(17.3%). The main reasons for self-medication were previous experience and drug accessibility, not enough time, expensive doctor visits, lack of access to physician and main reasons for preventing self-medication was fear of side effects.

**Discussion and conclusion:** It seems that to educate people about non self-medication we should focus on barriers and also improving perceived severity may reduce self-medication. Also, doctors may have an important role in this regard.

**Keywords:** Self-medication, Drug, Knowledge, Practice, Health Belief Model

**THE PROBLEMS OF MOTHERS IN EXCLUSIVE BREASTFEEDING: AN EDUCATIONAL INTERVENTION TO IMPROVE NUTRITIONAL KNOWLEDGE**

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**Introduction:** This study aims at determining the problems of exclusive breastfeeding among mothers and also intervening educationally to improve the nutrition status in Qazvin, Iran.

**Materials and Methods:** In this descriptive-analytical study 82 pregnant women selected and divided randomly into 2 groups of intervention (individual training and providing educational pamphlet about exclusive breastfeeding and breast observation) and control. In both groups, soon after delivery and 6 months later, an investigation about start of breastfeeding, continuing the exclusive feeding and mothers’ problems was performed. The gathered data was analyzed using SPSS and statistical tests: X2 and Spearman correlation.

**Results:** There was a meaningful statistical difference between starting time of breastfeeding after delivery in two groups (P=0.000). Both group differed in terms of abundance of exclusive breastfeeding in the first 6-month period of life (P=0.005). There wasn’t any meaningful difference about the trend of infant’s growth in terms of weight between 2 groups.

**Discussion and conclusion:** According to the obtained results, providing individual trainings based on mother’s need as well as educational pamphlet to remind the learning, to support mothers and to consult in pre and post delivery period can affect mother’s success to continue breastfeeding and eventually better growth of infants.

**Keywords:** Exclusive breastfeeding, Breastfeeding problems, Infant growth.

**KNOWLEDGE, ATTITUDES AND PRACTICE OF BREAST SELF-EXAMINATION AMONG FEMALE HEALTH WORKERS IN ISFAHAN, IRAN**

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**Introduction:** Breast cancer as a most common organ cancer in women is the first cause of death among women with 40-45 years old. This study, investigates
the Knowledge, attitudes and practice of Breast Self - Examination among female health workers in 2010.

Materials and Methods: This descriptive cross sectional study was done among 119 female health workers in Isfahan. The method of sampling was clustering. With KAP questionaire knowledge, attitude and practice of theses participants was assessed. The data collected were analyzed using descriptive and inferential statistics methods.

Results: The mean age of participants was 27.7±3.38. The knowledge about breast cancer and doing breast self examination (BSE) was good (79.8%) in most participants and (72.45%) of them have positive attitudes but only (39.5%) of the samples performed BSE regularly every month. A significant relationship was found between attitudes and the university degree of the health workers and also between age, university degree and the times of taking part in education classes with performing BSE in the best time for breast self examination.(P<0.005). 12.6% of them did not have a good performance.

Discussion and conclusion: Considering that health workers can play an important role on encouraging the clients to perform healthy and preventive behaviors, their weak behavior is not acceptable in these groups. This result also shows that additional studies are needed to identify the factors that make women to use screening services and use these factors to encourage them for using these methods.

Keywords: Knowledge, Attitudes, Practice, Breast Self – Examination, Health workers

COMPARING THE POSTMENOPAUSAL WOMEN’S’ KNOWLEDGE ABOUT THE CAUSES AND PREVENTION OF PELVIC FLOOR DISORDERS BETWEEN SUFFERED AND NON-SUFFERED WOMEN

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Introduction: The aim of this study was to compare the postmenopausal women’s knowledge about the causes and prevention of pelvic floor disorders between suffered and non-suffered women.

Methods and Materials: In this comparative descriptive study 90 postmenopausal women (45 women with pelvic floor disorders and 45 women without pelvic floor disorders) participated. Data collected by physical examination, interview and completed a questionnaire including demographic information and awareness on the causes of pelvic disorders. Ten questions about causes and method of prevention. Data analyzed using SPSS software and statistical tests such as Chi square.

Results: The mean age of study samples was 58.3 (55-63years.) There were no statistically significant differences between mean age of menopause, the years after menopause and employment in two groups. (p>0.05) but significant differences were reported between mean gravid ((P = 0.002), knowledge (p = 0.001) and socioeconomic status (P = 0.02).

Discussion and conclusion: Health Centers must be more responsible and they should have a more active role in education and promote awareness about menopause as the best way for prevention of disease.

Keywords: Menopause, Pelvic floor disorder, Education

EDUCATIONAL NEEDS OF HAMEDANIAN PEOPLE REGARDING DIABETES RISK FACTORS IN 2010

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Introduction: diabetes mellitus particularly type 2 is a major public health concern world wide. 2-3.5 million people( more than 5% in Iran) are suffering from diabetes. It is a complex disorder with resistance to insulin, alternance on it secretion, increasing blood glucose and several potentially preventable disabilities. The number of people with diabetes is increasing due to population growth, aging, urbanization, and increasing prevalence of obesity and physical inactivity. The aim of this study was to evaluate the educational needs of Hamedanian people regarding diabetes risk factors in 2010.

Materials and Methods: This was a descriptive cross sectional study and the research population was Hamedanian people who were non diabetic or had not glucose abnormalities. 200 people simple randomly selected and assessed with questionnaire including demographic data, educational needs about diabetes risk factors with content validity and Test re test reability. Then analyzed with SPSS software.

Results: Maximum sample of research, 64% none married, 55% house keeper, 49.7% university educated, 61% said had initial knowledge about diabetes, and 66% had levels of activity. Mean ages were 25.5±1.63, BMI 24.58± 3.2 and achieved scores from question were 9.49±3.27. Educational needs about Diabetes risk factors 21% were high, 71% were intermediate & 8% were low. There were not significant statistic relationship between educational needs and any demographic data.

Discussion and conclusion: Chronic non-communicable diseases are a major contributor to the burden of disease in developed countries, and are increasing rapidly in developing countries. This is mainly due to demographic transitions and changing lifestyles of populations associated with urbanization. Lifestyle interventions are reported to reduce the risk of type 2 diabetes in high-risk individuals after mid- and long-term follow-up.

Keywords: Educational needs, Diabetes, Risk factors.
MOTHERS’ KNOWLEDGE ABOUT THE FOODS THAT IMPROVE BREAST MILK QUALITY AND QUANTITY

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Introduction: Mothers’ nutrition is very important during lactation and good nutrition during this period guarantees mothers’ health in the future. Mothers change their diets during lactation in order to improve milk quality or quantity. The aim of this study was to determine mothers’ knowledge and opinions about the effect of foods on breast milk.

Materials and Methods: In this cross sectional descriptive study, using a face-to-face interview, 120 mothers with children less than two years old, who had come to Tabriz Pediatrics Hospital, participated. Data were collected by convenience sampling. Statistical analysis was carried out by means of the SPSS 11.5 and descriptive tests. The researchers asked mothers about their demographic characteristics and the effects of consuming different foods in their diets on breast milk.

Results: Level of knowledge in 95.8% of the mothers was poor and 4.2% had moderate level of knowledge. None of the mothers had high level of knowledge about the effect of foods on breast milk. Mothers also were asked about the effect of consuming fruits and vegetables, water, tea, milk, cereals, fish, meat, fatty foods and sweets on breast milk. They pointed some effects like improving milk quality or quantity, decreasing infant colic, causing colic, diarrhea and skin eruption. 75% of mothers believed that milk and dairy and 85% believed tea improves milk production. About the effect of cereals, 32.5% of mothers believed it would cause infant colic.

Discussion and conclusion: Mothers changed their diets according to their beliefs. Most of studied mothers had poor level of knowledge about the foods which affect breast milk and this shows the necessity of nutrition education for lactating mothers.

Keywords: Mothers’ nutrition, Breast milk quality and quantity, Knowledge, Opinion

SURVEY OF PREGNANT MOTHER’S VIEWS REGARDING PREGNANCY ACTIVITIES AND EXERCISES IN GONABAD

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Introduction: pregnancy is a natural physiological phenomenon and pregnant women should not change their daily life. Simple exercises refresh them in different aspects. Type of exercises change depends on previous activities and eager’s of mothers. Pregnant women not only should do their daily activities calmly but also they should do special exercises. Exercises cause fitness of pregnant women and increase blood circulation.

Materials and Methods: This descriptive and analytical research was done to survey views of pregnant mothers about pregnant activities and exercises. 229 samples were selected randomly from all pregnant mothers who came to Gonabahd health centers for services. A questionnaire was used for data collection and then data were analyzed.

Results: The findings showed that 67.3% of the sample were not aware about activities of pregnancy period. Also 81.2% did not know how to do exercises before child birth and 86.5% did not know after birth exercises. Mothers knowledge about effects of exercises on fitness was 75% and about prevention of constipations was 65.1% .but most of the samples were aware of exercises effects on accelerating of later(91.2%) and it effects on decrease of later pain(61.5%) and 8806% had knowledge of suitable exercise. Other findings showed that there were not significant differences among age, times, pregnancies, level of education and pervious information with knowledge and attitudes(p<0.05).

Discussion and conclusion: An effective and healthy person is the main part of developed society. pregnancy is the first step of the a healthy life. Finding of this research is a start for providing education needs of pregnant mothers also these can help our beliefs and increase their knowledge.

Keywords: View - Pregnant mothers - Exercises and activities

KNOWLEDGE, ATTITUDE AND PRACTICE OF YAZD RESTAURANT CHEFS REGARDING CARDIOVASCULAR DISEASES IN 2010

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Introduction: The aim of this study was to assess the knowledge, attitude and practice of Yazd restaurant chefs regarding cardiovascular diseases in 2010.

Materials and Methods: This study is a cross - sectional descriptive – analysis study that has been performed on 60 restaurant chefs of Yazd in 1389 (almost total chefs). By using questionnaires method in gathering information the reliability and validity of that were accepted and including demographic information (13 questions) and the questions related to the Knowledge of the causes, symptoms and prevention of cardiovascular disease (13 questions), attitude (12 questions have been developed based on Likert scale) and performance (14 questions). After entering data in the SPSS software by using statistical tests including Anova, T-test, Chi square test and Pearson correlation it has been analyzed.

Results: The mean knowledge score of the Chefs was 4.8 ± 16.6, and attitude and practice were 3.4 ± 16.9, 4.2 ± 13.7 respectively. There has been significant correlation between knowledge and attitude (p: 0.027) attitude and income (P: 0.03) and income and age (P: 0.029). Also significant
relationship between knowledge and health (P: 0.019) and performance and health (P: 0.004), attitude and history of cardiovascular disease in the family members (P: 0.032) have been existed. The information Source concerning samples was by physicians (21.7% percent) and nearly 77% percent of them have chosen doctor as their preferred source.

**Discussion and conclusion:** According to the results of this study the chefs mean knowledge, attitude and performance of the chefs tended to be weak. It is recommended to improve Chefs’ awareness, performance and attitude towards risk factors for cardiovascular disease.

**Keywords:** Knowledge, Attitude, Behavior, Cardiovascular disease, Chef

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**EVALUATING THE LEVEL OF KNOWLEDGE AND ATTITUDE OF MOTHERS REFERRING TO BIRJAND URBAN HEALTH CENTERS REGARDING NUTRITION BEHAVIOR**

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**Introduction:** One of the most important goals in the first years of child health is to achieve a balanced and correct nutrition. Family is the place where security of food and nutrition is made during daily life. In fact, mother of the family has the main role in supporting children' nutrition. Childhood is special time during which suitable nutritional behavior is being made. Family and child's relationship with life are both effective in constructing nutritional behavior in this age. This study was designed to determine the knowledge and attitude of mothers covered by urban centers in Birjand about children nutritional behavior.

**Materials and Methods:** In this descriptive – analytical study, the mothers referred to the Birjand urban centers with children under 5 were selected. The obtained data were analyzed by SPSS software, using chi-square Test, ANOVA (one-way), Tukey statistical test and Pearson correlation coefficient. P≤0.05 was considered statistically significant.

**Results:** From 294 mothers, 83.7% were aware about the mechanism of iron absorption. 65.6% knew when to consume iron drop, 82.7% knew beneficial minerals and vitamins. 64.6% knew about complication vitamin A deficiency. The mothers’ knowledge about nutrimental behavior in the average term and their opinion was evaluated in good term.

**Discussion and conclusion:** Considering the average level of knowledge and attitude of mothers about nutritional behavior in children, need retraining family physician and staff about nutrition are important. It is proposed to do a comprehensive plan on prevention of malnutrition in high-risk areas.

**Keywords:** Nutrition, Knowledge, Attitude, Birjand

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**EMERGENCY CONTRACEPTION: PROVIDERS KNOWLEDGE AND ATTITUDES AND THEIR RELATION WITH THE PILLS USERS’ KNOWLEDGE AND ATTITUDES IN TABRIZ**

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**Introduction:** One of the main tasks of health providers, like midwives, is to protect and promote health of women and families through the optimized implementation of family planning programs. Emergency contraception is an accessible and acceptable method for most women. Its proper use could prevent three quarters of unwanted pregnancies.

**Materials and Methods:** This was a descriptive – correlational study in which 140 health providers and one client of each selected provider who was using contraceptive pills for at least six months were studied in 52 randomly selected health centers/posts in Tabriz in 2010. A self-administered questionnaire was used to collect data from the providers, while the questionnaire for the clients was filled up by face-to-face interview. Data were analyzed by chi square and Pearson correlation tests using SPSS-13.

**Results:** The mean score of providers’ knowledge and attitudes were 69.4 ± 11.8 and 70.1 ± 12.8, respectively (possible score rang was 0-100). The providers’ knowledge level was high only in 35% (score>75). High majority (95.7%) had positive attitudes. There was a significant relation between the providers’ and users’ knowledge in three of the 14 statements (the most common side effect of the method, changes in menstruation time, no protective effect on subsequent unprotected sex). As well, there was significant relation between the providers’ and users’ attitudes in tow of the four investigated areas (effect on inducing abortion, effect on correct use of the more effective methods).

Overall, there was no significant relation neither between the providers’ and users’ knowledge nor between their attitudes scores (P> 0.05).

**Discussion and Conclusion:** The provider’s knowledge was insufficient, and there was no significant relation between the providers’ and users’ knowledge and attitude. Thus, in addition to need for promoting the providers’ knowledge, the other barriers should also be recognized and removed in order to promote using this method.

**Keywords:** Knowledge, Attitude, Emergency contraception, Pill user, Provider

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**KNOWLEDGE, ATTITUDE AND PRACTICE (KAP) OF FACULTY MEMBERS OF YAZD UNIVERSITY REGARDING CARDIOVASCULAR DISEASES (CVD) AND ITS RISK FACTORS**

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**Introduction:** To date, there are few studies recognizing
the levels of knowledge, attitude and practice of faculty members regarding knowledge, attitude and practice of faculty members regarding Cardiovascular Diseases (CVD) and its risk factors.

**Materials and Methods:** This cross-sectional descriptive study included 70 faculty members of Yazd University who were selected randomly. Data was gathered through a special questionnaire including background data, knowledge, attitude and performance questions. SPSS software program was used to analyze the data.

**Results:** In the study, 88.6% were men and 11.4% were women with a mean age of 41±9.2 years. The knowledge level of the faculty members regarding cardiovascular diseases was relatively good (mean score of 16.44 from total score of 27). The attitude of the participants was good (mean score of 32.70 from total score of 36) and their performance was also good (mean score of 27.57 from total score of 38). There was a significant relationship between knowledge and performance (P < 0.000) and attitude and performance (P < 0.003).

Discussion and Conclusion: The results of the study showed that the knowledge, attitude and performance levels of faculty members regarding cardiovascular diseases are high and as they are in a good position to disseminate information to students, faculty members can play an important role in early prevention of cardiovascular diseases.

**Keywords:** Cardiovascular diseases, knowledge, Attitude, Performance, Risk Factors

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**ATTITUDE OF IRANIAN MOTHERS TOWARD VACCINATION AND IMMUNIZATION PROGRAMS**

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**Introduction:** Based on the most recent data of ministry of health and medical education of Iran, 98% of the children under six years old have been immunized. Vaccination of children in Iran is mandatory and parents are required to obtain an immunized certificate and present it as a part of the first year primary school enrollment documents. Attitude consists of 3 components: cognitive, effective and behavioral. Behavioral component refers to that part of attitude which reflects the attention of a person in short run or in long run. If children don’t receive in time vaccination, risk of the disease and failure of the program of Immunization will increase. The aim of this study was to determine the prevalence of the positive attitude.

**Materials and Methods:** A Cross sectional questionnaire-based study was conducted among mothers with at least one child aged <=6 years. 198 mothers were chosen by random stratified sampling from crowded public health centers in Tehran. Initially the questionnaire was given to a group of 10 individuals as a pilot study. The reliability was determined by Alfa coefficient. The questionnaire was based on likert scale. Attitude scores >= 70% was determined as favorable (positive). Data analyzed using SPSS 13 software. The Pearson correlation test; Wilkaxon and multivariable regression analysis were used.

**Results:** The mean age of the participated mothers was 28.1±6.6 years. 35% of them were under diploma. The average of the scores given to viewpoint of mothers was 80.7±6.6. Most of the mothers (93.3%) had a favorable view (positive view) toward immunization program. There was a linear correlation between attitude and the number of children. There were no relationship between the mothers’ attitude and their education and age.

**Discussions and Conclusion:** Despite high immunization coverage and a strong positive attitude towards vaccination between mothers, educational programs about vaccines and vaccine preventable diseases which help promoting parental motivation are recommended.

**Keywords:** immunization, Attitude, Vaccination, mothers

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**THE AWARENESS OF FEMALE STUDENTS REGARDING MATURITY HEALTH, IN HASHTGERD CITY – 2010**

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**Introduction:** Due to the important role of youth in shaping the future of the country and improvement of health behaviors in adolescence (one of the most critical phenomena of the present time), the present study designed and implemented to determine the awareness of female students to their maturity health on first, second and third grade, guidance school, in Hashtgerd city.

**Materials and Methods:** In a descriptive, cross sectional analytical study, 260 female students were chosen by multi stage sampling. Inquiring was based on question form and gathered information by applying a statistical descriptive- analytical method (chi square) and using SPSS software were analyzed.

**Results:** Based on study results, there was a significant relation between students’ age and maturity health awareness (P=0.01) and between students’ grade and maturity health awareness (P=0.001) and also between father and mother’s education with maturity health respectively P=0.031 and P=0.02 and a relation between mother’s job and maturity P=0.059 (sample) was seen. There was no relation between other factors with health awareness.

**Discussion and conclusion:** Based on results, there are significant relations between variables like; age, high grade education, parents education, mother’s job and girls’ maturity health awareness. These variables were effective for increasing the students’ knowledge. Therefore it is recommended to increase the knowledge of girls with increasing the knowledge of the family by health care educator training (programs) and inclusion of maturity health, in special training books (for girls). Consultant role of health educators should be taken in to consideration in all schools especially in deprived areas.
HEALTH LITERACY: A GAP IN HEALTH EDUCATION AND HEALTH PROMOTION PRACTICE AND RESEARCH IN IRAN

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Introduction: Improved population health literacy is considered as a main goal and also as a fundamental means for health promotion. Accordingly, it is expected that a significant body of research in health education and health promotion to be dedicated to health literacy issues. The purpose of this review article is to explain the concept, dimension and applications of health literacy in health education and health promotion practice, and to describe the status of researches done on this issue in Iran, as well.

Materials and Methods: An internet-based literature research through Google search engine and Medline database was done, using words such as: «health literacy», «research», «health education», «health promotion» in English terminology and their equivalent in Persian language. Relevant and most reliable documents (considering some criteria such as published in scientific journals or in websites affiliated to academic and well-known health organizations were reviewed.

Results: Health literacy is defined as 'the cognitive and social skills which determine the motivation ability of individuals to gain access to understand and use information in ways which promote and maintain good health. According to WHO, health literacy implies the achievement of a level of knowledge, personal skills and confidence to take action to improve personal and community health by changing personal lifestyles and living conditions. It can be considered as a means to health and an indicator for monitoring and surveillance of nation's progress towards health, as well. The search results showed that just two descriptive studies were conducted in Iran. The first study, dealt with the influencing factors on health literacy in five provinces of Iran, has showed that health literacy was low in adult population; and the second study which specifically had focused on the relationship between maternal health literacy and prenatal cares and termination of delivery, showed that pregnant women had low health literacy.

Discussion and conclusion: As health literacy is a main goal of health promotion and also an important factor influencing many chronic behavioral diseases and because of research gaps about health literacy in Iran, it's suggested that health literacy subject should be placed in the topic research priorities of health education and health promotion.

Keywords: Health literacy, Health education, Health promotion, Practice, Research

COMPARING THE KNOWLEDGE OF MOTHERS WITH HANDICAPPED AND NON-HANDICAPPED 6-12 YEARS OLD CHILDREN ABOUT PREVENTION FROM PHYSICAL AND MENTAL DISABILITY

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Introduction: According to WHO there are 500 million handicaps in the world that one out of three is a child. In Iran except disability of imposed war, ten percent of the population is handicapped. Since ministry of health and treatment emphasizes on controlling population growth we hope that this problem could be overcame. The aim of this study was to investigate the knowledge of mothers with handicapped and non-handicapped 6-12 years old children about prevention from physical and mental disability.

Materials and Methods: This research is an analytical and descriptive sectional study, and a case study done to compare the knowledge of handicapped and non handicapped mothers of 6-12 years old children for preventing mental and physical disabilities in Gonabad city. The research domination in this research was the mother of children of 6-12 years old in urban areas. 50 mothers of disabled children as case group and 50 mothers of non disabled children as waitress group (of the same equality in education level, job, location, age,…) were selected and the data was collected by interview papers that was collected on demographic and necessary information on preventive factors before and after birth.

Findings: The findings showed that mothers knowledge of disabled children about preventive factors before birth was more than non disabled (healthy) children and this difference statically significant ( P< 0.001). And about preventive factors after birth the said knowledge was minimal and not statistically meaningful.

Discussion and conclusion: The findings showed that family marriages and aged mothers are factors of handicaps and these can be solved by consulting before marriage. Also mothers should be aware of risks of pregnancy at high age. Other findings showed that a large number of mothers in both groups had little knowledge about preventing from handicaps. So it is necessary to teach mothers.

Keywords: Knowledge- Handicap- Children- Mothers- Prevention- Physical and mental disability
KNOWLEDGE, ATTITUDE AND PRACTICE OF HEALTHCARE PROVIDERS REGARDING FAMILY PLANNING COUNSELING IN ISFAHAN HEALTH CENTER

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Introduction: Conducting a proper consultation, improves the quality of family planning services. Base on this fact, we decided to investigate the status of family planning counseling program with the goal of analyzing the knowledge, attitude and practices of family health employees.

Materials and Methods: A descriptive study conducted on 188 employees of family health department in Health Center No.2. Isfahan. Researcher after obtaining a referral from the Health Department, and justifying family health executive and after a coordination meeting, the knowledge and attitude questionnaire was completed by staff. Performance Questionnaires is completed by the questioner in personnel workplace and with individual watching of counseling of them. To extract information from the Questionnaire and in order to achieve the results SPSS software and tests Comparison, the correlation and regression were used.

Results: the level of knowledge, attitude and performance in among health care providers were 59.95%, 66.37% and 70.37%, respectively. No significant relationship was found between education level and knowledge score (P=0.580) attitude (P=0.234) and performance (P=0.789). Age, knowledge (P = 0. 024) and function (P = 0.010) had significant correlations.

Discussion and conclusion: base on the results of this research and its agreement with the precious researches, family planning counseling workshops as a necessity for all personnel and family health midwifery units is recommended.

Keywords: Health Care Providers , Consulting, Knowledge , Attitude , Performance

THE AWARENESS OF 15-50 YEAR OLD PEOPLE REGARDING AIDS AND ITS PREVENTION

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Introduction: AIDS due to the lack of certain treatment and efficient vaccine is one of the most important causes of mortality throughout the world. Control of this disease is possible just through improving public awareness and teaching its prevention ways especially to the youths. The aim of this pilot study was determining public’s awareness level in order to perform educational programming based on real needs of our community.

Materials and Methods: In a descriptive cross-sectional study, 300 individuals visiting the police exhibition in 2010 were randomly studied. Data gathering was done by a questionnaire consisted of demographic features and awareness testing items (α=0.79). Data were analyzed using Chi-square test and Pearson coefficient of correlation and through SPSS17.

Results: Mean age of participants was 27.09±9.44 years. In whole, 49.3% were female and 53.4% were male. The highest percent of respondents belonged to those with high school diploma. Mean awareness score was 38.73±8.75 from 59. Awareness level was poor in 16.7%, moderate in 61% and good in 22.3%. Awareness score showed significant relationship with sex, job and educational

Comparative Study of Group and Individual Education on the Level of Knowledge, Attitude and Practice of Self Care in Burned Patients

Ezati N¹
1. Medical Faculty Department (Nursing Group) at Islamic Azad University-Tabriz Branch.

Introduction: Burn is the third leading cause of death, leading to decrease in quality of life and increase in disability. Deformity and dysfunction in afflicted patients make their return to community hard. They often apply inappropriate coping strategies, resulting in incompliance with the disease, lack of seeking assistance and impairment of health condition. This study was conducted to determine the effect of individual and group education on knowledge, attitude and self care skills of burned patients at burn center of Tabriz in 2010.

Material and Methods: In this quasi-experimental study, the samples consisted of 80 burned patients between the ages of 15 to 60, selected with convenience sampling. They allocated randomly to two groups to receive either individual or group education (40 patients in each groups). The patients received one day education program about self care. The patients’ knowledge, attitude and practice of self care were assessed before and after the interventions. The data were compared between two groups. The data were analyzed by Spss software (version 14), descriptive and inferential statistics such as independent T-test, ANOVA, and Chi.

Results: The finding showed that before education programs, the level of knowledge and practice about self care were poor and the attitude was negative. After education, the level of knowledge, attitude and practice of both groups improved. There was no statistically significant difference between two groups.

Discussion and conclusion: The effects of group and individual education on burned patients are similar, but it seems that group education is more economical. This study indicates that heath education programs can lead to increase health knowledge and improving attitude and practice of self care in burned patients.

Keywords: Self care, Education, Burned patient, Knowledge, Attitude

COMPARATIVE STUDY OF GROUP AND INDIVIDUAL EDUCATION ON THE LEVEL OF KNOWLEDGE, ATTITUDE AND PRACTICE OF SELF CARE IN BURNED PATIENTS

Ezati N¹
1. Medical Faculty Department (Nursing Group) at Islamic Azad University-Tabriz Branch.

Introduction: Burn is the third leading cause of death, leading to decrease in quality of life and increase in disability. Deformity and dysfunction in afflicted patients make their return to community hard. They often apply inappropriate coping strategies, resulting in incompliance with the disease, lack of seeking assistance and impairment of health condition. This study was conducted to determine the effect of individual and group
level (p<0.05) in a way that females, housekeepers and those with high school diploma had higher scores. There was no significant relationship between awareness score and variables of age and marital statues (p>0.05).

Discussion and conclusion: According to the results, awareness of AIDS transmission ways and prevention is not desirable in our community. Therefore, more focus on educational courses and interventional programs in order to improve the health level of society is highly necessary.

Keywords: Awareness, Knowledge, AIDS, Transmission routes, Prevention

**KNOWLEDGE AND BEHAVIORAL INTENTIONS FOR HEPATITIS B AMONG STUDENTS OF UNIVERSITIES IN YAZD (IRAN)**

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Introduction: Hepatitis is one of the important problems in the world. More than one million of people are carriers of hepatitis and about 100000- 150000 have the acute disease. This disease is cause of more than 5000 death yearly .The prevalence of this disease is middle in Iran. Some studies showed that the most method for its transmission is from mothers to neonates. The aim of this study was to determine the knowledge and behavior intention of students of Yazd Universities about hepatitis B.

Materials and Methods: This was a descriptive analytical study (cross – sectional) that was done in the Yazd Universities. The samples were 1135 students of Yazd Universities. (Medical and Nonmedical Universities). Data collected by a questionnaire which consisted of 3 sections. The first section was demographic questions and section 2 consisted of 8 questions of knowledge with the range of 0- 16 and section 3 was 4 questions of behavior intention and its range was 5-20. The reliability and validity of questionnaire was calculated by Cronbach-α; knowledge (α=.84) and behavior intention (α=.73) .The data were analyzed by SPSS soft ware and T-test and ANOVA.

Results: The samples were 552 students of medical university and 583 of nonmedical universities. The mean grade scores of knowledge of male students about hepatitis B was 8.98±3.55 of 16, and for female students was 9.99±3.57. There was significant difference between the knowledge and sex of students with p<0.001. The mean grade scores of behavior intention of students of medical university was 17.06±2.42 out of 20 and for students of nonmedical was 7.83±1.66. There was significant difference between the behavior intention of students and their universities.

Discussion and conclusion: The data of this study and other studies in this field showed that knowledge and intention behavior are factors that oblige the students to go for vaccinating against hepatitis B.

Keywords: Knowledge, Behavior intention, Hepatitis B.

**NUTRITION AND ITS RISK FACTORS FROM THE PERSPECTIVE OF HOSPITALIZED CHILDREN’S MOTHERS IN SHIRAZ: A QUALITATIVE STUDY**

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Introduction and Objectives: The importance of having information about nutrition in children, especially for mothers is vital. The lack of information about nutrition after infantile stage can cause many problems in childhood, sometimes until the adolescence. This qualitative research was done to evaluate the status of nutrition education and risk factors from the viewpoints of mothers with children who have been hospitalized.

Materials and Methods: data were obtained from 20 mothers by using focus group discussions and face to face interviews.

Results: Most mothers with low literacy or poor economic conditions said that they had a little knowledge about the food groups and were not able to identify them. Almost all the mothers claimed that they learnt about nutrition from television and radio. The type of television programmes who they mentioned were children’ programmes, advertisements and educational and family programmes. Most of the mothers were interested in learning about nutrition by direct conversational methods while some believed that posters and good teaching were the best methods to learn about healthy nutrition. Some literate mothers indicated stories and science books, magazines, textbooks and newspapers as their choice of interesting learning sources.

Discussion and conclusion: Although disease severity, duration of hospital stay were effective in the mothers responses, but the role of nurses in ensuring food safety during the mothers stay at hospital is well accepted. Preparing and targeted nutrition education programs through multimedia are necessary. Training programs in all aspects of nutrition targeted at mothers are recommended to improve their knowledge.

Keywords: Nutrition education, Mothers perspective, Urmia

**HEALTH LITERACY AND EFFECTIVE COMMUNICATION**

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Introduction: Effective healthcare relies on the ability to communicate with patients. Many studies showed that limited patient literacy is a barrier to medical diagnosis and treatment. We rely increasingly upon patient knowledge and skills to manage chronic diseases such as asthma, diabetes, and congestive heart failure. Patients need to understand concepts of risk and probability in order to make informed choices about screening and treatment, and act as partners in the patient-physician relationship.

Discussion and conclusion: At the most basic level, limited literacy enhances the linguistic, social and cultural gap between clinician and patient, making mutual understanding more difficult. Interventions at the patient-physician level and at the practice level can help improve quality of care for population of patients with limited literacy skills.

There is a literature about the consequences of poor health literacy. Health literacy is thought to impact health via three ways: Access and utilization of health care services, Patient-provider relationship, Self-care behaviors

Low literacy is an independent risk factor for poor outcomes, including lower satisfaction with care, lower quality of care, worse patient safety, and higher health care costs. There is evidence that improving health communication can improve quality of care, especially for those with limited literacy skills.

Several strategies have been shown to improve communication for those with limited health literacy like using of plain language, specific phrases, and several methods of communication, including written, oral, and visual and encouraging questions from patients. Four strategies in communication can be helpful to improve health literacy such as communicate clearly, use numbers clearly, confirm comprehension, use appropriate educational materials, and use appropriate resources

Keywords: Health literacy, Communication, Behavior

MATERNAL HEALTH LITERACY: PROMOTION AND ITS EFFECTS ON MOTHER AND CHILD HEALTH

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Introduction: Literacy is a person's ability to read and write the degree to which these skills can be integrated to function in society, learn, and achieve goals. Health literacy specifically refers to the degree to which a person can obtain, process, and understand basic health information and services needed to make appropriate health decisions. Improving the nation’s health literacy is critical to create a system of care based on wellness and prevention. Maternal health literacy, is defined as the cognitive and social skills that determine the motivation and ability of women to gain access to, understand, and use information in ways that promote and maintain their health and that of their children. Pregnancy and early parenting is a time characterized by high need for health information, high readiness to learn and change, and first-time use of significant health services; a time when both the negative and positive effects of mothers’ literacy skills and functional health literacy pass to their children with lifelong consequences

Materials and Methods: The information of this article was collected, by search in numerous articles, from scientific websites in internet, and then reviewed.

Results: The results showed that, low literacy is associated with several adverse health outcomes, including low health knowledge, increased incidence of chronic illnesses, higher risk of hospitalization, and less than optimal use of preventive health services. There is a direct association between low maternal health literacy and poor child health outcomes. And one of the best ways to prevent maternal and neonatal mortality and improve their health is to promote women’s health literacy through education

Discussion and conclusion: Maternal and under-five child’s mortality rate is relatively high in our country and the influence of maternal health literacy on mother and child health is an inevitable fact, so promotion of the maternal health literacy, by dialogue based and face to face educations in prenatal, prenatal, and post partum course, is necessary for social health improvement

Keywords: Maternal health, Health Literacy, Child, Promotion

NUTRITION LITERACY AMONG CLIENTS OF A HEALTH CARE CENTER

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Introduction: The joint committee on National Health Education Standards defined “Health Literacy” as “the capacity of individuals to obtain, interpret and understand basic health information and services and the competence to use such information and services in ways which enhance health”. We know that nearly half of American adults lack the necessary health literacy skills needed to understand and act appropriately on health information but, there aren’t any documented information about Iranian people. The purpose of this research was to assess the current state of nutrition literacy (knowledge, reading and understanding) among the female clients of a health care center in Yasouj, Iran.

Materials and Methods: A total of 51 women, referred to a health care center, via a convenience sampling were participated in this study. Health literacy was measured using a nutrition Literacy survey instrument.
The questionnaire was prepared to assess the reading and understanding abilities among the readers of a popular health newspaper and validated in a small group. The instrument contained three sections, one for evaluating the medical and health vocabulary, second to measure the perceptions of a printed visual material (nutritional pyramid poster), and the third one to test the reading skills (speed and understanding) of participants.

**Results:** The mean age and education of the participants were 28.5 and 11.7 years respectively and 75% of them were originally citified. The percents of scores obtained by the participants for vocabulary skills, visual literacy and text perception sections were 55%, 61% and 73% respectively. There were no significant correlations between vocabulary skills of the participants with their education, age and visual literacy levels. The frequency of reading the text by the respondents was 1.1 times with the average time of 1.9 minutes. Furthermore, text perception abilities showed statistical significant correlations with vocabulary ($r=.37$ & $p<0.01$) and visual literacy skills ($r=.33$ & $p<0.05$).

**Discussion and conclusion:** in spite of appropriate level of participants’ education and age, they didn’t show a good performance in recognizing the nutritional terms; however they understood a selective topic in a public newspaper in the field of general health, reasonably. The low participants’ inference of a published poster messages implies that the rudiments of visual material designing and research in health literacy field as well, need to take into more consideration.

**Keywords:** Health literacy, Perception, Nutrition education

**KNOWLEDGE AND PRACTICES OF IRANIAN STUDENTS REGARDING HEPATITIS B TRANSMISSION**

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**Introduction:** Hepatitis B virus (HBV) is a common hepatotrophic infection that may result in chronic liver disease in some patients which can progress to important sequel such as cirrhosis and hepatocellular carcinoma (HCC). Health care workers are especially prone to acquire all blood-borne diseases including hepatitis B. adequate knowledge and sequent preventive measures could effectively reduce the risk of this important hazard.

The aim of this study was to assess Iranian nurses’ knowledge and practices toward Hepatitis B transmission. Material and Method: We conducted a questionnaire-based survey of 290 Iranian nurses who are affiliated to Tehran University of Medical Sciences. The questionnaire consisted of knowledge items including questions about general features of Hepatitis B virus and its ways of transmission and practice items including preventive measures of their own practice and vaccination status. Each correct answer for Knowledge items is given 1 point and then sum together, to form the final knowledge score.

**Results:** The dataset of the study incorporated 290 nurses (32 Male and 258 female). The mean age of subjects was 34.2 (Standard Deviation=7.62) and the mean time of employment was 10.94 (SD=7.12). Almost all (99%) agree that nurses are at high risk for HBV transmission; however, 93.8% have at least one episode of vaccination; 83.1% have completed the three dose regimen and 65.5% of subjects have checked for their antibody titers. The mean knowledge score is 13.21 (SD=1.99) out of maximum 15. Subjects who never had been vaccinated are found to have the lowest knowledge score (mean: 10.00 SD: 4.2) when compared to their vaccinated counterparts (P value=0.055).

**Discussion and conclusion:** This study implies the role for knowledge deficit in vaccination failure among nurses. Educational interventions are highly demanded for this group to promote preventive activities such as universal precautions and vaccination among nurses.

**Keywords:** Iranian Students, Knowledge, Practices, Health Education, Hepatitis B

**AWARENESS OF WOMEN ABOUT EMERGENCY CONTRACEPTION METHODS**

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**Introduction:** Given the importance of family planning in emergencies and in order to prevent unwanted pregnancy, enough awareness and knowledge of different social groups particularly women about emergency contraception methods is essential. This study carried out to determine women’s knowledge about emergency contraception methods in Tabriz, Iran.

**Materials & Methods:** In this descriptive and analytical study, we designed a questionnaire to investigate individual information and specialized items such as using condoms, coitus interrupts and rhythmic methods. Based on quota method, people covered by 17 health centers, and women referred to these health centers, 384 participants were chosen. For analysis of data, we used SPSS software, descriptive statistics, and Pearson correlation test. For all tests, the alpha level for statistical significant was 0.05.

**Results:** The mean age of participants was 25.9 years. The majority of women were educated and the mean marriage age was 22.1 years. The Mean of knowledge score about emergency contraception was 4.1 out of 7. Twenty five percent of respondents had inadequate knowledge, 50.5 percent had moderate and 24.5 percent had adequate knowledge. There was a significant correlation between age and job and scores of knowledge (P<0.001). A significant correlation was also found between level of

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education and scores of knowledge (P<0.001).

**Discussion and conclusion:** Regarding to the scores of knowledge, we recommend that health care providers should plan an educational approach to increase the knowledge and improve the performance of appropriate population about contraception, especially emergency contraception methods.

**Keywords:** Awareness, Emergency Contraception Methods, Tabriz

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**HEALTH LITERACY AND PREVENTIVE HEALTH BEHAVIORS AMONG OLDER ADULTS IN ISFAHAN**

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**Introduction:** Limited health literacy can reduce adults’ ability to comprehend and use basic health-related materials—such as prescription and food labels, health education pamphlets and articles, appointment slips, and health insurance plans—and thus affect their ability to take appropriate and timely health care action. It is widely accepted that many diseases, illnesses, conditions, and injuries can be prevented or minimized by early detection especially for older adults as an important at risk group. So the objective of this study was to identify the relationships between health literacy and preventive health practices among older adults.

**Materials and Methods:** Pilot study of older adults aged 60 years and older was done in Isfahan. About 112 participants were surveyed in this study. We used test of functional health literacy in adults (TOFHLA) to assess the level of health literacy in this group. The method of sampling was clustering and the method of data collection was home interview. We assessed the preventive service usage (mammography, PSA, FOBT) by self reporting. The data collected were analyzed using descriptive and inferential statistics methods.

**Results:** The mean age of participants was 67±7.2, 51.8% of them were female and 48.2% of them were male. Overall, 89% of older adults had limited health literacy. Self-reported lack of preventive services was higher among individuals with limited health literacy than those with adequate health literacy. It means that older adults with poor health literacy were less likely to use preventive services. Women with limited health literacy were less likely to have received mammography (p<0.01), men with poor health literacy, were less likely to have received PSA test (p<0.01) and older adults with limited health literacy were less likely to report receiving FOBT test (p<0.01).

**Discussion and conclusion:** participants with limited health literacy skills were less likely to do screening tests compared to adequate health literacy participants. Primary care providers should attention to this subject and they should know that poor health literacy is an important barrier for participating in preventive screening tests especially for older adults that these screening tests are more essential. Further researchs are needed to determine if educating low health literacy individuals about screening tests can increase screening rates.

**Keywords:** Health literacy, Preventive health behaviors, Older adults.

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**INVESTIGATING ADOLESCENT BELIEFS REGARDING OBESITY AND OVERWEIGHT BASED ON HEALTH BELIEF MODEL ,2010**

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**Introduction:** The prevalence of obesity has increased worldwide in the past decade. Obesity is a risk factor for many chronic diseases, such as cardiovascular diseases, type 2 diabetes, and musculoskeletal disorders. Identifying effective weight control strategies for adolescents is important and could help influence interventions for obesity in youth. The purpose of this study was to assess the adolescents beliefs about obesity and overweight based on Health Belief Model in Isfahan , 2010.

**Materials and Methods:** This descriptive study was performed on 228 adolescents between 14-19 years old. The method of sampling was clustering. The participants were selected from 3 regions of Isfahan. A self-administered questionnaire based on the Health Belief Model (HBM) was used for data collection that the validity and reliability of the questionnaire was measured by content validity and test re-test, respectively. Statistical analyses consisted of Student's t-tests, chi-square tests, ANOVA.

**Results:** The mean age of adolescents was 17.85±1.3 years (112girls and 116 boys). Perceived threat of obesity and benefits of the preventive behaviors were 84% and 92% respectively among participants. Perceived barriers and self-efficacy were 60% and 77%, respectively. A significant relationship was found between age and perceived threat, benefits and barriers (p<0.01). Significant differences were found between perceived barriers and behaviors related to weight reduction (p<0.05). The results demonstrated that the fitness were important for 87.5% girls and 74.1% boys.

**Discussion and conclusion:** These findings suggests important elements that should consider in developing effective intervention and prevention approaches for curbing the obesity epidemic among adolescents.

**Keywords:** Beliefs, Adolescent, Obesity, Health Belief Model
APPLICATION OF HEALTH BELief MODEL IN ASSESSING MOTHERS ATTITUDES TOWARD VACCINATION - ARDEBIL 2009

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Introduction: Immunization is the most effective and economical means available for progress and development of children’s health. This study aimed to determine the attitude of mothers who had children less than one year old referred to Ardabil health centers based on Health Belief Model components (perceived susceptibility and severity) toward vaccination in 2009.

Materials and Methods: in this cross sectional study 350 mothers with children under one year old who referred to Ardabil health centers and selected with multi-stage sampling method were studied. Instrument For data collection was a questionnaire designed by the researchers based on Health Belief Model components. Collected Data was analyzed with SPSS-15 and Chi square, t-test and ANOVA.

Results: The results showed that the mean age of mothers in the study was 26 years. Ninety percent of the mothers mentioned that the effectiveness of the vaccine was high, and 7% of mothers believed that vaccines are ineffective. Perception of mothers related to «my child is sensitive like other children against diseases” was measured and the majority of mothers (58.3%) opposed to this. The majority of mothers (70.9%) agreed with «vaccine is necessary for poor children».

Discussion and conclusion: Parental attitudes toward vaccination in general are favorable but educating the importance and real complications of vaccines and related information is essential. More efforts should be done to educate parents based on incorrect knowledge and beliefs that some mothers reported in this study.

Keywords: Attitude, Mother, Immunization, HBM, Health center.

VIEW OF MEDICAL STUDENTS TOWARD NUTRITION MASHHAD UNIVERSITY

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Introduction: Student Services Cooperative Company Mashhad University of Medical Sciences with membership of more than 1000 university students towards various activities for students, responsibility for cooking and food distribution services in the university’s predecessor also undertaken and comments to the satisfaction of students and create mechanisms necessary to provide appropriate and effective use of these loved ones and valuable comments and constructive criticism is about cooking and food distribution, this study was necessary to.

Materials and Methods: A descriptive and analytical study with a sample size of 864 people Mashhad University of Medical Sciences, referring to the self-service sampling and stratified systematic random in the final stage, were analyzed by SPSS and test data was the appropriate statistical.

Results: 6.4 percent with education quality cooking and serving food at a good level of -37.5 percent -40.9 percent moderate, and moderate in 15.3 percent of the poor have evaluated the quality of food. 28.1 percent of students than the University desirable than other universities as -9 per cent have no difference, 21.2 percent and 41.7 percent weaker level also have unknowing said. The best lunch in order of priority: Grilled Chicken - Stew Fesenjan and best fish and rice dinner tons Ash reshteh fish - feed and chicken salad was Olvieh. Results also showed 30.4 percent of students at dinner, demanding food with rice and 69.6 percent of the food without rice have chosen.

Conclusion: Students practice cooperative company of Student Services in cooking and food distribution had satisfaction, quality and variety of foods served in the Mashhad University to other universities, and evaluation of desirable diversity calls for serving food at dinner to feed (Foods without rice) have been.

Key words: medical students in Mashhad - the viewpoints of students - nutrition - self service

KNOWLEDGE OF MOTHERS OF HOSPITALIZED CHILDREN ABOUT ACUTE DIARRHEA IN URMIA

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Introduction: Acute diarrhea is the second cause of death among all infectious diseases in children younger than 5 years of age worldwide. It is the main factor of hospitalization in children in developing countries. Mothers play a great role in the reducing the morbidity and mortality of children. The present work was designed to assess knowledge of the mothers about acute diarrhea in their children in urmia, Iran.

Materials and Methods: This was a cross-sectional descriptive study. Data were collected by interviewing the mothers who have child younger than 5 years referred to health clinics in urmia (Sample size=200). The data was analyzed by SPSS software using descriptive statistics and χ².

Results: In this work we considered the correct preparation and ideal use of ORS during disease, continuous breastfeeding, complementary feeding, and using pacifiers. The results indicate that the majority of mothers had moderate level of knowledge. Mother’s knowledge about diarrhea was significantly associated with age group (25-35), high level education, better economic conditions, having more than one child (two
Health Promotion and Health Education Research

INTERNATIONAL ORGANIZATIONS AND THEIR ASSOCIATION WITH HEALTH EDUCATION AND HEALTH PROMOTION

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Introduction: Health and healthcare affairs are beyond individual affairs and are not limited to geographical boundaries. As we know, health and healthcare services are among basic rights of all human beings. On the other hand, considering the increasing growth of science and technology and the necessity of developing our professional abilities, we should know and interact with professional scientific organizations involved in health affairs. In this study, we aim to inform you about the goals, duties, activities, scientific services and researches of international organizations involved in education and promotion of health.

Materials and Methods: Using our professor’s guidelines and searching in scientific sources, we could gain access to websites of International organizations dealing with education and health promotion. So more data about these organizations were extracted, translated and summarized.

Results: In summary, organizations that were closely involved in health education and health promotion were identified as the following list: examination of goals, duties, and activities of these organizations, some relevant scientific subjects were offered that can be used in planning of education and research. Some valid scientific documents like handbooks and articles were considered and it was realized that many of these organizations have useful international scientific publications suitable for publishing articles written by students and specialists in this field. It goes without saying that Introduction of above mentioned organizations will be offered in the form of posters and pamphlets and will be given to the participants in conferences.

Discussion and conclusion: In summary, the main advantage of this work is to motivate health science students and graduates. Since they are informed that there are international organizations that are formally and seriously active in their field of study and they can gain access to this site and find the latest relevant news and information. They will also become more interested in health science and will be proud of themselves when they find themselves as small rings of this big chain.

Keywords: International organizations, Health education, Health promotion

HEALTHCARE PERSUASION IN CARDIOVASCULAR DISEASES: IS THERE A PLACE FOR INFORMATION TECHNOLOGY?

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Introduction: Cardiovascular diseases (CVDs) have been recognized as the major global healthcare concern. CVDs are the leading cause of mortality and morbidity in Iranian population according to the Ministry of Healthcare and Medical Education. There is a body of literature reporting the increasing role of health information technology (HIT) in prevention, treatment and monitoring of different categories of diseases. Giving these into account, we aimed to answer: Where and how can HIT be applied for the promotion of cardiovascular care? And, what lessons can we learn for our healthcare system?

Materials and Methods: To answer our research questions, we performed a systematic literature review. The MESH terms: cardiovascular disease, health Information technology, health promotion, prevention and control, and combinations of these terms were used to search PubMed (NLM) and Embase databases as well as Cochran Library from 1995 to 2010. The title and abstract of the 498 retrieved literatures were evaluated manually with respect to their relevancy to our study objectives. In this stage 69 papers were remained and more refinement of the literature was performed by excluding non-experimental studies. Moreover, the reference lists of the final literature were also evaluated to find more relevant papers.

Results: The comprehensive search of literature resulted in 23 full papers reporting on the impact of applying HIT to promote and/or to improve cardiovascular healthcare. Some important results of analyzing these literatures were: in 87% of the studies HIT was used in projects involving tele-communication (e.g., tele-home care) and/or electronic data registration (e.g., registry systems for CVD). HIT was mainly used for remote monitoring of patients with...
CVD (48%), mostly in outpatient settings (61%), and in order for managing patients with long-term care (e.g., hypertension) (48%). The studies reported direct positive impact (61%) and/or indirect positive impact (43.7%) of HIT applications on care promotion of patients with CVD or people with CVD risk factors. The most commonly used HIT infrastructure was Internet (74%).

Discussion and conclusion: There is more opportunities to promote the quality of cardiovascular care and to manage CVD risk factors using HIT. Continuous and shared cares reap most of the benefits. Considering the need of our healthcare system and with respect to the infrastructures required, it is both necessary and feasible to use the potentiality of information technology in promoting CVD care.

Keywords: Cardiovascular diseases, Health Information Technology, Health promotion, Systematic review.

SHARE OF NATIONS IN 37 INTERNATIONAL PUBLIC HEALTH JOURNALS: AN EQUITY AND DIVERSITY PERSPECTIVE TOWARDS HEALTH RESEARCH CAPACITY BUILDING

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Introduction: This paper contributes to further exploration of inequity in access to health research capacity development by examining the representation of different nations in international public health journals. It also aims to examine the degree of diversity that exists in these journals.

Materials and Methods: This study is a descriptive survey. It was done with objective sampling on 37 ISI health journals on October of 2008.

Results: The number and nationality of people in different editorial positions of the journals were identified. The second analysis involved recalculating the numbers obtained for each nation to the population size of nations per million inhabitants. In order to better illustrate the gap between countries in terms of presence in editorial team of the journals, a ‘public health editor equity gap ratio’ (PHEEGR) was developed.

Discussion and conclusion: Low income countries have occupied none of the leadership positions of chief editor or associate /assistant chief editors and middle income countries at maximum shared less than 5 percent. Although in terms of absolute numbers USA appeared to be the most privileged in gaining all type of positions in these journals, when data were normalized to population size of countries, a different pattern emerged. The PHEEGR gap in access to the different editorial positions between highest to the lowest representation of countries was 16.1 for chief editors, 12.1 for associate editors , 335.1 for editorial boards and 202.1 for associate editorial boards. However, after normalizing the data to the country’s population, the gap increased significantly.

Keywords: International public health journals, Equity, Diversity, Health research

HEALTH PROMOTION THROUGH SOCIAL MARKETING MODEL

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Introduction: Ill health and many social problems are caused by human behavior. Social marketing model tries to penetrate the root cause of individual belief and to change these agents hence improve social health. The goal of this research is to study the effect of social marketing model on health promotion.

Materials & Methods: This research has been prepared using a review of the most important internet sources containing the latest information available in the arena of Health Promotion and Social Marketing.

Results: The result of the study showed that at best, social marketing is a tool and not a solution for health education and health promotion's problems. To communicate health education messages effectively and efficiently, health needs assessment is recommended as a way forward. It is a public health approach and contains a range of flexible methods in the implementation of health education/promotion programs. Treatment of infant diarrheic diseases with promotional use of ORS, promotion of healthy nourishing and nutritional behavior, promotion of nourishment with mother's milk, prevention and control of AIDS disease and...are samples of social marketing model's application in public health arena.

Discussion and conclusion: Social marketing alongside education and law are considered the three main solutions that can change behaviors. In this endeavor with the use of social marketing as a genesis research consisting of audience, market, channel of essential material production analysis, educational interventions and broadcasting information along with design and implementation of effective programs for health promotion including formal and informal educational intervention can change and correct audience behaviors in health promotion.

Keywords: Social Marketing, Health Promotion, Education

COMPARISON OF HEALTH PROMOTING BEHAVIORS BETWEEN HEALTH CARE PROVIDERS AND CONSUMERS – IRAN, 2005

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Introduction: Following the First International Conference
on Health Promotion held in Ottawa, Canada (1986) and producing what is known Ottawa Charter for Health Promotion, also developing WHO projects which have sought to translate health promotion concepts into practical action, our understanding of health promotion strategies have been added greatly. Recent developments in health systems around the world and in our country (IRAN) have given new prominence to health promotion approaches.

Focus on health outcomes reconfirms the priority placed on investment in health promotion. Continually asking the question “where is health created?” links health promotion to health workers so we decided to conduct a study aimed at studying KAP of health care workers to promote their health as propagators of health promotion.

Materials & Methods: This study was a cross sectional survey, 200 health centers (HC) were systematically and randomly selected from East Azerbaijan and Ardebil provinces. In each HC, a general physician (GP) and two other health workers were chosen as care providers. Five health volunteers and five other clients were also chosen as health care consumers. Data were gathered in clients group through interview and in service providers group via self administered questionnaires. Data were analyzed using SPSS software.

Results: 41.5% of care providers and 36.4% of clients were always planning for their family health. 45.9% of care providers and 52.8% of health care consumers considered society and families and the person as the main factor in health promotion plans. There was a statistically significant difference between two groups. 31.4% of care providers and 36% of clients had more than 6 hours physical activity in the last week.

Discussion and conclusion: According to results of this study, health care workers especially GPs should take trainings about their healthy life through regular educational programs. On the other hand, community and families should be involved in health promotion programs which require a close cooperation between health centers and community.

Keywords: Health promotion, Health care providers, Iran, Health care consumers

PREDICTING EXERCISE BEHAVIOR IN COLLEGE STUDENTS: UTILITY OF AN INTEGRATED MODEL OF HEALTH BEHAVIOR BASED ON THE TRANSTHEORETICAL MODEL AND SELF-DETERMINATION THEORY

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Introduction: In light of the complex and dynamic nature of physical activity behavior change, it seems unlikely that a single theoretical approach can truly capture its. In our country, especially among college students, this kind of research has been seriously neglected as a research topic.

The purpose of this study was to evaluate a theoretical model explaining the exercise behavior of Iranian college students based on constructs from the Transtheoretical Model (TTM) and Self-determination Theory (SDT).

Materials & Methods: This study is a cross-sectional study in which 418 first year students of Guilan University of medical sciences completed the valid transtheoretical model, self-determination theory and exercise behavior questionnaire. Data were analyzed by SPSS 16 and LISREL 8.80 using bivariate correlation tests and structural education modeling.

Results: The relationship between exercise behavior and all of the constructs from the TTM and SDT (except external regulation) was statistically significant. Relative autonomy index accounted for 48% of the variance in current exercise behavior. The model accounted for 82% of the variance in current exercise behavior.

Discussion and conclusion: Study findings support the application of an integrated model of health behavior combining constructs from the TTM and SDT to explain the exercise behavior of Iranian college students.

Keywords: Transtheoretical model, Self-determination theory, Exercise behavior, Students

EFFECT OF COMBINATION OF APPROACHES TO GROUP DISCUSSION AND LEARNING SKILLS ON DEVELOPING THE ABILITY OF NURSING MOTHERS IN THE USE OF PROPER BREASTFEEDING TECHNIQUES

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Introduction: Improving mothers and babies’ health and creating a sense of calm in mother and child is the primary goals of breastfeeding. The common methods to train the pregnant and nursing mothers in health centers, had not primarily considered a position to promote the application of proper breastfeeding techniques. This study was performed aiming at determining the effect of combination of approaches to group discussion and learning skills on developing the ability of nursing mothers about using the proper breastfeeding techniques.

Materials and Methods: In this Semi-empirical study, the intervention group consisting of 129 pregnant women referred to Shahid Dastgheib health center of Yasuj who were selected randomly, were trained in 12 groups (the average number of each Group to be 10) and each group during four sessions (each session 5 / 1 hour) by the approach of group discussion and learning skills through showing movie. The educational topics included display of the common breast-feeding techniques, their strengths and weaknesses, showing proper breastfeeding techniques with help of movie and the exercises with doll. The control group including 129 subjects at the
other health center (Shahid Ashrafi of Yasuj) was randomly selected who achieved Breastfeeding training according to the previous common approach. After the intervention, the data regarding the «body condition» techniques, was observed and filed by the researcher through the breastfeeding observation check list and with help of displaying mother with infant mannequins. After the intervention, the data regarding the «body condition», «reactions or responses», «bond between mother and child» and «sucking» were collected and classified at the parturition time in the hospital and by Midwives and then the data were analyzed through spss software.

Results: The results showed that after the intervention and at the parturition time 79 subjects were observed from the group of and 129 participants in the program to investigate the correct approach of breastfeeding techniques. In the control group, the average score for the performance of the «body condition» changed before and after the intervention and demonstrated a statistically significant difference (p <0.000). Comparison of both intervention and control groups in the field of score of the performance of the «body condition» after the intervention, respectively 4.09 and 3.58, «reactions or responses» after the intervention, respectively, 4.53 and 1.05, «bond between mother and child» after the intervention, respectively 2.43 and 0.99 and «sucking» after the intervention, respectively 5.11 and 3.17, shows that among all these, the changes were significant.

Discussion and conclusion: Based on this study, women who undergo pregnant effective educational interventions in the field of breastfeeding are more successful in postpartum breastfeeding than women who have not participated in any interventions.

Keywords: skills training - breastfeeding techniques - pregnant women - a group discussion

SOCIAL MARKETING: A NEW METHOD OF TRAINING, A MECHANISM TO CHANGE BEHAVIOR, AND USE ITS ADVANTAGE IN DESIGNING EDUCATIONAL PROGRAMS

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Introduction: In this article the social marketing comments with attention to key concepts such as exchange theory, customer, competition, decisions based on data, marketing combination as one of the new training methods in the education process were investigated.

Materials and Methods: This qualitative study had a phenomenological method. Managers from the University of Mashhad participated in the training within which 18 of them were targeted sampling. Beginning to collect data and review of literature well known, semi-structured interview was conducted. Data analysis was performed using content analysis.

Results: Seven theme were the main data to extracted:

1 - Social Marketing intends to emphasize on behavioral objectives in education programs 2- to exact identify the audience groups in training 3 -To determine the components associated with behavioral training and environmental components, including marketing combination includes product, price, place and promotion 4 – To determine important channel to transfer Educational messages and Materials audiences from the View audiences. 5- To curriculum development based on the principles and concepts of social marketing.

Discussion and Conclusion: It appears that acquaintance with the social marketing as an important strategy in changing behavior and its use by teachers in training programs may transfer ideas and practices appropriate to the scientific and social values. It was effective to produce educational programs based on audience needs and desires, also increase learner’s motivation to attend training programs and therefore the effectiveness of training, to be followed.

Keywords: Social marketing, Behavior change, Training

CHANGING ATTITUDES; THE BIGGEST PROBLEM IN HEALTH EDUCATION

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Introduction: Attitude is a hypothetical construct that represents an individual's degree of like or dislike for an item. Attitudes are generally positive or negative views of a person, place, thing, or event—this is often referred to as the attitude. Attitudes can be changed through persuasion and we should understand attitude changes as a response to communication. The purpose of this article was to review the psychological research showing correlation between attitudes and behavior and the importance of education for changing attitudes.

Materials and Methods: The paper is organized as a review and editorial article, describing the influence of attitude on behavior and the importance of education for changing it.

Results: Attitudes are judgments. They develop on the ABC model (affect, behavior, and cognition). Most attitudes are the result of either direct experience or observational learning. Unlike personality, attitudes are expected to change as a function of experience. Too many researches have shown the relationship between attitudes and behaviors. Changing the attitude of world citizens is, in many cases, a necessary prerequisite for behavior change. However psychological researches indicate that several factors in addition to attitude influence behavior, but if attitude change is to translate into altered behavior, education must extend beyond attitudes to assist people to act in consistent with their values. Some of the factors that influence whether changed intentions lead to behavior change are likely to be influenced by education directed to attitudes and values.

Discussions and Conclusion: The importance of attitudes
Web 2.0 has crucially changed the way in which people seek for healthcare and access public health services. In spite of problems in public health, the use of Internet for these purposes simply cannot be ignored. Web 2.0 will almost certainly influence health behaviors. Health is a logical area in which individuals want to seek opinions from others and communicate their experiences. In this new era, public health officials need to learn how to more effectively listen to these messages and, simultaneously, develop more lively and engaging messages themselves to communicate with the public.

**Keywords:** Public health, Public Health 2.0, Web 2.0, Health promotion

**DEVELOPMENT AND ADVANCING SHORT COURSES FOR FOREIGN AFFAIRS FOCAL POINT OF HEALTH SYSTEMS: REFUGEE HEALTH CARE**

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**Introduction:** Todays, the life of refugees is in increasing danger and is an important topic for health systems in most of countries. According to United Nations High Commissioner for Refugees (UNHCR), as of January 2007, Iran was among world’s top 10 refugee-hosting countries with 968,000 refugees. It is estimated that about one million Afghan refugees are living in Iran, while only 3-4 percent of them stay in the refugees’ camps and the rest are scattered around the country. Iran’s neighbor countries are facing with wars, terrorism activities and major natural disasters. These entire make Iran exposed with the public.

**Materials and Methods:** A comprehensive literature review has been done and then a curriculum has been developed that provides a comprehensive approach for providing health services for refugees. The three-day course was done in two dates (September and December of 2010). These courses consisted of 14 sessions and were based on interdisciplinary teaching and problem oriented learning. The participants provided by lectures and group works that were mainly to be used in relation to specific case studies. For each session we provided with session material consisting of session briefing,
PowerPoint presentations and knowledge base. The case study was based on a real story situation that covered most parts of the refugees in Iran. The refugees who are staying outside the camps and might host the new arrival unregistered refugees.

Results: About 40 focal points from several provinces of Iran participated in these courses. Session by Session evaluation showed that increasing knowledge and practices of all of participants about refugee health care. Discussion and conclusion: Considering to vulnerability of Iran about facing complex emergencies such as sudden entries of refugees, caring about such courses is essential.

Keywords: Refugee, Complex emergency, Curricula, Health sector

EVALUATING A HEALTH EXHIBITION EFFECTIVENESS: A DESCRIPTIVE STUDY IN YAZD, IRAN-2009

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Introduction: Exhibitions are Communication links between visitors and suppliers of goods and services and the junction point of supply and demand. Their aim is to increase in sailing the goods or services and sometimes established for political or cultural goals. The goal of health centers attendance in exhibitions is promoting the health culture, informing public about health matters, preparing the way for using of available services and introducing health centers capability as well as social marketing for affecting social health related behaviors. This study designed to assess the community participation in health exhibition and the way that they use health products.

Materials & Methods: This was a cross-sectional study performed on Oct 2009 during the establishment of Universal Children’s Day exhibitions. The people, who visit the exhibitions, mostly came along with their children. The instrument for data collection was a self-administered questionnaire which was administered randomly to 100 visitors of health pavilions established in part of exhibitions, and returned by 85of them. The data entered in SPSS Win 11.5 and analyzed using descriptive statistics.

Results: The majority of the visitors were female (66.4%) and in 25-30 age group. About 39% of visitors was house holding and most of them had diploma (38.4%) and license (29.6%) education level. The information resources of visitors about establishment of health exhibition were friends and colleagues (46.9%), propaganda especially on billboard and banner on roads and streets (28.4%), radio (9.8%) and television (8.6%) respectively. About 53.1% of the visitors had a visit to health painting station, 44.4% had been received health package, 37% had participated in health match, 32.1% had profited from nutrition counseling and 18.5% from child bringing up counseling. 18.5% had been watched the animation show (with the subject of no smoking) and 2.5% had heard storytelling’s fable. The visitors stated that health package, painting station and nutrition counseling were the most interesting services of pavilion. Among distributed media in this pavilion, 42% received the pamphlet of child bringing up styles, 40.7% animation CD, 32.1% health magazine and 32.1% received healthy nutrition booklet. 82.7% of visitors expressed their satisfaction of exhibition time table and 71.3% of exhibition place. 86.4% were also satisfied of establishment manner totally.

Discussion and conclusion: Planned attendance of Health centers in exhibitions and other public places, focusing on health needs and priorities of people and intended groups as well as seizing the opportunities for exact education can attracts attention of people to health products and available services and may be the first step for social marketing in health.

Keywords: Exhibition, Effectiveness, Evaluation

HOW EFFECTIVE ARE CURRENT COMMUNITY PARTICIPATION AND HEALTH VOLUNTEERS TO PROMOTE HEALTH: THE VIEWPOINT OF HEALTH CARE PROVIDERS

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Introduction: Community participation was the constant issue of development dialogue since fifty years ago. In twenty past years, gradual changes were found in service providers and health care consumers’ relationship. In Alma - Ata declaration, community participation was presented as a main policy of primary health care. Recent developments in health systems have defined the community as a very important part of health promotion activities. The Main purpose of this research was to study the effectiveness of community participation in health promotion activities from health care providers’ point of view.

Materials and Methods: this was a cross sectional study, 200 health centers were systematic-randomly selected from East Azerbaijan and Ardebil provinces. In each health center one General practitioner (GP) and two other health care providers (HCP) were chosen as study participants. Questionnaires were provided and validated. Data were gathered and analyzed by SPSS 12.

Results: 26% of GPs and 32.6% of HCPs had positive attitude about community participation effects on health promotion activities. for both groups, community was mostly contributed in taking care of patients of family and also for both, education was the most effective way to involve community in health promotion activities.

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According to this study, in this cross-sectional educational intervention the extent of infection in the capitis that 150 cases of them were 4 and 5 grades. After studied, 210 cases (28%) were infected with Pediculus. Results: were analysed through SPss statistical software. After 40 days post-test was carried out. The obtained data group (75 students) educational intervention was done. randomly divided into case – control groups. In the case fifth grades students infected with Pediculus capitis were educational content was planned. Then, 150 fourth and educational program on pediculosis or head louse is an obligate ectoparasite transmitted mainly through physical contact. The prevalence of pediculosis in communities is one of the criteria for individual health and one of the most important diseases among students. The present study was carried out to plan and evaluate the effect of a health education program on pediculosis preventive behaviors among female elementary students in Paveh County.

Materials and Methods: We selected 30 primary schools of Paveh County during 2005 -2006. Totally 750 pupils from all grade 1-5 were selected by multistage, systematic random sampling in rural areas of Paveh County and were examined for lice. In addition, a standard questionnaire recorded information about demographic features of each pupil. After determining the rang of infection to Pediculus Capitis among female elementary students in Paveh County and holding pre-test on the basis of the obtained data, a hygiene program together with educational content was planned. Then, 150 fourth and fifth grades students infected with Pediculus Capitis were randomly divided into case – control groups. In the case group (75 students) educational intervention was done. After 40 days post-test was carried out. The obtained data were analysed through SPss statistical soft ware.

Results: Among 750 female elementary students studied, 210 cases (28%) were infected with Pediculus capitis that 150 cases of them were 4 and 5 grades. After educational intervention the extent of infection in the case decreased to 10.7% but it did not changed in the control. Besides, the statistical paired-t-test revealed a significant difference regarding the effect of hygiene educational program on knowledge, attitude, and hygienic behavior of the students (P<0.005) but in the control group this difference was not significant. The statistical x2 test showed that there was a significant relationship between infection to Pediculus capitis and variables such as school level, number of washing during the week, parents' level of education, having a bath at home, monthly income, family population, and using shared articles- e.g veil, scarf, comb, and towel-(P<0.005).

Discussion and conclusion: The obtained results showed that the health educational program had a positive effect on the decrease of infection to Pediculus capitis among the studied subjects and it is necessary to give health education for families to prevent of pediculosis in this area.

Keywords: Health education, Primary Students, Pediculosis, Paveh

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**EFFECT OF EDUCATION ON PEDICULOSIS PREVENTIVE BEHAVIORS AMONG PRIMARY STUDENTS IN PAVEH COUNTY, IRAN**

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Introduction: Pediculus capitis (Anoplura: Pediculidae) or head louse is an obligate ectoparasite transmitted mainly through physical contact. The prevalence of pediculosis in communities is one of the criteria for individual health and one of the most important diseases among students. The present study was carried out to plan and evaluate the effect of a health education program on pediculosis preventive behaviors among female elementary students in Paveh County.

Materials and Methods: We selected 30 primary schools of Paveh County during 2005 -2006. Totally 750 pupils from all grade 1-5 were selected by multistage, systematic random sampling in rural areas of Paveh County and were examined for lice. In addition, a standard questionnaire recorded information about demographic features of each pupil. After determining the rang of infection to Pediculus Capitis among female elementary students in Paveh County and holding pre-test on the basis of the obtained data, a hygiene program together with educational content was planned. Then, 150 fourth and fifth grades students infected with Pediculus Capitis were randomly divided into case – control groups. In the case group (75 students) educational intervention was done. After 40 days post-test was carried out. The obtained data were analysed through SPss statistical soft ware.

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Discussion and conclusion: The obtained results showed that the health educational program had a positive effect on the decrease of infection to Pediculus capitis among the studied subjects and it is necessary to give health education for families to prevent of pediculosis in this area.

Keywords: Community participation, Health promotion, Health Volunteer, Service provider, Tabriz

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**HEALTH PROMOTING BEHAVIORS AMONG RETIREEs OF EDUCATION DEPARTMENT**

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Introduction: Inattention to general health status, nutrition and periodic examinations for health control by medical equipment can lead to many problems in retirement community. The present study was carried out to determine the health-promotion behaviors in retirees of education department.

Materials and Methods: In this cross-sectional descriptive study in 2009, 259 retirees were randomly selected from Bojnourd city. Content and test-retest methods were used for validity and reliability(r=0.90) of the tool, respectively. The questions of the questionnaire consisted of individual, nutrition screening initiative (NSI) and periodic examination (screening & health check up) that was completed through interview. In order to analyze data, descriptive statistic tests and Chi-Square in Spss V, 16 software were used.

Results: The results showed that the mean age of the study population was 62.6 ± 2.9 years and majority were of the studied samples aged 60-51 years (56/8%), male (63/5%), married (90/3%), diploma (40/2%). They along with his wife and children lived. (57/5%). In terms of housing situation (85/6%) have had personal housing. In doing health promotion behaviors: were not used smoking (60/6%), (74/1%) and alcohol (72/1%) and addictive substances. (57/9%) of their periodic of examinations, by a physician
or person trained and influenza vaccine only (3/9%) was injected into retirement. Their daily diet includes: (58/4%) of liquid oil, (41/7%) low-salt foods, (66%) milk, dairy products, fruits (68%), bread, cereals (63/5%), water and fluids (59/1%), protein (46/7%). In response to questions, compare your current physical health and psychological, with his counterpart staff (46/7%) were similar to those. **Discussion and conclusion:** The results showed that more than half of the samples were encouraged to control their health and nutriment that vaccine injection and periodic examination should be compulsory, for high-risk groups like the retired. Therefore, planning for health Promotion based on the correlated factors, social contribution, improving medical and health services and counseling services in retired population is important to be considered.

**Keywords:** Health promotion behaviors, Retirees, Education Department

**RELATIONSHIPS BETWEEN LOCUS OF CONTROL AND ADHERENCE TO DIABETES REGIMEN**

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**Introduction:** Adequate self-care in diabetes causes quality of life promotion and decreases the number of inpatient cases. The health locus of control theory is used to assess adherence to diabetes regimen in some studies in developed countries. The purpose of this study was to determine the status of diabetes locus of control in a sample of diabetic patients in Iran and investigation of it's relationship to adherence to diabetes regimen.

**Materials and Methods:** This analytical and cross-sectional study was carried out on 120 patients referred to Yazd Diabetes Research Center. The Iranian versions of Diabetes Locus of Control scale and Diabetes Self care Activities scale were used for data collection. Questionnaire was completed with a private interview of subjects. Subjects' demographic variables were also enquired. Validity and reliability of the questionnaire was assessed and approved.

**Results:** Men were more internal locus of control and women were more chance locus of control. The attributions of external locus of control increased by age, while the internal locus of control increased by education level and chance locus of control decreased by education level. A positive association between internal locus of control and adherence to diabetes regimen was found and there was a negative association between chance locus of control and adherence to diabetes regimen.

**Discussion and conclusion:** Adherence to the diabetes regimen is considered the greatest barrier in controlling this disease and preventing its serious chronic complications. In general, subjects displayed internal locus of control, followed by powerful others and chance locus of control. These findings indicate that the participants considered themselves to have the greatest influence on their adherence to diabetes regimen. This is similar to the findings of previous studies in developed countries. Findings suggest that interventions aimed at improving internal locus of control may improve adherence to diabetes regimen but different diabetic patients have different attribution styles and interventional programs to enhance diabetes self-care will be more successful if patient’s locus of control is addressed.

**Keywords:** Locus of Control, Diabetes, Regimen, Iran

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**EFFECTS OF GROWTH MONITORING AND NUTRITION DEVELOPMENT EDUCATION ON CHANGING KNOWLEDGE AND PRACTICE AMONG MOTHERS WITH LESS THAN 3 YEARS OLD CHILD IN ISFAHAN: A COMPARISON OF LECTURE AND SELF LEARNING METHODS**

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**Introduction:** Childhood is the gold time for growth and physical development. Malnutrition is the most cause of many deaths. National assessment of children growth has shown that a large percent of country children are afflicted with growth failure. Growth failure is diagnosed with growth monitoring. Intervention programs in order to reduce children malnutrition and educating mothers are important and may be effective in increase knowledge and behavior.

**Materials and Methods:** The present study was experimental and has been rendered on 100 mothers that had child under 3 years old. Mother selected by randomized sampling (lecture-self learning). Questionnaires involve 45 questions that were validated and then data analyzed by SPSS.

**Results:** Knowledge about growth and stage of nutrition development among children under 3 years old before and after intervention were different. There were no different mean score knowledge about growth between 2 groups and there were difference about nutrition development between 2 groups (p<0.0001). Also findings showed that there are not different score behavior about growth between 2 groups (p<0.598) and there were difference between score mean behavior in 2 groups about nutrition development.

**Discussion and conclusion:** Knowledge and behavior about growth and nutrition development were not suitable. Education is effective and planning for increasing level of knowledge and behavior about growth and nutrition development is necessary.

**Keywords:** Growth monitoring – Education – Child – Nutrition – Nutrition development.
THE HEALTH EFFECTS OF EDUCATION

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Introduction: There is little agreement among economists concerning the mechanisms through which schooling affects health. This paper analyses the relationship between two important aspects of human capital: education and health. The contribution of our paper to the literature is three-folded: some further tests for causality in relationship between education and health are provided; it is tested whether results are affected by scale of reference bias and unobserved heterogeneity; and the results are used to calculate the health returns to education. Education and health are the two most important investments in human capital. Their economic values are founded in the effects they have on productivity: both education and health make individuals more productive. Also, education and health have a considerable impact on individual well-being. However, there is also a mutual relationship between education and health. This relationship is the focus of this paper.

Materials & Methods: Through searching on the internet on library reviews.

Results: Education is an important thing in nowadays society, and health education is an crucial task for governments. Health is not only determined by education, but also by genetic, biological, environmental, and other social factors. Both for women and men we find that higher educated people are in a better health than lower educated people. In particular we can strongly say that higher educated people are sensitive to their health more than illiterates or people with lower literacy.

Discussion and conclusion: A sizeable effect does not necessary imply that it is a worthwhile investment. For this we need to compare the benefit with the costs. Education is assumed to enhance health directly by for example allowing the reasonable use of medical care and indirectly through encouraging healthy habits and making the people aware when deciding about their occupation. Evidence from two national surveys indicated that the indirect dominates the direct effects.

Keywords: Human, Education, Health.

EFFECTIVE HEALTH PROMOTION EVALUATION

Tool A
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Introduction: Evaluation is conducted for responsibility purposes. The benefits of evaluation are more wide-reaching than meeting accountability requirements. Evaluation is essential to assess the effects of a program/strategy which has been performed within the local community. Evaluation enables individuals more systematically to document and promote effective practice. Evaluation is dependent on a many factors, including the program/strategy implementation methods, delivery and budget.

Discussion & Conclusion: There are three types of evaluation: process, impact and outcome. Process evaluation is used to assess the elements of program development and delivery, the quality, appropriateness and reach of the program. This type of evaluation can be used during the whole life of the program, from planning through to the end of delivery. During planning and piloting stages, process evaluation will focus on the quality and appropriateness of the materials and approaches being developed. Impact evaluation is used to measure immediate program effects and, so can be used at the completion of stages of Implementation. Outcome evaluation is used to measure the longer-term effects of programs and is related to judgments about program goal has been achieved. The long-term effects may include reductions in incidence or prevalence of health conditions, changes in mortality, sustained behavior change, or improvements in quality of life, equity or environmental conditions. Health promotion interventions are actions taken to achieve the program objectives. Effective health promotion generally involves a mix of interventions at multiple levels, from the individual through to populations, although single programs may target only some of these levels.

Keywords: Health promotion, Evaluation, Intervention.

ADJUSTMENT AND COMPLETION OF BASNEF MODEL TO PROVIDE A NEW MODEL FOR EDUCATING LARGE POPULATIONS

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Introduction: Although many studies regarding efficacy of educational models have been done but few studies have been performed in the field of making educational models applicable for educating the community in macro level; whereas with increasing population, the addition of new health problems to previous ones and increasing the amount of educational materials, educational models that have been created for educating small populations do not have enough efficacy, so this study was designed with the aim of application of BASNEF model to provide a new model for educating large populations.

Materials and Methods: In this quasi-experimental study, 60 Volunteer Health Workers (VHWS) and 120 households that were resident in endemic areas of Cuetaneous Leishmaniasis (CL) in Yazd in 2008-2009 were selected through census method and multi-stage
This educational program in this quasi-experimental study, a group of undergraduate students in the field of nutrition (n=32), were randomly assigned to experimental (n=14) and control groups (n=18). Control group received their course through traditional lecturing method, while cooperative learning methods was carried out for the experimental group. In the latter group, two students were trained by teachers, and then they should teach the educational model presented in this research which is formed based on BASNEF model. After 3 months of VHWS educating in experimental science field. The average grade of knowledge, attitude, and practice in two of these methods of education increased significantly and were trained by teachers, and then they should teach the average grade of knowledge, attitude, and practice in two education methods. Statically T-test showed significant difference between average grades of knowledge (P=0.03) but there wasn’t any significant difference between average grades of knowledge (P=0.4) and practice (P=0.2) between two education methods.

Discussion and conclusion: Findings of research didn’t show any significant difference between two education methods, and considering that schools are appropriate places for education, it is suggested to use peers group along with adults in order to improve knowledge level of students about AIDS.

Keywords: Reliance on God, Marital satisfaction, Depression, Female practitioners.

COOPERATIVE VERSUS LECTURE METHOD IN STUDENTS LEARNING; IMPLICATIONS FOR MEDICAL AND COMMUNITY HEALTH EDUCATION

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Introduction: Traditional teaching models, which are often based on lecturing, are associated with numerous challenges and constraints. Among them, quickly forgetting the instructional contents, weakness in transferring learning by learners, inadequate training for self-directed learning which is very important and necessary in the era of information explosion. Evidences show that cooperative learning approaches are suitable alternatives and at least useful complementary methods in response to these issues and challenges. This issue is not limited to educational programs running in schools and universities, but also is an issue of worthy consideration in the field of community health education. The purpose of this study was to compare the impacts of two methods of lecturing and cooperative learning on student learning.

Materials and Methods: In this quasi-experimental study, a group of undergraduate students in the field of nutrition (n=32), were randomly assigned to experimental (n=14) and control groups (n=18). Control group received their course through traditional lecturing method, while cooperative learning methods was carried out for the experimental group. In the latter group, two students were trained by teachers, and then they should teach the
course content to their counterparts. A test, running in three phases, before, immediately after and two months after the intervention, was carried out to measure student knowledge. Paired t-test and independent t-test were mainly used for statistical analysis purposes.

Results: The findings, through comparing pre and post test means of scores, showed that learners’ knowledge has been improved significantly in both experimental and comparison groups (p<0.05). Sixty seven percent of the students in the cooperative learning method and 42% of students in the lecture method have learned the lesson content at satisfactory levels. Comparing means of knowledge scores between two groups, measured in the third phase (two months after the intervention) showed a significant difference between the two groups (P<0.05). In other word, among those who have learned satisfactorily in both groups, a greater percentage (91%) of the experimental group and a lower percentage (54%) of the comparison group were able to recall more content of the lesson.

Discussion and conclusion: In spite of some limitations of this study, the results confirmed that cooperative learning method is more effective than lecture on students’ knowledge. In addition, this study suggests more research for evidence-based changes in educational approaches in the fields of medical and community health education programs.

Keywords: Cooperative learning, Lecture, Knowledge, Medical education, Community health education.

INFORMATION THERAPY- TRUTH OR MYTH, ITS FEASIBILITY AND PRACTICABILITY IN IRANIAN LIBRARIES

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Introduction: Information Therapy is described as prescription of evidence based medical information to patients/their caregivers to enable them to have a correct health decision and or change the behavior to improve their health. It is about two decades that information therapy is practiced in progressive countries in which librarians play an active role. This study aims to explore current state of Information Therapy (Ix) services in Iranian health science libraries and its problems and prospects. A structured questionnaire was used to collect data from a sample of hundred librarians which was randomly selected from membership list of Iranian Medical Library Association. Postal mail and email channels were used to distribute questions. However telephonic conversation and fax-mail were also utilized to follow up the correct administration of questionnaires, and wherever it was applicable and necessary the questions personally handed over the librarians. Data were gathered through the same channels and statistical analysis was done using SPSS Copy 15.

Results: A meager percentage of health science libraries in Iran render Information Therapy services. Majority of the responding librarians opined that librarians have an active and direct role to play in information therapy services. A minority of librarians in Iran have a supportive and indirect role in Ix. The study reveals that there is no statistically significant relationship between practice of information therapy service and adequate access to resources as well as number of librarians in the library.

Discussion and conclusion: The study is a significant study in the state-of-the art of health science libraries with regard to providing Information Therapy service in Iran. It brings in the light the feasibility of health literacy and patient empowerment through Information Therapy service in which librarians, physicians and patients’ interrelated collaboration plays a vital role.

Keywords: Information, Therapy, Consumer Health Information, Patient Empowerment, Patient Education, Information Prescription.

INFORMATION THERAPY THROUGH INFORMATION PRESCRIPTION BY CLINICIANS, FEASIBILITY AND APPLICABILITY IN IRAN; STUDY OF CARDIOLOGISTS’ VIEWPOINT

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Introduction: It is evident that health education to public can remarkably boost health care outcomes, health literacy and it reduces medical errors, unnecessary diagnostic tests, doctor-patient visits and hospitalization. One of the considerable innovative approaches towards the bridging the gap between patients and medical knowledge is prescribing evidence based medical information to patients/their care givers at the moment in care, when they are eager to know and understand their health condition more than ever it would be. Evidence indicates that patients increasingly demand and search for health information through the web. Iranian studies also reveal that patients regardless their age, literacy and gender prefer to receive health information at the moment in care. However Iranian patients prefer to receive information prescription from their health provider/doctor rather than other sources like Internet. The objective of this study is to identify do cardiologist wish to prescribe information to their patients/their care givers? If they encounter an ePatient in their clinic handing over a printed copy of internet based information
what do they react. What are the problems and prospects for information therapy/prescription in general and through an information system in particular?

**Materials and Methods:** A survey method was employed to explore cardiologists’ attitude towards information therapy and information prescription to patients. A structured questionnaire was used to collect data from universe of cardiologists who are faculty members of Tabriz University of medicine and working in teaching hospital of Shahid Madani Hospital in Tabriz City and residents of cardiology. Questionnaires personally submitted to cardiologists and residents by the researcher and the data were collected through the same channel. Simple descriptive statistical method was used to analyze data and comparative analysis also utilized to find out the correlation between the data gathered from two groups of faculty members and residents. Statistical analysis was done using SPSS Copy 15.

**Results:** the study indicates opinions and attitudes of faculty members and residents of cardiology department of Tabriz University of Medical sciences (Tabriz City -Iran) about prescription of information to their patients and information therapy. Their opinion about applicability, feasibility, problems and prospects of information therapy in Iran.

**Discussion and conclusion:** to improve health literacy and health care it is essential to prescribe information to patients and refer them to a reliable sources supported by an authentic organization.

**Keywords:** Information Therapy (Ix), Consumer Health Information (CHI), Information Prescription, Cardiology, Patient Empowerment.

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**PSYCHOLOGICAL DISTANCE: A NEW APPROACH TOWARD HEALTH EDUCATION**

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**Introduction:** Psychological distance refers to the distance of a stimulus from the perceiver’s direct experience and includes four dimensions: spatial, temporal, social and hypothetical. When one is exposed to any dimension, this distance is activated automatically to affect perception and action. The importance of psychological distance stems from its effect on construal. People tend to use high level construals when they think of distant stimuli and low level construals when they think of proximal stimuli. The reciprocal relationship between construal level and psychological distance manifests specifically in temporal dimension. Many important consequences of this distancing on evaluation, decision making, confidence, self control and creativity are mediated by the effect of construal. In other words, our decision and evaluation about events depend on the temporal distance of these events. We usually tend to use high level construal for far future events and low level construal for near future events. Consequently, decision about an action is based initially on abstract construals of the option but becomes more focused on concrete event details when the actual choice comes near. From this respect construing activities in high-level terms may foster procrastination of these activities. Disregarding this matter in designing educational packages, especially when the time of adopting a behavior is crucial, may convey unfavorable consequences.

**Discussion and conclusion:** Psychological distance mainly manifested by its temporal dimension must be considered as a basic and essential underlying principal in designing educational packages to accelerate new behavior adoption.

Key words: Temporal distance, Construal level, Educational package.

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**THE EFFECT OF HEALTH EDUCATION BASED ON HBM MODEL ON KNOWLEDGE, ATTITUDE AND PRACTICE OF GORGAN MIDDLE SCHOOL STUDENT ABOUT ANEMIA.**

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**Introduction:** Iron deficiency is a most important cause of anemia, the health belief model (HBM) is used in prevention. The aim of this research was to assess the effect of health education based on HBM model on knowledge, attitude and practice of gorgan middle school students about anemia.

**Materials and Methods:** This is a quasi-experimental study, done on 400 students of grade three in middle school of gorgan city, who were randomly divided into experimental and control groups. Data collection tool was a questionnaire including 51 questions based on health belief model in dimensions of perceived susceptibility, severity, benefits and barriers and cues to action about preventing anemia. After data collection and sorting them, analysis performed by SPSS software and T test and chi- square tests and p-value <0.05 considered as significant.

**Results:** findings showed that the difference between knowledge and attitude about anemia before and after intervention is statistically significant; before intervention the knowledge of 20.1% was weak, 74.1% was moderate and 5.2% was good , after intervention this ranges increased to 13.1%, 74.7% and 12.1% respectively (p-value <0.05). Before intervention attitude was 18.1%, 78.4 % and 12.1% and after intervention it increased to 5.6%, 70.5% and 23.9%, respectively, that is statistically significant. About practice there was not significant deference. The findings showed that the mean score of all dimensions of health belief model in Intervention group (except for perceived benefit and barriers) after
DESIGNING AND IMPLEMENTING EDUCATIONAL PROGRAMS TO PROMOTE PHYSICAL ACTIVITY AMONG STUDENTS: AN APPLICATION OF THE THEORY OF PLANNED BEHAVIOR

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Introduction: Reduction of physical activity among adolescents is one of the most important problems of society. The aim of this research is to determine the effects of educational programs to promote physical activity among school students by using the Theory of Planned Behavior.

Materials and Methods: This quasi-experimental research, conducted by choosing four schools randomly and assigning two schools to the intervention group (n = 150) and two schools to the control group (n = 150), was based on Theory of Planned Behavior. For each group, a result was obtained two months after the training was evaluated. The data were analyzed using SPSS-13.

Results: There was a significant difference in the mean score of attitude (p = 0.003), intention (p = 0.000), subjective norms (p = 0.013), perceived behavioral control (p = 0.001), and increasing physical activity (p = 0.000) among the intervention group after implementing the educational program.

Discussion and Conclusion: Overall results indicated significant differences in the variables of Theory of Planned Behavior and increasing physical activity among students of the intervention group after training. It seems that implementing educational programs to increase physical activity among students will be useful.

Keywords: Physical Activity, Students, Theory of Planned Behavior.

THE STUDY OF PROPAGATIONAL AND EDUCATIONAL MEDIA NEEDS AND DETERMINATION OF PRIORITIES IN HEALTH EDUCATION FIELD FROM THE VIEW OF URBAN AND RURAL AUDIENCES OF LORESTAN PROVINCE IN 1387.

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Introduction: Providing, protection, and promotion of people's health is not meet except by empowering them to control the individual and social destiny and health education is the starting point and the factor of fulfillment of empowerment people and societies. A lot of people's idea about the term of health education is providing some health messages and pamphlets. But this isn't the fact. Health or health education is using effective educational methods for changing the behavioral patterns in society so that people also can promote both their own health and welfare level and they can use health and medical services in the best way.

Materials and Methods: This research is a descriptive study. Research society is men and women above 15 in urban and rural areas in Lorestan province. Sampling is cluster form, 126 clusters of urban and rural (86 urban clusters and 40 rural clusters) and from every cluster 10 people from chosen families were interviewed. This research has been done using questionnaire and interview procedure by well-trained interviewers (health education experts) which in rural areas with the cooperation of Technicians and in urban areas with the cooperation of health volunteers, they went house to house of chosen people (cluster) and filled questionnaire according to the instruction.

Results: Society gives a lot of importance to health and for fulfilling this we need education based on evidence. In this research, the health information of people has been gotten about 51% by TV, about 48% by health and medical personal and less than 2% by the media from the point of view of audiences, the most important educational media were TV, book, pamphlet and radio respectively which lack no much difference in urban and rural areas. From the point of view of audiences the most important factor to choose the media has been the easy availability and their effect on learning.

Discussion and Conclusion: The study shows that from the point of view of audiences, the educational media which have more importance and are more effective on learning and their availability are easier were: TV, book, pamphlet and radio. Generally, the society gives a lot of importance to the health term and people feel that, they need health education for their own and their families and they tend positively to the learning in the field health. Therefore we should do our best in the field of Education and giving enough Information.

Keywords: Educational media, Education, Health, Audience, Communication and Need.
EMPOWERMENT AS A STRATEGY FOR HEALTH PROMOTION

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Introduction: Empowerment is one of the cornerstones of health promotion. Globally, governments have advocated the use of empowerment in their public health policies. During the past few decades, health promotion has increasingly focused on the empowerment of deprived communities and is shifting from a top-down approach to a participatory practice, aimed at helping people to gain control over their lives and health. Previous research shows that this shift is not without problems. Empowerment is a concept that has been much used and discussed for a number of years. However, it is not always explicitly clarified what its central meaning is. The present paper intends to clarify what empowerment means, and relate it to the goals of health promotion.

Materials and Methods: We searched the electronic data bases: pubmed between 1994 and 2010. In this search we use from key word: Empowerment, health promotion. We systematically searched these resources and found 25 articles, selected 10 valid and related articles.

Results: The results of 10 studies suggest that health promotion is not a social movement but a professional and bureaucratic response to the new knowledge challenges of social movements. Analysis identified seven methods frequently used to EMPOWER (acronym): empowerment education and training, media use and advocacy, public education and participation, organizing associations and unions, work training and micro-enterprise, enabling services and support, and rights protection and promotion. Furthermore the analysis revealed eight main dimensions of empowerment: (1) shared decision-making, (2) self-efficacy, (3) social support and social capital, (4) skills and competences, (5) health care utilization, (6) goal setting and attainment, (7) reflexive thought and (8) innovation. The study suggests that an effective empowerment strategy should use activity-related affect, as well as interpersonal and situational influences, as a means of facilitating and enhancing clients' health-promoting behaviors.

Discussion and conclusion: The paper integrates key findings into an empowerment model consisting of five stages: motivation for action, empowerment support, initial individual action, empowerment program, and institutionalization and replication. Implications for policy and health promotion programs are discussed. The involvement of health authorities towards empowerment indicators is a great challenge for funding of evaluations. Community members are to be included in the evaluation process, although it is not always easy to do so in a representative way and empowering approach. The best methods to capture whether empowerment has occurred in a programme are qualitative ones. The paper concludes with innovative qualitative methods encourage further investment in developing new research designs.

Keywords: Empowerment, Health promotion

A SUCCESSFUL EXPERIENCE ON PARTICIPATORY YOUTH HEALTH PROMOTION

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Introduction: More than 36% of the total population of Iran consists of young people aged 15 to 25. Recent studies show that this age group has the highest rate of serious problems related to health problem. Youth participatory studies on youth health priority have been shown that mental health is one of the most important priority in youth health. Aim to assessing the mental needs of youth we conducted a peer group based multidisciplinary study.

Materials & Methods: To conduct a multi disciplinary approach through involving youth for finding their mental needs and their suggestions, a qualitative approach designed based on grounded theory. In order to data collection a semi-structured guide questioner designed and 16 focus group discussions were conducted by trained peers with youth aged 15-25 years.

Results: According to FGDs results, most today’s young people have a comprehensive view of the ideal young and believe that to achieve ideals must be multidimensional also most of youth health needs concern with their interpersonal communications skills particularly with their parents and opposite sex; they had some problems with their parental expectations meet; life skills; stress management; self expression and problem solving process. They were extremely interested in participatory approach in which they involved in assessment and determination of their health problems also in designing health programs.

Discussion and conclusion: Our results showed, empowering the community through capacity building and notice to peer group based interventions to critical enhancing in various aspects of youth health, is the most effective method to needs assessment and community mobilization for better health.

Keywords: Community mobilization, Youth, Health

COMPARING THE GIRLS, MOTHERS AND TEACHERS' PERSPECTIVES TOWARD THE BEST INSTRUCTION OF EDUCATION DURING PUBERTY

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In this descriptive study we

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Introduction: Needs assessment is considered as the first step in planning comprehensive education in various settings. In this paper we aim to illustrate the efficiency of needs assessment approach in exploring the viewpoints of parents, teachers and adolescents towards pubertal health needs in school settings.

Materials and Methods: In this descriptive study we randomly selected two schools. The tools of gathering information contained 3 separate questionnaires that were used to assess the validity and reliability of the Iranian version of the BREQ-2 among university students (N = 418). The reliability and construct validity of the instrument were established using a panel of 12 Iranian experts in the areas of health education, psychology and exercise. Construct validity was assessed via confirmatory factor analysis (CFA) using LISREL 8.80 in a sample of university students (N = 418). The reliability of the BREQ-2 was assessed using 2-week test-retest reliability and Cronbach’s Alpha for internal consistency.

Results: The Iranian version of the BREQ-2 was slightly modified to improve content validity. Primary results of confirmatory factor analysis did not fully support the 5-factor uncorrelated model. After that, the model was modified; the fit indices indicated that the 5-factor correlated model was the best to the data best. The scale was found to have acceptable internal consistency (α > 0.7) and test-retest reliability (intra-class correlation coefficients > 0.80).

Discussion and conclusion: The Iranian BREQ-2 has acceptable validity and reliability in the study sample and may be used in relevant studies to assess behavioural regulation in similar samples.

Keywords: Validity, reliability, BREQ, Self-Determination Theory, Students, Exercise

TESTING THE IRANIAN VERSION OF BEHAVIOURAL REGULATION IN EXERCISE QUESTIONNAIRE-2 (BREQ-2) AMONG UNIVERSITY STUDENTS: A CONFIRMATORY FACTOR ANALYSIS

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Introduction: The Behavioral Regulation in Exercise Questionnaire (BREQ) and the BREQ-2 are the most commonly used measures of behavioral regulation in exercise psychology. The purpose of this study was to assess the validity and reliability of the Iranian version of the BREQ-2 in a sample of university students using confirmatory factor analysis.

Materials and Methods: The BREQ-2 was translated into Persian by relevant experts. After translation, the content and construct validity of the instrument were assessed using the following methods. Content validity was established using a panel of 12 Iranian experts in the areas of health education, psychology and exercise. Construct validity was assessed via confirmatory factor analysis (CFA) using LISREL 8.80 in a sample of university students (N = 418). The reliability of the BREQ-2 was assessed using 2-week test-retest reliability and Cronbach’s Alpha for internal consistency.

Results: The Iranian version of the BREQ-2 was slightly modified to improve content validity. Primary results of confirmatory factor analysis did not fully support the 5-factor uncorrelated model. After that, the model was modified; the fit indices indicated that the 5-factor correlated model was the best to the data best. The scale was found to have acceptable internal consistency (α > 0.7) and test-retest reliability (intra-class correlation coefficients > 0.80).

Discussion and conclusion: The Iranian BREQ-2 has acceptable validity and reliability in the study sample and may be used in relevant studies to assess behavioural regulation in similar samples.

Keywords: Validity, reliability, BREQ, Self-Determination Theory, Students, Exercise

IS THE PREVALENCE OF TYPE 2 DIABETES MELLITUS RELATED TO EDUCATION, MARITAL STATUS AND URBANIZATION IN ISFAHAN, IRAN?

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Introduction: This research determined the prevalence of type 2 diabetes mellitus and its relationship with sociodemographic factors, such as gender, urbanization, education and marital status in the Iranian population.

Materials & Methods: A total of 637 men and women aged above 60 years were recruited using a cluster-stratified sampling method from Isfahan province, center of Iran. Using an interviewer administered questionnaire, demographical data including gender, urbanization, education and marital status collected.

Results: The prevalence of diabetes mellitus (defined as existence of diabetes mellitus symptoms together with fasting blood sugar equal to or more than 126 mg/dL) among men and women, were 18.6 percent and 12.3 percent, respectively (P-value < 0.05). Diabetes mellitus was found to be more prevalent among those who lived in urban areas (20.8%, in comparison to 12.8% for rural areas) (P-value = 0.004). Education and marital
status were not significantly related to diabetes mellitus (P-value >0.05).

Discussion and conclusion: The prevalence of diabetes mellitus is related to some sociodemographical factors within the Iranian population. Thus the preventive strategies should be based on the affective factors. The urbanization of the population with the migration of people from rural to urban areas may account in part for the increasing prevalence of type 2 diabetes mellitus in Iran. Although the prevalence of diabetes mellitus does not differ between men and women in the world, it is more prevalent among women in Iranian population, and this might be due to different lifestyle pattern in Iranian women.

Keywords: Diabetes mellitus, Sociodemographics

VALIDITY AND RELIABILITY OF THE PERSIAN VERSIONS OF WOMAC OSTEOARTHRITIS INDEX AND LEQUESNE ALGOFUNCTIONAL INDEX

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Introduction: The WOMAC Osteoarthritis Index and Lequesne Algofunctional Index have not been translated and validated for Iranian patients with osteoarthritis (OA) of the knee or hip. The aim of this study was to validate the Persian form of WOMAC OA Index and Lequesne Algofunctional Index and to assess their test-retest reliability and convergent validity.

Materials & Methods: Forward/backward translations and consensus panels were conducted to obtain the Persian version of WOMAC OA Index and Lequesne Algofunctional Index. A non-probability sample of 120 patients with knee/hip osteoarthritis (00 hip and 00 knee) was asked to complete the WOMAC OA Index and Lequesne Algofunctional Index as well as Medical Outcomes Study-20 item Short Form (SF-20) questionnaires, a visual analogue scales (VAS) of pain and a form for the characteristics of the patients. Internal consistency (using Cronbach's alpha) and convergent validity (by examining the Pearson's correlation coefficients) were applied to examine psychometric properties of the questionnaires. Moreover, in order to conduct test-retest reliability, 20 randomly selected patients were asked to complete the questionnaires 7-10 days later for the second time.

Results: Cronbach's alpha coefficient and intraclass correlation coefficient (ICC) for the WOMAC OA Index and Algofunctional Index subscales ranged from 0.69 to 0.81 and 0.70 to 0.95, respectively. Significant correlations were found between WOMAC OA Index, Algofunctional Index and SF-20 subscales and VAS for pain.

Discussion and conclusion: According to the results of the study the Persian versions of WOMAC OA Index and Lequesne Algofunctional Index had reasonably good validity, test-retest reliability and convergent validity in patients with knee/hip OA.

Keywords: Osteoarthritis, Health Status, WOMAC Osteoarthritis Index, Lequesne Algofunctional Index, Medical Outcomes Study-20 item Short Form (SF-20)

DESIGNING AN EDUCATIONAL INFORMATION MANAGEMENT SOFTWARE

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Introduction: Wasting a lot of time by the teachers in order to find the related material to teach, necessitates the use of technology to classify the educational information.

Materials and Methods: We used Photoshop, Visual Basic (VB.net), Outo Media Studio, Flash and Swish softwares to design the software.

Results: This software is the first software ever designed to classify educational information. The psychology of color has also been included in its design. The software enables the trainer to attach the needed materials to be taught in the classroom and revise them any time they want to. The software includes many sections; such as a lesson plan, educational movies, powerpoints, pictures, flash (animation), web (to connect to the related sites), extra-reading resources, calling role lists, etc. All these sections indicate that the software is an exhaustive one in classifying the information and materials. Also it focuses on all the available educational facilities for the teaching of many levels and courses. On selecting any of the above mentioned sections, a new page will open which demonstrates the chapters and classified materials which the teacher of the course has defined earlier. On selecting each chapter, the related materials will show up and can be taught in class. Students and other trainees as well, can utilize this software at home to simulate the classroom environment.

Discussion and conclusion: The production of this software in a large number and using it in any educational center will lead to the improvement of the educational system of the country.

Keywords: Software, Education, Teaching

EVALUATING HEALTHY LIFE STYLE EDUCATION TO ADOLESCENTS USING DIRECT METHOD, PARENTS, AND TEACHERS USING CIPP EVALUATION MODEL

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Introduction: The aim of this study was to assess the different methods of healthy life style education to adolescents considering the feasibility and applicability in
school environment from the viewpoints of stakeholders and program administrators using CIPP (Context, Input, Process, Product) model.

Materials & Methods: This field evaluation study was performed using CIPP model. 600 male and female students of intermediate schools in Khomeinishahr were selected and randomly assigned into 4 intervention groups including direct education to students (Group A), education by parents (Group B), education by teachers (Group C), and control group (Group D). Education about healthy nutrition and appropriate physical activity was presented for a month using 3 different methods. The effectiveness of education was evaluated by interview with stakeholders and using questionnaire. Data related to evaluation of interventional program was gathered by a researcher-made checklists adapted from CIPP checklist (Version 2007).

Results: The highest scores in the stages of «contractual agreements» and «program effectiveness» of CIPP checklist belonged to parents group (B) and direct education group (A), respectively. The results of stakeholders’ viewpoints (students, parents, and teachers) about the program showed that the highest score belonged to group A.

Discussion and conclusion: This study recognized «direct education to students » as the most effective and practical method for healthy life style education to adolescents.

Keywords: Education, Life style, Adolescents, Evaluation, CIPP model.

PARTICIPATORY NEEDS ASSESSMENT: AN EFFECTIVE APPROACH FOR NEIGHBORHOOD AND POLICY CHANGES

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Introduction: The aim of this study was to assess the effects of previous needs assessment conducted on 2007 on West Abozar neighborhood changes after three years.

Materials and Methods: This was a cross sectional study that consisting two parts of qualitative and quantitative. In qualitative part, we determined type of interventions and selection criteria, and their effects on local headquarters approaches by using semi structured interviews. Based on qualitative results, a questionnaire was designed for quantitative part. Type and quality of interventions and also their effect on quality of life of people were assessed through quantitative valid and reliable questionnaire. Sample size included 352 households from West Abozar neighborhood of Tehran which selected through random cluster sampling. Data gathered and analyzed using statistical methods.

Results: The results showed that for the identified needs and problems, at least one intervention had been performed. Majority of interventions were conducted on constructive and health issues while in social issues limited interventions were implemented. The qualities of interventions in 29.5% of cases were good, 47% of cases were moderate and 23.5% of cases were weak. Fifty one percent of participants stated that interventions were effective on their quality of life but they expected more interventions. Also local headquarters reported significant changes in their approach to planning and solving the problems.

Discussion and conclusion: Participatory needs assessment and intervention based on the local needs, is an effective approach to fulfill community needs in long term.

Keywords: Needs assessment, Participatory research, Neighborhood Change

MASS MEDIA USE AND COMMUNITY PARTICIPATION IN HEALTH PROMOTION PROGRAMS

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Introduction: Mass media can influence health through health promotion campaigns and social marketing. Public health experts have begun to explore the purposive use of different forms of mass media as a means for changing health attitudes and behaviors. The purpose of this study was to determine the extent to which Tehran citizens are using the mass media for health promotion and their participation.

Materials and Methods: This cross sectional study was a random telephone survey which interviewed approximately 1600 Tehran residents, 18 years of age and older, to assess their television viewing, radio listening, magazine and newspaper reading and Internet use habits. Telephone numbers were selected randomly in 4 geographical area of Tehran city through probability proportional to size sampling method. Data gathered through interview telephone survey by using a structured questionnaire. The content validity and test re-test reliability(α=0.78) of questionnaire were assessed. Data analyzed through descriptive statistics.

Results: Results indicated that people use media widely as a tool for health promotion. Most people watch TV (78.6%) for more than an hour a day, while newspaper and radio usage was 9.8% and 5% respectively. Participation in sharing information was high in 39.9% of residents, and moderate in 34.3%. While 25.8% reported that they are not interested. They perceived barriers to effective participation primarily were lack of time and complexity of topics. The main incentive for cooperation was helping others.

Discussion and conclusion: Our results raised concerns as to whether media particularly TV are used in ways...
that provide respected role models for health promoting behaviors and long term social reinforcement of such behaviors. The quality and feasibility of information and involvement of target audiences should be considered.

Keywords: Mass media, Community, Participation, Health promotion programs

Health Psychology

THE RELATIONSHIP BETWEEN PERSONAL AND SOCIAL FACTORS AND THE PATTERNS AND SYMPTOMS OF MENOPAUSE

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Introduction: Menopause was a natural event and in climacteric period, different degrees of psychosomatic changes occur. To determine a relation between personal, social and reproductive factors with the frequency of mental and physical symptoms of menopause, quality of life of women in climacteric phase, and women’s attitude toward menopause, a cross-sectional study was carried out.

Materials and Methods: In this study, which conducted in the Clinics and Health Centers of Tabriz, in East Province of Azarbayejan, Northwest of Iran from April 2005 to April 2006, 300 women aged 40-60, filled a questionnaire about background details, history of pregnancy, mental and physical symptoms of menopause and women’s attitude toward menopause.

Results: Aching in muscles and joints was the most (68.7%), and increased facial hair was the least (20.5%) common symptoms. According to participants, as age increases, the quality of life worsens (p=0.003). Quality of life in employed persons was better than retired ones and housewives (p=0.001). Quality of life improves by increase in educational level (p<0.05). Increase in number of children lead to worsening of quality of life in menopause (p=0.001). By improving in quality of life, positive attitude toward menopause increased (p=0.005). About 85% of women accepted menopause as a natural process, 43.6% as getting old, and 21.6% as a disease.

Discussion and conclusion: Quality of life worsens with increase in age and number of children, whereas increased educational level and employment improved it. Those with better quality of life have a more positive attitude toward menopause. Despite the fact that most women accepted menopause as a natural process but almost one fifth of them accepted it as a disease.

Keywords: Menopause, Quality of life, Socioeconomic factors

ISLAMIC APPROACH IS APPROPRIATE FOR ACHIEVING STRATEGIES TO MILLENNIUM DEVELOPMENT GOALS 4

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Introduction: Nearly 9 million children under five years old die every year, worldwide. Almost 90% of all child deaths are attributable to neonatal causes, pneumonia, diarrhea, malaria, measles and HIV/AIDS. WHO recommends effective and affordable strategies to decrease mortality rates in Children. These recommendations were remarked comprehensively in Islam religion in old times. Protecting children and mothers health was regarded as an important duty in Islamic religion.

Materials and Methods: This was a descriptive study based on original resources which were included Quran, interpretations, credible islamic quotations, health papers and WHO website. The aim of this study was to assess the documenting conformity of Islamic advices to Millennium Development Goals 4 (reduce child mortality to two third).

Results: The Islamic instructions presented valuable strategies toward reduce child mortality that include breastfeeding, childhood and maternal nutrition, sexual and environmental health. Breastfeeding is the normal way of providing young infants with the nutrients which they need for healthy and normal growth and development. Religion of Islam advised valuable practical points to promote breast feeding e.g. benefits of mother’s breast milk, the duration of suckling, the necessity of counseling about suckling techniques, the importance of breast feeding in premature newborns, rooming in mother and newborn, exclusive breast feeding up to 6 months and considering breast feeding as Jihad in the way of Allah. In Islamic advises, good nutrition was considered as an indisputable right that meets physical needs in Childs. Also Islam emphasized to feed pregnant women adequately for promoting her and child’s health. This religion largely advised to use of bread, grains, vegetables, fruits, meat and dairy in daily dietary regimen. These foods should be appropriate in order to provide sufficient energy, protein and micronutrients to meet a growing child's nutritional needs. Islam banned illicit relations to prevent and control sexual diseases. Moreover it emphasized to marriage to improve sexual health and protect tranquility in society. Islamic advices is offered important key points about protecting environmental health such as water, air and housing, wastewater filtration, sanitary waste disposal.

Discussion & Conclusion: Considering child health in Islamic practice, it is one of the most important predicted human needs by God. All his creatures need to follow his advices to have a peaceful and healthy life. It is a reason to practice the simple and beneficial scientific Islamic advices through an international organization.
or convention for promoting human health, particularly children.

**Keywords:** Millennium Development Goals 4, Islam, child mortality.

**EFFECT OF GROUP COGNITIVE BEHAVIORAL INTERVENTION ON STRESS, ANXIETY AND DEPRESSION IN PATIENTS WITH CORONARY ARTERY DISEASES**

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**Introduction:** Severe stress is significantly involved in heart attack and raises the amount of disease and mortality. In addition, there is evidence that specific treatment for severe stress can have a positive impact on the treatment results. Cardiovascular diseases are one of the most important research subjects study psychological and behavioral factors on health.

**Materials and Methods:** This research is an experimental one with pre test- post test design and experimental and control groups with randomly assigned 36 patients in experimental and control groups. The present aims at testing the effect of eight, 2-hour sessions of stress management training based on cognitive behavioral techniques. Subjects were tested at the beginning and at the end of the project with beck depression inventory primary care, beck anxiety inventory and depression, anxiety, stress scales. The data was analyses via covariance analysis test.

**Results:** Mean scores showed significant differences between the two groups (31.83 in experimental group and 17.94 in control group). Study findings showed that the subjects of experimental group compared with control group showed significantly better scores and test effectiveness.

**Discussion and conclusion:** The subjects of the present study were homogenous in terms of age, education and socio-economic status. The effectiveness of group intervention of cognitive behavioral aspects of stress management on depression, anxiety and stress of cardiovascular patients was significant. Finally the presence of a psychologist within the treatment team of cardiac patients is recommended.

**Keywords:** Cognitive- behavioral intervention - stress management - anxiety - depression -cardiovascular disease

**THE EFFECT OF LOCUS OF CONTROL AND GENDER ON SOCIAL ADJUSTMENT AND INTELLIGENCE IN HIGH SCHOOL STUDENTS**

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**Introduction:** Young population growing rapidly in developing countries and Iran. Teenagers’ adjustment may help them in their future roles in family and job achievement. Adjustment is a psychological process which person challenge with daily life's problems. Locus of control is one of the personality characteristics that associated with adjustment. The aim of this study was to assess the effect of locus of control and Gender on social adjustment and intelligence in high school students.

**Materials and Methods:** 106 high school students of Kermanshah city were selected randomly. Ratter's locus of control scale, California of personality inventory in aspects six include of social norms, social skills, Antisocial interests, family relations, school relations, social relations and demographic questionnaire were used for data collection. Data was analyzed using spss16 software and correlation, ANOVA, Scheffe tests.

**Results:** Students with internal locus of control have higher social adjustment than the students with external locus of control (p<0.01), locus of control have significant of correlation with aspects of social norms (p<0.032), family relations (p<0.00), school relations (p<0.022). Social adjustment of the intelligent girls was higher than the intelligent boys (p<0.035). The interaction between effect of gender and locus of control in social adjustment was not significant.

**Conclusion:** Locus of control is related to psychological symptoms and controlling IQ, locus of control still can be an effective factor on social adjustment. Considering the role of parent’s child rearing style and effect of social institutions in creating of internal locus of control, training parents using appropriate methods such as media and lectures at the schools may lead to improve the situation.

**Keywords:** Internal locus of control, external locus of control, social adjustment, adjustment

**THERELATIONSHIPBETWEENPERSONALITY DISORDER AND SENSITIVITY TO BEAUTY: A STUDY IN COSMETIC SURGERY APPLICANTS**

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**Introduction:** The previous studies have shown that lots of personality disorders influence performing the cosmetic surgery. But the most important personality disorder in these applicants is yet to be determined. The present study has been conducted with the goal of determining the relation between personality disorder and sensitivity to beauty in cosmetic surgery applicants.

**Material and Methods:** 46 applicants of cosmetic surgery were chosen among those came to Sheykhorrayis clinic. The data was collected from the demographical questionnaire, Millon Clincal Multiaxial Inventory II (MCMI-II) and the sensitivity to the beauty of visage and body questionnaire. The descriptive statistical methods (Mean, Standard Deviation- Frequency, and Percentage), Pearson's correlation coefficient and Stepwise Regression were used.

**Results:** The average age of the participants was
25.93±4.97. 36(78.3%) of cosmetic surgery applicants were women and 10(21.7%) were men. Respectively, Antisocial, Avoiding, Bordering, Hysterical, Narcissistic, Paranoid and Schizotypal personality disorders had positive correlations with the sensitivity to the beauty of visage and body of the cosmetic surgery applicants (P<0.05). According to the stepwise regression results of Regression analysis, histrionic personality disorder predicts 31.7% of the variance of sensitivity to the beauty of visage and body of the applicants (F=18.67, df=1, P<0.001).

Discussion and conclusion: According to this preliminary study, histrionic personality disorder is the most important disorder in sensitivity to the beauty of visage and body in the applicants of cosmetic surgery. The results can be used in psychological treatment of the cosmetic surgery applicants.

Keywords: Personality Disorders, Cosmetic surgery, Sensitivity to Beauty

EFFECTS OF PERCEIVED PSYCHOLOGICAL STRESS ON SERUM LIPID CONCENTRATIONS

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Introduction: While there is substantial evidence that psychological stress enhances risk for coronary artery disease, the mechanisms underlying such an influence remain unclear. Several studies have shown that acute stress can raise plasma lipid levels, but there is no study on assessing perceived stress and lipid profiles. Therefore, We examined the relationship between perceived psychological stresses and serum lipid levels in type 2 diabetic patients.

Materials and Methods: Two hundred type 2 diabetic patients, aged 30-75 years old, were assigned to this descriptive study. For measuring perceived stress score, perceived stress questionnaire (PSQ) was filled out for all participants. HDL-c, triglycerides (TG), total cholesterol (TC) were measured enzymatically by colorimetric methods. LDL-c was calculated with Friedwald formula.

Results: The mean triglycerides, total cholesterol, HDL-c and LDL-c concentrations in the patients were 202.20±36.01 mg/dl, 201.20±26.01 mg/dl, 39.20±7.8 mg/dl and 122.01±36.01 mg/dl, respectively. The mean perceived stress score was 12.58±5.26. Significantly positive association was found among negative perceived stress and triglyceride (p=0.01, r=0.53), total cholesterol (p<0.01, r=0.33) levels. However, positive perceived stress inversely related with significantly lower triglyceride levels (p<0.01, r=0.4). There was no significant association among perceived stress and HDL-c and LDL-c concentrations.

Discussion and conclusion: These results suggested that perceived stress level may adversely affect the effects on cardiovascular diseases through increasing serum total cholesterol and triglyceride concentration, and are the first to examine in that lipid status to perceived Stress in Iran. Therefore stressful life may be attributing in diabetes chronic complications so decrease quality of life in this patients.

Keywords: Type 2 diabetes, Lipid profile, Perceived stress

THE RELATIONSHIP BETWEEN PERCEIVED STRESS AND METABOLIC SYNDROME COMPONENTS

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Introduction: The metabolic syndrome (MS) is a major risk factor for chronic diseases. The metabolic syndrome was defined by the presence of three or more of the following components: abdominal obesity, hypertriglyceridemia, low HDL-C, high blood pressure, and high fasting glucose. MS and its components seem to be underlying factors for the development of atherosclerotic cardiovascular disease and type 2 diabetes. Statistics revealed that the prevalence of MS in Iran is higher than the developed countries (30% of adults in Tehran). There are few data available on possible association between perceived stress and metabolic syndrome. The aim of this study was to assess relationship between perceived stress and metabolic syndrome components.

Materials and Methods: This cross-sectional study was carried out in 200 metabolic syndrome subjects aged 30 to 75 years who underwent general health screening. Demographic, anthropometric and perceived stress data were assessed by questionnaire. HDL-C, Triglyceride (TG), fasting blood sugar (FBS) were measured enzymatically by colorimetric methods.

Results: There was significant association between negative perceived stress and TG (r=0.52, P<0.01), waist circumstance (r=0.3, P<0.001), FBS (r=0.4, P<0.01) and diastolic blood pressure (r=0.5, P<0.001). No association was found between HDL-c with negative perceived stress. There was a positive association between total perceived stress and blood pressure (r=0.4, P<0.001), TG (r=0.4, P<0.001) and FBS (r=0.23, P<0.01).

Discussion and conclusion: Perceived stress was strongly associated with several of metabolic syndrome components. Waist circumstance, triglyceride, FBS levels and DBP were the major determinants. This could be attributed to association between stress and eating behaviors.

Keywords: Metabolic syndrome components, Perceived stress

THE RELATIONSHIP BETWEEN PERCEIVED BODY DISSATISFACTION AND PERFECTIONISM WITH UNCONTROLLED EATING BEHAVIORS

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**Introduction:** Uncontrolled eating behaviors present a pervasive problem. The problem is becoming larger as its prevalence is increasing. The uncontrolled eating behaviors involve inability to maintain control over eating when hungry or when food is present. Numerous risk factors for uncontrolled eating behaviors have been proposed, encompassing both environmental factors, such as family environment, as well as personal characteristics, including body dissatisfaction and perfectionism. This research was conducted to study the relationship between Perceived body dissatisfaction and perfectionism with uncontrolled eating behaviors.

**Materials and Methods:** Study was performed on Tabriz university students. The sample consisted of 340 female students, which were randomly selected. The instruments employed in the study were The Almost Perfect Scale-Revised (APS-R), The Body Shape Questionnaire, The Uncontrolled Eating Subscale of The Three-Factor Eating Questionnaire-R21.

**Results:** Hierarchical regression analyses showed that body dissatisfaction, orderliness, and perception of a discrepancy between those standards and actual performance were important predictive factors of uncontrolled eating behaviors. Also it was founded that 13% of the variance of uncontrolled eating behaviors was accounted by linear combination of body dissatisfaction, orderliness, and perception of a discrepancy.

**Discussion and conclusion:** This study has important implications for clinical work. Clinically, these findings reveal the importance of attendance of other factors, such as perfectionism and body dissatisfaction, when working with a population displaying uncontrolled eating behaviors. By working to improve an individual’s positive feelings toward her body and to decrease perfectionism, uncontrolled eating behaviors might also be reduced. Future research should further examine the relationships among these variables in a clinical sample to see if the results would be similar.

**Keywords:** uncontrolled eating behaviors, perceived body dissatisfaction, perfectionism, orderliness, and perception of a discrepancy

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**THE RELATIONSHIP BETWEEN SOCIAL CLASS AND MENTAL HEALTH IN YOUNG PEOPLE IN TEHRAN**

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**Introduction:** people need calm and mental health because in this situation they can grow and access to their high grade goals and behaviors. Focus on roots of mental diseases shows that one of the reasons of them is social class and social status; so the goal of present study was to study the role of social class in mental health.

**Materials and Methods:** data collected using public health and social class determination standard questionnaires. Number of the sample is calculated in accordance with multistage cluster sampling of Tehran’s youth and was estimated 385 people.

**Results:** results showed that there is a meaningful relationship between economical social class and people mental health. Furthermore, social class variables (job, income and education) and mental health have direct relation; it means that increasing occupation status, education and income cause to improve mental health.

**Discussion and conclusion:** there may be relationships between social class and mental health.

**Keywords:** Social class, Mental health, Public health, Youth

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**RELIGIOUS BELIEFS AND RISKY BEHAVIORS**

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**Introduction:** The aim of this paper was to evaluate the role of religious beliefs in risky behaviors.

**Materials and Methods:** Reviewing article using library and internet studies.

**Results:** Researches showed that having religious beliefs causes decrease in psychological stress and prevention of risk behaviors such as smoking and drinking alcohol. Results showed that the correlation between religious beliefs and drug abuse was negative and statistically significant(r=-0.14 , p<0.01). In addition, religious beliefs have a significant effect in recovery from drug abuse(p<0.05, p<0.001). Statistics presented in the field of social corruption indicated that incidence of crime decreased about 40% in Muharram. The results of the other studies showed that the correlation between religious orientation in students with anxiety and depression was negative and statistically significant.

**Discussion and conclusion:** More attention to strengthening religious beliefs in schools and colleges, training people particularly the youth in terms of religious beliefs, participation in religious ceremony, informing people about the dangers of smoking, obesity and stress are important aspects that may reduce risky behaviors among people.

**Keywords:** Religious beliefs, Risk behaviors, Health

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**MARITAL SATISFACTION IN INFERTILE MEN AND ITS RELEVANT FACTORS**

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**Introduction:** Infertile couples might experience psychological distress and suffer from impaired marital satisfaction. This study aimed to examine marital
satisfaction in infertile men receiving infertile treatment. To evaluate the hypothesis that infertility may result in a decrease in marital satisfaction. The burden of infertility is physical, psychological, emotional, and financial.

Materials & Methods: This was a descriptive study in which 717 infertile men with different infertility causes participated in. Data gathered by Index of Marital Satisfaction Scale (IMS), which is a self-administered valid and reliable questionnaire and also with demographic questionnaire. Data were analyzed using one-way-ANOVA and Independent T-Test.

Results: Age range was 21-53 years and duration of infertility was 1-20 years. The mean score of marital satisfaction in employer and free-work infertile men was (85±15) but in worker and workless infertile men were 74±17 and 77±18, respectively. The mean score of marital satisfaction in low income was significantly different between two groups (p<0.05). This research indicated significant difference among the two above groups. The mean of marital satisfaction in men with low income (lower than 3000000 rials) was 82±15 and those of moderate income (3000000-6000000 rials) and high income were 85±14. We found significant difference between the means. The results determined significant relationship between marital satisfaction and job, income, emotional pressure, marriage duration.

Discussion and conclusion: paying attention to psychological needs of these patients and treating them properly are of great importance for their marital satisfaction and will improve quality of their lives.

Keywords: Infertility, Marital satisfaction, Effective factors.

THE RELATIONSHIP BETWEEN PARENTING STYLES AND NEGATIVE-POSITIVE PERFECTIONISM AMONG ADOLESCENTS

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Introduction: Perfectionism is perfectionist tendencies, striving for high standards and critical assessment of oneself and others behaviors. Positive and negative perfectionisms were considered as normal and neurotic dimensions of perfectionism. Previous research and many theories were addressed perfectionism as product of parent-child relationships. Since parenting styles and parent-child relationship have important in normal and abnormal behaviors, the aim of this study was to examine the relationship between the parental styles and negative-positive perfectionism.

Materials and Methods: In this study, 180 senior high school students of Marand city (East Azerbaijan province, Iran) were selected through randomized cluster sampling. The parents of students were asked to complete Baumrind's parenting scale, and perfectionism scale was completed by adolescents. Data were analyzed by Pearson's correlation and multiple regression.

Results: The results showed that authoritative parenting style had significant positive relationship with positive perfectionism and negative relationship with negative perfectionism, but authoritarian and permissive parenting styles, both, had negative relationship with positive perfectionism and positive relationship with negative perfectionism. The combination of parental styles predicted dimensions of Perfectionism. Regression analysis also revealed that the authoritative parenting style had high positive contribution in the prediction of positive perfectionism and negative perfectionism.

Discussion and conclusion: Based on the results of this research, the role of parenting styles on conformation of perfectionism dimensions was confirmed. And these indicated that authoritative parenting style through proper control, emotional support and optimal independency can be effective for elevation of positive perfectionism and diminish in negative perfectionism. Authoritarian and permissive parenting styles, respectively, through extreme and low control preclude positive perfectionism and increase negative perfectionism.

Keywords: Parenting styles, Negative perfectionism, Positive perfectionism, Adolescence

STUDY OF APPLYING COPING STYLE AND ITS RELATED FACTORS AMONG CARDIAC PATIENTS AFTER CORONARY ARTERY BYPASS SURGERY

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Introduction: Coronary Artery Disease is one of the most important chronic diseases which needs patients to be educated through different coping styles. These diseases involve many problems for patients and cost a lot of the society. The aim of this study was to determine the applying coping styles and factors related to it among cardiac patients after coronary artery bypass surgery and the relationship between coping style with some demographic variables.

Materials and Methods: This was a descriptive-cross sectional study. In this study 110 heart patients participated after coronary artery bypass grafting referring to Heshmat hospital in Rasht that were selected non randomly and through a goal-oriented or purposive sampling method. The Data was collected through an interview, patients self report and referring to their records. Data collecting tool was a questionnaire in two parts, demographic characteristics and standard jawloviec questionnaire. Data were analyzed by using SPSS version 16 software and descriptive and analytical statistical methods ,significant level p≤ 0/05.
Results: Findings showed that the mean and SD of problem coping style was 36.28±9.38 and emotional coping style was 78.69±18.27. There was a statistically significant relationship between problem coping style and some variables such as: age( p= 0.009), literacy level( p= 0.017), and it has no significant relationship with other variables using this research. Also, there was a significant relationship between emotional coping style and some variables such as: age( p= 0.012), literacy level( p= 0.002), occupation( p= 0.004), income level( p= 0.015), duration of infection ( p= 0.018), and it has no significant relationship with other variables using this research.

Discussion and conclusion: It was concluded that the patients should receive trainings about coping styles.

Keywords: Coping style, Cardiac patients, Coronary Artery bypass surgery

SLEEP QUALITY, SLEEPINESS AND GENERAL HEALTH STATUS OF ISFAHAN UNIVERSITY OF MEDICAL SCIENCES STUDENTS, 2010

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Introduction: Sleep problems express themselves in daily living, causing difficulties in cognitive performance (learning, concentration and memory problems), mood swings and emotional distress, poor performance on the job and during leisure activities and creating a lack of general physical and mental well-being. The purpose of this study was to determine the Sleep quality, Sleepiness and General health status of Isfahan University of Medical Sciences Students, in 2010.

Materials and Methods: This cross-sectional descriptive study comprised a sample of 500 students (M=203, F=297) from five Schools of Isfahan University of Medical Sciences. Participants completed a self-reported questionnaire that included the Pittsburgh Sleep Quality Index (PSQI), Epworth sleepiness scale (ESS), and the General Health Questionnaire (GHQ-28). A PSQI global score greater than 5 indicated insomnia.

Results: Of the 500 participating students (mean age was 21.6 years), mean sleep duration was about 5.7 h and weekends 6.8 h. As defined by the PSQI, 54% of females and 50% of males in this sample were poor sleep quality. Taking 10 as ESS cut-off point, it was found that 16% of the students had a high level of sleepiness. There was a significant correlation between quality of sleep and General Health and sleepiness (P<0.001). The GHQ-28, showed of 500 students, 244 (48.8%) had poor mental health a score>23, the cutoff score. A significant association, however, was found between poor mental health and marital status and household size. (P<0.05). The most frequent symptoms were social dysfunction (79%), anxiety/ insomnia (46%), somatic symptoms (28.2%) and severe depression (26.9%) Using a cut off point of >6 for the GHQ-28 score.

Discussion and conclusion: These results suggest that insomnia is very common among Isfahan college students and is associated with other psychosocial factors. This study provides preliminary data on sleep quality and risk factors for insomnia, which may be used to guide sleep hygiene promotion and intervention among college students.

Keywords: Sleep quality, Sleepiness, General health

THE RELATIONSHIP BETWEEN PERSONALITY TRAITS AND GENERAL HEALTH AMONG STUDENTS IN YAZD UNIVERSITY OF MEDICAL SCIENCE, IRAN, 2010

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Introduction: Personality traits are a main factor in determining behavior and general health of university students. The purpose of this study was to examine the relationship between personality traits and general health in Yazd university of medical science dormitory students.

Materials and Methods: This cross-sectional study conducted on 212 dormitory students in Yazd University of Medical Science. Sampling method was quota sampling. Instruments of data collection were questionnaires Eysenck Personality Inventory (EPI) that is used to measure neuroticism and extraversion; and also general health questionnaire 28 (GHQ 28) that is standardized self report questionnaire used to screen for psychological distress and common mental disorders. Data were analyzed through using SPSS ver 16 and statistical tests of T. test, Chi-square, One Way Anova and Pearson correlation coefficients and linear regression.

Results: Mean age of the sample was 22.19 ±2.85 years. Mean score of general health, neuroticism and extraversion were 22.19 ±2.85(total score = 84), 11.33 ±5.22(total score = 24) and 14.15 ±3.54 (total score = 24), respectively. A significant association were seen between general health and demographic variables that including age (p=0.03) and situation of social economical (p=0.04) and between extraversion and gender (p=0.03). A significant correlation was seen been between general health and neuroticism(r = - 0.59, p=0.000). But no correlation was seen between general health and extraversion. Regression analysis indicated that 0.29 of variance in general health was predicted by neuroticism.

Discussion and conclusion: According to results it is suggested that a educational program based on models of health education should be held for students.

Keywords: GHQ28, Eysenck Personality Inventory, medical science students
PREDICTION OF ANXIETY AND DEPRESSION BASED ON A HISTORY OF CHILD ABUSE

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Introduction: Child abuse is a problem millions of children and families that occur in any society. This problem affects on children of any race, color, religion, social class was impressive and all ages (prenatal, infancy, childhood, adolescence, and ...) is to contain. Child abuse includes any physical damage, psychological, sexual, Neglect behaviors or violent with someone under 18 by a person responsible for his welfare is responsible, is, so that the child’s health and comfort damaged or fall risk. The purpose of this study was predicted anxiety and depression in adults who were childhood victims of child abuse.

Materials and Methods: Total 294 samples for selected patients (164 males and 130 females) from Azad University students using randomly selected. Measuring variables of Goldberg general health questionnaire (subscales anxiety) and Beck Depression Inventory was used. For data analysis Pearson correlation test and simultaneously multiple regressions were used.

Results: Data analyzed showed that there is significant relationship between history of physical, emotional abuse and neglect with depression, between sexual abuse and depression, there is no significant relationship. There is significant relationship between physical, emotional abuse and neglect with anxiety, while, between sexual child abuse with anxiety, there is no significant relationship. history of child abuse the ability to predict anxiety and depression is.

Discussion and conclusion: The results showed that adults with a history of physical, emotional abuse and neglect them have experienced a lot of anxiety. Another result showed that adults with a history of physical, emotional abuse and neglect that has high rates of depression.

Keywords: anxiety, depression, child abuse

LIFE SKILLS AMONGST ELDERLY PEOPLE: CONFIDENCE AND POSITIVE SELF CONCEPT

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Introduction: Due to world’s scientific advance particularly public health and medicine, the number of elderly people is increasing. World Health Organization has predicted an increase in elderly population to 1.2 billion in 2050, and consequently predicting ageing population in Iran to 8.5 million which indicates young people every day toward ageing is closer. Implications for consequences of this event in future years should remedy this problem today and the next generation to accept and deal with the situation reasonably prepared. This study was carried out to assess skills of confidence and positive self concept in older urban and rural which are the important aspects of quality of life.

Materials and Methods: This study was a cross-sectional study. A sample of 96 urban and rural aged 55 and above was chosen from Tabriz consisting 27 percent of urban and 73 percent of rural elderly population. In order to collect data and determine confidence and other variables, trained interviewers completed a questionnaire including close-ended questions and then analyzed by SPSS.

Results: Thirty-seven percent were in the age group of 55-60 years, 52 percent in the age group of 66-75 years and 11 percent in the age group of 76-85 years. The results showed that the level of confidence and positive self concept between urban and rural elderly were different (p ≤0.05). There were no differences between confidence and positive self concept with sex, age groups, having children, education level, marital status, occupation and living conditions (p ≥0.05).

Discussion and conclusion: Rural and urban settings impact confidence of elderly people. Participants from rural areas reported more positive concept and self confidence than the urban elderly. This would be due to different definitions and concepts of ageing amongst elderly people. Elderly people in rural are experiencing more comfortable life, taking the life easy and reducing their expectations and demands. Furthermore, their successes in their daily affairs improve feeling of prosperity, and therefore increase their confidence.

Keywords: Elderly people, Rural and Urban, self confidence, positive self concept

THE RELATIONSHIP BETWEEN PHYSICAL ACTIVITY, SELF-ESTEEM AND HEALTH LOCUS OF CONTROL AMONG UNIVERSITY STUDENTS: A CASE-CONTROL STUDY

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Introduction: It is useful to use different psychology theories in order to analyze health behavior, because of the complexities of human behaviors. The scientific studies about the effect of self-esteem and health locus of control (HLC) in providing health behaviors have caused that these concepts provided a pattern to intervene in sanitary and psychological subjects. This study survey the physical activities relationship to self-esteem and health locus of control among athlete and non-athlete students at Gonabad University of medical sciences in 1385.

Materials and Methods: A case-control study was
used. 148 university students recruited into study that 74 athlete students allocated for case group and 74 non-athlete students allocated for control group. The data were collected by demographic questionnaire, MHLC-Form B and Rosenberg self-esteem scales. Collected data were analyzed by SPSS-13 software.

**Results:** The findings showed that there is a significant relationship between athlete and non-athlete groups’ between chance HLC and self-esteem. Also, intra groups, it was not significant differences for health control components but it was significant differences for self-esteem. This indicates relationship between self-esteem and physical activities.

**Discussion and conclusion:** Physical activity affects not only physical health but also mental aspects of human. So authorities should provide facilities and motivations to study internal and intellectual aspects in order to adapt mental and physical activities. Human has found his existence in harmonizing his mental and physical with time transitions and creation system. Hence human will deserve a healthy life if there is a harmony between these two remarkable events.

**Keywords:** Physical Activity, Health Locus of Control, Self-Esteem, Student

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**EFFECTS OF COURAGEOUSNESS EDUCATION ON ASSERTIVENESS OF HIGH SCHOOL ADOLESCENTS BASED ON PRECEDE MODEL IN GONABAD**

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**Introduction:** Assertiveness is one of the social skills used vastly in everyday interactions and is regarded as one of the factors associated with the skill “to say no” against hazardous behaviours including cigarette smoking, addiction, sexual contact…etc. This study was conducted with the aim of determining the effects of courageousness education on assertiveness of high school adolescents based on PRECEDE model in Gonabad.

**Materials and Methods:** This study was semi experimental and conducted in the school year 2008-2009. In this study 70 students participated from second grade high school using multistage random cluster. Data gathering tools was a questionnaire consisting of six parts (according to the PRECEDE Model). Educational intervention based on this model was performed after the pre-test, and post-test was conducted one month after intervention. These data were analyzed by the statistical software spss.

**Results:** Knowledge, attitude and assertiveness before intervention in the target group was moderate and the skill of saying no was lower than average. Paired T test showed that the mean score of Knowledge, attitude, skill and assertiveness after the educational intervention show a significant increase (P<0.001). Similarly, independent T test showed that there was a significant difference in the level of assertiveness in both sexes, as this level was higher in male students, but in other factors under study, no significant difference was shown in the two sexes.

**Discussion and conclusion:** These results showed that the teaching of courageousness according to PRECEDE Model has been effective on level of knowledge, attitude and has also had an effect on reinforcing and enabling factors as well as assertiveness and can be employed alongside of other methods of assertiveness.

**Keywords:** Courageousness; PRECEDE Model; Assertiveness; students; Gonabad

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**NURSE’S SPIRITUALITY, SPIRITUAL CARE, PATIENT SATISFACTION**

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**Introduction:** The quality of care presentation is the most important and major concern in care centers, and target search in work for nurses may be effective on the quality of patients care. Yet, there are a few studies about the effect of nurses’ spirituality on the degree of patient satisfaction. Accordingly, the objective of present research was to determine the relationship between nursing staff spirituality and patient satisfaction from the cares.

**Materials and Methods:** This was a correlation – descriptive study. 100 nurses and 100 patients hospitalized in selected hospitals of Ardabil Medical Sciences were randomly selected. Data was collected through the spiritual wellbeing scale (SWBS) and patient satisfaction instruments from nursing care.

**Results:** The findings showed that mean and standard deviation of satisfaction degree in hospitalized patients participating in this research was 157.2±19.5 that the lowest rate was 89 and the highest is 180. Mean and standard deviation of spiritual wellbeing of nurses participated in this study was 101.3 ±9.3 and the lowest rate was 78 and the highest rate was 120. Mean ± SD in religious wellbeing was 6.1 ± 53 and the lowest and the highest rate was 27 and 60 respectively. Existential wellbeing scale has a mean and standard deviation with 48.3±5.2 that the lowest rate was 35 and the highest was 60 and also, there was a significant relationship between the levels of nurses’ spirituality and the degree of patients’ satisfaction in selected hospitals of Ardebil University of Medical Sciences (p <0.05).

**Discussion and Conclusion:** The assessment of nurses’ spiritual well being indicated that most nurses studied, had high and positive spiritual wellbeing scores, but they had received no professional training to provide the spiritual assistance to the patient. Considering that patient satisfaction is concerned to this aspect of care more than anything, so it can be increased the patients’ satisfaction at care centers through using the professional training in nursing, in order to develop the spiritual assistance to patients and to evaluate their spiritual needs.
The relationship between the significant features of cognitive, competence, effectiveness, choice, confidence and motivation of paramedical and health college teachers in Mashhad in 1388

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Introduction: The aim of this study was to assess the relationship between the significant features of cognitive, competence, effectiveness, choice, confidence and motivation of paramedical and health college teachers in Mashhad in 1388.

Materials and Methods: This study was a cross-sectional study. Population study of 30 faculty members and allied Health School of Mashhad in 1388 who were selected through census sampling method. Data collection tool was a questionnaire including of two parts: The first part related to the demographic characteristics and the second part related to the motivational in the form of empowerment areas and consisted of 48 questions on Likert scale. The standardization of the questionnaire through the approval and content validity by expert persons, and its reliability through the Test-Retest in a pilot study (Pilot study) was determined. Data analyzed using software SPSS, and statistical tests such as chi-square test, ANOVA and other tests were used.

Results: The results showed that 60% who felt their jobs meaningful, were more motivated to perform job tasks. 40% who felt their competence, were desire more to perform tasks. 70% who feel confident in their work were more motivated to do the job tasks.

Discussion and Conclusion: Although empowering beliefs and feelings about the job and organization employees were related together, organizational environment factors play a vital role in persons beliefs.

Keywords: Components of empowerment, Motivation, Teachers

Fear and anxiety of patients before angiography in Shahid Madani hospital in Tabriz, 2010

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Introduction: Angiography is the most common diagnostic procedure for assessing coronary artery disease (CAD), so evaluating of patients' response is very important. If fear and anxiety of patients are recognized truly, removing of them will be easier and patients will make more tranquility of mind. Therefore this study was conducted to find out the degree of fear and anxiety of patients with CAD in Shahid Madani hospital in 1389.

Materials and Methods: This research was a descriptive study. The samples of study were 70 patients with CAD, who were waiting for their first time angiography. They were selected by convenience sampling in medical and surgical heart wards of Shahid Madani hospital in Tabriz in 2010. A questionnaire was used for data collection and it was including questions about demographic risk factor for stroke. The main objective of this study was to determine the association between education and prevalence, knowledge and control of hypertension among Iranian northern adult.

Discussion and Conclusion: Although empowering beliefs and feelings about the job and organization employees were related together, organizational environment factors play a vital role in persons beliefs.

Keywords: Components of empowerment, Motivation, Teachers
data, Coronary Arteriography Fear Scale and Spiel Berger's Scale. Content method and cronbach coefficient Alpha were applied for validity and reliability of the questionnaire respectively. The data were analyzed by Spss software (version 14), descriptive and inferential statistics such as Mann-Whitney, Kruskal-Wallis and Spearman coefficient.

**Results:** Findings indicated that %67 of patients had obvious anxiety, %83.8 of them had hidden anxiety, and %76.6 of them had fear. A statistically significant correlation was found between fear and anxiety of patients (p<0.05). Also there were statistically significant correlation among some demographic characteristic and anxiety and fear of patients (p<0.05).

**Discussion and conclusion:** In general, the degree of anxiety and fear of patients were considerable, therefore the use of consultation and educational methods for patients before angiography are necessary.

**Keywords:** Fear, Anxiety, Angiography

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**THE RELATIONSHIP BETWEEN PARENTING AND IDENTITY STYLES AMONG ADOLESCENTS**

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**Introduction:** Parenting styles are important factors in development of children’s personality, moral properties and identity. Each of parenting styles may have a role in child’s personality and identity formation. The purpose of present study was to determine the relationship between parenting styles and identity styles among adolescents.

**Materials and Methods:** The sample of research consisted of 200 high school students in Marand which selected through cluster random sampling. Utilized instruments included Baumrind’s parenting style (parent version) and Burzynski’s identity styles. Data were analyzed by pearson’s correlation coefficient and multiple regression analysis.

**Results:** The results revealed that there was positive relationship between authoritative parenting style and informational identity, identity commitment, but negative relationship with avoidant confused identity. Also there was positive relationship between authoritarian, permissive parenting style and avoidant confused identity, but negative relationship with identity commitment, informational identity and normative identity. The regression analysis revealed that authoritative and permissive parenting style could predict identity commitment and informational identity, significantly. Authoritarian and permissive parenting style could significantly predict normative identity as well. No parenting style could separately predict avoidant confused style.

**Discussion and conclusion:** It is indicated that adolescents whose parents were of authoritative child – rearing style did have identity commitment, informational and normative identity, whereas adolescents with parents having authoritarian and permissive parenting style did have avoidant – confused identity styles. In explaining the results we can say that Parenting style is a very important factor in the development and consolidation of moral character and personality and identity of children. Each of the specific educational practices had basic role in shaping of personality and identity. As if, child growing in friendly and warm family environment was positively associated with a healthy mental development during the adolescence.

**Keywords:** Parenting style, Identity styles, Authoritative, Authoritarian, Permissive

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**GLOBAL SCIENTIFIC ATTITUDES TOWARDS HEALTH PSYCHOLOGY**

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**Introduction:** The main concern of health psychology is to focus on how the biological, psychological and social issues influence the health and illness in our body. Study about the relation between the body health and the food we eat has become an interesting subject. The world wide Psychological researches prove that there is a strong relationship between the mind and body’s health. The mental disorder causes the physical health decline and vice versa; therefore learning about the linkage between mental health and physical health is vital for everybody.

**Materials and Methods:** The main purpose of current study was to illustrate the global trend of health psychology researches during a five years period (2006-2010). All documents indexed as a main heading of health psychology in Medline during a period of five years was extracted and analyzed.

**Results:** Findings showed that a total number of 310 scientific documents in the field of health psychology had been indexed in Medline during the period of study. The American scientists contributing 74% of total publication were the most productive authors in the world followed by scientists from UK (13%), Canada (3%) and New Zealand (3%). The most dominant language of publication was English. Journal of Behavioral healthcare with publishing 26% of total publications in the field of health psychology was the most prolific journal followed by Journal of health psychology (13%), Annals of behavioral medicine (6%) and Primary care (5%).it is considerable that 97% of total publication was appeared in the journals from USA and UK.

**Discussion and conclusion:** Analysis of data indicated that the scientific activities in the field of health psychology are fairly new in the world of medicine and nutrition so that the majority of researches (90%) in the field have been done only by USA and UK. Only 10% of researches in the field of health psychology have been done by other countries worldwide. As a conclusion, education and training of health psychology and related investigations are required global endeavors.
**RELATIONSHIP OF EMOTIONAL INTELLIGENCE WITH GENERAL HEALTH OF PREGNANT WOMEN IN ALZAHRA HOSPITAL**

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Introduction: Emotional intelligence shows recognition and evaluation capability and excitement expression in right and appropriate way. Emotional intelligence is related with one’s mental health in regular and critical situations and those people with high emotional intelligence have better ability in coping with new and stressful conditions and environmental pressures. Based on evidence, people with high emotional intelligence are successful in any life field. This study was conducted considering that pregnancy is a special period in women’s life with high significance of mother and fetus health evaluation and improving effective health factors in this period.

Materials and Methods: This descriptive- analytical research was carried out among pregnant women referring to Alzahra hospital. 150 persons were randomly. Then, personal, Goldberg general health, and Bor-On Emotional Intelligence questionnaires were filled out, scored and finally, statistically analyzed.

Results: To evaluate the relationship between emotional intelligence and general health, first correlation coefficient between general health and its factors with emotional intelligence and its factors were calculated (r=0.71, generally). Results of simple regression also showed that emotional intelligence is a good predictor for general health (%49). Details relating to emotional intelligence and general health factors will be presented elsewhere.

Discussion and conclusion: The results showed that emotional intelligence predicts general health changes; therefore, emotional intelligence has relationship with health as a psychological factor. Those people, who regard feelings of themselves and other people and also understand them and reconstruct their own moral state, can reduce the effect of stress and face them, have high physical and mental health. Emotional intelligence factors can be improved by means of education. Therefore, by holding individual and group educational sessions, self control skills of people can be improved.

Keywords: Emotional Intelligence

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**FAMILY-CENTERED EMPOWERMENT MODEL AND ELDERLY SELF EFFICACY**

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Introduction: Elderly is a sensitive period of human life, therefore attention to needs and problems in this period is one of the social requisites. Considering special needs of this time, attention to family-centered empowerment and elderly self efficacy is an important neglected issue. This study was performed to assess the effect of family centered empowerment model on the self efficacy in Shahrekord elderly people.

Materials and Methods: This quasi-experimental study was conducted on aged adults in 2008 in Shahrekord. In this study 60 elderly persons were randomly (convenience Sampling) divided into two groups; experimental (30) and control (30). Family centered empowerment model was administrated to experimental group for 3months. The self efficacy was evaluated using self-reported checklists before and after intervention. Data was analyzed using inferential statistical tests.

Results: As the difference before and after intervention was statistically significant in experimental group (p<0.01), but not in the control group (p>0.01), therefore, family centered empowerment model led to increase in the level of self efficacy.

Discussion and conclusion: Our study showed that using a family centered empowerment model can increase the level of self efficacy in older adult in different dimensions.

Keywords: Family centered empowerment model, Multiple sclerosis, Sleep quality

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**PREDICTION THE LEVEL OF EXISTENTIAL ANXIETY BY IDENTITY STYLES AND RELIGIOUS ATTITUDE**

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Introduction: Existential anxiety refers to a sense of worry, dread or panic that may arise from the contemplation of life's biggest questions, such as «Who am I?» or «Why am I here?». Existential perspectives in philosophy and psychology contend that this contemplation leads inevitably to the realization that everyone has the freedom and responsibility to find meaning in life. Although this realization is inherently distressing, many existential thinkers view this form of anxiety as healthy and productive. The present study aimed to predict the level of Existential anxiety experienced based on identity styles and Religious attitude.

Materials and Methods: Using random method, 200
undergraduate students of Tabriz University were selected. For the measurement of the given variables, Lawrence Goode Existential anxiety scale and Brzvnksy intelligence styles inventory and Brahn Gauge attitudes of religious were applied. The results were analyzed using Pearson correlation coefficient and multivariate regression. **Results**: Findings showed that there is a significant negative relationship between existential anxiety with informational identity & normative identity & commitment identity and religious attitude, and there is a positive relationship between existential anxiety and diffuse-avoidant identity at the (P<0.05). The coefficients of determination for identity styles and religious attitude with Existential anxiety, in order, was found to be $R^2=0.63$, $R^2=0.43$. in the base result of ANOVA, identity styles with value of $F=8.3/309$ and Religious attitude with value of $F=149/462$ could significantly predict Existential anxiety. Among the variables identifying differentially only commitment identity could significantly predict Existential anxiety. **Discussion and conclusion**: Results of this study suggested that religious beliefs and identity styles influence on Mental Health and individuals with further identity commitment and with further religious attitudes have less existential anxiety. **Keywords**: Existential anxiety, Identity styles, Religious attitude.

### COMPARATIVE LEVEL OF SELF-CONCEPT, GENERAL HEALTH AND WILLINGNESS TO COMMUNICATE IN ADOLESCENTS WITH AVERAGE AND SMART IQ

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**Introduction**: Intelligence is a general term describing a property of the mind including related abilities, such as the capacities for abstract thought, understanding, communication, reasoning, learning, learning from past experiences, planning, and problem solving. The present study aimed to compare the levels of self concept, general health and willingness to communicate among adolescents with moderate and smart IQ.

**Materials and Methods**: Using a purposive sample, 40 adolescents with (IQ>120) and 30 adolescents with moderate of IQ (90-110) of high schools of Marand were selected. For the measurement of the given variables, becks self – concept, Goldberg general health, the willingness to communicate inventories and adults Raven IQ test were applied. The results were analyzed using independent T test.

**Results**: finding showed that mental health with assuming equal variances and with $t$-value $=2.635$ and self concept with assuming equal variances and with value of $T= 2.335$ and willingness to communicate with assuming unequal variances and with value of $T =4.960$ have significant difference (P <0 / 05) in smart and moderate IQ adolescents.

**Discussion and conclusion**: Results of this study suggested that smart IQ adolescents tend to have superiority in most areas, smart IQ adolescents compared with moderate IQ adolescents have high willingness to communicate and self - concept and have further general health. In explaining the results we can say that intelligent adolescents compared with adolescents with moderate intellectual ability, the ability to adapt with the environment, problem solving, logical thinking abilities that can effect on self - conception, public health and willingness to communicate in adolescents.

**Keywords**: Self - concept, General health, Willingness to communicate, Average IQ, Smart IQ

### COMPARISON OF INTERNAL AND EXTERNAL CONTROL IN PREDICTION OF SAFE DRIVING

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**Introduction**: Risky speeding behavior is one of the most important factors causing road crashes in Iran. It has been reported that about 70% of Iranian drivers exceeded speed limits frequently. Despite the magnitude of this problem, there have been relatively few studies regarding speeding behavior and its consequences in Iran. The aim of this study was to compare internal and external control to predict driving within posted speed limits for a sample of commercial automobile drivers.

**Materials and Methods**: In this cross-sectional study, all commercial automobile drivers who were literate and who transported people to and from Bandar Abbas and other cities were likely to be included in the study. A self-administered questionnaire including demographic characteristics and items related to internal and external control for driving within speed limits were used to collect data. Items were measured on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Multiple regression analyses were used to predict internal and external control for driving within speed limits at a level of P<0.05.

**Results**: In all, 246 eligible drivers with a mean age of 32.2 years (SD=6.7) were studied. The mean years of automobile driving was 8.7 (SD=5.0). Multiple regression analysis revealed that internal and external control could predict driving within speed limits (R2 =0.40, F=56.6, p<0.001). The participants who perceived more internal and external control were more likely to drive within speed limits. The contribution of perceived internal control to the prediction of driving within speed limits was more than the contribution of perceived external control.

**Discussion and conclusion**: In order to driving within speed limits enhancement of internal control of drivers
should be considered as a priority.

**Keywords:** Speed limits, Internal control, External control, Driving

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**PERSONALITY TRAITS AND INHIBITION / ACTIVATION BEHAVIORAL SYSTEMS IN PEOPLE WITH BIPOLAR DISORDER AND SCHIZOPHRENIA DISORDER**

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**Introduction:** The aim of present study was to investigate the personality traits and inhibition/activation behavioral systems among two groups of schizophrenic and bipolar patients.

**Materials and Methods:** The present descriptive-comparative study consisted of 70 people including 34 schizophrenic patients (16 females and 18 males) and 36 bipolar patients (17 females and 19 males) who had been selected by available sampling. For data gathering inhibition/activation behavioral systems scale (Carver and White) and Eysenck Personality Questionnaire-Reversion were used in this study.

**Results:** The study demonstrated a significant difference in neuroticism (N), extraversion (E) and psychosis (P) between schizophrenic and bipolar groups of patients (P=0.001). Also, there was a significant differences in behavioral inhibition system (BIS) (P=0.003), behavioral activation system (BAS) (P=0.043) and two behavioral activation system subscales (BAS), Drive (D) (P=0.019) Reward Responsiveness (R) (P=0.043).

**Discussion and conclusion:** There was a significant relationship between the extreme levels, either high or low of personality traits (neuroticism (N), extraversion (E) and psychosis (P)) as well as the sensitivity of BAS, BIS with the symptoms of psychopathological disorders. Particular combination of sensitivity BAS, BIS was relevant with special psychopathology species.

**Keywords:** Personality traits, Behavioral Inhibition System (BIS), Behavioral Activation System (BAS), Bipolar, Schizophrenia

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**EFFECT OF EDUCATION ON ANXIETY AND DEPRESSION IN PATIENTS WITH MYOCARDIAL INFARCTION**

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**Introduction:** About 65 percent of patients with myocardial infarction suffer from psychological and emotional problems like depression and anxiety that causes delay in the return to work, decreased quality of life and increased risk of death. The purpose of this study was to determine the effect of education on anxiety and depression in patients with myocardial infarction in Urmia hospitals in 2009.

**Materials and Methods:** This study was a quasi-experimental study that compares the effect of education on anxiety and depression in patients with myocardial infarction in the Urmia University of medical science hospitals. 124 patients were selected randomly and divided into two groups. The experimental group was educated by a face to face training and educational booklet. Control group did not receive any intervention. Level of anxiety and depression was evaluated by using a standard HADS questionnaire at 3 intervals after 48 hours of admission, day of discharge and 2 months after discharge.

**Results:** There was no significant difference between control and experimental groups before the intervention. But after the intervention, anxiety and depression in the experimental group was significantly less than controls, (p<0.05)

**Discussion and conclusion:** Considering the beneficial results obtained from education on reducing anxiety and depression in patients with myocardial infarction, it should be one of the health care goals.

**Keywords:** Anxiety, Depression, Myocardial Infarction, Uremia

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**RELATIONSHIP BETWEEN HEALTH BELIEF AND SELF CONCEPT REGARDING BREAST SELF EXAMINATION IN STUDENTS**

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**Introduction:** Breast cancer is currently the most common female cancer, accounting for 30% of new cases of diagnosed cancers. Breast Self Examination (BSE) is an opportunity for early detection, better treatment and locus of control. Different studies show that in some cultures BSE is somehow predictable by some “health indicators” like health belief, skill, past behavior and self concept. Considering the importance of early detection of cancer, in this study, researchers try to determine relationship between health belief and self concept with BSE in own culture.

**Materials and Methods:** This was a descriptive study. The sample consisted from 247 students chosen by simple sampling from Guilan University of Medical Sciences. The instrument used was a questionnaire; subjects answered a three parts questionnaires which gathered socio-demographic, health belief (29 statements: based on Champion Health Belief Model) and self concept (researcher-made questionnaire with 49 statements based on Bearnrouther Personality Test and Tennessee
Our study indicated that... with physician- patient relationship in patient with type II diabetes. Also through variable predictors, external health locus of control (other- powerful) has significant power for prediction of physician- patient relationship.

Results: Results showed that 55.9% of students were above 20 years old (2107 ± 6.6), 91.9 % were unmarried, 94.7% without clinical practice and 91.9 % without breast cancer history in their family. The majority of participants (60.3%) do not practice of BSE; the most important reason for it was “I do not think it”. The result obtained on the times of doing BSE indicated that only 26.3 % of participants do it “sometimes”. The results revealed that only 17.8% had positive self concept and 52.2% had undesirable health belief. Finally, results showed that there was a statistical positive relationship between health belief and self concept with doing BSE ($\chi^2 =4.42$, df=1, p=0.03). The relation between health belief and self concept with socio demographic characteristics was not statistically significant.

Discussion and conclusion: Our study indicated that most of students don’t practice BSE and do not have opinion to perform it. Furthermore, it was revealed that belief and times of self examination stemmed from the internal feelings, so it seems that attention to self-concept as a concept in doing BSE is vital.

Keywords: Breast cancer; Breast self examination, Health belief, Self concept, Student

RELATIONSHIP BETWEEN HEALTH LOCUS OF CONTROL WITH PHYSICIAN - PATIENT RELATIONSHIP IN PATIENTS WITH TYPE II DIABETES

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Introduction: Physician – patient relationship is one of influencing factors on treatment outcome. Therapeutic relationship is a human capability which substantial training can make it a communication skill and this skill becomes integral part of clinical physician activities. The present study reviews the health locus of control associated with physician - patient relationship.

Materials and Methods: To carry out this research 115 adults with type II diabetes (men and women) referred to Sina Hospital Endocrinology Clinic of Tabriz during the period of June – August 2010, completed the following five research questionnaires: demographic information questions, patient – doctor relationship questionnaire (PDRQ-19), and Multidimensional health locus of control (MHLHC). Data were analyzed by Pearson's correlation coefficient and multiple regression analysis methods.

Results: The results indicated that there is positive significant relation between external health locus of control (other- powerful), internal health locus of control with physician- patient relationship in patient with type II diabetes. Also through variable predictors, external health locus of control (other- powerful) has significant power for prediction of physician- patient relationship.

Discussion and conclusion: Based on the results of this study, patients with diabetes type II who accept more powerful ones like their physician as responsible for their health and then believe their own trust in self-preservation had desired relationship with their physicians. In this manner, it can be predicted that the patient who had external health locus of control (other- powerful), they would have more desired relationship with their physicians.

Key words: Type II diabetes, Health locus of control, Physician – patient relationship model, Nursing, Educational Planning.

THE ROLE OF DOGMA IN COMMUNITY HEALTH PROMOTION

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Human being is always involved in a numerous social situations and it is not possible to make balance between different aspects of life without proper intelligence. Human being should always search for such a balance through proper intellectual education, which can lead to divine and ethical decisions for community health promotion. Appropriate training through attention toward god can help human being to be aware of different hazards in the community and avoid them. To do this, human being should always concentrate and search for god's satisfaction. There are several principles such as respect to social regulations, having appropriate behavior, attention to consequences of actions and the use of intelligence which should be considered in this respect. This paper describes the background for evolution of human being and the role of virtue in community health promotion from the Islam's points of view.

Keywords: Human Being, Community, Health

High risk behavior

THE PREVALENCE OF HIV HIGH RISK BEHAVIORS AND ITS RELATION WITH SOCIAL BACKGROUND AMONG 14-18 YEARS OLD ADOLESCENTS IN THE CITY OF FOOLADSHahir

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Introduction: Infections caused by HIV are recognized as one of the major causes of infectious diseases which ends in death worldwide. Global statistics show that 85% of cases are in the 15-49 age group. In most cases the transmission paths are related to human behaviors which are changed often with appropriate training and consultation. So, the aim of this study was to measure the prevalence of high risk behaviors among adolescents and their relationship with some social background.

Materials and Methods: A cross sectional study conducted among 669 adolescents (327 boys) and (342 girls) residing in FooladShahr in academic year 1387-1388 using anonymous questionnaires. Data were described using descriptive statistics including mean and proportion. Fisher’s Exact test was applied to compare the proportions between different genders and other groups. All analyses were performed using SPSS18.

Results: Among 669 studied individuals, the average age was 16.7 (SD=1.3) and 16 (SD=1.3) for female and male group, respectively. The proportion of misunderstanding on how to prevent HIV contamination was 18% and 7% for female and male adolescents respectively. Overall, Radio and Television had 39% contribution to transfer AIDS-HIV knowledge and school education program had little contribution (3%). Smoking prevalence were about double in boys by 39 versus 21% for girls; the second highest risky behavior was drinking alcohol 38 versus 9%; sexual contact with the opposite sex by 30 against 6% ; sexual contact with the same sex by 20 versus 6%; and taking the exhilarating tablets with 14 against 4% for boys and girls respectively . Our findings indicated that the prevalence of high risk behavior were associated with parents education level, and family income. The trend of high risk behavior increased by increasing level of education for boys and decreased for girls.

Discussion and conclusion: The high prevalence of risky sexual behaviors confirms and alarms the third wave of HIV transmission. Therefore, to transfer the correct knowledge and remove misunderstanding of HIV contamination, explicit interventional training program should urgently be considered by all educational organizations, particularly, Radio and Television and High School Education System.

Keywords: AIDS, HIV, knowledge, high risk behaviors, adolescents, FooladShahr

SURVEY OF THE INTERNET ADDICTION BETWEEN SCHOLARS IN ISFAHAN PAYAME-NOUR UNIVERSITY-KOHANDEZH UNIT

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Introduction: Nowadays, internet addiction is a common problem that define as abuse in computer and online information. Internet addiction is appeared by internet excessive applications and it’s attractiveness. The incidence and prevalence of Internet addiction is growing in scholars. Internet addiction is associated with problems such as interpersonal communication loss, anger, aggression and emotion in students. This study carried out to assess the internet addiction between scholars in Isfahan Payame nour university (kohandezh unit).

Materials & Methods: This analytical cross-sectional study was conducted on 96 scholars of payame nour university . The questionnaire included 4 parts: demographic information (age, sex, degree), using reasons (search, download, chat , mail, game, entertainment), time of using (morning, night, changed) and Yang test with Likert scale (completely agree, agree, no idea, completely disagree, disagree). finally, users situation were defined as normal, light addicted and severe addicted. Independent t-test, Mann Whitney used for analyzing data.

Results: Based on the findings 76% were woman, 92% undergraduate, 91.7% of scholars were normal and 8.3 % of them were light addicted users. Using of searching motors and file download were used excessively. There was no significant relation between demographic information and internet addiction, but there was significant relation between time and internet addiction(p<0.05). Also 8/7% of scholars were involved in educational falling by internet.

Discussion and conclusion: It seems that educating people about internet usage correctly and educating family, may have tremendous effects on preventing internet addition among scholars.

Keywords: Internet addiction, Scholar, Isfahan

COPING APPRAISAL AND THREAT APPRAISAL; WHICH ONE IS A BETTER PREDICTOR OF UNSAFE DRIVING BEHAVIORS AND INTENTION IN YAZD CITIZENS

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Introduction: Coping appraisal is a cognitive mediating process in Protection Motivation Theory which evaluates one’s ability to cope with, or avert of threatened danger and included perceived self-efficacy, response efficacy and perceived costs of protective behavior. Threat appraisal process evaluates the factors associated with the behavior that potentially creates danger, including the intrinsic and extrinsic rewards accompanying the behavior, the severity of the danger, and one’s vulnerability to it. There are some evidences for their effects on intention and behavior of some safety areas but there isn’t any study on intention and behavior of driving. The current study aimed to determine the status of these processes regarding driving behavior.

Materials and Methods: In this cross-sectional study, total number of 379, 19 years old and above people, which had a driving license entered in the study with a clustered random sampling from 10 health care centers in the city of Yazd in Iran. Data collection instruments
was a self-report questionnaire included subscales for measuring coping appraisal, threat appraisal, unsafe driving intention and items of deliberate violations of Manchester driving behavior questionnaire. The validity and reliability of the questionnaire was examined and approved. The data were analyzed using SPSS software and, Pearson correlation coefficient and Liner Regression statistical tests.

**Results:** There was a negative significant correlation between coping appraisal and intention ($r=0.329$) and unsafe driving behavior ($r=0.536$) and positive significant correlation between threat appraisal and intention ($r=0.255$) and unsafe driving behavior ($r=0.413$) at 0.01 level. Coping and threat appraisal both predicted % 31.1 of variance in unsafe driving behavior in which the coping appraisal ($r=0.441$) exceeded the threat appraisal ($r=0.180$). They also predicted 11.7% of variances in intention to unsafe driving which the predictability of coping appraisal was statistically significant ($P=0.000$).

Discussion and Conclusion: cognitive mediating process of coping appraisal was a more powerful predictor of intention to unsafe driving behavior. Therefore increasing self efficacy and response efficacy, and decreasing perceived cost of drivers aimed at facilitating the acceptance of safe behavior could be noteworthy as a principle in education.

**Keywords:** Coping appraisal, Threat appraisal, Protection motivation, Unsafe driving behavior

**DANGEROUS BEHAVIORS AND ROAD ACCIDENTS AMONG YAZD TRUCK DRIVERS**

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**Introduction:** Road accidents are a social phenomenon in different communities which its infrastructural dimensions of which as well as technologic failures such as road quality, and technical faults of automobiles, need to be assessed in detail. According to the report of Iran Ministry of Health, number of deaths due to road accidents in 2005 was 27764 persons. Iran has the first order in the world for deadly road accidents.

**Materials and Methods:** This was a cross-sectional descriptive-analytic study on 300 truck drivers in Yazd. We used 3 questionnaires, including one for demographic data, Driver Behavior Questionnaire (DBQ), and one for drivers' self-evaluation of the of their driving.

**Results:** Five types of the dangerous behaviors had the highest frequency: Misjudge speed of oncoming vehicle when overtaking; Deliberately disregard the speed limits late at night or very early in the morning.; Ignore ‘give way’ signs, and narrowly avoid colliding with traffic having right of way.; Stuck behind a slow-moving vehicle on a two-lane highway, you are driven by frustration to try to overtake in risky circumstances.; Drive with only ‘half-an-eye’ on the road while looking at a map, changing a cassette or radio channel, etc. The more the driver's driving was influenced by emotional and mental states the more deliberate violations and slips.

**Discussion and conclusion:** Drivers’ dangerous behavior is related to motivational factors; it seems that some presenting strategic solutions in order to distinct between motivational factors and cognitive subjects, especially among truck drivers to be effective. So designing some training courses for drivers about the risks of the different types of dangerous behaviors may affect this issue.

**Keywords:** Dangerous Behaviors; Road Accidents; Truck Drivers; DBQ

**A NEW SUBJECT FOR HEALTH EDUCATION: MORE CELL PHONE USE AND MORE MEN INFERTILITY**

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**Introduction:** There has been a tremendous increase in the use of mobile phones in the past decade and concerns are growing about the possible hazardous effects of radiofrequency electromagnetic waves (EMW) emitted by these devices on human health. Reports of potential adverse effects of radiofrequency EMW on brain, heart, endocrine system, and DNA of humans and animals are widely reported in the literature. Recent studies also suggest that EMW emitted from cell phones can reduce the fertilizing potential of men. On the other hand education serves as the means to bring about the desired change about this phenomenon and develop a generation of virtuous individuals and thus contribute to the development of good human habits. This study looks at the relationship between cell phone use and male infertility and also the importance of education for this new and hazard technology.

**Materials and Methods:** This study is a review article and uses library resources and journals and sites such as Pub Med, Science Direct and Web Med, Sic Topics from years 2008 to 2010. We systematically searched these resources and found 14 articles, selected 10 articles as related and valid articles.

**Results:** As said above, recent studies suggest that EMW emitted from cell phones can reduce the fertilizing potential of men. The reasons for this are often linked to various types of environmental and occupational exposure, leading to possible causes for reduced sperm quality and impact on neurological dysfunction. Several studies on mobile phone emissions indicate that these radiations may alter hormone secretion due to deformation of Leydig and Sertoli cells, which may lead to cell proliferation. Such type of alteration may also decrease the fertilizing potential of men. On the other hand education serves as the means to bring about the desired change about this phenomenon and develop a generation of virtuous individuals and thus contribute to the development of good human habits. This study looks at the relationship between cell phone use and male infertility and also the importance of education for this new and hazard technology.

**Discussion and conclusion:** The First International Congress on Health Education & Promotion
Discussion and conclusion: There are risks for people associated with the use of cell phones. As technology is advancing, new risks will present themselves. Education is the process of learning and knowing, it is a holistic process and continues through our life, it would not be an exaggeration to say that the existence of human beings is fruitless without education. By educating people about hazardness of excessive use of cell phones we can help them to reduce their problems particularly infertility problems.

Keywords: Education, Cell phone use, Infertility, Men infertility

AWARENESS FROM THE EFFECTS OF INTERNET ON HIGH RISK BEHAVIORS: A CROSS SECTONAL STUDY BETWEEN INTERNET USER STUDENTS IN TABRIZ UNIVERSITY OF MEDICAL SCIENCES

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Introduction: As the internet becomes a major communication medium in the lives of students, the number of young, problematic internet users has also grown remarkably. Excessive use of internet has negative effects on behavior and social well-being. Internet addiction, especially among adolescents, has been recognized as an important social issue in various countries. This study was carried out to determine the general characteristics of internet use among Medical university students in Tabriz and to identify how the students’ use of internet has affected their behaviors. We investigated the knowledge of students about negative aspects of internet on behavior such as internet addiction, physical activity, healthy nutrition, high risk sexual behavior, smoking and drug abuse.

Materials and Methods: This cross-sectional study included internet user students from 8 schools of Tabriz University of Medical Sciences. A total of 292 students (49.7% boys and 61% girls) completed a questionnaire to measure their internet usage and knowledge about effects of internet on high risk behavior.

Results: Mean age of the respondents was 21.66 years (SD 2.61 years). Mean using of internet between users was 3.91 years (SD 2.21 years). Results obtained by this study show 39.7% of students know symptoms of internet addiction. Our findings showed users had intermediate and poor knowledge respectively 56.2% and 40.4 %. Students had more knowledge with using of internet over 10 hours at week.

Discussion and conclusion: The results suggest that informative programs for internet users should pay attention to internet addiction and high risk behavior. Using the internet is associated with more awareness of high risk behavior. By contrast excessive use of internet provides opportunity for high risk behavior. It suggest to future study for investigate in this gap.

Keywords: Internet users, Internet addiction, High risk behavior, Awareness

PORNOGRAPHY AS A HIGH RISK BEHAVIOR WHILE USING INTERNET AND PROPOSE SOME STRATEGIES TO PREVENT IT

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Introduction: Since the communication age is an appropriate term for the world today, mass media, especially internet and its consequences (internet addiction, addiction to pornography sites and etc) can affect the religious, national and personal identity and mental health. The present study examines pornography as one of the high risk behaviors of using internet based on different literature and propose some strategies to prevent it.

Materials and Methods: The research method has been done by descriptive and content analysis. At first internet pornography of different perspectives in the field of addiction to the internet and addiction to pornography from the scientific literature during the years 2000-2009 was obtained by the relevant educated specialist, then the data was coded and categorized and the subjects were discussed and the more emphasized issues, were extracted.

Results: Our results showed that 80 percent of internet searches among internet users and specially in Iranian users is immoral and sexual sites because «pornography» is very common and attractive field in internet, the great number of porn sites with free membership increases the opportunity for youth to access and visit the immoral and ugly websites almost every day and everywhere. Also internet may affect users by chartroom, and increases Internet suicide, internet robbery, the distance between the imaginary real world and virtual spaces, browsing in anti religious sites, apathy, aggression, and sexual corruption. They cause disturbances in mental health and youth’s identification immoral, sexual and religious dimensions.

Discussion and conclusion: 1-Parents should tell their children the negative consequences of the Internet and its moral deviations.2-Parents should monitor their children while using internet and teach them the useful and correct methods of internet using. 3-Authorities and cultural institutions have a duty of healthy and proper usage of the Internet to individuals, especially adolescents who are most vulnerable, by mass media education and training so the most important step in this field is education and information. 4-We should know, however, filtering is necessary and can limit abuse of internet (using pornographic sites and etc) but it is temporary. In the current situation, government
must invest on immunization, strengthening of religious beliefs and improve the spirit. It seems that in such way the correct usage of the internet in the community will be naturalized.

Keywords: Internet, Pornography, High-risk behavior

STUDY OF SMOKING BEHAVIOR AND ITS RELATED FACTORS AMONG BOY STUDENTS IN KERMANSHAH UNIVERSITY

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Introduction: Smoking is the first preventable cause of death in the world. This problem is one of the most important difficulties of public health which has involved adolescents and young people. Since smoking incidence pattern has changed and needed to be recognized, getting involved the community and also health officials in this field is so essential and at the same time few researches have been conducted about this matter, present study got to perform to determine influencing factors in smoking (on the basis of BASNEF Model which is a new one of health education models derived from behavioral sciences) among boy university students studying in Kermanshah city.

Materials and Methods: This was a descriptive-analytical and cross-sectional study in which 569 students (from Razi University, Kermanshah University Of Medical Sciences, Islamic Azad University, and PayameNoor University) in Kermanshah-2008 participated. Sampling method was Snowball and data was collected by researcher-made questionnaire consisting of 70 questions included 5 sections which was analyzed by SPSS software through Central Indices, One-Way Variance analysis and X2.

Results: Knowledge and attitude average grades about smoking among students were 89±7.1 and 72.7±6.2, respectively. Smoked cigarette average number was 10.7 ones per day. There was no significant relation between smoked cigar numbers and university kind or educational level of students. The most frequency of enabling factors for smoking was Easy access to cigar and the most influencing social norm in smoking was students close friends. The most frequent reason to smoke stated by students was to keep themselves calm (38.3%), not to have suitable pastimes and to be so curious to try smoking for the first time.

Discussion and conclusion: Having friends smoking was the most considerable factor to attract students to be caught by this habit which demonstrate the role of mate group pressure among young people. The second outstanding factor among social norms was having smoking parents. Parents are considered as one of the reference group for their children so that they imitate their parents behavior during decision making. Their instructors in university and TV stars were the later ones influenced their intention to smoke.

Keywords: Smoking, BASNEF Model, Male Students, Kermanshah city.

EPIDEMIC CONSIDERATION OF DANGEROUS SEXUAL BEHAVIORS AMONG UNIVERSITY STUDENTS REFERRING TO SAYACOUNSELING CENTER FROM 1383 TO 1389

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Introduction: HIV is increasing by sexual relations and dangerous sexual behaviors among single and married people only because of unprotected sex relationships. There will be more problems if we don’t aware people especially in high-risk groups, because it can cause dangerous sexual behaviors or it can cause many health problems such as, economic aspects and social, cultural and political problems in next decade. The aims of this study were to find: the prevalence of dangerous sexual behaviors in university students referring to Saya Center. The rate of (unprotected) sex relations among students. The rate of dangerous sexual behaviors in married and single university students. The percent of deviations among students.

Materials and Methods: This was a descriptive-analytical research in which 1000 student were taken from total 1850 cellos who had dangerous sexual behaviors in Iran and 65 of them had dangerous sexual behaviors out of Iran. The data obtained through questionnaires designed by the researcher and also via consulting about sexual hygiene and dangerous sexual behaviors. EPI6 software was used for data analysis.

Results from the behaviors of consulted people consist of dangerous sexual behaviors such as males had sex relation from 16% to 77%. Five percent of the consulted female students were married and unfortunately had sex relation out of family focus. Condom use was up to ???? percent. Only 99% of people used it just because of protecting against pregnancy. Condom was used at last step of sexual relations. There were many dangerous sexual behaviors among university students such as using opium's and modern kind of opium's up to 11%.

Discussion and conclusion: Teaching who to say «no» is the answer of using opium's and dangerous sexual behaviors.

- Teaching life skills and healthy sex relations.
- Teaching sex hygiene to university students especially in the course of family planning.
- Appearing and prevalence of HIV in Iranian society has been reached

Keywords: Gay, Sexual disorders, Sexual deviations, HIV / AIDS
HIV/AIDS Prevention

PERCEIVED SUSCEPTIBILITY, PERCEIVED SEVERITY, PERCEIVED BENEFITS AND SELF-EFFICACY IN PREVENTING AIDS AMONG KERMAN MEDICAL STUDENTS

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Introduction: AIDS is one of health problems in world especially in under development countries. This study accomplished to determine perceived susceptibility, perceived severity, perceived benefits, and self-efficacy about AIDS for health education and promotion planning in Kerman medical science students.

Materials and Method: In this cross-sectional study, 350 students of Kerman University of Medical Sciences selected by randomized stratified sampling. The data of 296 person analysed. The data collection tool was a valid and reliable questionnaire consist of demographic variables, perceived susceptibility and severity, perceived benefits and self-efficacy constructs for AIDS prevention. The data was analyzed statistically using SPSSv.17.

Results: The mean age of participants was 22 ± 3.35. 62.2% was female and 37.8% was male. The Mean score of perceived Susceptibility was 17.83 ± 4.03 from 30, perceived Severity was 12.50 ± 2.50 from 20, perceived benefits was 71.60 ± 9.30 from 80 and Self-efficacy was 39.07 ± 6.22 from 50 so. in statistical Analysis only meaningful relationship observed between perceived benefits and Self-efficacy, but didn’t observe any meaningful relationship between other constructs.

Discussion and conclusion: Health educational interventions for AIDS prevention in Kerman Medical Science students is necessary. Health education and promotion interventions should be directed to raise perceived susceptibility and severity among students.

Keywords: Perceived Susceptibility, Perceived Severity, Perceived benefits, Health education

THE EFFECT OF EDUCATION BASED ON HBM ON PREVENTIVE BEHAVIORS OF HIV/AIDS AMONG HEALTH VOLUNTEERS

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Introduction: AIDS has become an important public health hazard in Iran. Health education and prevention remain the main health care priorities in AIDS prevention. The purpose of this study was to examine the effect of health education based on Health Belief Model (HBM) in promoting the preventive behaviors of HIV/AIDS in women health volunteers in Shoshtar.

Materials and Methods: In this quasi-experimental study, 70 health volunteer women were participated. The questionnaire was used to obtain information on demographic characteristics, knowledge, Health Belief Model constructs (perceived severity, perceived susceptibility, perceived benefits and barriers) and attitude towards HIV/AIDS patients. All subjects were initially interviewed after obtaining informed consent by using the questionnaire. Participants were randomly assigned to intervention (n=35) and control (n=35) groups. After initial interview, all subjects in intervention group received educational intervention. The intervention content was designed, edited, and executed after the analysis of the results of the first test. One month after the intervention, all the study subjects were interviewed using the same questionnaire. Data were analyzed using SPSS 17 and t-test, chi-square and paired T-test.

Results: Before the educational intervention, there was no statistically significant difference between two groups regarding demographic characteristics, knowledge and health belief constructs. After intervention, knowledge scores increased in the intervention group compared to the control group (P<0.001). Results showed that the mean score of all parts of Health Belief Model including, perceived susceptibility, severity and benefits in intervention group was significantly increased after educational intervention in comparison with the that of before intervention and also the mean score of all parts of HBM after intervention was significantly increased in experimental group compared to control group.

Discussion and conclusion: The results of this survey confirmed the efficiency of Health Belief Model in adopting preventive behaviors of health volunteers.

Keywords: Health Belief Model, HIV/AIDS, Health volunteers

EFFECT OF HEALTH EDUCATION ON KNOWLEDGE AND ATTITUDE OF HIGH SCHOOL STUDENTS REGARDING AIDS IN KASHAN, 2009

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Introduction: Based on World Health Organization (WHO) studies health education is the best possible way for HIV prevention. So, the aim of this study was to assess the effect of an educational program on knowledge and attitude of high school female students regarding AIDS in Kashan.

Materials and Methods: This pre-post quasi-experimental study was done to know knowledge and attitudes of middle school female students about AIDS in Kashan (2009). Then data was analyzed with SPSS software.

Results: Before intervention 20% of the students had weak knowledge, and 42% had average knowledge; but
after intervention these percentages changed to 5.2% (weak), 20.4% (average) respectively. level of knowledge in post-test was significantly higher than pre-test (P<0.05). Before intervention 2% of the students had weak attitude, 83% average attitude. These percentages changed to 0.5%, 63%, and 36.5% of them had good attitude after intervention respectively; then level of attitude in post-test exam was significantly higher than pre-test (P<0.05).

Discussion and conclusion: Since the effect of education on the promotion of students’ knowledge and attitude has been approved, implementing health education programs in schools must be taken into consideration as an educational priority throughout the country. 

Keywords: Education, AIDS, Knowledge, Attitude, students

STAKEHOLDERS ENGAGEMENT: AIDS PREVENTION POLICIES

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Introduction: The epidemic of AIDS is a global phenomenon containing social, economical and political problems which affect legislating in each society. AIDS is one of the most pernicious, infectious diseases which has been known as the 4th cause of death in the world being a main snag for development of societies. Due to inexistence of proper vaccine and care for this disease it is important to be prevented by educational and behavioral changes which would promote public awareness about disease nature, transmissive and preventive ways in its epidemic management. In this study we are trying to determine East –Azarbaijan connoisseurs and authorities attitude about AIDS preventive policies.

Materials and Methods: This research was applied in Tabriz University and Tabriz University Of Medical Sciences. The study population was faculty members of these universities & sample size was 180. Information collected based on questionnaire which its reliability and validity was confirmed after distributing 20 of them between connoisseurs and authorities whom had not been incorporated in our samples. For data analysis SPSS software was used.

Results: In this study 70% of respondents were disagree to perform AIDS preventive policies in elementary school, 61.7% were agree to do it in guide school, 88.9% were agree to do it in school, 88.9% were agree to do it in high school & 86.1% were agree to do it in university, 82.8% were agree to do it by Health centers and finally 75.6% were agree to implement AIDS preventive policies by multimedia.

Discussion and conclusion: With regard to the findings of this study and comparing with similar studies, it was shown that teaching aspects of AIDS problems particularly sexual prospects related to it during guide school & codifying educational comprehensive programs to increase public awareness especially for young population about this purpose, using suitable social –cultural preparedness to improve these programs is essential for all organizations in Iran

Keywords: AIDS, Attitude, Prevention, Stakeholders engagement

AWARENESS OF KERMAN UNIVERSITY OF MEDICAL SCIENCES STUDENTS ABOUT AIDS TRANSMISSION ROUTES AND PREVENTION IN 2010

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Introduction: AIDS is a new viral disease with a rapid spreading. It is one of the most serious diseases of young ages. At present, this disease has no known treatment or vaccine, but can be prevented. Through improving public awareness level about transmission routes and prevention, the disease spread can be prevented. This study was performed to determine the awareness of students about AIDS for planning educational programs based on their real needs.

Materials and Methods: In this descriptive-analytic cross-sectional study, 296 students of Kerman University of Medical Sciences were randomly selected. Data gathering was done through a questionnaire consisted of demographic features, awareness-testing questions, and source of information ($\alpha=0.87$). Data were analyzed using Chi-square test and Spearman coefficient of correlations and through SPSS17.

Results: Mean age of participants was 22±3.35 years and 37.8% were male. From all, 3.4% of the students were working and 7.5% had history of blood transfusion. Based on self-reporting, 5.8% smoked cigarette and 5.1% consumed narcotic drugs. The most important sources of information were respectively television (79.4%), teachers (76.7%), health posters and pamphlets (70.3%). Mean awareness score was 45.28±5.14 from 59. Awareness level was good in 52.7% and moderate in 45.9%. Awareness score had significant direct relationship with age, but no significant relationship with variables of sex, marital status and field of study.

Discussion and conclusion: According to the obtained results, Kerman University of Medical Sciences has worked well in regard to the AIDS education. In spite of this, considering the significant impact of television and other mass media in improving public’s awareness level and consequently community health level, more widespread use of these sources in AIDS educational programs is emphasized.

Keywords: AIDS, Awareness, Students

The relationship between perceived self-efficacy, behavioral intention, benefits, susceptibility, severity and awareness of AIDS prevention behaviors among students of Kerman University of Medical Sciences

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Introduction: HIV infection due to its prevalence, incidence, mortality rate, treatment costs, social outcomes and aiming young population is one of the major problems of human communities. This study was carried out to find the relationship between the constructs of health belief model and students awareness of AIDS prevention.

Materials & Methods: In this descriptive cross-sectional study, 296 students in Kerman University of Medical Sciences were participated. Data were collected by a questionnaire consisted of demographic part, awareness-testing questions and constructs of health belief model (perceived susceptibility, severity, benefits and self-efficacy). Data analysis was done using Chi-square test and Pearson coefficient of correlations and through SPSS17.

Results: Mean age of students was 22±3.35 years and 62.2% were female. According to self-reporting, 5.8% had history of cigarette smoking and 7.5% had history of blood transfusion. Mean awareness score was 45.28±5.14 out of 59 and 52.7% of participants had high awareness level. Mean scores of perceived self-efficacy, Behavioral intention, benefits, susceptibility and severity were respectively 39.07±6.22 from 50, 41.38±5.41 from 50, 71.60±9.36 from 80, 17.83±4.03 from 30 and 12.59±2.5 from 20. Awareness showed significant relationship with age and perceived Self-efficacy, Behavioral intention and benefits (p<0.05), but no significant relationship with sex, field of study, marital statues and perceived severity and susceptibility.

Discussion and conclusion: According to the results, awareness level and also mean scores of perceived self-efficacy, Behavioral intention and benefits are in acceptable levels. Although there have been good attempts for AIDS education, it is emphasized to use theories and patterns of health education designed for youths in order to maintain and even promote our community health statue.

Keywords: AIDS, Health belief model, Awareness, Students

Comparing attitude and behaviors of HIV positive patients and Kashan people about AIDS in 2009

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Introduction: This study was conducted to compare the attitudes of people and AIDS patients in Kashan. Regarding transmission and prevention of AIDS among people with AIDS, and misinterpretations between them.

Materials & Methods: This was a descriptive study on 30 AIDS patients in Kashan and 300 people living in this city. In this study, the patients with AIDS were selected according to the available list in AIDS center and drug addiction in Kashan University of Medical Sciences. To collect information, Four questionnaires including six questions about demographic characteristics, 15 about attitude, and 18 about patients performance and People of community setting were made. Chi-square test and Fisher’s results were used for analysis.

Results: In this study 10% of patients before AIDS had

poster
a positive attitude towards AIDS and 7 / 86% of the AIDS 90% of patients had a good function to the disease. The positive attitude of society towards AIDS was 94.2% while the proper functioning of society towards the disease was 31.3% respectively. Among the 30 patients, 26 patients (86%) were over 30 years and a significant correlation was observed between the attitude of society and education level. However, significant correlations in other variables except income level was observed. Also in this study, a significant correlation was not found between marital status and the type of function in people with AIDS.

Discussion and conclusion: In this study, a large gap was seen between positive attitudes before and after AIDS and a little distance was found between the positive attitude after AIDS and good performance about AIDS patients. In the community a Large gap was observed between the positive attitude and Good performance to HIV.

Keywords: AIDS, Attitude, Performance

COMPARING THE EFFECTS OF TWO METHODS OF VERBAL AND DISTANCE (PRESENTING EDUCATIONAL BOOKLET) EDUCATION ON PROMOTING THE AWARENESS AND PRACTICE OF WORKERS IN FOODSTUFFS DISTRIBUTION AND PREPARATION CENTERS IN SEMMNNAN

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Introduction: One of the important activities to access the foodstuffs security is performing educational programs in order to promote knowledge of foodstuffs distributors. Merchant academies as private sectors have effective and important role in this manner. The aim of this study was to compare the output of merchant academies (verbal education) and the method of education from a distance education (presenting educational booklet), to promote awareness and performance of this group.

Materials and Methods: In this analytical – interventional study, target population was incumbents of food stuffs exhibition centers in Semnan city. The knowledge of three groups (merchant academy group –distance education group and control) were compared and determined with a questionnaire in the field of health care subjects before and after the educational intervention.

Results: The results of unidirectional variance analysis showed the meaningful statistical variance between educated and control group after intervention. But there was no meaningful difference between two educated groups. Also the results showed that the difference of awareness level was meaningful in two educated groups before and after intervention. The higher increase in knowledge scores was observed in butchers and vegetable and fruits sellers. Comparing the knowledge score of different age groups showed that the participants with less than 21 years old had higher knowledge.

Discussion and Conclusion: Education had the best effects on those with secondary level of education. The average score of knowledge in those who were employed less than 5 years was higher than those whose employment was higher.

Keywords: Knowledge, Merchant academy, Foodstuffs, Verbal education, Distance education

THE RELATIONSHIP BETWEEN SELF-EFFICACY, BEHAVIORAL INTENTION, PERCEIVED BENEFITS, SUSCEPTIBILITY, SEVERITY AND KNOWLEDGE OF PROFESSIONAL MEDICAL STUDENTS OF KERMAN UNIVERSITY OF MEDICAL SCIENCES ABOUT AIDS IN 2010

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1- Kerman Medical University- Health Deputy

Introduction: AIDS is emerging Viral diseases and one of the most challenging issues in human society. Currently it didn’t have any vaccines and effective treatment and the only way to restriction is, to health education and cognition about the transmission ways and preventive methods.

Materials and Methods: In this cross - sectional study, 127 medical, dentistry and pharmacy students selected by Systemic Randomized Sampling method. So we designed a questionnaire including personal information, Knowledge questions, Self-efficacy, behavioral intention, perceived benefits, perceived Susceptibility and Severity constructs. After collecting data into Spssv.17 software then we were analyzed them with Chi square and Spearman correlation coefficient tests.

Results: The mean age of participants was 21.81±3.40, among this 55.1% were women. 63.9% had smoking history and 9.5% had blood injection history. The Mean Knowledge score, Self-efficacy, behavioral intention, benefits and perceived Susceptibility and Severity were 45.73±4.26 from 59 , 38.67±5.86 from 50, 40.61±5.59 from 50, 70.21±9.60 from 80, 17.85±3.30 from 30 , 12.77 ± 2.29 from 20. Although 55.1% of students had a high Knowledge score. There was a significant statistical relationship between the Knowledge score with Self-efficacy, behavioral intention and students’ age. (p<0.05). On the other hand the Knowledge score did not have any significant relationship with sex, marital status, education, perceived Susceptibility and perceived Severity and perceived benefits.

Discussion and Conclusion: Findings showed that knowledge level among population is relatively desirable. With Attention to low mean score of perceived Susceptibility and Severity and any significant relationship between Knowledge and perceived Susceptibility and Severity health education and promotion intervention must more Attention on these constructs.

Keywords: Knowledge, AIDS, Students
COMPARATIVE STUDY OF DIFFERENT EDUCATION METHODS ABOUT AIDS ON KNOWLEDGE AND ATTITUDE OF STUDENTS (2010).

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Introduction: Acquire Immune Deficiency Syndrome (AIDS) is one of the most destructive infection diseases and impairment force that causes agitation, turbulence, and imperfection of society with family life and individual relations. The incidence of AIDS is intensified in young people and as a regard there is no essential treatment and vaccine to AIDS, so the most practical policy is education. The aim of this study was determining and comparing the effect of some education about AIDS on knowledge and attitude of the nursing and midwifery students in Islamic Azad University of Tabriz in 2010.

Materials and Methods: This study is a quasi experimental design. The study sample consisted of 100 nursing and midwifery students that were selected by stratified random method. Data collection instrument was a questionnaire. Content method and cronbach coefficient Alpha were applied for validity and reliability of the questionnaire respectively. First a pre-test was administered for groups then the training plan in 3 methods: questioning and discussion, educational handbook, and group instruction were taught. Then after one month the subjects completed the questionnaire as post test. The data were analyzed by Spss software (version 13) descriptive and inferential statistics such as independent T-test, ANOVA, and Chi.

Results: Finding showed that education led an increasing knowledge and improvement attitude of students. The results of the paired t-test indicated that there are significant differences between knowledge and attitude level after and before teaching with different education methods (p<0.05). The independent T test showed no significant differences on affected level of three educational methods on knowledge and attitude of subjects about AIDS disease

Discussion and conclusion: This study indicated that health education programs can lead to increase health knowledge and improving attitude regarding AIDS among students.

Keywords: AIDS, Attitude, Health promotion, Iranian adolescents, Knowledge

AIDS HEALTH PROMOTION PROGRAMS AMONGST IRANIAN ADOLESCENTS

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Introduction: AIDS is a preventable disease that is progressive and has social, cultural and economic aspects which is very broad and not only is a health issue but an important challenge throughout the world. Iran is one of the countries in the Middle East that is facing with AIDS crisis and the number of young people contaminated is increasing dramatically. Improving the knowledge and modifying attitudes to prevent AIDS amongst adolescents, especially girls in high schools is very important. Therefore, this study sought to assess awareness and attitudes of high school students in Naghadeh City, Iran.

Materials and Methods: This research was a cross-sectional study that carried out among all girl high school students. Due to its large population, using Cochrane test 381 students were chosen. Based on coherent approach and in order to collect data a questionnaire based on Likert scale was set. Reliability and validity of the questionnaire were considered similar to earlier research as .83 and .76. The questionnaires randomly were distributed among participants and then data analysed by using SPSS and relevant parametric tests.

Results: The findings showed that attitudes and awareness levels was less than the mean value index. There were statistical differences between these variables and levels of education as pre-university students had in-depth knowledge and appropriate attitude towards AIDS.

Discussion and conclusion: According to the findings, appropriate health promotion strategies about prevention of AIDS should be planned to increase awareness of female students. Furthermore, increasing public awareness, especially young people about these issues and planning suitable social and cultural programs to promote comprehensive cooperation with the beneficiary organisations and institutions are recommended.

Keywords: AIDS, Attitude, Health promotion, Iranian adolescents, Knowledge

EFFECT OF EDUCATIONAL INTERVENTION WITH PAMPHLETS ABOUT AIDS ON KNOWLEDGE AND ATTITUDES OF HIGH SCHOOL STUDENTS – ASHTIAN

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Introduction: HIV/AIDS is one of the most important public health problems today. It has been spread throughout the world without discriminating as to culture, language, race, gender, or age. Surveillance shows that the greatest increase in HIV infection is in the young adult population. This study was carried out with the aim of assessing the effect of educational intervention with pamphlets about AIDS on knowledge and attitudes of high school students in Ashtian city.

Materials and Methods: We conducted an interventional survey on 200 high school students in two groups (case
and control) selected with multistage sampling method from high schools of Ashtian city. Instrument used for data collection was a valid and reliable questionnaire designed by researcher. Education was provided to case group using pamphlets about AIDS and one month after the intervention, knowledge and attitudes of both groups were measured again and the obtained data was analyzed using statistical software SPSS-15.

**Results:** Both groups were matched in demographic variables. Mean knowledge score in case group significantly increased after the intervention, whereas changing was not seen in the control group. Results showed that education using pamphlet had no significant effect on attitude.

**Discussion and conclusion:** Using educational media such as pamphlets, to increase the knowledge can be useful in situations with no possibility of individual and group training. But to influence and change attitudes, media and educational methods should be used that require the participation of learners.

**Keywords:** AIDS, High school, Pamphlet

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### BEHAVIORAL FACTORS AMONGST PATIENTS WITH HIV REFERRED TO TABRIZCOUNSELING CENTER FOR BEHAVIORAL DISEASE

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**Introduction:** Nowadays, HIV infection is an important problem throughout the world. This study investigated the prevalence of risky behaviors in HIV patients referred to the Counseling Center of behavioral disease in Tabriz, Iran.

**Materials and Methods:** This study was a descriptive, cross-sectional research carried out using census method on 64 patients with HIV. For gathering data a questionnaire was used including 92 questions that were used as structured interviews taken from respondents. Its reliability and validity was confirmed through expert opinions and using Respondent Validity method. In order to analyze the data, Statistical Package for the Social Sciences (SPSS) was used by applying descriptive statistics.

**Results:** This study revealed that 75 percent of respondents had a history of shared injection mostly due to lack of syringes, 65.6% had unprotected sexual contact mostly due to the use of condoms reduce pleasure, 22 % had a history of mass tattoos. Also 90.6 % reported a history of imprisonment which 8.8 % of them had a history of shared injection mostly because of lack of knowledge about HIV transmission by syringes, and 11 percent had a history of alcohol consumption.

**Discussion and conclusion:** In order to prevent from spreading the disease and improve the effectiveness of other community groups to use the opportunities and resources, immediate interventions and initiatives amongst high risk groups particularly injecting drug users are key considerations.

**Keywords:** Behavioral factors, Tabriz Counseling Center of behavioral disease, HIV-positive

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### RISK PERCEPTION OF HIV/AIDS AMONG COLLEGE STUDENTS IN SEMNAN UNIVERSITY OF MEDICAL SCIENCES

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**Introduction:** Acquired Immune Deficiency Syndrome (AIDS) has devastated the lives of many people throughout the world. Young people and adults represent a significant age group among populations. Statistically, AIDS needs not to be viewed as a lifelong risk; rather, it is foremost a disease of the young. The centers for disease control and prevention (CDC) reported that approximately 50 percent of new Human Immunodeficiency Virus (HIV) infections in the United States are among individuals of younger than 25. At present, young adults and college students are at a substantial risk for contracting HIV/AIDS. Some college students often perceive personal autonomy as freedom from their family of origin and lack of responsibility. The purpose of this study was to investigate AIDS awareness, knowledge of transmission and prevention among college students at Semnan Medical University, Iran.

**Materials and Methods:** A cross-sectional questionnaire survey was carried out on 100 college students in Semnan University of Medical Sciences. After obtaining informed consent, students were asked to complete a brief confidential questionnaire about AIDS awareness, knowledge of transmission and prevention. SPSS ver.10 software was used for data analyzing.

**Results:** Mean age was 22 years (range 20-28) and students were studying in nursing, anesthesia, medical record, operating room, speech therapy and physiotherapy. One hundred percent of students were awareing about disease agent and transmission ways of HIV. Ninety four percent and 91% of those respectively understood that AIDS transmit via sharing infected syringes, needles and graft. Eighty six percent, 77% and 83% of the students had the knowledge that a person cannot get AIDS from using public telephones, showers or toilets, family contact and sneezing or coughing, respectively. Most students (72%) believed that the AIDS anti body test could be negative even if people carry the virus.

**Discussion and conclusion:** Regarding to the AIDS importance, suitable and sufficient educations are a requirement which should be executed by governmental and health care policy centers.

**Keywords:** Risk Perception- Students- HIV-AIDS
Maternal health

THE EFFECT OF SIMPLE EXERCISES AND CORRECT DAILY ACTIVITIES ON BACKACHE DURING PREGNANCY PERIOD

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Introduction: Few studies have been done to demonstrate the cause and effects of various supplements and exercise in the backache women. So this research carried out in order to investigate the effect of some simple exercises and daily activity on pregnancy period.

Materials and Methods: This study was selected by block sampling methods and clinically performed on 132 pregnant woman with 8 to 12 weeks of gestational age who were divided in case and control groups. The study group included 66 women and control group included 72 women. The research had four stages: 1) taking history, 2) a teaching program for study group, 3) collecting data, 4) assessment and analyzing data using Chi-square and T tests. Data were analyzed by SPSS for statistical analysis

Results: Most of the studied persons in two groups emphasized that this backache was only in one side alternately was in the down of waist back. About 18% of the case group and 36.6% of control group had the backache during pregnancy (p<0/05). Also, daily activities and walking was important factors in the case group but daily activities were important (31.8%).

Discussion and conclusion: The results showed that performing exercises during pregnancy period, not only has any injury on embryo, but also can improve the outcome of pregnancy.

Keywords: Exercise, Outcome of pregnancy, Daily activity, Pregnancy

PREVALENCE OF POSTNATAL DEPRESSION AND ITS RELATED FACTORS IN WOMEN REFERRED TO HEALTH CARE CENTERS OF SANANDAJ IN 1388

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Introduction: Pregnancy and accouchement is a great change and important evolitional process for majority of women, in which mothers experience new biological, physical, emotional and social changes. Each of these alterations has a very important psychological effect's on mothers. This program was carried out to determine the prevalence of postnatal depression and its related factors in women referred to health care centers of Sanandaj after accouchement in 1388.

Materials and Methods: This was a cross sectional research within which 278 women referred to health care centers of Sanandaj after accouchement participated.
Each mother who participated in this research filled the Standard Edinburg Postnatal Depression Scale Questionnaire. The collected data was analyzed by SPSS Statistical software (SPSS 13).

Results: According to the standard Edinburg scale the prevalence of postnatal depression in this research was 21.1%. There were statistical significant relationships between unexpected pregnancy, low mothers age and cesarean with postnatal depression (P≤0.05) but no statistical significant relation was found between occupation, schooling and sexuality of newborn with postnatal depression.

Discussion and conclusion: The final analysis showed that postnatal depression have a statistical significant relation with unexpected pregnancy, low mothers age and cesarean so that it seem to be useful to have a educational programs in pregnancy period for women and her families (specially for younger women) to preparation them for acceptation the newborn and eventual psychological problems after accouchement.

Keywords: Postnatal depression, Unexpected pregnancy, Cesarean, Edinburg postnatal depression scale

COMPARISON OF DEPRESSION IN WOMEN WITH WANTED AND UNWANTED PREGNANCIES

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Introduction: The aim of this study was to compare depression in women with wanted and unwanted pregnancies in Iran.

Materials and Methods: this research was a descriptive and analytic study and the research society was composed of the whole pregnant mothers referring to Gonabad healthcare centers among which 78 subjects were chosen by simple sampling and were being studied in two groups of wanted and unwanted pregnancies. The information on individual characteristics was obtained using questionnaire and the applied depression test was Beck.

Results: The results showed that the average of depression in unwanted pregnancies is more than wanted pregnancies and the two groups had a meaningful statistical difference in this regard (P=0.001). The average of depression in woman who never thought of pregnancy was also more than women who didn't intend to become pregnant at present (P=0.0001).

Discussion and conclusion: the results of this research showed that the depression level is higher in unwanted pregnancies, therefore it is suggested that in order to raise the psychologic healthiness level in pregnant women, some artifices might be employed to control the unwanted pregnancies.

Keywords: Depression, Mental health, Unwanted pregnancy

IMPACT OF NEW MATERNAL HEALTH CARE PROGRAM ON BIRTH OUTCOMES

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Introduction: Maternal health refers to the health of women during pregnancy, childbirth, and the postpartum period. The major direct causes of maternal morbidity and mortality include maternal and neonatal complications such as high blood pressure and preterm birth labor.

Materials and Methods: This study compared a new program of maternal health care that includes preconception care and lower number of prenatal care visits with an old program in Qazvin province of Iran. The research design was a cohort study. A total of 940 mothers who came to 16 active maternal health clinics of Alvand and Qazvin cities were recorded, and then screened for exclusion and inclusion criteria. Of the eligible 484 subjects, 450 pregnant mothers consented to participate in the study. These mothers were followed from 3 months before pregnancy to six weeks after delivery.

Results: The results of the current study showed significant improvement in the new program in terms of impact on preconception care, the number of visits during prenatal care (p<0.001), gestational hypertension (p<0.05) and maternal and neonatal complications of birth outcomes such as preterm births (p<0.05). Fetal distress, malpresentations, and premature rupture of membranes were also less in the new program. The median number of prenatal care visits was less in the new program (5 visits in new program versus 9 visits in old program).

Discussion and conclusion: The findings of the present study indicated a lower number of prenatal visits and maternal and neonatal complications in the new program. Therefore, it is necessary to emphasize the benefits of new maternal health care, including preconception care and lower number of visits but without any increase in gestational complications adverse birth outcomes.

Keywords: Maternal Health care, Prenatal care, Preconception care, Birth outcomes

THE SURVEY OF EMOTIONAL HEALTH OF WOMEN POST ANTENATAL EDUCATION ON PREGNANT WOMEN IN WOMEN REFERRING TO DEZFUL HEALTH CENTERS IN 1388

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Introduction: Antenatal education aids pregnant mothers that they have been safer pregnancy and with less
complications. Antenatal education decreases affray and postpartum depression. Depression has been associated with pregnant negative outcome and can influences on fetal health and pediatric health. Aim of this study was to determine of emotional health of women post antenatal education on pregnant women referring to Dezful health centers in 1388.

Materials and Methods: Experimental study was performed. A total of 124 women consented to participate at study. They were divided to experimental and control groups with attended or non attended at education classes. Data collection tools were demographic information and Beck depression Inventory. It was completed through interview. Data were analyzed by using statistics methods.

Results: The results of this study indicated that most women pre education in the experimental group(65.4) and control group(67.3%) were moderate depression score. No statistical significant difference was found in depression score in the two groups pre education. The mean depression score post education in the experimental group had decreased. Depression score revealed statistically significant difference in pre education and post education in experimental group (p<0.001).

Discussion and conclusion: Depression during pregnancy has been associated with pregnant negative outcome and beside on different outcome on pregnant women can influences on fetal health and pediatric health, hence is recommended that Mother depression screening and Mother education during pregnancy.

Keywords: Keyword: Maternal depression, Antenatal education, Beck depression Inventory

THE EFFECT OF PRENATAL PHYSICAL EXERCISE ON LABOR DURATION

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Introduction: Physical exercise plays an important role in prenatal health. This research has been planned and preformed to assess the effect of prenatal physical exercise on labor duration.

Materials and Methods: The samples for this descriptive-cross sectional study included 300 healthy pregnant women of 18 to 35 years old, who had a history of 1 or 2 pregnancy, and referred to Kowsar Hospital with labor pain, were admitted to have normal vaginal delivery and were inclined to take part in this research. The sampling method was a simple accessible one. The required data were collected through the researcher’s questionnaire and were classified under four categories including demographic data, physical exercise data, pregnancy data, and labor data. The questions of these questionnaires were answered by the researcher who interviewed the samples and used their medical records for this purpose. Women who used to have physical exercise at least two times a week and 20 minutes each time were categorized under exercise group and those who had no physical exercise under no-exercise group. Data were collected through SPSS ver 17 software and analyzed using independent T-Test, Chi Square, and Pierson Correlation Coefficient.

Results: 192 pregnant women were categorized under exercise group and 108 under no-exercise group. The study revealed a significant difference between the two groups regarding dilatation (p=0.000 , X2=66.48), descent (p=0.008, X2=9.86), duration of second stage of labor (p=0.000, X2=18.19), duration of hospitalization (p=0.06, X2=5.57), and mother opinion about labor pain (p=0.000, X2=19.61). The study findings revealed no significant difference between the two groups regarding the newborn’s average weight at birth.

Discussion and conclusion: The study findings revealed that an average physical exercise during pregnancy decreases labor duration and improves mothers’ attitude towards labor pain. However, it did not prove to effect newborns weight at birth. Hence, where it is not risky for pregnant women to have physical exercise, it is wise for health centers to recommend physical exercise and such exercises are advisable to be included in the national plans of the ministry of health since they useful and improve women’s life style.

Keywords: Physical exercise, Labor duration, Newborn weight
(p=0.04) are increased after intervention. Well being at the time of discharge (p<0.05), mother’s attendance in hospital and mother’s self confidence are increased also in intervention group.

Discussion and conclusion: Regarding to significant increase of neonate well being at the time of discharge and mother’s self confidence, we recommend KMC implementation in other hospitals of the country.

Keywords: Planning, Implementation, Monitoring, Evaluation, Kangaroo Mother Care

THE INCIDENCE OF ANEMIA AMONG PREGNANT WOMEN WITH IRON SUPPLEMENTATION

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Introduction: Anemia in pregnancy is a serious condition, contributing to maternal mortality and fetal morbidity. Iron deficiency is the most common cause of maternal anemia and iron supplementation during pregnancy is a primary component of prenatal care. Almost all supplemental programs in developing countries focus exclusively on iron supplementation, but how much iron can meet the needs of this period always is a controversial issue.

Materials and Methods: In this study, 108 healthy pregnant women with GA=10-14 weeks and Hb≥11g/dl, chosen by cluster random sampling, were included and they were followed to delivery. All of women received 50mg ferrous sulfate daily as a routine program. Hb concentration was checked in the end of second and third trimesters. Hemoglobin less than10.5g/dl in the second trimester and less than 11g/dl in the third trimester was considered as anemia. For statistical analysis SPSS software was used.

Results: The incidences of anemia in the second and third semester were 12.7%, 27.9% respectively; Of course 92% of cases were mild and moderate. 29/1% of women in the second trimester and 5.8% of them in the third trimester had Hb>13.2g/dl but no cases found in third trimester. Inadequate weigh gain in the first trimester (p<0.009) and nausea vomiting (p<0.02) were maternal predictors of Hb concentration during pregnancy.

Discussion and conclusion: Our findings indicated that despite the routine iron supplementation, the prevalence of anemia was high, so it is recommended in addition to routine supplementation, women at risk should be identified to receive intensive care at the first trimester.

Keywords: Hemoglobin, Pregnancy, Ironsupplementation

EFFECTS OF HEALTH BELIEF MODEL-BASED EDUCATION ON BEHAVIORAL PROMOTION OF PREVENTING URINARY INFECTION IN PREGNANT WOMEN REFERRED TO HEALTH AND TREATMENT CENTERS IN BEHBAHAN-1389

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Introduction: Urinary infection is one of the most frequent difficulties in women and because of the changes taking place in the body conditions, pregnant women are more susceptible to it. The aim of this research was to determine the effect of Health Belief Model-based education on behavioral promotion of urinary infection prevention in pregnant women referred to health and treatment centers in Behbahan in 1388-89.

Materials and Methods: The present study was a quasi experimental research which has been conducted before and after, and in this research 110 pregnant women who referred to the health and treatment centers in Behbahan were chosen as samples. Pregnant women were divided randomly into case and control groups. The tool for collection of data was a questionnaire designed according to health belief model, knowledge and behavior which its validity and reliability was obtained before the study began. After the initial tests, the results were analyzed with Chi-square Test, t-Test and Correlation. Then educational contents in this regard were designed, prepared and executed. One month after intervention, the second test with the initial questionnaire was conducted and data were analyzed by SPSS16.

Results: The mean age pregnant women was 25. Among the pregnant women who were employed or housewifes, there was a meaningful difference considering knowledge. Also among the average of awareness scores of pregnant women, in different levels of education, there was a meaningful difference. The average scores for knowledge and other components such as (barriers perceived, benefits perceived, perceived sensitivity and perceived severity and self-efficiency) before and after intervention, there was a meaningful difference (P<0.05) and after intervention, there was a significant correlation between knowledge and perceived severity (P<0.05).

Discussions and Conclusion: Health education program designed based on Health Belief Model to promote urinary infection preventing behaviors was effective. Therefore this model can be used as a frame work for designing and execution of educational intervention for prevention of urinary infection. Besides such programs, follow up education for controlling and monitoring is highly recommended.

Keywords: Health Education, Health Belief Model, Pregnant Women, Urinary Tract Infection
DEPRESSION DURING PREGNANCY AND ITS EFFECTIVE FACTORS IN CLIENTS OF TABRIZ HEALTH CENTERS

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Introduction: In contrast to the substantial investigations of women’s psychological functioning after childbirth, relatively little research has been devoted specifically to mental health during pregnancy. Despite the impression of well-being in pregnancy, comparable rates of depressive symptoms have been found among pregnant and non-pregnant women. Large systematic studies have shown that rates of depression in late pregnancy are as high or higher than rates of postpartum depression. To determine the prevalence of depression during pregnancy and its effective factors among pregnant women visited at the selected health centers, Tabriz, Iran.

Material & Methods: This was a descriptive study in which 179 pregnant clients with gestational age of 26-32 weeks were studied in selected health centers. The instruments for data collection were demographic questionnaire and Edinburgh Postnatal Depression Scale (EPDS), which is a self-administered valid and reliable questionnaire, measuring manifestations of depression. Scores 13 or higher were considered as depression. Data were analyzed using chi square test.

Results: Out of 179 pregnant women 59 (33.0%) had suffered from depression at the time of the study. Nevertheless, none were under supervision of a health care professional for management of depression. There was significant relationship between depression during pregnancy and “positive history of psychiatric disorder in client”, “poor relationship between client and her husband” and “occurrence of bad event in past months”.

Discussion and conclusion: Considering the high prevalence of depression in pregnancy, implementation of strategies to integrate mental health screening in prenatal cares is needed. Special attention is needed to the high risk persons.

Keywords: Depression, Pregnancy, Effective factors

THE PATTERN OF DIET REGIMEN AMONG PREGNANT WOMEN IN GONABAD CITY, BASED ON HEALTH BELIEF MODEL, 2008

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Introduction: Mother diet regimen can affect her efficiency in fertilization, pregnancy, delivery and also her ability to take care of her fetus. Metabolism elevation confirms the importance of pregnancy nutrition and diet in this period of life. So, this study was conducted to find out the educational needs about pregnancy diet regimen based on Health Belief Model (HBM) among women referring to health centers of Gonabod city in 2008.

Material and Methods: This was a cross-sectional study. 173 pregnant women referring to health centers of Gonabad city were selected by cluster sampling method to participate in the study. The data were collected by a researcher-made questionnaires consisted of 67 question in eight parts: demographic characteristics, knowledge, perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action and nutritional behaviors. The questionnaire was completed through organized interview after confirming its reliability and validity. The range of scores was 0-100. Completing the questionnaires, the data were analyzed by SPSS software through central index, correlation coefficient and Chi-square test.

Results: The mothers’ mean age was 26.6 and they were housewives. Their knowledge and nutritional behavior mean scores were 53.34 and 76.41, respectively. Mean scores of all HBM variables were more than average so that, perceived susceptibility, perceived severity, perceived benefits, perceived barriers scores were 75.46, 73.23, 70.23, 70.73 and 79.29, respectively. The most significant relationship was between behavior and perceived benefits and perceived barriers (r=0.503, r=0.512). The results also showed direct significant correlation between the numbers of pregnancy, nutritional behavior and HBM variables.

Discussion and conclusion: The means of studied variables were moderate, which may be as a result of educating mothers in health centers. Results showed that they found themselves in exposure of adverse effects of unsuitable nutrition. However, they did not consider these effects as dangerous as they are in real. It seems that main activities of health centers in pregnancy nutrition affairs must focus on the perceived benefits of suitable nutrition and also take into consideration alternatives to remove the barriers against good diet regimens. In fact, the focus of educational programs should not be on the mothers’ knowledge, only.

Keywords: Health Belief Model, Nutrition Behavior, Pregnant women

THE EFFECT OF EDUCATIONAL PROGRAM BASED ON HEALTH BELIEF MODEL (HBM) ON PREVENTIVE BEHAVIOR OF SELF-MEDICATION IN WOMAN WITH PREGNANCY IN ARAK CITY

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Introduction: Self-medication is one of the most important health problems that induce many problems for society and person. The purpose of this study was to determine the effect of educational program based on Health Belief Model (HBM) on preventive behavior of
self-medication in women with pregnancy in Arak city. **Materials and Methods:** In the study quasi-experimental two hundred women with pregnancy referring to health centers participated in study. The subjects were randomly divided in two group experimental group and control group (each of group is 100 women) sampling was done with cluster on based post zone in arak city. Data collection with a questionnaire based on HBM (perceived susceptibility, severity, barrier and benefit and cuse to action and performance checklist about self-medication was used in order to evaluate the effectiveness of the educational program, before intervention data collection for both group with questionnaire and checklist then intervention done in 1 month consist of 4 session each session 50 minutes after intervention 1 and 2 month fulfill two session for follow up and 3 month after data recollection and analyzed. **Results:** The average age of case and control groups were respectively 29.2± 4.7 and 27.1± 3.8 years and mean time of pregnancy is 7.2. ± 4.6 week. The result indicated that the mean scores of knowledge, perceived susceptibility and performance about self-medication is lower moderate and severity, barrier and benefit about self-medication were in the higher moderate. The mean score of all HBM elements of experimental group changed significantly after the intervention and in comparison to the control group and performance women about self-medication reduced (p<0.05). **Discussion and conclusion:** If knowledge, perceived susceptibility, severity and benefit were higher, the women performance about self medication would be reduced. Findings of this research confirm the effect on health education based on HBM (in front with educational traditional methods in control group centers health) on self medication in pregnant women. **Keywords:** Health Belief Model, Self-Medication, Mothers.

**POSTPARTUM DEPRESSION AMONG IRANIAN WOMEN: THE ROLE OF PERCEIVED SOCIAL SUPPORT**

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**Introduction:** Depression in the postpartum period is a well known clinical phenomenon, but women at risk are rarely recognized during pregnancy or at the delivery ward. Depression in the postpartum period is a public health problem and has a long term effect on mental health since it may increase the risk of continuing or recurrent depression. Postpartum depression has also been associated with adverse effects on infant development. The aim of this study to describe the relationship between social support and postpartum depression in a sample of Iranian women.

**Materials and Methods:** This study is a cross-sectional study that was conducted on 226 women during one month postpartum refers to health center in Saqez, Iran. Participants responded to the Edinburgh postnatal depression scale and social support questionnaire. Demographic variables such as age, education level, status of dwelling and type of pregnancy were also recorded. Data were analyzed by SPSS-13. **Results:** Results indicated that the prevalence of postpartum depression was 19.47 percent among women, corresponding to a score of 13 or higher on the Edinburgh postnatal depression scale. Postpartum depression had a significant relationship with unwanted pregnancy, first pregnancy, younger age and lower social support (p < 0.05).

**Discussion and conclusion:** Postpartum depressions are common among Iranian women. Our findings provide important information about the role of social support related to postpartum depression. According to the results prevention of unwanted pregnancies can be useful in reduction postpartum depression. It also shows the importance of education especially for women whose first delivery.

**Keywords:** Postpartum depression, Social support, Iranian women.

**EFFECT OF EDUCATION ON KNOWLEDGE AND ATTITUDE OF PREGNANT WOMEN ABOUT NUTRITION DURING PREGNANCY IN IRASHAHR, 2008.**

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**Introduction:** Growth and development of fetus has close realationship with mother,s nutrition. One of the greatest obstacles related to economic and social development in pregnant women is malnutrition. This problem in low-income communities is associated with poverty, inadequate access to the types of food and lack of knowledge of a proper diet during pregnancy. According to the study of low-literate women in the region and the importance of nutrition education during pregnancy, we tried to assess the effect of education on knowledge and attitude of pregnant women about nutrition during pregnancy in Irashahr, 2008.

**Material and Method:** This study was cross-sectional in the pregnant women that referring to the health centers (centers: 3,4,5) in Iranshahr. Participating women were 30 pregnant women. Sampling randomized method was used. Data was collected with questionnaire based on pyramidal nutrition during pregnancy. The questionnaire was completed by interview after and before education and analyzed by SPSS software using descriptive
THE IMPACT OF ANTENATAL EDUCATION ON KNOWLEDGE OF AND ATTITUDE TOWARD PRIMIGRAVIDA’S WOMEN ABOUT DELIVERY METHODS REFERING TO TABRIZ SOCIAL-SECURITY, IN 2009-2010

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**Introduction:** Significant rise in cesarean delivery rates throughout the world has made this issue as one of the problems in hygienic system. In our country, cesarean delivery request by pregnant women has been increased in recent years, in which the most important reason is fear from child birth. Since unknown points and lack of knowledge are the main reasons of this fear, education pregnant women on childbirth methods in next visits to control pregnancy helps them to take a role in decision making. Aim of this research was done to determine the effect of education delivery methods on knowledge and attitudes of primigravida’s women.

**Materials and Methods:** In this Quasi-experimental study, 50 primigravida’s women in their three last months of pregnancy, who had come to Tabriz social security hospitals, were selected using systematic sampling. Education about different ways of delivery was done following pre-test by a questionnaire, and then a post-test was held. The results were analyzed by T-paired test and SPSS-VER15.

**Results:** In this research, most of the subjects (54%) had moderate knowledge of delivery methods before education and about (62%) showed good knowledge after education. There was a significance statistical differences between knowledge of delivery methods before and after education (p<0.001). Most of the subjects’ attitude toward normal delivery was positive before education (78%) which rose to 92% after education. There was a significance statistical differences between attitude towards normal delivery before and after education (p<0.001). Also, most of the studied units had a positive attitude towards cesarean delivery before education (74%) which declined to 58% after education. There was a significance statistical differences between attitude towards cesarean before and after education (p=0.009).

**Discussion and conclusion:** Education given to women about delivery methods increased their knowledge of, and improved their attitudes toward delivery methods. For this reason, it is emphasized that in health providers’ centers continuing education about delivery methods should be attended; also supervision and evaluation should be done at regular intervals.

**Keywords:** Attitude, Knowledge, Education, Delivery methods, Primigravida

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Mothers' satisfaction from cesarean cares in physical and emotional aspects in public and private Maternity Tabriz Hospitals in 2010

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**Introduction:** Consumer satisfaction is recognized as an important parameter for assessing the quality of patient care services. Patient satisfaction has become a key to gain and maintain market share. It is commonly acknowledged that patients’ reports of their satisfaction with the quality of care and services, are as important as many clinical health measures.

**Material & Methods:** This is a descriptive-comparative study. We select 392 mothers, were experience cesarean section with quota sampling method in public and private Tabriz hospitals. For data collection, we used a questionnaire that includes two parts: demographic characteristic and mothers’ satisfaction with delivery care givers. For data analyze we helped from descriptive statistic, Independent t test, ANOVA and correlation tests.

**Results:** Findings indicated, the highest rank from mothers’ satisfaction was in the physical category and the lowest rank was in emotional aspect. So that physical satisfaction rate in labor and postpartum phase were 87.5% and 100% in public hospitals and 82.7% and 100% in private hospitals. Emotional satisfaction rate in labor and postpartum phase were 78.8% and 97.8% in public hospitals and 78.8% and 97.6% in private hospitals. The analysis of data showed significant difference between mothers’ satisfaction with two aspects of care in public and private hospitals.

**Discussion and conclusion:** The results showed that
mothers were more satisfied in physical category with public hospitals and about emotional in private hospitals. That may be related to constant education and observation system in Iran public hospitals. Since public hospitals were very crowded, providers don’t have enough time to pay attention to the other sides of care like emotional aspects.

**Keywords:** Patient satisfaction, Cesarean section delivery, Care

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**EDUCATIONAL NEEDS ASSESSMENT IN PREGNANT WOMEN REGARDING URINARY INFECTIONS**

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**Introduction:** Urinary infection is one of the most frequent difficulties in women. Because of the changes occurring in the body conditions, pregnant women are more susceptible to it and according to the potential effects on mothers and the fetus, it is considered very important. The elements which cause susceptibility to urinary infection, the personal characteristics and behavior can be mentioned here. The aim of this study was to determine women educational needs in this regard.

**Materials and Methods:** the method of analysis conducted was explanatory-analytic which was conducted on 110 pregnant women referred to the center for health and treatment in Behbahan. The information collection tool was a multi sectional questionnaire consisting of demographic information, knowledge, attitude and behavior. Statistical analysis of information was done by the use of “SPSS”.

**Results:** the average age of the pregnant women in this research was 25. About 31% of the sample had good knowledge, 4.5% had good attitude, and 35.5% had good behavior. Among working people and housekeepers regarding knowledge, there was a meaningful difference. Knowledge does not have anything relationship with income. Among the average of awareness points in different levels of education, there is a meaningful difference and also between behavior points there is relation with the education.

**Discussion and conclusion:** Education is a necessity, but at the same time the method of its execution and educational program contents are also very important. Programming according to the needs and priority cause better quality in programming and condition.

**Keywords:** Educational need assessment, Pregnant women, Urinary infection, Educational planning

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**ASSESSING THE CAUSES OF CESAREAN AMONG WOMEN’S FIRST PREGNANCIES: AN APPLICATION OF BASNEF MODEL CONCEPTS.**

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**Introduction:** Cesarean section without medical indication is cited as a factor in increase in the rate of cesarean delivery in modern obstetric practice. Concerns over rising rates of cesareans have focused on the risk of death and medical complications associated with surgical delivery but have largely neglected psychosocial and behavioral factors that affect and are affected by cesarean delivery. In this study factors affecting the intention of choosing the delivery method was investigated based on the BASNEF model among women who were experiencing their first pregnancies and had referred to Ardabil health centers.

**Materials and Methods:** this was a prospective study that was carried out on 396 women with their first pregnancies in Ardebil (2010). The instrument for data collecting was a validated and reliable Questionnaire based on BASNEF model (Belief, Attitude, Subjective Norms, and Enabling Factors) and consisted of 54 questions that were designed in six parts. The data gathered before and after delivery from women and collected data were analyzed by SPSS computer software.

**Results:** The mean age of the mothers referred to Ardabil health centers was 21.8 years± 3.2, educationally, majorities of mothers (34.6%) had graduated the secondary level and had a diploma and almost most of them (93.9%) were housewives. A large number of pregnant women’s friends, husbands and mothers had suggested normal delivery for pregnancy termination. Total of 70.7% of mothers expressed that they would have probably or definitely normal delivery method of pregnancy termination, but in the contrary, cesarean section was chosen as the dominant method of delivery (58.6%).

**Discussion and conclusion:** The effect of subjective norms and motivation comply on the pregnant women’s behavior was obvious. Having a positive evaluation and preoccupation from the results of cesarean can be contributed to a positive attitude and the attitude had a direct relationship with intention to behavior.

**Keywords:** BASNEF model, Subjective norms, Enabling factors, Cesarean.
NULLIPAROUS WOMEN’S EXPERIENCES OF TALKING TO FETUS: A PHENOMENOLOGICAL STUDY

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Introduction: Babies are capable of hearing even before they are born, and some researchers believe that talking or singing to a baby in-utero is a great way to begin the parent-child bonding relationship, and perhaps even to stimulate a baby’s intellect before birth. The objective of this research is phenomenological assessment of women’s experiences of talking to fetus in womb.

Materials & Methods: We taught to pregnant women how to talk to their baby in utero at the beginning of second trimester. This research had been done by using of open and in-depth interviews along with verbal and non-verbal probing and armful sampling. Voluntaries expressed their views about their experiences of vagina childbirth next day after delivery. Speeches were taped and then manuscriped and analyzed with using of Colizzi method.

Results: In this research 3 main themes has been included which each one composed of several sub themes. Main themes included: physiologic changes, psychologic changes, changing of behaviors and views.

Discussion and conclusion: Talking to unborn baby is one of the most important ways for promoting mental health and Wellbeing during pregnancy.

Keywords: Null parity, life experience, Qualitative Research, Fetus, Speak.

THE HISTORY OF ADVERSE OUTCOMES IN RETURNEE PREGNANT WOMEN TO THE CLINICS OF ZANJAN

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Introduction: Having the history of adverse pregnancy outcomes may affect maternal and child health in their future pregnancy. Therefore, the determination of these outcomes, improving maternal and child health and reduction of social costs for them are necessary.

Materials and Methods: In a descriptive study, the determination of the history of adverse pregnancy outcomes were done in 185 pregnant women using questionnaires including demographic status and adverse outcomes (abortion, death child before or after delivery, child defect, diabetes, hypertension, UTI, vaginal discharge, LBW, LGA).

Results: Mean of gestational and maternal age were 24.70±11.04 (w) and 28.90±5.08(y), respectively. Seventy-eight (42.20%) women didn’t have any adverse outcomes in their previous pregnancies. About 60 (28.80%) women declared that their previous pregnancies were unintended. About 14 (3.90%) women had dead child before delivery and 14 (3.90%) women had dead child after delivery. 59 (16.30%) had one or more abortion, the interval of pregnancy in 38 (10.50%) women were less than 3 years, 10 (5.40%) had preterm labor 8 (4.20%) had bleeding during pregnancy and 19 (10.30%) women had a history of more than one adverse outcome.

Discussion and conclusion: About more than 50% of the pregnant women had at least one adverse pregnancy outcome in this study. Since, most of adverse outcomes are repeated in the next deliveries and most of them are preventable, women screening are necessary in preconception period.

Keywords: Adverse outcome; Pregnancy, Zanjan, History

QUALITY OF MATERNAL CARE FROM THE PERSPECTIVE OF PREGNANT WOMEN

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Introduction: This study aimed to assess the quality of maternal care from the perspective of pregnant women.

Materials & Methods: A cross-sectional study conducted using a sample of 185 pregnant women at the 9th month of pregnancy from 40 health posts and urban health centres in Tabriz, Iran. Service Quality (SQ) was calculated using:

SQ = 10 — (Importance × Performance) based on importance and performance of maternal care from the customer’ perspective. Data analyzed using SPSS; and one way analysis of variance and General Linear Modelling were used to estimate effect size and 95% Confidence Intervals.

Results: The majority of the participants (65%) aged between 21-30, nearly half of them completed high school and almost all received maternal care from the 3rd month of pregnancy. From the customers’ perspective the average service quality score was 7.59 of 10. Service quality aspects of “continuity of care”, “availability” and “confidentiality” achieved scores at the level of good quality (≥9); and “support group” (3.48), “safety” (6.79), and “dignity” (7.14) reached low service quality scores. There was no statistically significant relationship between service quality score and demographic factors.

Discussion & Conclusions: Our results revealed a significant room for quality improvement in most aspects of provided care, particularly support group and safety from the perception of people who received maternal care.

Keywords: Service Quality, Patients’ Perspective, Maternal Care

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**HEALTH ASSESSMENT AMONG PREGNANT WOMEN THROUGH A PHC AUDIT FOR HYPERTENSION AND PREECLAMPSIA**

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**Introduction:** Hypertension, pre-eclampsia and eclampsia are dangerous conditions for pregnant women which can result in a high risk pregnancy. Pre-eclampsia is a complication of pregnancy and women with pre-eclampsia have high blood pressure, protein in their urine, edema in lower extremities and may develop other symptoms and problems. The more severe pre-eclampsia, the greater the risk of serious complications to both mother and baby. Evidence showed that adherence to the guidelines and specific quality standards could improve pregnant women's health. This study aimed to determine the degree of adherence to maternal care standards for hypertension and pre-eclampsia, released by Ministry of Health (MOH)-Iran.

Materials & Methods: A retrospective audit (Cross sectional study) was conducted using a sample of 185 pregnant women in their 9th month of pregnancy in 40 health centers and health posts in Tabriz, Iran. CQMH_TQ questionnaire assessed reported adherence to MOH maternity care standards from the perception of pregnant women. SPSS software was used for data analysis.

**Results:** The proportions of participants who received recommended care, at or above the standard level, up to 9th month of pregnancy for three main indicators: checking lower leg edema, blood pressure and urine analysis (for proteinuria) were 8.6 %, 69 % and 24.3 % respectively. Also education about the above mentioned indicators did not reach the standard level (41.7%).

**Discussion and conclusion:** A notable proportion of pregnant women reported receiving suboptimal care indicating significant room for improving the quality of maternal care based on MOH standards for primary health care system.

**Keywords:** Audit, Pregnancy, Quality Of Care, Maternal Care

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**ADHERENCE TO MATERNITY CARE STANDARDS TO IMPROVE THE HEALTH OF PREGNANT WOMEN**

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**Introduction:** Quality has been defined in a number of different ways during the last decades. According to Crosby «quality is conformance to a set of standards and requirements». There for, adherence to care standards might be one of the feasible ways to improve quality of delivered care. So, this study aimed to assess the providers' adherence to maternal care standards from the perspective of pregnant women.

Materials & Methods: A cross-sectional study conducted with 185 pregnant women in their ninth month of pregnancy who were received maternal care from urban health centers and health posts in Tabriz. All participants were selected randomly from 40 health centers and health posts. Study data collected using a researcher-developed questionnaire based on Iranian Ministry of Health standards for maternity care. Questionnaire validity was reviewed and confirmed by 10 experts.

**Results:** About 69 percent of pregnant mothers during their 9 month pregnancy received at least six times standard maternal care, but 31 percent had less than six times maternity care. Almost two-thirds of participants received recommended maternal care at or above minimal standards for some aspect of maternal care, such as number of care during pregnancy, referral to health center physician, and weight and blood pressure measurement. For some other services such as measuring uterus height, review of edema and varicose, referral to a dentist, listening of fetal heart sound and vaginal examination, reported adherence rates to Ministry of Health guidelines were very low. So that, some participants never receive some services during pregnancy. The results illustrated that there were significant differences between the two sources of information, which support a statistical disagreement between medical document and customers’ report for almost all services.

**Discussion and conclusion:** A notable proportion of pregnant mothers reported receiving suboptimal care indicating significant room for improving the quality of maternal care based on Iranian Ministry of Health standards and guidelines. An interventional study recommended improving quality of maternity care, with special attention to health care providers training and awareness of pregnant women about standard maternal care who must receive during pregnancy period.

**Keywords:** Adherence To Standards, Maternal Care, Quality Improvement

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**EFFECTIVENESS OF THE INTEGRATED MOTHERS HEALTH CARE PROGRAM (IMHCP) ON KNOWLEDGE, ATTITUDE AND PRACTICE OF PREGNANT WOMEN REFERRING TO THE HEALTH CENTERS OF ISLAMSHAHR**


**Introduction:** As the commitments of Islamic Republic of Iran on the millennium development goals, maternal mortality rate must be reduced to 20 in 100,000 live births up to 2015. The health professionals must educate to pregnant women for safe motherhood, child birth and newborn care based on the standard determinants of IMHCP.
ATTITUDE AND SATISFACTION OF PHYSICIANS, STAFF AND MOTHERS TOWARD THE KANGAROO MOTHER CARE PROGRAM

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Introduction: Low birth weight and prematurity are dramatically related to neonatal mortality and morbidity rate. Based on MDG, Islamic republic of IRAN has committed to reduce neonatal mortality rate about 10/1000 (alive birth) up to year 2015. KMC is a proper method for caring of premature infant. Appropriate practice of physicians, staff and mothers results in successful implantation of KMC program. Therefore evaluation of attitude and education of these groups is necessary. This research was carried out in order to reform the LBW newborn care system.

Material Methods: This study was analytical – descriptive and qualitative research that was carried out in Tehran Mahdieh hospital (1387). The Purpose of study was to determine the attitude and satisfaction of physicians, staff and mothers to the Kangaroo Mother Care program. The number of 104 newborns (2.5 months before KMC) and 68 newborns (2.5 months after KMC) were studied. Unstable infants were omitted from study. 18 persons (8 physicians and 10 staff included midwives and nurses) participated in focus group discussion (FGD). Check list and questionnaire were used for data collection. Also SPSS software was applied for quantity data analyzing.

Results: All of the participants in FGD believed that staff has enough motivation for performing KMC. Most of the participants pointed out that not only staff’s education is the most important factor for conception of KMC but also standardization of staff is necessary for successful implantation of KMC program. Nurses were stressed since neither there wasn’t any decreasing in their working load nor the presence of mothers were not resulted in more confusion and noise. Despite this note, the staff believed that implantation of KMC program enhanced services that were given to premature neonates. Moreover emotional relationship of mother and baby caused more staff satisfaction. Mothers had low satisfaction from staff behavior and hospital facilities such as place and time. But they enjoyed from their role in KMC. Mothers’ attendance in hospital and mothers’ self confidence are increased also in KMC group.

Discussion and conclusion: Considering the increase in satisfaction of the staff and mothers especially mothers’ self confidence, we recommend KMC implementation in other hospitals of country.

Keywords: Kangaroo Mother Care, Attitude, Satisfaction

Mental health

THE RELATIONSHIP BETWEEN SOCIAL CLASS AND MENTAL HEALTH IN YOUNG PEOPLE IN TEHRAN

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Introduction: people need calm and mental health because in this situation they can grow and access to their high grade goals and behaviors. Focus on roots of mental diseases shows that one of the reasons of them is social class and social status; so the goal of present study was to study the role of social class in mental health.

Materials and Methods: data collected using public health and social class determination standard questionnaires. Number of the sample is calculated in accordance with multistage cluster sampling of Tehran’s youth and was estimated 385 people.

Results: results showed that there is a meaningful relationship between economical social class and people mental health. Furthermore, social class variables (job, income and education) and mental health have direct relation; it means that increasing occupation status, education and income cause to improve mental health.

Discussion and conclusion: there may be relationships
between social class and mental health.

**Keywords:** Social class, Mental health, Public health, Youth

**COMPARISON OF WORRY AND ANXIETY CONTROL BETWEEN OLDER AND YOUNG ADULTS**

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**Introduction:** The term ‘‘locus of control’’ describes the way an individual makes attributions about events. Internal locus of control refers to viewing events as controlled by one’s own behavior or personal attributes, whereas external locus of control describes the tendency to view events as the result of chance or fate, or as being unpredictable. Perceived anxiety control that is the extent to which external threats and an individual’s own emotional reactions are viewed to be under one’s own control, one of the structures that explains the relationship between age and worry. More recently, however, it has been suggested that the sense of being unable to control one’s environment is related more generally to negative affective states.

**Objects:** The present study aimed to compare worry and control over anxiety between older and young adults.

**Materials and Methods:** Ninety six persons including 48 young and 48 old men and women were recruited in research. We selected these persons by convenience sampling method from students of Payame nour university and kheradvarzan rehabilitation center of sari city. The instruments employed in the study were The Anxiety Control Questionnaire (AxCQ), The Worry Questionnaire Pennsylvania (PSWQ).

**Results:** Results of MANOVA showed significant difference between two groups in worry and anxiety control. Investigating worry components (typical worry and excessive worry) suggested that old persons compared to young persons had significant higher scores in both components. Persons of old group also significantly had higher scores in both components of anxiety control (internal and external locus of control).

**Discussion and conclusion:** Elderly people compared to young people experience more worry in life, however, when experience anxiety, they had more control on their anxiety compared to young people.

**Keywords:** Worry, Anxiety locus of control, Age differences

**THE STUDY OF SOCIO-MENTAL STATUS OF MOTHER AND INFANT GROWTH IN UNDER 6 MONTHS CHILDREN IN AHVAZ**

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**Introduction:** Physical growth is a reliable index for evaluation of health status in children especially in the first two years of life. This study was conducted to evaluate the relationship of maternal socio-mental factors and growth of under 6 months children out in western health centers in Ahvaz.

**Materials and Methods:** The current study was a cross-sectional and analytical study which was carried out in western health centers in Ahvaz 2008-2009. Subjects were 200 under 6 months children who referring to health centers and were selected through random sampling. Data were collected using a standard questionnaire GHQ-28 to evaluate mothers’ mental health status and a checklist was used for recording children growth indexes like weight, height, head and chest circumferences and mother’s demographic information. T –Test, Spearman correlation Statistical analysis were conducted by using Statistical SPSS version 16. (P < 0.05).

**Results:** showed that using Spearman correlation test there was a significant association between the weight gain and head circumference in children and maternal age and economical status (P<0.01), also a significant relationship was seen among education and mental status of mother with weight gain and head circumference (P<0.05). Although there was not a relationship between the growth of children and maternal job and her physical health.

**Discussion and conclusion:** regarding to findings, maternal characteristics like age, education and mental status have an important relation with infant growth. So these indicated the need for implementing strategies for recognition of mother’s risk factors and specific infant care programs concerning the importance of maternal characteristics.

**Keywords:** Infant’s growth, Mental and social factors, Mother

**THE RELATIONSHIP BETWEEN PERCEIVED STRESS AND METABOLIC SYNDROME COMPONENTS**

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**Introduction:** The metabolic syndrome was defined in the presence of three or more of the following components: abdominal obesity, hypertriglyceridemia, low HDL-C, high blood pressure, and high fasting glucose. MS and its components seem to be underlying factors for the development of atherosclerotic cardiovascular disease and type 2 diabetes. The aim of this study was to assess the relationship between perceived stress and presence of metabolic syndrome components.

**Materials and Methods:** This cross-sectional study carried out on 200 subjects who suffer from metabolic
syndrome, aged 30 to 75 years and underwent general health screening. Demographic, anthropometric and perceived stress data were assessed by questionnaire. HDL-c, Triglyceride (TG), fasting blood sugar (FBS) were measured enzymatically by colorimetric methods.

Results: There was significant association between negative perceived stress and TG ($r=0.52, P<0.01$), waist circumference ($r=0.3, P<0.001$), FBS ($r=0.4, P<0.01$) and diastolic blood pressure ($r=0.5, P<0.001$). There was no association between HDL-c, and negative perceived stress. There was a positive association between total perceived stress and blood pressure ($r=0.4, P<0.001$), TG ($r=0.4, P<0.001$) and FBS ($r=0.23, P<0.01$).

Discussion and conclusion: Perceived stress was strongly associated with several metabolic syndrome components. Waist circumference, triglyceride, FBS levels and DBP were the major determinants. This could be attributed to association between stress and eating behaviors.

Keywords: Metabolic syndrome components, Perceived stress

PREVALENCE OF DEPRESSION IN IRANIAN TURKMEN OLDER ADULTS – 1389

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Introduction: Psychological and mood disorders are the most important problems in elderly people. There are some barriers in the elderly with specific race and ethnicity that can lead to difficulty in detection and interpretation of psychological and mood disorders, for instance the different languages and low education. This study was a part of a comprehensive geriatric evaluation of Turkmen elderly. In this survey, demographic status, the prevalence of depression in Turkmen elderly people over 60 years were measured based on standard tests.

Materials and Methods: This study was cross-sectional and conducted on 300 community-dwelling Turkmen over 60 without cognitive impairment. Samples were selected cluster randomly. The questionnaire used containing demographic information and standardized questionnaires of Cognition (AMT) and depression in the elderly (GDS15). They were completed as an interview. Data were analyzed by SPSS 16 and related tests.

Results: The mean age of men and women were 67 and 65, respectively. According to the research, 20 percent had mild depression, 13 percent had moderate depression, 3 percent had severe depression and 67 percent were asymptomatic. In this study significant relationship was observed between depression score and cognitive impairment ($P$ value $=0.000$), gender ($P$ value $=0.000$), chronic diseases ($P$ value $=0.002$), employment ($P$ value $=0.001$), medicine consumption ($P$ value $=0.000$), the level of life satisfaction ($P$ value $=0.000$), smoking ($P$ value $=0.013$), addiction ($P$ value $=0.027$) and income level ($P$ value $=0.018$). There was no significant relationship between depression score and age, education, rural or urban region, number of children, previous surgery, sports activities, marital status, insurance coverage.

Discussion and conclusion: Depression is a significant public health concern worldwide. The prevalence of depression among older Turkmen adults is less or similar to rates found in other researches. Comprehensive assessment and comparison of status of the Turkmen elderly with other Iranians and other ethnic-specific people is suggested.

Keywords: Elderly, Depression.
Materials and Methods: In this experimental study, two group 96-men were randomly selected; one group as the experimental group and another group as the control group. During the sessions, we used lecture and films along with discussion and question and answer. Finally, the average was obtained after intervention from both groups. The study data were analyzed to compare mean scores during the semester before and after training in each test group by T-paired, and was used to compare the mean change scores between the two groups by t-test.

Results: In this study, Mean±SD score of students in the experimental group before training was 16.55±1.96, and control group was 16.39±2.12 and after training the experimental group score was 16.72±1.93, and controls mean score was 16.32 ± 2.15. Mean scores significantly increased in case and control group (P<.001).

Discussion and conclusion: It was concluded that education stress management strategies to the students may have a major role in their later success.

Keywords: Stress management, Academic achievement, Students

STUDY OF «MENTAL HEALTH» AND ITS RELATIONSHIP WITH THE FAMILY WELFARE IN PRE-UNIVERSITY STUDENTS IN THE SALMAS CITY IN 1388-1389

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Introduction: Mental health, science and art that helps people by creating the correct procedures in terms of mental and emotional adjustment can your environment and optimal ways to solve problems are more to choose. Families in all communities, especially in our community have vital roles in providing mental health of adolescents. Each adolescent mental health largely to the enjoyment of the riches families depend on welfare facilities and secondary school, most teenagers can appear specific talents. If successful at the end of this period of transition, adolescent social skills gained And will lose their identity in this study to evaluate «mental health» and its relation to family welfare in pre-university students in 1388-1389 Salmas city have paid.

Materials and Methods: This cross-sectional study (descriptive - analytic) is that on 160 pre-university students were Salmas city. Number of samples from each school based on the number of quota as boys and girls were selected randomly, to perform Research standard questionnaire GHQ-28 questionnaire and family welfare, which was designed by researchers using data collected by spss software using chi square test and Logistic Regression were analyzed.

Results: The results of this study showed 48.9 percent of girls and 35.7 percent of teenage boys suspected of mental disorder studied, are, who their family welfare, good, moderate, were poor respectively 22.2%, 48.8% 61.1% had psychiatric disorders. Using chi square test between variables, being a living parent, maternal education, parental cohabitation, number of family members and all aspects of family welfare and mental health correlation was found (p<0.05) but the logistic regression test with the method Backward only between sex, maternal education, parental cohabitation, then leisure activities and economic situation after the family and mental health facilities was a significant relationship (p<0.05).

Discussion and conclusion: According to research results, including youth groups at risk of psychiatric disorders and the mental disorders is high. The relationship between mental health and family welfare was appropriate policies need to address the government and family safety and comfort in the form of activities, leisure activities and welfare, education, economy ... To improve the health of adolescents should be provided.

Keywords: Mental health, family welfare, adolescent, GHQ-28 questionnaire

PREDICTING OBSESSIVE-COMPULSIVE SYMPTOMS IN NONCLINICAL POPULATION BASED ON THOUGHT FUSION BELIEFS

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Introduction: Patients with Obsessive-Compulsive Disorder (OCD) often manifest magical or superstitious qualities in their compulsive behavior. The present study aimed to predict the Obsessive-Compulsive Symptoms in nonclinical population based on Thought Fusion beliefs.

Materials and Methods: Using simple random method, one hundred and eleven undergraduate students in University of Tabriz selected. For the measurement of the given variables, Maudsley Obsessive-Compulsive Inventory (MOCI) and Wells Thought Fusion Inventory (WTFI) were applied. The results were analyzed using Pearson correlation coefficient and multivariable regression.

Results: Finding showed that there was a significant positive relationship between Obsessive-Compulsive Symptoms, Thought Fusion (r=0.40), Thought Action Fusion (r= 0.35), Thought Object Fusion (r=0.33) and Thought Event Fusion (r=0.33). The multivariable coefficients of determination for Thought Fusion beliefs with Obsessive-Compulsive Symptoms, was found to be R2= 0.16. Among the components, only Thought Action Fusion (R2= 0.12) could significantly predict Obsessive-Compulsive Symptoms.

Discussion and conclusion: Results of this study support the Wells metacognitive model of OCD and showed Thought Fusion beliefs has important role in onset and maintenance of Obsessive-Compulsive Symptoms. Therefore, modification of Thought Fusion beliefs and substitution adaptive beliefs can be useful in prevention of intensifying and maintenance of Obsessive-Compulsive Symptoms.
Keywords: Obsessive-Compulsive Symptoms, Thought Fusion, Thought Action Fusion, Thought Event Fusion, Thought Object Fusion

PREVALENCE OF DEPRESSION AMONG DIABETIC PATIENTS REFERRED TO HAMEDAN DIABETES CENTER-2009

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Introduction: Diabetes mellitus and major depressive disorder are both chronic, debilitating illnesses that may progress for years before diagnosis. Depression is a common psychiatric disorder among diabetic persons. Several studies have reported that 10% to 25% of persons with diabetes develop a major depressive episode at some time. The aim of this study was to assess the prevalence of depression in diabetic patients referring to Hamedan Diabetes Center 2009.

Materials and Methods: It was a descriptive study within which 139 diabetic patients who referred to Hamedan Diabetes Center selected. The census method for 2 months was applied. Depression assessed using DSM-IV symptom criteria for major depressive episodes, and the risk of depression as measured by the Beck test.

Results: 56% were female, 69% were married, 42% had low level of education, 61% had positive family history of diabetes, 50% had physical activity, and 70% had type 1 diabetes. 53.9% had suffered different degrees of depression.

Discussion and conclusion: In recent years, studies in persons with either diabetes or other medical diseases have demonstrated that comorbid depression adversely affects the outcome. Depression was found to be significantly associated with diabetic complications.

Keywords: Prevalence, Depression, Diabetic patients.

THE SURVEILLANCE OF MENTAL HEALTH AND THE STRATEGIES THAT FAMILIES OF PATIENTS WITH EPILEPSY NEED TOCOPE WITH STRESSES

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Introduction: A research base should be of mental health and coping strategies in families of having patient with epilepsy, in Iran. These families are at increased risk of stress and weakened family relationship, and to identify the variables that have a negative impact on a families and possible moderating influences on them.

Materials and Methods: this research was a descriptive study on 150 families of epileptics referring to the Iranian Association of Epilepsy Selected Using a Systematic sampling. A questionnaire consisting of three parts was used. The first part indicated the demographic specifications of the patient’s family, the second part showed the General Health Questionnaires (GHQ), and the third part indicated stress coping strategies carver-sheier-weinrub questionnaires.

Results: According to the acquired screen in the total mental health score, the majority of the epileptic patients’ family (56.7%) were not in an appropriate mental health condition. In this study most of respondents had depression (56.7%), social functional disorder (52%) somatic signs (61.3%). The majority of under research subjects used this strategies in a medium level. The findings showed that there is a meaningful statistical relation between gender (p=0.03), occupation (p=0.00), patient care period (p=0.00), and epileptic family mental health. And also there is a meaningful statistical relation between gender (p=0.02), occupation (p=0.02), patient care period (p=0.05), and depression scale, and also between occupation (p=0.05), patient care period (p=0.002) and social functional disorder. According to stress coping strategies, there is a meaningful statistical relation between occupational status (p=0.04) and problem solving stress coping strategies. It was found that the majority of respondents in the study had a medium mental health and used stress coping strategies in a medium level (s=0.30) (p=0.00).

Discussion and conclusion: Our results showed that if there is more mental health in the family of the epileptic patient, they will use stress coping strategies in more suitable level. Thus, it is important to construct some sources in the side of psychology, social, physical and economical supports for improving family mental health.

Keywords: Epilepsy-Mental health-Stress coping strategy

THE RELATIONSHIP BETWEEN VETERANS’ QUALITY OF LIFE AND THEIR WIVES’ GENERAL HEALTH

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Introduction: Physical and mental problems of people who were presented in war directly or indirectly is a consequence of every war. One of the most important points in health promotion in care of war veterans is attention to whole family instead of individuals. After finishing of war and returning of veterans to their family, war stresses and their destructive effects on individuals’ mental status is going on special for veterans’ wives. This research aimed to determine contribution portion of veterans’ quality of life in prediction of their wives’ general health.

Materials and Methods: 180 veterans’ families (veterans and his wife) selected by cluster random sampling of
A descriptive-analytical study with average (4.70) used problem-based coping (2.98) used emotion-based coping strategies. Mothers inventory (1983) was and the data were analyzed.

Results: Regression analysis showed that social function was the first important predictor and explained 17.2% of wives' general health, lonely. In second step physical function entered in regression as second important predictor and 21.7% of wives' general health explained totally by these variables. Discussion and Conclusion: With respect to the results, intervention related to veterans' quality of life by specialists for improvement of wives' general health should be considered. Attention to family health especially wives should be considered in counseling and therapeutic planning and it can be useful in health improvement. Also, the focus is on instructional supports and improvement of family awareness, in order to more acceptances of veterans in family, stronger family relations and welfare, and the improvement of family members' life.

Keywords: Veteran, Quality of life, General health

THE ROLE OF COPING STRATEGIES IN PARENTS WITH DIABETIC CHILDREN: A METHOD FOR KEEPING BALANCE AND FAMILY MENTAL HEALTH PROMOTION

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Introduction: Diabetes is one of the common metabolic diseases in children and adults. The research results show that one in sixty children has insulin-dependent diabetic disease. This disease involves heavy expenses as well as side effects resulting from lack of disease control which could be of main stressors for the patient and his/her family. This condition can affect parent's mental health, their social function and work. Coping strategies exist in two groups: problem-based, emotion-based. These two strategies may prepare the person for his family. This condition can affect parent's mental health, their social function and work. Coping strategies correctly can provide balance in behavior and family mental health. It is suggested that training programs on correct coping strategies for patients with mental health to be implemented.

Keywords: Coping strategies, Parents, Diabetic, Mental health family

THE RELATIONSHIP BETWEEN DEFICIT IN AFFECT REGULATION WITH PHYSICAL AND MENTAL HEALTH

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Introduction: Alexithymia is a disturbance in regulating affective states that is identified as three features; difficulty identifying feeling, difficulty describing feeling, and a severe lack of abstract thinking. This study explores the relationship between disturbance in regulating affective states that is identified as three features; difficulty identifying feeling, difficulty describing feeling, and a severe lack of abstract thinking. This study explores the relationship between disturbance in regulating affective states and physical affects and mental symptom disorders.

Material and Methods: A descriptive-analytical study was planned. Thirty patients with functional dyspeptic disease and 30 healthy subjects participated in the study. Both the patients and the control groups were asked to complete the 20-item Toronto Alexithymia Scale and the Symptom Check List-90 (SCL-90). Two groups compared according to difficulty identifying feeling, difficulty describing feeling, abstract thinking, and symptoms of 9 mental disorders, somatization, interpersonal sensitiveness, obsessive-Compulsive disease, aggression, phobia, paranoia, depression, anxiety, and schizophrenia.

Results: Twenty-eight persons in case group and 10 persons in control had disturbance in regulating affect. Mean scores of disturbance in regulating affect were more than healthy persons (62±6.8 VS 48±8.7). Risk relative to functional dyspeptic disease in patient with disturbance in regulating affect was 3.4 (OR=3.4, % 95 CI 1.9-5.9) more than non-alexithymic subjects. There was positive correlation %66 between alexithymia state and psychiatric symptoms (P<001). Risk relative to psychiatric disorders (depression, anxiety, phobia...) in alexithymic patients was 2.4 (OR=2.4, 95% CI 1.6-3.5) more than non-alexithymic subjects.

Discussion and Conclusion: Significant positive correlations were found between disturbance in affect...
We studied 1060 consecutive women in the 20-28 age range. Higher level of maternal depression was more prevalent among patients with psychological disorders than in the general population. However, most of these studies involved psychiatric patients and did not rely on population at risk of cardiovascular disease who specifically received healthy lifestyle recommendations, as was the case in our study. Modifying the lifestyle in patients with depressive disorders is difficult.

**Keywords:** Depression; Lifestyle; Behavior; Cardiovascular disease.

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**RELATIONSHIP BETWEEN DEPRESSION AND UNHEALTHY LIFESTYLE IN PATIENTS AT RISK OF CARDIOVASCULAR DISEASES**

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**Introduction:** Almost 90% of fatalities before the age of 60 occur in developing countries and can be largely prevented by reducing the level of exposure to tobacco use, unhealthy diet and physical inactivity. Non-communicable disease deaths are increasing in all regions of the world. If trends continue unabated, deaths will rise to an estimated 41.2 million a year by 2015. The evidence for the importance of healthy lifestyles is now overwhelming. New research conducted in Iran shows that lifestyle changes in diet and levels of physical activity improve the health of entire communities. Adherence to lifestyle recommendations to prevent cardiovascular diseases has remained a critical issue. We examined the association of depression with healthy behaviors in a large population of subjects at risk of cardiovascular diseases.

**Materials and Methods:** We studied 1060 consecutive subjects in order to evaluate their cardiovascular risk factors. Separated scores reflecting unhealthy behaviors (physical inactivity, smoking and poor diet) were combined to produce a global unhealthy lifestyle score. Depression assessed using DSM-IV symptom criteria for major depressive episodes, and the risk of depression as measured by the Beck test. Other variables included indicators of age, education, social, physical health problems, functional limitations, chronic medical conditions and exercise program.

**Results:** Depression was significantly associated with physical inactivity in both genders and with an unhealthy diet in men but not in women. Depression was both significantly correlated to smoking habits in men whereas only related to smoking in women. In both genders depression was associated with a cluster of unhealthy behaviors in subjects at risk of cardiovascular diseases.

**Discussion and conclusion:** The present study showed in a large population of patients, at risk of cardiovascular disease, an association between depression and a series of unhealthy behaviors. Depression was significantly associated with increased dietary cholesterol intake, increased prevalence of smoking, and a sedentary lifestyle. These findings are consistent with previous studies showing that cigarette smoking appears to be more prevalent among patients with psychological disorders than in the general population. However, most of these studies involved psychiatric patients and did not rely on population at risk of cardiovascular disease who specifically received healthy lifestyle recommendations, as was the case in our study. Modifying the lifestyle in patients with depressive disorders is difficult.

**Keywords:** Depression; Lifestyle; Behavior; Cardiovascular disease.

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**EFFECTS OF DEPRESSION AND ANXIETY ON NEONATAL AND PREGNANCY OUTCOMES**

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**Introduction:** Prevention of prenatal mental disorders in women is an important component of comprehensive health service delivery because of the substantial potential benefits for population health. However, diverse approaches to prevent prenatal depression, anxiety have had limited success. The aim of this paper was to determine the effects of depression and anxiety on neonatal and pregnancy outcomes.

**Materials and Methods:** 125 women in the 20-28 pregnancy week were surveyed using the Short Form of Beck Depression Inventory for the measurement of depression and the Spielberger Trait-Anxiety Inventory for the measurement of anxiety. At the end of the follow-up period, data on 89 mothers and their singleton neonates were available. The relationship between the explanatory and outcome variables (Delivery type, birth weight, length, chest circumference, gestational age, and 1- and 5-min Apgar score) was tested in girls and boys separately by multiple linear regression analysis.

**Results:** Maternal depression and anxiety did not show any association with neonatal outcomes. Higher level of maternal depression and anxiety was associated with the higher level of birth weight and birth height in boys and higher birth weight in girls. Delivery type in 67% with higher level of maternal depression was preterm labor. Maternal education positively correlated with birth height in boys, and birth weight in girls.

**Discussion and conclusion:** Higher level of maternal stress and anxiety possibly leads to a higher level of depression which may reduce fetal growth through physiologic changes. Also, depression can be the underlying cause of preterm labor. Gender differences in associations between demographic factors and neonatal outcome measures indicate differences in fetal development between boys and girls.

**Keywords:** Depression, Anxiety, Neonatal, Pregnancy.
THE STUDY OF DEPRESSION RATE AMONG DORMITORY STUDENT IN TEHRAN UNIVERSITY OF MEDICAL SCIENCE.

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Introduction: Depression is one of psychosis that can be caused following physical diseases. Despite depression is one of psychosis from old history but in two recent decades the importance of this disease and agent recognition was regarded. This disease is the most and common agent in psychiatrist. By attention of this subject in this research the depression rate among dormitory student of Tehran University of Medical Science investigated.

Materials and Methods: In this research, personal characteristics and beck test questionnaire offered to dormitory student and finally data analyzed with spss software.

Results: The depression rate among students was 1: without symptom (70.3%) 2: mild (23%) 3: moderate (6.4%) and depression rate had significant correlation with drug history, mother education, cigarette use, love break, mother and father dispute and home condition.

Discussion and conclusion: Considering the previous researches and this research it was indicated that depression rate in this society was considerable and depression can be affected by different factors like: cigarette, love break, family dispute, mother education and home condition. For remove of each factor offer different solutions.

Keywords: Depression rate, Student, Dormitory, Tehran

ASSESSMENT OF MENTAL HEALTH AND SOME RELATED FACTORS AMONG STUDENTS OF SABZEVAR UNIVERSITIES IN 2010

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Introduction: Mental health is one of the most important factors that influence aptitude growth of university students. The purpose of the present study is assessment of mental health and some related factors among students of Sabzevar universities.

Materials and Methods: This cross-sectional study was carried out on 270 students of universities of Sabzevar in 2010. The subjects were selected using stratified random sampling. The data were collected using GHQ-28. The cut off point of total score (0-84) was set as 23 and in each item (0-21) was set as 6. In addition to demographic information, we asked all subjects about Social Support and Parent Relationships. The data were analyzed by SPSS version 15.0 software using descriptive and analytical statistics (T test, ANOVA and Pearson correlation).

Results: This study showed that 39% of students are suspected to have physical or psychological disorders. The rate of social dysfunction disorders (%57.8) and depression (%35.9) of students was more than those of physical disorders (%32.3) and anxiety rate (%23.7). Depression and social dysfunction disorders were related to gender and residential status of students. The rate of social dysfunction disorders and depression was more among males and non-domestic students. Also, there was a significant difference between physical disorders and depression and parent relationships. The average of physical disorders and depression were higher in student who their parent were separated each other or their relationships were with the contention. There was a negative correlation between social support to stress (r=-0.134, P<0.05) and depression (r=-0.189, P<0.01).

Discussion and conclusion: Considering the high rate of suspected cases of mental disorders in students, more attention to student’s mental health problems and activation student counseling centers at universities is necessary. The changes of policies for promoting quality and quantity of supportive networks, especially for vulnerable students can reinforce mental health among students.

Keywords: GHQ28, Sabzevar, Students, Mental health

RELATIONSHIP BETWEEN DIMENSIONS OF MENTAL HEALTH AND EXERCISE QUALITY CANDIDATES OF PHYSICAL EDUCATION COURSE

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Introduction: Today, it is well known that exercise play an important role in both physical and mental health. The aim of this study was to determine the relationship between dimensions of mental health and exercise quality.

Materials and Methods: The population of this study was (n=1415; 648 males and 767 females) candidates of physical education course. 145 males with age 20.33±3.80 years and 158 females with age 19.63±1.99 years by simple random sampling were selected as sample of this study. After checking reliability of general health questionnaires (Alpha Cronbach=0.94); the questionnaires of quality of exercise and general health (GHQ28) were distributed among males and females candidates.

Results: K-S Test showed that distribution of data was abnormal (p<0.05). The result indicated that there is a significant relationship between regular exercise and sub-scale of mental health (anxiety and sleep loss, depression and Total score of mental health) (p<0.05). The result also indicated that there is a significant relationship between exercise and anxiety and Total score of mental health (p<0.05). The result also indicated that there is a significant relationship between intensity of exercise...
and anxiety and sleep loss (p<0.05). No significant relationship was observed between regular exercise with physical signs and Social dysfunctions (p≥0.05). Farther, mental health between males and females candidates was not significantly different (p≥0.05).

Discussion and conclusion: Based on the results of performed research, subjects who were involved with regular exercise, had higher levels of mental health. Subjects with regular exercise had lower anxiety, sleep loss and depression. The results of this study also indicated that subjects with the highest levels of history of exercise had lowering anxiety and sleep loss. Moreover, as observed in results with enhance exercise quality (regular and history of exercise and intensity of exercise) can lowered anxiety and sleep loss and depression and increased total score of mental health. Gender was not effective factor on mental health of the candidates. In this investigation it was observed that subjects with higher intensity of exercise had lower level of anxiety and sleep loss; but in overall, total score mental health had no significant relationship with intensity of exercise. In addition Physical activities improve mental health in various ways. Sanstrom psychological models (1978) with positive effect of physical activities on self-credence and self-esteem, Brik-— and Morgan(1978) distractibility hypothesis with relaxing factor from stimuli and stress-hearing emotions and biological model with biochemical and biological effect on mental health.

Keywords: Mental health, Exercise quality, Physical education.

COMPARISON OF ANXIETY SENSITIVITY AND WORRY IN PATIENTS WITH MAJOR DEPRESSION, PANIC DISORDERS AND NORMAL INDIVIDUALS

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Introduction: Anxiety Sensitivity and psychopathology worry are cognitive components which plays an important role in major depression and panic disorders. It leads to create dept and continuing the signs of disorders. The purpose of the present study was to compare anxiety sensitivity and worry in patients with major depression disorder, panic disorder and normal individuals.

Materials and Methods: In this study, 31 clients with Major Depression Disorder (MDD), 31 clients with Panic Disorder (PD) and 31 normal individuals as a sample of Tabriz were selected randomly. The groups were matched together in terms of demographic characteristics. The participants completed the following questionnaires: Anxiety Sensitivity Index (ASI) and Penn State Worry Questionnaire (PSWQ). The gathered data analyzed by SPSS-13 and descriptive statistic indexes and Multivariate Analysis of Variance (MANOVA).

Results: The results showed that significant differences in anxiety sensitivity and psychopathology worry between panic disorder, major depression disorder and normal individuals (P<0.0001) and between major depression disorder and normal individuals (P<0.004). Individual with panic disorder experience more anxiety sensitivity intensity than individual with major depression disorder and normal individual. In contrast, Individual with major depression disorder experience more psychopathology worry intensity than individual with panic disorder and normal individuals. Also, result showed that significant differences in components of physical concerns and mental concerns between major depression disorder, panic disorder and normal individuals (P<0.0001) but there aren’t significant difference in component of social concerns in between groups.

Discussion and conclusion: Anxiety Sensitivity and psychopathology worry are cognitive constructs that effected anxiety and depression symptoms and result in exacerbate and maintenance Panic disorder and major depression disorder.

Keywords: Anxiety Sensitivity, Worry, Major Depression Disorder, Panic Disorder

PREVALENCE OF DEPRESSION AMONG OLDER PEOPLE IN ISFAHAN, IRAN: A COMMUNITY-BASED STUDY

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Introduction: Depression is an important mental health problem, which is quite unknown among old age in our community. Thus, the purpose of this study was to investigate the prevalence of depressive symptoms and to determine the relationship between some socio-demographic variables on depression in a community sample of older adults in Iran.

Methods: A questionnaire including socio-demographic characteristics was administered by interviewer to a total of 637 men and women aged 60 to 90 years old from Isfahan province, center of Iran. Depression was assessed using the 15-item Geriatric Depression Scale which is a good method of screening for major depression. In this scale the scores 0 to 4, 5 to 9 and 10 to 15 were grouped as normal, mild depressed and severe depressed participants, respectively. Analysis was conducted using SPSS 18.0 and logistic analysis procedure.

Results: The prevalence of mild and severe depression was 50.6% and 69%, in men and women respectively (P value < 0.000). In a univariate analysis, 44.4% of married people, and 27.2% of widowed adults did not have any symptoms of depression (P value < 0.000).

Conclusion: According to GDS estimates, depressive symptoms are common in our subjects and they have significant association with marital status; however, most of them do not seek any treatment. This may lead
to serious impacts on health behavior of the community in general. In designing prevention programs, detection and management of older patients with depression using psychiatric interview should be a high priority in developing countries. We would also like to acknowledge the national elite foundation that supported us attending the congress.

**Keywords:** Depression, Geriatric Depression Scale

### Effects of Stress Management Training Methods on the Adolescents Mental Health: Applying Health Belief Model with Social Marketing Approach in Tehran

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**Introduction:** Marital conflict and divorce is an important problem in Iran. Divorce rate in Yazd is higher than its average in Iran. This study investigated the causes of marital conflict in newlywed couples in Yazd.

**Materials and Methods:** This retrospective, cross-sectional study carried out on all 250 newlywed couples referring to Yazd Marital Counseling Center, in 2003-2005. Collected data were analyzed by spss software with appropriate statistical test such as T-test, ANOVA and chi-square.

**Results:** The results showed that the most important and the most prevalent causes of conflict noted by husbands were; family interferences (16.8%), lack of moral understanding (7.2%), lack of dignity (6.8%), irresponsibility (6%) and lack of interest (4.4%). While the wives noted the following causes; family interferences (18.8%), violence (18.4%), irresponsibility (11.6%), addiction (11.2%) pessimism of husband (8.8%) and lack of moral understanding (8.4%). There was a significant relationship between the education level and parental family size of the wives and the divorce rate in the couples (P<0.05). The relationship between the history of previous marriage, the history of crime in husbands and compulsory marriage in couples and the divorce rate was significant (P<0.05).

**Discussion and conclusion:** Cultural organizations should construct educational courses about life skills for newlywed couples in order to instruct them their duties and responsibilities in marital life and, of course, problem solving skills.

**Keywords:** Conflict, divorce, mental health, newly-wed couples, yazd

### Nutrition education

**THE EFFECT OF NUTRITIONAL EDUCATION ON WEIGHT CONTROL**


**Introduction:** Obesity is the most common chronic metabolic disease in the world. It is a risk factor for most

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*Keywords: Health Education, Mental Health, Stress, Self-Efficacy, Social Marketing, Health Belief Model.*

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*ABSTRACTS*
of diseases and may decrease the level of public health. This study was carried out to determine the effect of nutritional education on weight control in women.

**Materials and Methods:** An experimental study was carried out and 100 obese women (BMI ≥ 30) were selected from a private nutritional clinic. The convenience sampling method was applied. Variables such as age, weight and height were measured. The face to face nutritional education and low calorie diet was introduced. Results showed that the mean daily dairy products consumption of female college students were 2.94±1.6 which hardly met current daily recommendation of 3 servings. Also 53.80% of our samples consumed 2.94±1.6 which hardly met current daily recommendation of 3 servings. Also 53.80% of our samples consumed.

**Results:** The mean age was 29.6 ±7.9 years and height was 160.5 ± 5.2 centimeters. Before and after education, the women weight was 85.2 ± 12.7 and 71.2 ± 11.1 kg respectively. There was significant differences in weight before and after education (p<0.001).

**Discussion and conclusion:** The findings showed that nutritional education is effective on decreasing weight. Planning of an educational program for increasing the knowledge of women using media such as TV, newspaper and face to face education is highly recommended in population of kermanshah.

**Keywords:** Nutritional education, Women , Obesity

**EFFECT OF EDUCATION BASED ON HEALTH BELIEF MODEL IN CREATING NUTRITIONAL BEHAVIORS ASSOCIATED WITH GASTRIC CANCER AMONG HOUSEWIVES**

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**Introduction:** Planning the educational programs and informing people regarding the prevention of widespread diseases like cancers is necessary. In Iran, the prevalence and mortality rate of stomach cancer is high. Furthermore screening for this kind of stomach cancer is costly and difficult. There for this study was conducted to determine the effect of educational interference based on Health Belief Model on nutritional behaviors related to stomach cancer among housewifes.

**Materials and Methods:** In this interventional study, 84 housewifes were randomly categorized into two groups (case and control). Designing the educational plan was done based on Health Belief Model. Before enforcing the educational plan, health behaviors questionnaires based on Health Belief Model was completed by the two groups. The case group received the considered intervention (4 educational sessions at 4 week). Housewives in both groups have completed the questionnaires 2 months after intervention. The data were collected and analyzed using SPSS18 software and by independent-t, chi-square and Mann Whitney statistical tests.

**Results:** The findings of this study showed that the two groups of control and case were not significantly different of demographic characteristics. Also Results show a significant difference (p<0.001) in the median of awareness scores, perceived susceptibility, perceived severity, perceived barriers, perceived benefits, perceived self-efficacy and function of the case group in relation with the control group after the intervention.

**Discussion and conclusion:** Results show the effectiveness of the educational plans based on Health Belief Model on the increasing of awareness, vision and function of housewifes about nutritional behaviors related with stomach cancer.

**Keywords:** Nutritional Behaviors, Health Belief Model, Stomach Cancer

**ASSESSMENT OF CALCIUM CONSUMPTION OF COLLEGE STUDENTS AND ITS RELATIONSHIP WITH EDUCATIONAL LEVEL AND BODY MASS INDEX**

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**Introduction:** Dairy products are core component of healthy diet for all people especially adolescent girls. This population group needs more calcium because of their rapid growth and development and dairy products are the best supplier of this nutrient. So in this study the mean daily products intake of female college students was investigated for development of proper nutrition policies and educations.

**Materials & Methods:** One hundred fifty female college students who resident in university dormitories were participated in this cross-sectional study. Different types of milk, yoghurt, cheese, ice cream and dough consumption was determined using 13-item semi-quantitative food frequency questionnaire. Information on anthropometric, demographic and socio-economic characteristics was obtained by related questionnaires. Means, standard deviations (SDs), and frequencies were calculated. Pearson and spearman tests were used to analysis the correlation between dairy products consumption and Body Mass Index (BMI) and education levels respectively.

**Results:** The mean age and BMI of the participants were 20.58±1.90 years and 21.74±2.95 kg/m2 respectively. Sixty six percent of participants were B.Sc and 44% of them were M.Sc students. The mean daily intake of milk, yoghurt, cheese, ice cream and dough were 0.92±0.83, 0.48±0.42, 0.84±0.70, 0.24±0.28 and 0.43±0.46 respectively. The educational level and BMI was negatively but insignificantly correlate with dairy products consumption (R= -0.081, R= -0.034 respectively).

**Discussion and conclusion:** The mean daily dairy products consumption of female college students were 2.94±1.6 which hardly met current daily recommendation of 3.2 servings. Also 53.80% of our samples consumed.
less than 3 servings per day. Taking into account the impact of dairy products consumption of female young adults on their bone health, the proper nutritional education are needed for increasing the knowledge of this population group about beneficial effects of milk and its products consumption.

**Keywords:** Dairy products-Student-Body Mass Index-Education level

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**DEVELOPMENT AND DETERMINATION OF VALIDITY AND RELIABILITY OF AN INSTRUMENT TO MEASURE DETERMINANTS OF SALT CONSUMPTION AMONG WOMEN BASED ON THEORY OF REASONED ACTION, YAZD, IRAN.**

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**Introduction:** Despite the high prevalence of salt consumption in different populations and global recommendations to restrict dietary sodium consumption no scientifically solid instruments were available in Iranian and international literature which intend to assess determinant factors of salt consumption among healthy people. Hence, this study aimed to present the content validity and reliability analysis of an instrument to study the determinants of salt consumption among women referred to medical health centers, based on theory of reasoned action.

**Materials and Methods:** The instrument was designed after an extensive literature review of research and the guidance of internal and external experts. The instrument consist of three behavior related to salt consumption (B1: the use of less than 6g of salt when cooking one of your usual recipes for any meal. B2- To avoid adding table salt to the food you eat at meals. B3 : to avoid the consumption of food with high salt content). For testing content validity the first version of the instrument was given to five judges, expert in health behavior research and had experience in measurement instrument validation. For content reliability the final version of the instrument was given to 30 women refer to medical health centers and Cronbach alpha was calculated. The Average age and BMI of the participants was 20.58±1.90 years and 21.74±2.95 kg/m2 respectively. Sixty six percent of participants were B.Sc and 44% of them were M.Sc students. The mean daily intake of fruits, vegetables, fruit juices, dried and canned fruits were 3.7±2.1, 3.75±1.8, 1.2±1.2, 0.47±0.57 and 0.16±0.2 servings respectively. The education level and BMI was positively but insignificantly correlate with fruits and vegetables consumption (R=0.143 and 0.028 respectively).

**Discussion and conclusion:** The mean Fruits and vegetables consumption of our participants was 9.3±4.1 servings/day which met the current daily recommendation of 9 servings/day provided by USDA. Nevertheless 14.70% of our samples consume less than 5 servings per day. So considering the importance of dietary pattern of female young adults on their future health, the community-based nutrition education programs should focus on increasing the intake of fruits and vegetables of this population group.

**Keywords:** Salt consumption- Validity – Reliability- Theory of Reasoned Action- Instrument

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**ASSESSMENT OF FRUITS AND VEGETABLES CONSUMPTION OF COLLEGE STUDENTS AND ITS RELATIONSHIP WITH BODY MASS INDEX**

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**Introduction:** Fruits and vegetables are important parts of healthy diet. This study conducted with the purpose of assessing fruits and vegetables consumption of college students and its relationship with Body Mass Index.

**Materials & Methods:** One hundred fifty female college students who were resident in university dormitories were participated in this cross-sectional study. Fruits, vegetables, juices, dried and canned fruits consumption was determined using 73-item semi-quantitative food frequency questionnaire. Information on anthropometric, demographic and socio-economic characteristics was obtained from related questionnaires. Means, standard deviations (SDs), and frequencies were calculated. Pearson and spearman tests were used to analysis the correlation between fruits and vegetables consumption and Body Mass Index (BMI) and education levels respectively.

**Results:** The mean age of participants was 20.58±1.90 years and 21.74±2.95 kg/m2 respectively. Sixty six percent of participants were B.Sc and 44% of them were M.Sc students. The mean daily intake of fruits, vegetables, fruit juices, dried and canned fruits were 3.7±2.1, 3.75±1.8, 1.2±1.2, 0.47±0.57 and 0.16±0.2 servings respectively. The education level and BMI was positively but insignificantly correlate with fruits and vegetables consumption (R=0.143 and 0.028 respectively).

**Discussion and conclusion:** The mean Fruits and vegetables consumption of our participants was 9.3±4.1 servings/day which met the current daily recommendation of 9 servings/day provided by USDA. Nevertheless 14.70% of our samples consume less than 5 servings per day. So considering the importance of dietary pattern of female young adults on their future health, the community-based nutrition education programs should focus on increasing the intake of fruits and vegetables of this population group.

**Keywords:** Fruits and vegetables consumption, College students, Body Mass Index, educational level

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**EVALUATING THE EFFECT OF NUTRITION EDUCATION ON THE KNOWLEDGE OF ELDERS IN DARAB CITY**

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**Introduction:** The aim of this study was to evaluate the effect of nutrition education on the knowledge of elders in Darab city.

**Materials and Methods:** This study was interventional
and conducted on 82 participants from 60-69 years of old (32 male -50 female) at one of the rural health center of Darab in 1388. Training program of nutrition was performed in three series with specified intervals in order to increase the knowledge of elderly in this regard.

Results: 96.3% of illiterates and 12.1% of literates participated in the study. Moreover, 96% of them lived with their family while the other 4% lived alone. The participant's level of awareness was 12.1%, when the training program of the elderly nutrition was pretested by questionnaire. After keeping three training class series of nutrition and post-testing the questionnaire on them, their knowledge increased to 90.2%. The study results showed significant statistical relationship between training and the elderly awareness.

Discussion and conclusion: Search for the most appropriate solutions to solve the problems in the elderly, including the need to assess nutritional status is necessary.

Keywords: Elders, Nutrition, Knowledge

THE NUMBER OF FOOD MEALS CONSUMED BY LACTATING MOTHERS AND ITS RELATIONSHIP WITH INFANTS' ANTHROPOMETRIC INDICES

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Introduction: Nutritional education for lactating mothers is one of the important responsibilities of health care professionals. For getting the best result of education, assessment of mother’s nutritional knowledge is needed. Therefore we evaluated the number of meals consumed by lactating mothers and its correlation with infant’s anthropometric indices in Tabriz and its rural areas.

Materials and Methods: Information on mothers’ characteristics, anthropometric and 24-hour food recall collected from 182 urban and rural lactating mothers who exclusively breast feed their infants aged 90-120 days. Infant body weight and height were measured by accurately calibrated instruments and weight for age Z-score (WAZ) and height for age Z-score (HAZ) were calculated. Number of daily main meals, snacks and dietary intake of subjects were collected. Between-group comparisons were made by independent t test.

Results: Infants’ mean WAZ and HAZ were in the normal range (0-1). After breakfast, evening and after dinner snacks was omitted in 16%, 3%, 32.1% of the mothers, respectively. The WAZ (1.2) and HAZ (0.4) of infants with mothers consuming 6 meals/day were significantly higher than WAZ (0.3) and HAZ (0.17) of infants with mothers omitted one or more meal/day (P<0.05).

Discussion and conclusion: According to the results, since the consumption of snack in lactating mothers is necessary and because of the positive effect of mothers' nutrition and especially number of meals on infants' growth, more nutritional education program in order to improve nutritional status of lactating mothers is needed.

Keywords: Lactating mothers, Education, Meal, Infants, Anthropometric indices

DETERMINANTS OF SALT CONSUMPTION BASED ON THEORY OF PLANNED BEHAVIOR AMONG WOMEN REFERED TO SETTINGS OF HEALTH CARE IN YAZD, IRAN

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Introduction: Excessive salt consumption has been associated with severity of arterial hypertension and ventricular hypertrophy, resulting in international recommendations for the use of reduced-salt diets. This study conducted with purpose the identification of determinants of salt consumption based on theory of planned behavior among women refer to medical health centers.

Materials and Methods: This cross-sectional study was conducted on 250 women refered to medical health centers. Sampling method was multi stage. Data collection was conducted using a questionnaire that designed based on structures of theory of planned behavior on three salt consumption behaviors: 1: the use of less than 6g of salt when cooking one of usual recipes for any meal. 2: To avoid adding table salt to the food eat at meals. 3: to avoid the consumption of food with high salt content. Validity was confirmed by panel of experts and reliability by alpha cronbach. The data were analyzed through using SPSS ver 11.5 and statistical tests of T-test, Chi-square, One Way Anova and spearman correlation coefficients, linear regression.

Results: Mean age of sample was 29.91±6.75 years. A significant correlation was found between use of less than 6g of salt when cooking and intention and perceived behavioral control (r= 0.132, p=0.04), (r= 0.141, p=0.02) respectively, between to avoid adding table salt to the food and intention and attitude and perceived behavioral control (r= 0.422, p=0.000), (r= 0.411, p=0.000) (r= 0.436, p=0.000) respectively, and between to avoid the consumption of food with high salt content and attitude and perceived behavioral control (r= 0.169, p=0.009) , (r= 0.291, p=0.000) respectively. Regression analysis indicated that 0.05 of variance in use of less than 6g of salt when cooking was predicted by attitude and perceived behavioral control, 0.89 of variance in to avoid adding table salt to the food was predicted by intention and perceived behavioral control, 0.10 of variance in to avoid the consumption of food with high salt content was predicted by perceived behavioral control.

Discussion and conclusion: As attitude is the most important predictors of avoid adding table salt to the food, so changing attitudes in this regard is valuable.

Keywords: Salt consumption - Theory of planned behavior - Women
OBSERVANCE OF DIETARY REGIMEN IN PATIENTS WITH CORONARY ARTERY DISEASE IN TABRIZ HOSPITALS

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Introduction: Coronary Artery Disease (CAD) is the most prevalent cardiovascular disease and the leading cause of mortality in industrialized and developing countries. It is also the first cause of mortality in Iran. People with CAD need changes in lifestyle, spatially in nutrition, because the disease is chronic. This research was conducted to evaluate the observance of diet in patients with CAD.

Materials and Methods: In this descriptive research 165 patients with CAD and history of hospitalization at least one time because of their condition were selected by convenience sampling at medical surgical cardiology wards of hospitals in Tabriz in 2009. A questionnaire with 30 questions about demographic data and observance of diet was used for data collection. Content method and cronbach coefficient Alpha were applied for validity and reliability of the questionnaire respectively. The data were analyzed by Spss software (version 14), descriptive and inferential statistics such as Mann-Whitney, Kruskal-Wallis and Spearman coefficient.

Results: Findings showed that most of patients (60%) observed their dietary regimen, moderately. A statistically significant correlation was found between dietary performance and some demographic characteristics of patients, meaning that patients with greater age and level of education and positive family history had better dietary performance (p<0.05).

Discussion and conclusion: Since a few patients (27.7%) observed their dietary regimen appropriately, it seems that clients have an essential need for education in this regard. Nurses, therefore, are responsible to identify educational needs of CAD patients regarding diet and instruct proper self-care strategies in this connection.

Keywords: Coronary Artery Disease (CAD), Dietary Regimen, Observance

KNOWLEDGE OF MALE MEDICAL STUDENTS OF AHVAZ UNIVERSITY OF MEDICAL SCIENCES ABOUT TYPES OF THERAPEUTIC DIETS IN 1389

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Introduction: Nutrition is important in the prevention of many diseases, especially chronic diseases and mental and physical efficiency of labor. Meanwhile, the role of physicians and medical students as the medical team in the community is important. Proper performance of physicians and medical students with the principles of healthy nutrition and dietary recommendations require adequate knowledge of these students. The present study investigated the knowledge of male medical students of Ahvaz Jundishapur University of Medical Sciences about Types of therapeutic diets that was done in 1389.

Material and Methods: This was a cross-sectional study (descriptive - analytical) conducted on 100 male medical students of Ahvaz Jundishapur University of Medical Sciences. Sampling method was convenience. Data from questionnaires containing 8 questions, using statistical software spss 13 analysis and knowledge of male medical students of Ahvaz University of Medical Sciences about Types of therapeutic diets was measured at three levels that they were low, medium and well.

Results: The results showed that 47% of male students had moderate knowledge, 50% of them had low-level knowledge, and 3% was good. Also there was a significant relationship (p< 0.05) between knowledge about Types of therapeutic diets and the grade of students.

Discussion and conclusion: It was concluded that nutritional knowledge of Medical students is inadequate.

Keywords: Knowledge, Medical students, Types of therapeutic diets, Ahvaz

THE RELATIONSHIP BETWEEN SERUM COPPER AND ZINC AND LIPID LEVELS IN IRANIAN WORKERS.

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Introduction: Copper and zinc are essential trace elements. Both are parts of enzymes with antioxidant functions, such as superoxide dismutase, lysyl oxidase and ceruloplasmin. Superoxide dismutase is an antioxidant enzyme that detoxifies the superoxide radical and whose activity depends on Cu availability. Epidemiological studies support the possibility that increased serum copper and decreased zinc concentration may increase the risk of cardiovascular disease. However, Studies on the role of zinc and copper nutrition as risk factors cardiovascular disease have produced conflicting results.

This study was assessed relationship between serum copper and zinc with lipid levels in Iranian workers.

Materials & Methods: This cross-sectional study was conducted on 140 workers (75 men, 65 women) aged 17-50 years who underwent general health screening. Demographic, anthropometric data and dietary intake were assessed by questionnaires, the serum copper and zinc concentrations were determined by atomic absorption spectrometry.

Results: There was significant gender-related difference in serum zinc (p<0.01) and copper (p<0.01). The mean serum copper was significantly higher in women. However, The mean serum zinc was significantly higher
The lack of Fruit and vegetable consumption may be the main factors of metabolic syndrome. None of the patients except one person have higher fruit and vegetable consumption (5 times a day). 

Discussion and conclusion: Evaluation of trace elements status may be associated with lipid profile among workers. 

Keywords: Serum Copper and Zinc ; Coronery risk factor ; Dietary intake; Worker

FRUITS AND VEGETABLES CONSUMPTION IN MALE PATIENTS WITH METABOLIC SYNDROME AND MYOCARDIAL INFARCTION

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Introduction: People with metabolic syndrome are at high risk of cardiovascular and other chronic diseases. Reasons causing the metabolic syndrome is unknown but it has been proven that the metabolic and genetic factors, environment, diet, have an important role on the disease. Diet is a major lifestyle factor in the primary and secondary prevention of numerous chronic diseases, including myocardial infarction, stroke, and diabetes. Epidemiological studies suggest that the beneficial cardiovascular health effects of diets rich in fruits and vegetables. Fruits and vegetables are important sources of fiber and nutrients with a recognized antioxidant capacity, which could have beneficial effects on the inflammatory status as well as some metabolic syndrome and cardiovascular disease features.

Materials and Methods: The current study assessed 40 men with myocardial infarction and metabolic syndrome. Patients with including criteria were enrolled to study in educational hospitals in urmia, west Azerbaijan. Nutritional intakes, Family history, age, physical activity and smoking were estimated by a validated questionnaire.

Results: Systematic sampling was used to select 40 men 30-70 years of age from urmia hospitals, west Azerbaijan, Iran. The mean of blood pressure (137/86), blood glucose (142.5) HDL (35.6), and the average triglyceride level (173.5) was higher than identified markers of metabolic syndrome. None of the patients except one person have higher fruit and vegetable consumption (5 times a day). 13 patients had daily fruit and vegetable consumption. The best age group of fruit and vegetable consumption was 46-50 years old patients.

Discussion and conclusion: The lack of Fruit and vegetable consumption may be the main factors of metabolic syndrome or infarction and It is necessary to emphasize the benefits of lifestyle modification, including losing weight, and consumption of more fruits, vegetables and dairy products in reducing the risk of the metabolic syndrome and more in-depth and well-controlled clinical and experimental studies are needed to better define the potential protective vascular effects of these nutrients and their therapeutic value in cardiovascular medicine.

Keywords: metabolic syndrome, myocardial infarction, Fruits and vegetables Consumption

COMPARISON OF SOCIAL AND PERSONAL NORMS AND HABITS WITH INTENTION AND FREQUENCY OF FISH CONSUMPTION

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Introduction: Seafood is an important part of a healthy diet. The aim of this study was to compare social and personal norms and habits with intention, and also frequency of fish consumption in Bandar Abbas, Iran.

Materials and Methods: In this cross-sectional study, a total of 321 individuals were selected and a self-administered questionnaire including demographic characteristics and items related to social and personal norms and habits within the framework of theory of planned behavior were used to collect data during face to face interview.

Results: The mean age of the participants was 43.7 (SD=14.1) years. Males and females accounted for 37.1% and 62.9% of the intended sample, respectively. 55.8% of participants had consumed fish at least once a week. Multiple regression analyses revealed that social and personal norms and habits could significantly predict intention of fish consumption frequency (R2 =0.52, F=114.4, p<0.001). The contribution of habits to the prediction of intention of fish consumption frequency was more than the contribution of personal and social norms. Furthermore, multiple regression analysis revealed that intention, social and personal norms and habits significantly predict fish consumption frequency (R2 =0.64, F=143.3, p<0.001). The contribution of habits to the prediction of fish consumption frequency was more than the contribution of personal and social norms. 

Discussion and conclusion: This study revealed that subjects, who perceived more social and personal norms, had more habits and more intention, were more likely to consume fish. Moreover, the contribution of habits to the prediction of fish consumption frequency was more than the contribution of personal and social norms.

Keywords: Theory of planned behavior, Social norms, Personal norms, Fish consumption
ASSESSMENT OF GLYCEMIC INDEX AND GLYCEMIC LOAD OF DAILY DIETARY CARBOHYDRATE (GI & GL) INTAKE AMONG STUDENTS

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Introduction: The fundamental role of human diet on the chronic diseases has been reported before, however we failed to find-out any study about Iranian food items including the glycemic index and glycemic load and the their relationship to health related parameters. This investigation conducted among the apparently healthy and free of disease students to evaluate Iranian foods’ GI and GL. The relationship between GL and BMI was investigated as common parameters. This study was performed among apparently healthy male (31) and female students (31) who lived in the dormitory, which aged 18-23 y. Dietary GI and GL were assessed using a self-reported food weighed record and also international glycemic index table was used. The main points of this study were to determine the average GI and GL intake of diets and comparison of the two genders.

Materials and Methods: The Schofield equation was used to distinguish under and over reports in the study. The habitual intake of students, were evaluated and the glycemic load of individual foods were calculated. The GL of each diet was also calculated by dividing the GL of the diet by the total amount of carbohydrate in the diet then multiplying by 100. The GL for each diet was obtained by finding the sum of each individual GL value.

Results: There were significant (P< 0105) low average GI and GL intake by female students group, compared to the male. GL intake of male students was 16 g; however the corresponding value for female students was 11 g. There was also a significant and strong association between GL intake and BMI (r= 0.34, P= 0.0007) for all.

Discussion and conclusion: Present research, indicates to the feasibility and suitability of Iranian food stuff for application and assessment of the food intake by the feasibility and suitability of Iranian food stuff for application and assessment of the food intake by the feasibility and suitability of Iranian food stuff for application and assessment of the food intake by the feasibility and suitability of Iranian food stuff for application and assessment of the food intake by the feasibility and suitability of Iranian food stuff for application and assessment of the food intake by the feasibility and suitability of Iranian food stuff for application and assessment of the food intake by the feasibility and suitability of Iranian food stuff for application and assessment of the food intake by the feasibility and suitability of Iranian food stuff for application and assessment of the food intake by the feasibility and suitability of Iranian food stuff for application and assessment of the food intake by the feasibility and suitability of Iranian food stuff for application.

Keywords: Glycemic Load, Glycemic index, Students

EFFECT OF NUTRITIONAL NON PRESENCE METHODEDUCATION OF MOTHERS BY HEALTH VOLUNTEERS IN ANTHROPOMETRICAL CHANGES OF INFANTS

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Introduction and Objectives: Intervention of parental education in increasing the knowledge of maternal nutrition has significant effect on infants’ nutrition. Nutritional education of mothers will reduce malnutrition incidence and increase physical development of infants. The aim of this study was to determine the effect of nutritional education on nutrition knowledge of mothers by health volunteers on anthropometrical changes in infants.

Materials and Methods: This project was a semi-experimental study. In this study, effects of nutritional education program of mothers by health volunteers on anthropometrical changes of infants were evaluated in Ardabil. Seventy-six mothers with children under 6 months referring to healthcare centers in Ardabil were studied. Data were collected by validated questionnaire. Non-presence educational interventions based on a predetermined program were conducted and re-assessed after one to two months of intervention. Data were analyzed by SPSS and Epi-info software.

Results: There were significant differences in maternal knowledge about infants nutrition as well as between height and weight and infant growth curves before and after intervention (p <0.05). The results of this study showed that this nutritional education program had significant positive effect on children’s growth (p <0.05).

Discussion and conclusion: This study showed that this nutritional education program was likely effective in increasing maternal knowledge about proper infant feeding.

Keywords: Nutritional education, Non-prenatal, Mothers, Infants, Anthropometry

IMPACT OF NUTRITION EDUCATION ON KNOWLEDGE, ATTITUDE AND PRACTICE OF ADOLESCENT GIRLS ABOUT DIETARY CALCIUM ACCORDING TO HEALTH BELIEF MODEL (HBM).

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Introduction: Adolescence is a state or process of growing up from puberty to maturity. Adequate dietary calcium is needed to permit optimal gains in bone mass and density in the prepubertal and adolescent years. These gains are especially critical for girls because the accumulated bone may provide additional protection against osteoporosis in the years after menopause. Dietary calcium knowledge of dietary calcium sources is a first step toward increasing the intake of calcium-rich foods. The present study has been elucidated to see the impact of nutrition education on knowledge, attitude and practice (KAP) of adolescent girls about dietary calcium. The theoretical bases for the research were the Health Belief Model (HBM).

Materials and Methods: In a Controlled trial, a total of 188 (95 cases and 93 controls) female junior high school students in the age group of 14-18 years were selected randomly from two schools of Alhavaz, Iran. Both two
groups completed a KAP validated and reliable pre-questionnaire (40 questions) that was developed based on the following HBM domains: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and health behavior action for dietary calcium intake. Case group participated in eight nutrition education sessions of half an hour for the period of three months through lecture cum discussion method based on components of the HBM using charts, leaflets, and demonstrations. After nutrition education, above questionnaire was again given to two groups for filling to adjudge the gain in level of nutrition KAP of each subject. Data were collected at two points: before the intervention and one month after the intervention and analyzed with paired and independent sample T-tests by SPSS 17.

Results: There were no significant differences between 2 groups in mean knowledge, attitude and practice scores before education. In case group, nutrition education improved their mean nutrition attitude scores significantly (P<0.049) from 29.7±3.9 to 32.6±4.1. Similarly, the case’ practice increased significantly (P<0.005) from 24.3±5.2 to 25.5±4.8. In control group, the mean nutrition knowledge, attitude and practice scores did not significantly increase after education. After intervention, nutrition knowledge increased significantly (P<0.006) in case group from 29.7±3.9 to 32.6±4.1. But in comparison to control group, this difference was not significant.

Discussion and conclusion: The findings of this study demonstrated that nutrition education program based on HBM is an effective measure to bring about the favorable and significant change in adolescent girls KAP about dietary calcium intake.

Keywords: Knowledge, Attitude, Practice, Female students, Dietary calcium intake

EFFECT OF A NUTRITION EDUCATION PROGRAM ON THE RECOMMENDED WEIGHT GAIN DURING PREGNANCY AMONG WOMEN; AN APPLICATION OF HEALTH BELief MODEL

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Introduction: Nutrition in pregnancy has an important role on fetus and mother’s health and also on the pregnancy outcome. One of the significant changes related to nutrition is weight gain of pregnant women as one of the influencing indicators which is measured by Body Mass Index (BMI). This study was conducted to determine nutritional education effect on pregnancy weight gain in pregnant women base on Health Belief Model (HBM) in Gonabad city.

Materials and Methods: This was a quasi-experimental randomized study on 110 pregnant women referring to Gonabad’s health centers divided in to experimental (54) and control (56) groups in 2009. The data was collected by reliable and valid questionnaires during first part of pregnancy care in pre-test stage. Then two educational sessions held for the experimental group. Post test was done for both groups in the last stage of pregnancy care and data were analyzed by paired T, T independent, the correlation coefficient, Mann-Whitney and Chi-square significance level P<0.05.

Results: Before intervention 25.45% of samples were thin and 56.36% normal, 13.64% overweight and 4.55% obese. Statistical significant differences between the education, parity, abortion, jobs and the mean age of the two groups were not observed. The most influencing external cue of action was found to be wife in the experimental group (88.26%) and healthcare workers in the control group (51.56%). The mean score of knowledge, perceived susceptibility, severity, threat, benefits and barriers and nutritional behavior in the experimental group, where as just knowledge average grade significantly changed in control group after intervention (P<0.01). More over statistical analysis showed significant difference between two groups in gaining recommended weight in pregnancy.

Discussion and conclusion: While 77.78% of experimental group members gained recommend BMI, only 32.29% of control group members gained this criterion. This study proved that HBM application in nutritional education was successfully effective in gaining recommended weight during pregnancy.

Keywords: Body Mass Index, Health Belief Model, Pregnant women, Pregnancy nutrition.

EFFECTS OF A NUTRITION EDUCATION PROGRAM ON KNOWLEDGE AND ATTITUDE OF FEMALE STUDENTS ABOUT DIETARY IRON

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Introduction: Iron deficiency anemia affects a large number of women in developing countries, especially during childbearing years. It can cause reduced work capacity in adults and retards motor and mental development in children and adolescents. Iron nutritional status of adolescent girls is a matter of great concern especially in the urban poor and rural areas, since these girls enter reproductive life soon after attainment of their menarche. This study was aimed to evaluate the impact of nutrition education on knowledge and attitude of female students about dietary iron.

Materials and Methods: This was an interventional experimental study (before and after). Seventhly 12 to 14 years old girls (35 intervention and 35 controlled) with iron deficiency anemia, were randomly selected.
from two schools in the city of Ahvaz and divided into two equally matched groups, one received nutrition education, and one did not. The education group received instruction in face-to-face sessions, group discussions, and pamphlets in school classrooms once a week, for the period of three months. The control group did not receive any information during the study. Socioeconomic characteristics (including Information about age, parent education levels, parent’s job, family income and family number), nutrition knowledge and attitude about dietary iron were obtained by a questionnaire before nutrition education programs and two months after intervention. Descriptive statistics, independent and pair sample t-tests were done to analyze data.

Results: before the intervention there was no significant difference between two groups in terms of nutrition knowledge and attitude. Intervention group but not control revealed a significant increase in average knowledge and attitude scores from 22.3±3.64 to 32.4±4.94 (P=0.001) and 80.4±6.16 to 89.08±5.13 (P=0.004), respectively.

Discussion and conclusion: The results of the present investigation revealed that nutrition education was effective in increasing the level of nutrition knowledge as well as attitude. It seems that the nutrition education programs could be an effective strategy for improving the nutritional habits to increase dietary iron and preventing iron deficiency anemia in adolescent girls.

Keywords: Education, Knowledge, Attitude, Iron deficiency anemia

THE EFFECT OF PRECEDE MODEL-BASED HEALTH EDUCATION PROGRAM ON REDUCING HYDROGENATED VEGETABLE OIL CONSUMPTION AMONG FAMILIES

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Introduction: Hydrogenated vegetable oils (solid oils) consumption-rich sources of both saturated and trans fatty acids- is one of the most important risk factors for cardiovascular diseases (CVD). The aim of this study was hydrogenated vegetable oils consumption reduction based on PRECEDE model among families covered by health centers of Khomein city.

Materials and Methods: This study was a random semi-experimental study with a control group. The samples were 136 adult women from Khomein and Mahallat cities whom randomly allocated to experimental and control groups. Data gathering instruments was a questionnaire based on PRECEDE model frameworks. The educational intervention was three sessions conducted weekly during 60-90 minutes based on the PRECEDE model and research samples were followed in 2 months.

Results: Mean scores of predisposing factors (knowledge and attitude), reinforcing and enabling factors showed significant difference in experimental group related to control group (p 0.05). The consumption rate of hydrogenated vegetable oils decreased from 72% to 63% and meanwhile, consumption rate of non-hydrogenated vegetable oils (liquid oils) increased from 28% to 37% (p 0.05).

Discussion and conclusion: The design and implementation of health educational intervention according to PRECEDE model could be effective in reduction of hydrogenated vegetable oils consumption.

Keywords: Health education, PRECEDE model, Hydrogenated vegetable oil, Khomein.

KNOWLEDGE, ATTITUDE AND PRACTICE OF BAKERIES OF GORGAN ABOUT THE USE OF SODIUM BICARBONATE IN BREAD -2007

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Introduction: Using Sodium Bicarbonate in bread can increase loss of bread, chill stomach acid, disorder in digestion and suction in nutrient material. So the aim of this study was to assess knowledge, attitude and practice of bakeries of Gorgan about the use of Sodium Bicarbonate in bread.

Materials and Methods: One hundred out of 208 bread bakeries participated in this study who selected by simple random sampling. Data collection instrument was a questionnaire included demographic variables and knowledge and attitude questions. Practice evaluation was performed by chemical and electrochemical exam that are useful for appointment alkality and PH in bread. The questionnaire completed by bakeries and the sample of bread was taken in start of decoction and tested in paramedical laboratory by method number 2320 of standard method. Data analyzed by SPSS soft ware via test such as chi-square test and p-value <0.05 considered as significant.

Results: Forty one percent of bakeries were using Sodium Bicarbonate that 88.9% of them was Lavash bakeries and 23.9% was Barbari bread bakeries that this was statistically significant (P<0.001). Twenty eight percent of the participants had weak knowledge about the risk of using Sodium Bicarbonate in bread, 62% had middle and 10% of them had good knowledge and about attitude 29% were weak, 43% were middle and 28% of them has favorable attitude.

The relation between bakeries members knowledge and using Sodium Bicarbonate was not statistically significant but relation between favorable attitude and kind of bread was statistically significant (P=0.001) and the Barbary bread bakeries has a better attitude rather than other.

Discussion and conclusion: According to this study, educational plan for bakeries can affect on Sodium Bicarbonate used in bread. And according to weak practice in Lavash bakeries, except for education plan there is a need for punctual supervision.

Keywords: Knowledge – Attitude – Practice- Sodium Bicarbonate - Bread
CAUSES AND CONTROL OF FOOD INSECURITY: THE DESIGN OF A MODEL IN THE NORTHWEST OF IRAN

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Introduction: Food security is an indicator of individual and household health. It is one of the major challenges for socioeconomic programs in the communities. Food insecurity has been found to have significant impacts on physical, social, and psychological status of individuals in communities suffering from that. The purpose of this study was to determine the prevalence of food insecurity, influencing factors and role of education on its reduction.

Materials and Methods: This community trial was conducted on 2500 households selected from Qaresoo region in Khoy city, northwest of Iran. Household food security status was measured by a validated short questionnaire including six questions. Other required data (influencing factors) also were obtained using validated questionnaire. Then all insecure households invited to intervention (classes). After six months of follow-up, food security status of households was evaluated.

Results: Prevalence of food insecurity in the region was 59.4 percent. Results showed that economic factors including (per capita income, housing infrastructure, number of rooms, home situation) and social factors including (distance from the city, parent status, number of centers providing food) were effective factors on household food insecurity. Insecure households (1450) invited to intervention (classes). After six months of follow-up, the prevalence of food insecurity in this group had significant impact on the prevalence of food insecurity. Insecure households (1450) invited to the intervention and (40) percent of households participated in intervention. The prevalence of food insecurity in this group after six months of follow-up was 70 percent. Intervention had significant impact on the prevalence of food insecurity.

Discussion and conclusion: Our findings indicated that household food insecurity was prevalent in the northwest of Iran. Household’s socioeconomic status was found as an important factor that affect on household food security status. food education is an effective way for food insecurity reduction, especially in low-income households.

Keywords: Food insecurity, Influencing factors, Education, Reduction.

ASSESSMENT OF GLYCEMIC INDEX AND GLYCEMIC LOAD OF DAILY DIETARY CARBOHYDRATE (GI & GL) INTAKE OF STUDENTS

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Introduction: The fundamental role of human diet on the chronic diseases have been reported, however we failed to find-out any study about Iranian food items including glycemic index and glycemic load and the relationship to health related parameters. This investigation conducted among the apparently healthy and free of disease students to evaluate Iranian foods’ GI and GL. The relationship between GL and BMI was investigated as common parameters.

Design: This study was performed among apparently healthy male (n=31) and female students (n=31) who lived in the dormitory, which aged 18-23 y. Dietary GI and GL were assessed using a self-reported food weighed record and International glycemic index table. The main points of this study were to determine average GI and GL intake of diets and compare them between two genders.

Materials and Methods: The Schofield equation was used to distinguish under and over reports in the study. The habitual intake of students, were evaluated and the glycemic load of individual foods were calculated. The GL of each diet was also calculated by dividing the GL of the diet by the total amount of carbohydrate in the diet then multiplying by 100. The GL for each diet was obtained by finding the sum of each individual GL value.

Results: There were significant (P<0105) low average GI and GL intake by female students group compared to the male. GL intake of male students was 16g; however the corresponding value for female students was ll g. There was also a significant and strong association between GL intake and BMI (r= 0.34, P= 0.0007).

Keywords: Iranian food, Glycemic Load (GL), Glycemic Index (GI)

THE EFFECT OF EDUCATIONAL PROGRAM BASED ON HEALTH BELIEF MODEL (HBM) ON THE NUTRITIONAL PRACTICE IN MENOPAUSED WOMEN IN ISFAHAN, 2010

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Introduction: The post menopausal women are at risk for chronic diseases due to estrogen deficiency. On the other hand, hormone therapy has many side effects. So the most important strategy for prevention and control of chronic disease in these women is changing the nutritional behaviors.

Materials and Methods: A randomized interventional study was conducted on 154 post menopause women in Isfahan. Menopause women were randomly divided in to experimental (84) and control (70) groups. The training was based on HBM and certain behavior goals that was took place on two 120 minutes sessions. The essential information was educated using different ways like functional designs, lecture and answer and questions. Data were collected by a valid and reliable questionnaire. The questionnaire was completed 3 times (immediately
EFFECTIVENESS OF NUTRITION EDUCATION IN TYPE 2 DIABETIC PATIENTS

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Introduction: Diabetes Mellitus is one of the most common metabolic complications that is rapidly growing. It is expected that diabetes remains as one of the most common causes of death in the coming decades. Considering that the patients’ knowledge & behavior in the field of nutrition, have a major role in type 2 diabetes control and treatment, it could be useful to provide a self-management program through nutrition education in these patients. The aim of this study was to determine the effects of nutritional education program on knowledge and nutritional behaviors of type 2 diabetic patients.

Material and Methods: In this prospective study which was conducted in Ilam University of Medical Sciences, 98 type 2 diabetic patients, aged between 30-65 years, were selected by simple sampling method. The intervention was conducted through an oral nutrition education session which took 3 hours. Data were collected by 2 validated and reliable pre and post test questionnaires, in a one month period. The mean differences of variables were compared by paired t test. P values less than 0.05 were considered significant.

Results: Comparing pre and post test results, our findings indicated that mean scores of patients’ knowledge increased significantly (p<0.001). There was also a significant improve in patients’ nutritional behavior (p<0.001). The study results showed a non significant decline in body weight and body mass index (p> 0.05).

Conclusions: Nutrition education could be considered as an effective intervention to improve the nutritional knowledge and behavior in diabetic patients. Further studies are suggested to assess the effect of nutrition education on biochemical indices in diabetic patients.

Keywords: Type 2 Diabetes, Nutrition Education, Knowledge, Behavior

HEALTHY NUTRITIONAL BEHAVIORS IN TWO GROUP OF COMMERCIAL UNIVERSITY OF MEDICAL AND NONMEDICAL SCIENCES IN 2008

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Introduction: more youth often in were exposed to risky health behaviors. Therefore, attention to the importance of nutrition disorder In relation to life style due to obesity in this period is important. This study compared the nutritional health behavior of students in medical and non medical groups have been conducted.

Materials and Methods: with Sampling cluster was collected 400 students. In this study to collect information from questionnaires was used. students have studied were aged between 19-35 with the full consent of all students participated in the study. methods of data collection using a questionnaire was consisted of three parts: Part I student demographic characteristics, Part II Questions concerning nutritional habits, which included 12 questions were based Likert ratings and The last part was a list of food groups, distinctive in 8 Table Total score based on disposable food type and rate were ranked. Data collected through questionnaires were analyzed and from descriptive and inferential statistical methods and spss software was used.

Results: The results showed that in the Medical group in (67/5 %) and non-medical Science (58/5 %) in the situation «fairly good» were in relation to nutrition and significant differences between student performance in Science Medical and non medical not Observed (p>0/05).

Discussion and conclusion: The results showed that training on medicine had little effect on the health behaviors of these students, so it is necessary as in other countries, specific training on health behaviors and self care on arrival and during the education for learn the students created, should been institutionalized in the future in Iran

Oral health

ORAL HEALTH BEHAVIORS AMONG FOURTH AND FIFTH GRADE STUDENTS AT ELEMENTARY SCHOOL IN YAZD, 1389

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Introduction: This study aimed to assess the level oral health behaviors among fourth and fifth grade students at elementary school in YAZD, 1389.

Materials & Methods: This research was a descriptive
cross-sectional study. This Study was conducted on 354 students of fourth and fifth grade students at elementary schools selected through multistage sampling. After completing the questionnaires, the data were collected and then analyzed by T-test and ANOVA statistical test.

Results: The results showed that mean score of student’s performance was 11.88±2.63 out of 18 full score. 46.9% had good performance, 50% had average performance and 2.8% poor performance. Mean score in male students performance was 11.79±2.4. And mean score in female students performance was 11.95±2.8. This study showed that the level of performance about oral health had a statistically significant relationship with father’s job official (P<0.008). And study showed that the level of performance about oral health had a statistically significant relationship with the level of father’s universal education (P<0.033).

Discussion and conclusion: As the results of the study showed that there was significant difference between the father’s job and the level of father’s education with the level of oral health behaviors.

Keywords: Performance. Oral health. Students, elementary school.

EFFECT OF ORAL AND DENTAL HEALTH EDUCATION ON ORAL HYGIENE PROMOTION DURING PREGNANCY

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Introduction: Physiological changes during pregnancy make pregnant mothers highly prone to various periodontal diseases. These mothers may prevent the problems to a large extent just by adhering to principles of oral and dental health. The present study is aimed to evaluate the effects of an oral and dental health education program on the awareness, attitudes and performance of pregnant women.

Materials and Methods: In this pre-test and post-test, semi-experimental study, 142 pregnant woman, receiving care from Khaje Rabi Regional Health Center in Mashhad city, were chosen by systematic clustering methods and randomly divided into test and control groups. The test group had two education sessions of 1 hour long, focused on generalities of oral and dental health and particularly on oral and dental health during pregnancy. Control group received no education. At the beginning two questionnaires were completed for demographic and pregnancy details of the subjects. Three forms were completed by test subjects measuring knowledge, attitude and practice before, immediately after and one month after the education program by both groups. SPSS software and student t-test were used to analysis the data.

Results: There was no statistically significant difference between two groups in the terms of knowledge, attitude and practice before the educational program. Immediately after the education program the two groups demonstrated significant statistical differences for knowledge, attitude...
and practice (P<0.0001). Also, one month later the two
groups demonstrated significant statistical differences in
terms of knowledge (P<0.0001), attitude (P=0.017) and
practice (P=0.005).
Discussion and conclusion: Results of the present
study indicated that education programs were effective
in promoting knowledge, making positive attitudes, and
promoting practice of pregnant woman in terms of oral
dental health.
Keywords: Oral health, Training Programs, Knowledge,
Attitude, Practice, Pregnancy.

DETERMINANTS OF DENTAL BRUSHING
BEHAVIOR AMONG IRANIAN ADOLESCENTS:
A THEORY OF PLANNED BEHAVIOR STUDY

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Introduction: The aims of this study were two-fold: (i)
to examine the validity of the proposed 3-factor structure
(intention, action- and coping planning) in an Iranian
sample of adolescents and, (ii) to assess the predictive
ability of the Theory of Planned Behavior (TPB) and
measures of action planning and coping planning for
dental brushing in a longitudinal study.
Material & Methods: 800 adolescents were randomly
selected to participate in the study. 90% (721) of
adolescents agreed to participate. Perceived behavioral
control, action and coping planning scales and a self-
report questionnaire regarding dental brushing behavior
were completed by the adolescents at baseline. One
month later (time-point 2), the adolescents were asked
to re-assess their frequency of dental brushing over the
four week period. Data were analyzed by a confirmatory
factor analysis (CFA) on an original three-factor structure
(intention, action plan and coping plan), a hierarchical
linear regression analysis was also performed.
Results: The CFA for the original three-factor structure
showed a good fit index (2 = 637.60, degrees of freedom
df = 116), goodness-of-fit index (GFI) = 91, and root mean
squared error of approximation (RMSEA) = 0.079. When
the data were corrected for baseline measurements, it
was found that action- and coping-planning aggregated
accounted for 4.7 % of the variance associated with dental
brushing behavior one month later. The interaction term
of action planning × coping planning explained a further
2.6 % of the variance for dental brushing frequency.
Discussion and conclusion: Action planning and coping
planning were associated with dental brushing. The
effectiveness of action planning and coping planning in
change of dental brushing frequency is discussed.
Keywords: Oral health. Tooth brushing . Action planning.
Coping planning. Adolescents

KNOWLEDGE, ATTITUDE AND SELF-CARE
BEHAVIORS ABOUT ORAL HEALTH OF
STUDENTS IN YAZD, 2009

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Introduction: Dental caries and periodontal diseases
are the most common human diseases. Oral and dental
diseases are obviously related to behavior. Having oral
hygiene knowledge is crucial for oral health behavior.
Although there is positive attitude towards oral self – care
but a lot of people still don’t have sufficient knowledge
about it. Students have an important role in the public life
in many countries; therefore, this study was carried out to
evaluate the amount of knowledge, attitude and self – care
behavior of YAZD students regarding oral hygiene.
Materials and Methods: This was a cross-sectional study
that was done in 2009. Two hundred and eighty medical
and non medical students were selected using cluster
sampling. Data were collected from the Hiroshima
University-Dental Behavioral Inventory questionnaire
(HU-DBI) which included questions about oral health
attitude and self – care behaviors plus demographic
information and knowledge evaluation. HU-DBI validity
and reliability was proved in many studies. Data were
analyzed using descriptive and inferential statistics.
Results: Of the participants, 48.6% were medical
students and 51.4% were non medical. knowledge,
attitude and self – care behavior of the students were at
moderate level. There was a positive correlation between
knowledge and age, sex, attitude and self-care behaviors.
Girls had more knowledge than boys. Also older students
had higher knowledge. Medical students had better
attitude and self – care behavior.
Discussion and conclusion: According to the non-
satisfactory levels of self care behaviors among the
students, it is necessary to improve knowledge, attitude
and self –care behaviors through oral hygiene instructions.
Keywords: knowledge, attitude, self care, oral, students

A COMPARATIVE STUDY OF PRIMARY
SCHOOL PUPILS KNOWLEDGE ABOUT
ORAL HEALTH USING ACTIVE LEARNING
IN TORBAT-E-HEIYDARIEH

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Introduction: The aim of this study was to assess the
knowledge of primary school pupils about oral health
using active learning in Torbat-e-Heiydarielh.
Materials & Methods: It was a descriptive and analytical

ABSTRACTS
ORAL HEALTH BEHAVIORS AMONG FOURTH AND FIFTH GRADE STUDENTS AT ELEMENTARY SCHOOL IN YAZD, 1389

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1: Health Education Department, School of Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.

Introduction: This study aimed to assess the level of oral health behaviors among fourth and fifth-grade students at elementary school in Yazd, 1389.

Materials & Methods: This research was a descriptive cross-sectional study. This study was conducted on 354 students of fourth and fifth grade students at elementary schools selected through multistage sampling. After completing the questionnaires, the data were collected and then analyzed by T-test and ANOVA statistical test.

Results: The results showed that the mean score of student’s performance was 11.88±2.63 out of 18 full score. 46.9% had good performance, 50% had average performance and 2.8% poor performance. Mean score in male students performance was 11.79±2.4. And mean score in female students performance was 11.95±2.8. This study showed that the level of performance about oral health had a statistically significant relationship with father’s job official (P<0.008). And study showed that the level of performance about oral health had a statistically significant relationship with father’s universal education (P<0.033).

Discussion and Conclusion: As the results of the study showed that there was significant difference between the father’s job and the level of father’s education with the level of oral health behaviors.

Keywords: Oral health. Students, elementary school.
**Introduction:** Dental health problem among elementary students is a social and health problem which results in un-recoverable social, economical, cultural and health effects. This research is aimed to improve Dental Plaque Control among elementary students in Sanandaj city by using Health Belief Model (HBM) and peer education approach.

**Materials and Methods:** This was a quasi experimental research which started by selecting three primary schools, randomly. Peer education was assigned to educate the first group (n=30) and the second group was educated by trainer group (n=30) and the third was a control group (n=30). For each group, two questionnaires were filled before and two month after implementing education and all of students had visited by dentist two time (before and after educational program). The educational programs were based on health belief model (HBM) and were about knowledge on Dental Plaque & side effect of Dental Plaque & how we can control it? This program was carry out based on child to child approach and was a peer education program.

**Results:** There were no statistical significant difference for mean score of knowledge (p-value = 0.726), Perceived Susceptibility (p-value = 0.785), Perceived Benefits (p-value = 0.898), Perceived Barriers (p-value= 0.950) and Dental Plaque Index (p-value= 0.364) among child to child group and trainer group. But there was a better practice of a child to child group in Perceived Severity (p-value= 0.002) and increasing use of toothbrush among students.

**Discussion and conclusion:** The final Statistical analyses showed that in dental plaque control which was the main goal of the research, the peer education group had effective as good as the trainer group, however in many parts of health belief model there were no statistical significant difference between child to child and trainer group. So it is recommended to use child to child approach for many health educational programs.

**Keywords:** Health education, Health Belief Model, Dental Plaque Index, Child to Child Approach

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**THE POTENTIAL OF DENTAL-PROTECTIVE CHEWING GUM IN ORAL HEALTH INTERVENTIONS**

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**Introduction:** Today more than 50 percent of chewing gums are sweetened with sugar substitutes such as polyol sweeteners, artificial sweeteners or both. It have shown that oral bacteria do not use these sugar substitutes to produce acids that dematerialize enamel and dentin. The purpose of this study was to provide an overview of chewing gum as a delivery vehicle for dental-protective agents, highlighting xylitol and its potential application in caries-prevention programs.

**Materials and Methods:** A review was done in clinical investigations and previous reviews associated with chewing gum containing substances such as calcium, bicarbonate, carbamide, chlorhexidine, fluoride and xylitol and their effects on reducing caries and plaque. Study reviews were conducted by a MEDLINE search and hand searching.

**Results:** Common claims for the effects of chewing gum include cleansing food debris from teeth and plaque, stimulating salivary flow, increasing the pH of saliva and plaque, and reducing gingivitis and periodontitis. Xylitol-
containing gum alone or with CHX is actively protective against tooth decay through reductions in S. mutans and levels of lactic acid produced by these bacteria. The use of chewing gum is an effective way to deliver fluoride and bicarbonate, minerals such as calcium and phosphate into oral cavity enhanced acid-buffering capacity and decreases demineralization. When mothers of infants and young children chew xylitol-sweetened gum, it will block transmission of mutans streptococci from mother to child.

**Discussion and conclusion:** Chewing polyol-sweetened gum, particularly xylitol-containing gum, alone or in combination with other dental-protective substances in oral health and caries-prevention programs for high-risk populations may facilitate reaching the national oral health goals. Chewing gum use by children in the school setting should be reconsidered.

**Keywords:** Chewing gum, Oral health, Caries; Sugar free; Xylitol

## ANTIBIOTIC PROPHYLAXIS IN DENTISTRY: A REVIEW AND PRACTICE RECOMMENDATION

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**Introduction:** The American Heart Association (AHA), and the American Dental Association recently changed their recommended protocols for antibiotic prophylaxis against bacterial endocarditis. A new recommendation also has been issued by the ADA and the American Academy of Orthopaedic Surgeons, or AAOS, against routine antibiotic prophylaxis in patients with prosthetic joint replacements. These changes reflect increasing scientific evidence and professional experience in opposition to widespread use of antibiotic prophylaxis in these specific situations and others faced in dentistry.

**Materials and Methods:** The authors reviewed the medical and dental literature for scientific evidence regarding the use of antibiotics to prevent local and systemic infections associated with dental treatment. Situations commonly considered by dentists for potential use of prophylactic antibiotics were reviewed to determine current evidence with regard to use of antimicrobial agents. This included prevention of distant spread of oral organisms to susceptible sites elsewhere in the body and the reduction of local infections associated with oral procedures.

**Results:** There are relatively few situations in which antibiotic prophylaxis is indicated. Aside from the clearly defined instances of endocarditic and late prosthetic joint infections, there is no consensus among experts on the need for prophylaxis. There is wide variation in recommended protocols, but little scientific basis for the recommendations. The emerging trend seems to be to avoid the prophylactic use of antibiotics in conjunction with dental treatment unless there is a clear indication.

**Discussion and conclusion:** Aside from the specific situations described, there is little or no scientific basis for the use of antibiotic prophylaxis in dentistry. The risk of inappropriate use of antibiotics and widespread antibiotic resistance appear to be far more important than any possible perceived benefit. Dentists are wise to use antibiotic prophylaxis in only those specific situations in which there is a valid scientific basis for it. Whenever possible, dentists should follow the standard protocols recommended by the ADA, AHA or AAOS.

**Keywords:** Antibiotic prophylaxis, Dentistry

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**THE EFFECT OF HEALTH EDUCATION BASED ON HEALTH BELIEF MODEL (HBM) FOR PROMOTING PREVENTIVE BEHAVIORS OF TOOTH DECAY AMONG BOY STUDENTS IN PRIMARY SCHOOL.**

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**Introduction:** Modern human is the most susceptible creature to dental cavities because of his lifestyle and food habits. Having healthy tooth or not, depends on people's behavior. This research was done to determine the effect of health education based on Health Belief Model (HBM) for promoting preventive behavior of tooth decay among the boy students, who were in the fifth-grade in the primary school in Dezfool in 2009-2010.

**Materials and Methods:** In this experimental study, 150 students were studied into two groups called experimental and control each containing 75 members chosen randomly. After determining the needs based on health belief model, suitable educational intervention was designed and executed in experimental group. The data were collected by a questionnaire which filled out in two stages before and 4 weeks after intervention. Finally, the collected data were analyzed by SPSS software (version15).

**Results:** In first stage before intervention, there was no significant difference in demographic parameters and model constructs between two groups. After intervention, a significant difference was observed between experimental and control group, in perceived susceptibility and severity, self efficacy constructs means and preventive behavior of tooth decay (P<0/05), but there weren't significant differences (P>0/05), in the other constructs of the model (perceived benefits and barriers and cues to action).

**Discussion and conclusion:** The result of this study confirms efficiency and effectiveness of educational intervention based on health belief model in increasing preventive behavior of tooth decay.

**Keywords:** health education, health belief model, tooth decay, students.
INTER-DENTAL CLEANING BEHAVIOR AND ITS RELATIONSHIP WITH PSYCHOLOGICAL CONSTRUCTS BASED ON THE TRANSTHEORETICAL MODEL

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Introduction: The common, preventable risk factors of oral health diseases are linked to oral health-related self-efficacy, attitudes and behaviors. The aim of this study was to test the applicability of the Transtheoretical model (TTM) to gain an understanding of inter-dental cleaning behavior change in senior high school students (12th Grade) in Iran.

Materials and Methods: Multistage cluster sampling was employed to recruit 361 senior high school students from 8 schools in Yazd City, Iran. This cross-sectional study took place from November 2008 to March 2009. Appropriate instruments were used to identify the stages of inter-dental cleaning behavior and psychological attributes including Inter-dental cleaning behavior decisional balance and self-efficacy. The statistical analysis of the data included descriptive statistics, t test and ANOVA.

Results: Of the 361 students, nearly 12.5% were in the maintenance stage, while 49.6% were in the pre-contemplation stage, with the rest distributed among the other stages of inter-dental cleaning behavior change. There was a statistically significant difference in the stages of inter-dental cleaning behavior change by gender. Self-efficacy and decisional balance differed significantly across the stages of inter-dental cleaning behavior change.

Discussion and conclusion: The TTM was found to be useful in determining the stages of inter-dental cleaning behavior change among students. This study suggests the development of theory-based and empirically supported intervention strategies and programs to improve inter-dental cleaning behavior directed toward students in the school health care and school nursing areas.

Keywords: Trans theoretical model, Inter-dental cleaning behaviors, Self-efficacy, Decisional balance, Students

DETERMINANTS OF ORAL HEALTH BEHAVIORS AMONG HIGH SCHOOL STUDENTS IN MARIVAN COUNTY (IRAN) BASED ON HEALTH PROMOTION MODEL

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Introduction: This paper reports on predictors of students’ oral health behaviors (OHBs), using variables...
based on the Health Promotion Model (HPM) in an attempt to identify influential variables that may be addressed through intervention efforts.

**Materials and Methods:** A multistage cluster sample of 403 high school students was recruited from 8 high schools in Marivan County in Iran. The study took place between April and July of 2010. Appropriate instruments were used to measure the variables of interest. The statistical analysis of the data included bivariate correlations, t-test, One-way ANOVA and linear regression.

**Results:** All HPM variables (perceived self-efficacy, perceived benefits and barriers, activity-related affects, interpersonal and situational influences and commitment to a plan of OHBs) were significantly related to OHBs among the respondents (p < 0.01) and a negative association was found between OHBs and perceived barriers (p < 0.01). All HPM variables were statistically significant predictors of OHBs and accounted for 42.2% of the variation.

**Discussion and conclusion:** Promotion of interpersonal influences and the students’ perceived self-efficacy and also commitment to a plan of action should be priorities of any programs aimed at promoting OHBs among students. School health care providers should suggest strategies to overcome the barriers of performing OHBs, rather than noting the benefits of these behaviors.

**Keywords:** Oral Health behavior, Health Promotion Model, Students.

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**UTILIZING PEN -3 MODEL TO PREDICT ORAL HEALTH BEHAVIORS RELATED FACTORS AMONG PRIMARY SCHOOL STUDENTS IN MASHHAD, 2010**

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**Introduction:** The aim of this study was to utilize the PEN -3 model to predict oral health behaviors related factors among primary school students in Mashhad, 2010.

**Materials and Methods:** This was a cross-sectional study in which data collected using questionnaire. An interview for fourth grade girl students and their mothers was performed through questionnaire.

**Results:** Qualitative findings showed that positive perceptions were dental health effects in personality, effect of dairy products and fruit on dental health, effects of dental health in other organs and negative role of smoking on tooth decay. Negative perceptions were the importance of tooth type is more than brushing, not brushing due to the lack of time, healthy teeth is a sign of dental health and tablet and anesthetic sprays instead of going to the dentist. Positive enabling factors were oral health posters in health systems and effects of mass media. Negative enabling factors included unfavorable distribution of sodium fluoride mouthwash in school, the cost of dental services and easy access to drug for self-medication. Positive reinforcing factors included obedience of the parents and teachers and negative reinforcing factors were not brushing by teacher, fear of dentist and dental unit, advice to self-medication by adults and encourage children with chocolate and snake by the grandfather and mother. Neutral behaviors were the use of traditional herbal medicines to reduce tooth pain.

In quantitative research, this study showed that the perceptions in mothers and students had a statistically significant relationship with educational level (t=-7.417, P=0.001 and t= 3.939, P=0.001, respectively). Findings showed that the increased perceptions urged the children to perform oral behaviors . Between the mothers awareness and attitude there was a statistically significant relationship with education level (t=-2.227, P=0.001). Mothers and students were confirmed that the role of father is reinforcing.

**Discussion and conclusion:** Economic and social factors and cultural backgrounds are causes of behaviors. This study found that fathers need to train because the most of children had received first training from them. Also schools should provide oral hygiene instruction to parents and children.

**Keywords:** Primary school children - PEN-3 model - Oral Health

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**Professionalism in health promotion and education**

**AN INVESTIGATION OF THE EFFECT OF HEALTH EDUCATION ON THE PROMOTION OF THE SCIENTIFIC BASE OF LITERACY TRAINERS AS A STEP TOWARDS TUBERCULOSIS PREVENTION IN THE PROVINCE OF ESFARAYEN, IRAN, IN 2010.**

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**Introduction:** Despite being one of the oldest known diseases in the world, tuberculosis continues posing one of the greatest threats to human life. The mortality rate due to tuberculosis is one every 4 seconds worldwide and three million people lose their life as a result of this disease annually. The increase in the spread of the disease in the past decade has been clearly recognized in developing Asian and African countries. This disease is on the increase for a number of reasons, one of them being HIV infection. Under prevailing conditions of tuberculosis control, the annual incidence of tuberculosis will show an increase of 40% by 2020. Specific tuberculosis control programs include the treatment of 85% of new pulmonary tuberculosis cases showing a positive sputum culture and the identification of at least
70% of pulmonary tuberculosis cases with a positive smear test. This study aimed at determining the effect of educating and increasing the awareness of literacy trainers in national literacy programs according to a ministerial letter of agreement. The aim was to provide health education focusing on pulmonary tuberculosis and the DOST strategy to illiterate and semi-literate groups.

**Materials and Methods:** This was a cross-sectional descriptive study conducted in 2010 (1389 Iranian calendar) in the province of Esfarayen. Training sessions (a minimum of three sessions) were provided for literacy trainers with prior invitation in the educational hall of the health center. Data were collected in two stages, one on the day of commencement of the classes and one on the final day. The validity of the method for gathering the data and the questionnaires which was comprised of demographic information and specialized questions was confirmed by the advisors and professors concerned. Data analysis of the descriptive data was done through independent t-test and with the help of EPi6 and spss software.

**Results:** There were 150 women participants between the ages of 20 and 35 with an average age of 30. 1% of the participants held a high school diploma, 12% an associate degree, 82% a bachelor’s degree and 5% a master’s degree. In terms of their knowledge on tuberculosis and based on the results obtained from pre-tests taken on the symptoms of tuberculosis, the following results were obtained. When questioned about the most significant sign of the disease 50% stated incessant coughing for a duration of two weeks, 15% only high temperature, 10% only weight loss and loss of appetite, 13% only bloody sputum and 12% stated all or a combination of the above. After the classes, the above numbers changed to 12%, 5%, 8%, and 75% respectively. Before training, 7% of the participants believed tuberculosis to be a treatable ailment, and this number changed to 98% after the training sessions.

**Discussion and conclusion:** Based on the above findings and considering the geographical dispersion and the high population of the province (130,000 inhabitants), and in particular with a view to the rural and the deprived nomadic inhabitants of the region as well as the availability of trainers with a good scientific base, it can be concluded that one will be able to provide most areas of the province and in particular the less privileged portions of the community with good educational opportunities using the resources mentioned above. The letter of agreement between the Ministry of Health and Medical Education and the National Literacy Campaign addressing the organization of health education classes as well as other health programs has provided an opportunity for literacy trainers to act as health messengers to illiterate members of the population and their families and to increase their awareness of the control and preventive measures of diseases, in particular of tuberculosis.

**Keywords:** tuberculosis, epidemiology, Esfarayen

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**EFFECT OF EDUCATION ON KNOWLEDGE AND ATTITUDE OF NURSING STAFF TOWARD PARENT PARTICIPATION IN THE CARE OF HOSPITALIZED CHILD**

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**Introduction:** Regarding the importance of education in improving health and behavior variable a quasi experimental study aims at searching the effect of education parents participation on the nurses and grade diploma in nursing attitude and knowledge in the care or the hospitalized child in hospitals depended to medical science Mashhad in 2006-2007.

**Materials & Methods:** The population was all nurses that 65 samples were selected by census, the data collection were done by questionnaires consisting of demographic characteristic, knowledge level, and attitude questions. The content validity of the question was tested by experts and reliability of them was measured by test – retest. A pretest was given to the subjects followed by training. After two weeks the same test was given to them to measure the effect of education. The statistical methods such as t-paired, mc-nimar, Wilcoxon were used to analyze the results obtained.

**Results:** The findings showed that (69/2%) had average knowledge towards parents participation in the care of the hospitalized child before education but (100%) obtained a good knowledge after education. Furthermore, it was observed that (81/5%) of units obtained average attitude before education, but (70/8%) have acquired a good attitude after education. The results showed that there was a statistically significant difference by test between the two test (p<0.001). Hence, research hypotheses is rejected which shows that education has statistically importance on both the nurses and grade diploma in Nursing attitude and knowledge.

**Discussion and conclusion:** There for the educational intervention of nurses is necessary towards parent’s participation in the care of the hospitalized child and increase their attitude. Therefore, it is recommended to do similar research in community health centers as well as for healthy children.

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**THE RELATIONSHIP BETWEEN INDIVIDUAL AND SOCIAL CHARACTERISTICS OF HEALTH PROVIDERS AND THE QUALITY OF THEIR SERVICES PRESENTED TO BELOW TWO-YEARS OLD CHILDREN IN TABRIZ HEALTH CENTERS**

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**Introduction:** The aim of this study was to assess the
**THE EFFICIENCY OF HEALTH NETWORKS IN «TABRIZ UNIVERSITY OF MEDICAL SCIENCES» APPLYING MATHEMATICAL MODEL OF DATA ENVELOPMENT ANALYSIS**

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**Introduction:** Health Networks are designed at the forefront of health service systems and a high percentage of health sector resources are being allocated to these networks in our country. Hence, it is necessary to pay a serious attention to the efficiency indexes to be assured of the best application of these scarce resources. This study aimed to estimate the efficiency of health networks and consequently their role in improving the region’s level of health.

**Materials and Methods:** This was a descriptive-analytic study that was performed in 2010. The health networks of Tabriz University of Medical Sciences were considered as the study population. The input variables included the networks’ current per capita funding, the number of personnel employed in each network, the number of active beds per ten thousand people in each district and finally the average per capita of health houses and health centers in rural and urban areas per ten thousand. The output variables included infant mortality rate (IMR), children mortality rate (CMR), the percentage of deliveries that was managed by an under graduate person and the percentage of family planning services. The data collection forms designed by the researchers according to the aims of the study, finally a comprehensive analysis software DEAP 2 was applied for data analysis.

**Findings:** Results showed that Miyaneh and Hashtrood Health Networks had the lowest efficiency among all health networks in the province with 0.580 and 0.625 of total technical efficiency, respectively. As a result, Vrzgan and Malekan networks were introduced as the reference and template for the previous above networks because of their similarity in their status and output data.

**Discussion and conclusion:** Applying this model may help the chief managers in universities of medical sciences to be able to assess the performance of related units and try to increase this grade in future.

**Keywords:** Efficiency, Health Network, Data Envelopment Analysis (DEA)

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**EFFECT OF FAMILY PLANNING COUNSELING WORKSHOP ON HEALTH WORKERS’ KNOWLEDGE IN BIRJAND FAMILY HEALTH CENTERS**

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**Introduction:** Family Planning Program is one of the most effective strategies in health indicators improvement and socioeconomic development. An effective family planning consultation can help clients to choose an appropriate contraception. This study aimed to indicate effects of family planning counseling workshop on family health worker knowledge in Birjand Health Centers.

**Materials & Methods:** In this quasi experimental study (before and after), a designed questionnaire which validity and reliability was proved by skilled staffs, was used to assess knowledge of family health workers before and after intervention; this questionnaire contained demographic and scientific questions. All of family health workers and physicians in rural and urban Health Centers were invited to attend in 2 days counseling workshop. Data

**Results:** 20.2% of attending health workers were male and 79.8% were female. Mean age was 34.48 years and mean work length was 10.2 years. 80.9% subjects didn’t know principle of consolation. 77.7% believe that condition of health center isn’t appropriate for counseling and 73.4% express that haven’t adequate time for counseling. Mean knowledge score increased dramatically after the intervention by about 2 folds (from 16 to 29.94). 42.6% of attending health workers had been attended in family planning courses before our intervention.

**Discussion and conclusion:** 2 days counseling workshop improved knowledge score of attending health workers from 16 to 29.94. Hence, we suggest counseling workshop for all health care providers in intermittent
periods to develop their knowledge in this field. Future studies are suggested to assess health care providers' practice and skills as family planning counselors

**Keywords:** Education, Counseling, Family planning, Health providers

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**QUALITY GAP ASSESSMENT IN PREMARITAL CONSULTATION IN HEALTH CENTERS OF SHAHID BEHESHTI UNIVERSITY OF MEDICAL SCIENCES**

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**Introduction:** Health office as a responsible organization for society health promotion should improve the quality and continuity of health services. This study has been carried out in order to assess the clients satisfaction from premarital consultation in health centers of Shahid Beheshti University of Medical Sciences.

**Materials and Methods:** This was an analytic cross-sectional study. Sampling method was based on purpose. The numbers of 1000 couples referring to urban premarital counseling centers of Shahid Beheshti University were studied. Servqual questionnaire including assurance, tangibles, reliability, responsiveness and empathy dimensions was used for data collection. SPSS V.14 software was applied for data analyzing.

**Results:** Mean age of couples was 25.5 years (minimum age: 15 and maximum age: 51 years old). 65.8% of couples were women and 34.2% were men. Literacy level of couples: 10.7% under diploma, 33.4% diploma, 55.9% upper diploma. Job situation of couples: 26.8% officer, 1.8% worker, 28.5% and 42% jobless. Findings showed negative service quality gap (-1.92). The most service quality gap was seen in assurance dimension (-1.35) and then in tangibles (-0.69), reliability (-0.54), empathy (-0.27) dimensions, respectively. But this gap was not seen in responsiveness dimension (0.06). Based on T-test, there was no significant gap difference between women and men (f=0.019, p=0.8), and couples with and without history of participation in premarital counseling class (t=0.572, p=0.56). One-way ANOVA test showed that with increasing of couples’ education, negative quality gap increases significantly (p=0.000). Also Significant difference was seen between quality gap with couples’ job and premarital counseling center (p=0.000).

**Discussion and conclusion:** Findings indicated the presence of quality gap in assurance, tangibles, reliability and empathy dimensions. Assurance dimension has more importance that must be notified as a preference in quality improvement programs in order to increase clients’ perceptions, more than their expectations.

**Keywords:** Perceptions, Expectations, Quality gap, Premarital counseling.

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**HEALTH PROMOTION IN TREATMENT ENVIRONMENT: A REQUIREMENT FOR TREATMENT TOURISM DEVELOPMENT**

Zamankhani M

**Introduction** : In today’s world and with development process of health promoting equipment and facilities, the hospitals can be one of the important places for offering health promotion services in society. One of the foreign currency income resources is development of treatment tourism as 50 to 80% of budget of health and treatment sectors is allocated to hospitals. The aim of this project is to determine strategies and comparing the development rate of health promoting services and its results in different hospitals of Tehran.

**Materials & Methods** : This is an investigative research in health promotion services and was performed as descriptive research in all wards of an educational hospital and two private hospitals in Tehran and the results were obtained through studying two types of checklists for evaluation of health promotion services and satisfaction rate of patients and personnel from the results. The questions in this regard are about the quality of services, the required trainings, method of offering services in patients’ ward and items regarding effectiveness of programs, dealing with suggestions, paying attention to health promotion of personnel in personnel department and average satisfaction of any part of services were calculated and analyzed through Excel Software.

**Results:** According to the results and diagrams, it was determined that Jam Hospital has the highest scores in offering these services with average of 73.5% and Kian Hospital with 51% in second rank ad Rajaei Hospital, affiliated to Shahid Beheshti University of Medical Sciences, in lower rank with 46.3%. The suggestion for establishment of health promotion committee in hospitals and paying attention to basic factors threatening the health of people such as contamination were proposed for improving the present status. Finally, standardization and promotion of healthy environments will bring tourists who come for treatment to our country and the governmental educational hospitals have priority and health promotion services training for the personnel working at clinical wards are considered as a necessity.

**Discussion and conclusion:** This research shows that paying attention to health promotion status in hospitals as health promoting environments in society can improve the quality of life in society and develop treatment tourism industry as an income resource for hospitals.

**Keywords:** Health Promotion Services, Treatment Tourism, Shahid Beheshti University of Medical Sciences.

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**THE ROLE OF CONTROL KNOB BEHAVIOR IN HEALTH SYSTEM REFORM**

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Introduction: The health system performance and health status are influenced by individual behavior from different aspects. One of the approaches for health systems analysis is the control knob approach. This approach is made of five components: financing, payment systems, organizing, regulation, and behavior which are set forth and discussed in the form of health system reforms. This study was to evaluate control knob behavior and its usage in health system reform.

Materials & Methods: This research is a review study using reliable internet and library sources.

Results: Studies review showed that the behavior control knob including design, implementation and evaluation of programs intended to change individual behavior are to improve health system performance. This type of control knob wants to answer the following question as how personal behavior of providers and patients influence both individual interaction with the health system and individual health? Behaviors are grounded in culture, social structure, habits, values, perceptions, beliefs, attitudes, and ideas. Health reformers should not seek to “push” certain practices or ideas on people; instead, they should find ways to “pull” new desired concepts for existing values held by the individual. The control knob can be used in health system reform when the four major categories to be considered in individual behavior, such as: Treatment seeking behaviors, Health professional behaviors, Patient compliance behaviors and Lifestyle and prevention behaviors are met. Each behavioral category can be related to important objectives for health sector reform.

Discussion and conclusion: Changing individual behavior is critical to the successful implementation of health reform plans. This control knob seeks to produce changes in individual behavior. Behavior change is necessary, as a control knob base for health reforms, to be considered in the elevation of overall performance of health systems and to achieve the main criteria more efficiently.

Keywords: Control knob, Health Reform, Behavior

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NGO STATUS AND GOVERNMENTAL ORGANIZATIONS ROLE IN PROMOTING POPULATION'S HEALTH

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Introduction: World Bank defines NGO as: private organizations performing activities in order to heal the pain, increase poor people's benefits, protect the environment, provide basic social services. In many countries, NGOs and public, work voluntarily and based on group interest of some people taking care of the social health of that community. This article tries to identify the duties of such organizations in the field of social health of a community.

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MATERIALS AND METHODS: review of documents and articles overview

RESULTS: Non-governmental organizations active in the field of health in recent years have done significant activities in the field of public health and that’s the reason why the government and health ministry are using such organizations in more specialized fields of public health. In recent years, expanding participation of these organizations in promoting social capital and public’s more general satisfaction, social indexes, cultural and public health has increased to a great extend. The following are some examples that NGOs can be involved in its implementation.

- Empowering people to use low cost technology
- Developing educational programs to promote health and healthy living practices

Note that these forums have some problems in the way of their activities. Such as:

- limited budget
- limited organizational capacity
- Loss of Members

Discussion and Conclusion: In conclusion there is a positive overall look towards NGOs. But direct criticism in operational problems, conflicts and incorporations, misuse of funds, etc. are also there. The majority of the top NGO are created by the government agencies but we should not forget that networking is a process that is basically should form from the bottom up and based on necessity and the need felt by the NGOs themselves. Development in a comprehensive partnership of all Iranian in promoting health based on equal citizenship rights is possible through the following:

- In terms of attitudes to gender
- In terms of sustainable development strategy
- Setting up special commissions in the areas of health in non-governmental organization, the system of decision making, decision making and executive management of the country
- Expanding educational opportunities and cultural areas of health-related NGOs
- Identify and prioritize social harms and addressing these problems by citizens and NGOs.

Keywords: NGO, Government Organizations, Health

COMPARATIVE INVESTIGATION OF THE EFFECTS OF EDUCATIONAL METHODS (LECTURE, GROUP DISCUSSION, QUESTION & RESPONSE AND ILLUSTRATIVE POSTER) ON KNOWLEDGE AND BEHAVIORS OF HEALTH CENTERS STUFF IN ALBORZ, 2007

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Introduction: The aim of this study was to compare the effects of educational methods (lecture, group discussion, question & response and illustrative poster) on knowledge and behaviors of health centers stuff in Alborz, 2007.
Materials and Methods: This was an interventional study. In the research, all health worker of Alborz Town health center (24 persons) has been investigated and the education sessions has held by 4 education methods included lecture, group discussion, question and response and using from poster in approximate equally conditions to preview knowledge of health worker. To consider the operation, 8 persons from behvarz with 4 education methods for participants (housewives 20-30 years, high school and higher) and after 2 months, the rate of participant improvement by using observed check list has been evaluated. The study tool in education evaluating of behvarz and the participant include pretest and posttest questionnaire with 10 questions, education subjects according to the official resources and confirmed by health ministry and also education title of consumption patterns education of nutrition oil.

Results: In the research, the maximum rate of education methods effect on behvarz knowledge was in group discussion (30%) and the minimum rate was in lecture method (5%). There is a meaningful relationship between education method and its effect on knowledge and behvarz operation. (p<0.05) In question and response and poster education methods, the rate has been respectively 15% and 20%. The rate of education methods effect on participant knowledge in correct consumption method of nutrition oil has been (11%) maximum in poster and (6%) minimum in lecture. There is a meaningful relationship between the education methods and knowledge of participant (p<0.05).

Also in the education methods of group discussion and question and response the rate were 10% and 8%. The rate of education methods effect on participant operation improvement has been (28.2%) with poster and (7.5%) with question and response. There is a meaningful relationship between the education methods and participant operation improvement (p<0.05) and this is 28% for group discussion and 9% for lecture.

Discussion and conclusion: The education methods of group discussion and poster was 2 - 5 times more effective than the others. The most important cause was total presence in education sessions.

Keywords: Health worker - Education methods - Lecture - Group discussion - Question & response - Poster

Introduction: In view of the rapid increase of the older people in recent decades the country needs to consider how the primary health care system can be improved to better serve the present and future aging population. Guided by the research question, the study has sought to understand and interpret the intervening conditions that may improve the state of caring behaviors for the elderly in primary health care in Isfahan, Iran.

Materials & Methods: A grounded theory approach was used on the rationale that it is most suitable for a study aiming at finding out the essence of a phenomenon that is little or not adequately know, such as posed by the present topic. The main source of data came from interviews with the elderly and their families (24 interviews), sampled on the basis of achieving theoretical saturation of the data. Other sources of data were focus group discussions (FGD) with health care providers and managers (4 focus groups, 8 participants in each group), researcher’s observations (field notes) and memos. The researcher used the constant comparative method for data analysis.

Results: Despite the strong effect of some inhibiting conditions on caring behaviors for the elderly in primary health care, the presence of some factors mitigated the effect of those conditions. In this study, four categories were identified as intervening conditions. These categories include «reinforcing factors», «individuals’ characteristic», «perceived concepts of health», and «adaptation mechanisms». Some of these factors only affected individual domain, or family and personnel domain and sometimes they mitigate all domains.

Discussion and conclusion: By using grounded theory methodology the study was able to provide new insights into the conditions mitigating the elderly primary health care in urban health care centers as an aspect of elderly primary health care quality in Isfahan, Iran. The reality of elderly primary health care in urban health care centers in Isfahan provides adequate knowledge for policy makers and health care providers to consider appropriate strategies for immediate and future applications. Other studies using different approaches in other urban and rural areas of Iran are recommended as they would provide other processes and dimensions affecting the elderly primary health care.

Keywords: Intervening conditions, Elderly health , Primary health care, Isfahan
patients and to meet their needs and expectations. This study was carried out to evaluate the quality of care services given to the patients hospitalized in university hospitals of Kashan.

Materials and Methods: A cross sectional study was carried out in 2008. A total of 390 patients admitted to three hospitals randomly have been approached. The survey instrument was designed around the validated SERVQUAL instrument. The questionnaire consists of seven quality criteria including physician's empathy, physician's availability, physician's assurance/competence, nurse's responsibility, nurse's empathy, drug's management and tangibility of the services. Validity and reliability of the questionnaire were confirmed using content validity and Cronbach's alpha coefficient (0.93), respectively. Data obtained were analyzed using the Kruskal-Wallis and Mann Whitney tests.

Results: Mean age of the subjects was 45.72±18.36 years. Male patients (54.1%) had the largest sample size. A significant difference was detected in the average of quality score in the seven dimensions. Also, mean quality score in different dimensions showed significant difference among the hospitals under study. The highest and lowest averages for quality score were given to physician's empathy (3.97±0.75) and tangibility of the services (3.76±0.58) given, respectively.

Discussion and conclusion: Service quality in the university hospitals had a good condition from the patients' view, but different quality scores amongst quality dimensions in any hospital conveys that management should put more attention on quality improvement programs in order to improve patients' satisfaction.

Keywords: Patient satisfaction, Total Quality Management, University Hospitals, Quality of Health Care, Inpatients

QUALITY GAP OF HEALTH CARE SERVICES IN KHORRAMABAD URBAN HEALTH CENTERS

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Introduction: The aim of this study was to investigate the gap between expectations and perception of the urban health centers consumers of Khorramabad city about health care services.

Materials and Methods: A sample of 650 health care service consumers of urban health centers in Khorramabad city participated in this cross-sectional study which was done in 2010. For this study stratified random sampling was applied. Data were collected using modified SERVQUAL instrument which measures the quality gap of delivered services in 5 dimensions. For statistical analysis, descriptive statistic and Wilcoxon tests were applied.

Results: The results demonstrated that in each of five SERQUAL dimensions (Tangibles, Reliability, Responsiveness, Assurance and Empathy) quality gap were observed. The least and the most quality gap means were in the reliability and empathy dimensions respectively. Between age of clients and gap score, reverse association was observed (P = 0.014). Gap score was significantly higher in males than females (P = 0.03). Gap score and education level of clients was not correlated.

Discussion & Conclusions: Based on results, delivered services in all dimensions was lower than client's expectations. Therefore, there are appropriate opportunities to improve delivered health care services in these health centers.

Keywords: Quality Gap, Health Care Services, Urban Health
EDUCATIONAL PACKAGE FOR INCREASING COGNITIVE AND BEHAVIORAL SKILLS OF PHYSICIANS ABOUT MALARIA IN BALUCHESTAN AREA, IRAN, 2009

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Introduction: Malaria is one of the three important diseases in the world. More than 3.5 million in Iran are living in malaria endemic areas. 65% of malaria cases in Iran reports from Sistan va baluchistan province. The physicians are the head of health services in Rural and Urban areas in Iran and have essential role in malaria control. Therefore they are in the tip of capacity building program in this area. This study evaluated an educational package to increase cognitive and behavioral skills of physician about malaria control.

Materials & Methods: A before after intervention was conducted in 2009 in Sistan and baluchistan province, Iran. A 62 open questions was developed to assess cognitive skills and the checklists for measuring 13 behavioral skills. Four booklets were designed about different subjects related to malaria; Booklet 1 (malaria vectors, clinical pattern, immunology and physiology and diagnosis), Booklet 2 (Anatomy and physiology of Anopheles, epidemiology malaria), Booklet 3 (Malaria treatment and prevention), Booklet 4 (Malaria Control) and some films and PowerPoint about needed skills. Thirty physicians participated from four districts in province. Paired t-test was done by SPSS to analysis.

Results: The cognitive skills were increased from 28 to 74 significantly after intervention. The behavioral skills were enhanced from 30 to 51 significantly. Physicians Knowledge about different subjects related to malaria in all the booklets increased significantly after the intervention; booklet 1(post-79.2% vs pre-33.3%) and booklet 2(post-86% vs pre-34%) and booklet 3(post-74.8% vs pre-25%) and booklet 4(post-54.4% vs pre-16%).

Discussion and conclusion: The results showed that an educational package is a simple and economic way to build capacity among physicians who has essential role in malaria elimination program in malari- endemic areas.

Keywords: Health education, Primary health care, Evaluation, East Azerbaijan

THE ROLE OF FAMILY PHYSICIAN IN SCREENING, PATIENT REFERRAL AND INSURANCE COVERAGE IN THE RURAL AREAS IN SANNANDAJ, 2009

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Introduction: Family physician program has been implemented since 2005 in rural areas in the Islamic Republic of Iran. This study evaluated its impacts on accessibility, screening, patient referral, feedback process and insurance coverage in rural health units.

Materials & Methods: This study was quasi experimental (before after study) and compared the last 3 months function of 4 health centres and 8 health houses in 2004 and 2008. Data were collected through accessible documents in health units and evaluated by SPSS.

Results: Full time work of physicians and midwifes was 75 and 50 percent respectively in 2004, this rate was 100 percent for both groups in 2008. Among 2676 referred cases to hospital, feedback rate was 36% (963 cases). Follow up rate by physicians was 0 % in 2004 and 3.17 % (85 cases) in 2008. Case finding in 2004 and 2008 was 189 and 246 respectively. There wasn’t a significant difference between 2 years. Physician feedback to health house was 19 and 364 cases in 2004 and 2008 respectively. There wasn't a significant difference. Insurance coverage in 2004 and 2008 was 28.28 and 97.53 respectively with meaningful p value.

Discussion and conclusion: The comparison of health units function before and after family physician program implementation showed that availability of physician and midwives in rural area and also insurance coverage increased but screening, patient follow up and referral system were not differed. Training of doctors as family physicians, considering special training courses for them and finding ways to attract specialist’s attention to this issue is highly recommended.

Keywords: Family physician, Patient screening, Referral system

HEALTH EDUCATION AND MEDIA: EFFECTS OF PAMPHLET ON KNOWLEDGE OF HEALTH CENTERS' STAFF ABOUT HIGH BLOOD PRESSURE

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Introduction: High blood pressure (HBP) causes heart diseases. Today’s modern world is concerned with this problem. Preventing HBP is the best way to solve this problem. The routine prevention depends on the people’s reaction to this illness. This behavior is learnable and
This study was a quasi-experimental study. Samples contained 40 employees of Environment Health and Family Health from Tabriz Health centers. We studied Pre tests and gave them our pamphlets then studied post test. We used descriptive statistics for data analysis.

Results: There was a significant relationship between the score of knowledge about high blood pressure after and before pamphlets and marks have been much in post test. There was a meaning relationship between knowledge and age group and level of person studies. And there was no relationship between gender and knowledge during study.

Discussion and conclusion: According to the findings of this study, patient’s acknowledgment about high blood pressure was increased after the study. This reality shows the importance of training by pamphlet and role of environment and family health employees on decreasing high blood pressure. We suggest that we can decrease the number of high blood pressure and finally heart diseases by pamphlets.

Keywords: Training, Pamphlet, High blood pressure, Media

EFFECTS OF REGULAR MIDWIFERY CARE ON CHILDBIRTH OUTCOMES

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Introduction: childbirth, the most important physiologic event in woman’s life, has profound effects on her body, spirit and emotion’s health. Quality and process of midwifery care is one of the most effective parameters on mother and child’s health, labor and childbirth course. This study was preformed to survey the effect of continues midwifery care, during labor, on childbirth outcomes

Materials & Methods: This study was a quasi-experimental design. 100 woman were randomly assigned to either experimental (n=50) or control (n=50) groups. In experimental group, women were cared with one midwife from active phase of labor to one hour after child birth (4th course of labor), with continuous care by the same midwife, and in control group women where cared with several midwives without continuity of care in labor and childbirth course. The birth outcomes, such as kind of delivery (normal vaginal delivery or Cesarean section), length of labor course and Oxytocin amount, used in labor, neonate's Apagar score in first minute after delivery, were recorded in both groups. Data were analyzed with SPSS/ver13.0 and student's t- test and U Man-Whiteny tests were used.

Results: kind of delivery was the same in both groups (p=0.051). In experimental group, length of labor course was shorter (p=0.001), also in this group, less Oxytocin had been used in labor (p=0.001) and neonate's Apgar score in first minute after delivery was higher (p=0.001)

Discussion and conclusion: The results showed that continuity of midwifery, by decline in labor length and elevate in first minute Apagar score, decrease childbirth complications and mother's fatigue, and in this manner, cause mother and child health improvement

Keywords: Care, Childbirth, Midwifery, Continuity, Outcome

COMMUNITY-BASED PARTICIPATORY RESEARCH: HOW GOOD WE ARE IN IRAN?

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Introduction: Community-Based Participatory Research (CBPR) is believed to be a potent means for the promotion of health in the community. To date, Iran has conducted several CBPR projects in various community research centers (CRCs). We aimed to assess the quality of some of these CBPR projects in Iran.

Materials and Methods: In this cross-sectional study, carried out during 2005, five CBPR projects implemented in Iranian CRCs (Tehran, n=3; Qazvin, n=1; and Bandar Abbas, n=1) were selected. Three academic members involved in each project were interviewed using a structured questionnaire that appraised the extent to which the research project was aligned with the principles of participatory research (higher score denoting higher quality) and consisted of six parts: A) participants and the nature of their involvement (6 items), B) origin of the research question (2 items), C) purpose of the research (4 items), D) process and context – methodological implications (6 items), E) opportunities to address the issue of interest (3 items), and F) nature of the research outcomes (4 items).

Results: The mean quality score was 45.0 ± 13.1. The origin of the research received the highest quality score (53.3 ± 12.5), whereas the process and context received the poorest (40.3 ± 17.5).

Discussion and conclusion: The CRCs and the academic members in our CBPR projects should receive further training and consultation. Quality assessment of CBPR projects seems essential from the view point of other participants of such projects, namely community and stakeholders.

Keywords: Community-Based Participatory Research, Quality of Implementation, Health
EDUCATIONAL NEEDS ASSESSMENT OF HEALTH STAFF REGARDING HEALTH EDUCATION & PROMOTION IN HEALTH CENTERS OF BIRJAND UNIVERSITY OF MEDICAL SCIENCES

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Introduction: Need assessment process acts as a foundation for defining goals and making a proper ground for organizing other important elements by identifying crucial needs and focusing on priorities. The present study was carried out to define the educational needs of health staff in health center of Birjand University of Medical Sciences in relation with education & health promotion. Need assessment leads to educating staff based on their needs.

Materials and Methods: In this descriptive survey 47 experts from health centers participated. Then data collected by questionnaire. The questionnaire involve 18 parts about courses that is necessary for every expert of health assessment (planning- need assessment – self care – Health promotion – models- communication – patient education- evaluation programs -design message …) then data analyzed by SPSS software.

Results: Findings showed that Plan of Action and Methods of Research in health system were tow course that almost experts participated (62) and only 5 per cent of staff participated in work shop of patient education and nobody has educated about self care (0). Finding has shown that and evaluation programs were priorities. X2 test showed that there are no relation sheep between degree and needs among experts.

Discussion and conclusion: Need assessment process acts as a foundation for defining goals and making a proper ground for organizing other important elements by identifying crucial needs and focusing on priorities. Health education and health promotion is much expended. It is necessary to planning for education according to needs also it is necessary that use by effective methods.

Keywords: Education- Health education- Need assessment – Health promotion

KNOWLEDGE, RISK PERCEPTIONS AND BEHAVIORAL INTENTIONS FOR HEPATITIS B AMONG HEALTH MANAGERS IN YAZD PROVINCE (IRAN)

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Introduction: Viral hepatitis type B is a worldwide public health problem of major concern. HBV is a significant cause of morbidity and mortality worldwide. An estimated one third of the world’s population has been infected. That is also an important health problem in the Islamic Republic of Iran. Development and implementation of effective clinical and public health prevention strategies for hepatitis B are predicated on an understanding of the knowledge and attitude among people regarding hepatitis B, in particular, of health managers who have an important role in planning and implementation of those strategies. This article reports the knowledge, risk perceptions and behavioral intentions for hepatitis B infection and their correlates among a group of health managers in Iran.

Materials and Methods: The target population for this survey was health managers of Yazd Shahid Sadoughi University of Medical Sciences. A questionnaire was developed to measure knowledge, Risk perceptions and behavioral intentions for hepatitis B among subjects. Its validity and reliability was examined by pilot testing of the questionnaire and computing Cronbach’s coefficient. All of the health managers (160 persons) completed the questionnaire. Data were analyzed Using SPSS software.

Results: The average summary of knowledge, general and personal risk perceptions, total risk perceptions, and behavioral intentions scores were 6.4±.94, 25.43±3.2, 8.63±1.6, 34.06±3.5 and 13.64±3.0 respectively. General risk perceptions, personal risk perceptions and total risk perceptions were significantly related to behavioral intentions for hepatitis B at 0.01 levels but its correlation with knowledge was not statistically significant. General and personal risk perceptions together accounted for 10.3% of the variation in behavioral intentions for hepatitis B. General risk perception was the only statistically significant predictor of behavioral intentions for hepatitis B.

Discussion and conclusion: Although health managers, have an acceptable level of knowledge, general and personal risk perceptions but their level of behavioral intentions to hepatitis B is not at sufficient level. The results of this study identified that which part of health manager's knowledge level and also risk perceptions is not at sufficient level and should be emphasized in educational and interventional programs.

Keywords: Hepatitis B, Knowledge, Risk perceptions, Behavioral intentions.

PROFESSIONAL RELATIONS IN HEALTH SYSTEM AND MEDICAL ENVIRONMENTS

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Introduction: Physicians and other staffs of health system are professional members of a regulated team for exact defined purposes that are «treatment of patients», and «providing health services for public». Between health system staffs, traditionally, physicians formally or informally have been considered as «leader». Due to this important role of physicians, the WMA Declaration
Moreover the optimistic role of Midwifery in medical environment, Women and adolescents are considering in component interventions, social and political activities, are needed. capability, an educational and clinical collection of by which individuals achieve the ability to control Introduction:

Dep, Tarbiat Modares University, Tehran, Iran.

1. Medical Faculty Midwifery and Reproductive Health Nematollahzadeh M, Lamyian M*1, Masoomi R
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Introduction: Sexual health promotion is the process by which individuals achieve the ability to control and improve sexual health. In order to achieve this capability, an educational and clinical collection of interventions, social and political activities, are needed. Women and adolescents are considering in component of high-risk groups in every society, on the other hand sexual and reproductive health of these two groups is exposing to many adventures, so midwifery professions have an important key role to promote sexual and reproductive health of these people. The aim of this study is investigation and explanation of the midwifery professions role in promoting sexual and reproductive health.

Materials and Methods: This article is resulted from searching the scientific websites and literatures reviewing of the role of midwifery professions in sexual health promotion title.

Results: Review of these researches emphasized on the use of multidimensional intervention strategy to improve sexual health. Different aspects of this strategy—client centered strategy include therapeutic, educational, behavioral and sociopolitical interventions. All of the health providers like midwives should use it. The aim of all dimensions of treatment and education was promoting clinical intervention level for prevention, early diagnosis and improve sexual problems, identification individual value system and providing necessary information for essential skills to achieve a healthier life. In the behavioral dimensions, focus was on encouraging individuals to create behavioral changes stem from false beliefs and attitudes. The purpose of the socio-political dimensions was performing activities with the aim of reform life style. Reflection point in the core of this strategy was empowering clients to take on responsibility for self-sexual health. With usage of these strategies, midwifery professions who are the first supporters of females during critical periods of pregnancy and childbirth will play an important role in achieving the highest standards of sexual health. Because one of the important tasks of midwifery profession is professionals counseling, in additional to the use of these multi-dimensional strategy, they can scientifically consulte in order to promote sexual and reproductive health for their client. One of these patterns, with much capacity usage is the model of PLISSIT.

Discussion and conclusion: In medical environment, teachers have an exacting responsibility not to require students to employ in unethical practices or activity. In medical schools, should be arranged educational courses for raise concerns about high standards of ethical issues and behavior in medical students.

Keywords: Profession relation, Health system, Medical ethic

THE ROLE OF MIDWIFERY PROFESSIONS IN SEXUAL HEALTH PROMOTION

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Introduction: Sexual health promotion is the process by which individuals achieve the ability to control and improve sexual health. In order to achieve this capability, an educational and clinical collection of interventions, social and political activities, are needed. Women and adolescents are considering in component of high-risk groups in every society, on the other hand sexual and reproductive health of these two groups is exposing to many adventures, so midwifery professions have an important key role to promote sexual and reproductive health of these people. The aim of this study is investigation and explanation of the midwifery professions role in promoting sexual and reproductive health.

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Discussion and conclusion: In medical environment, teachers have an exacting responsibility not to require students to employ in unethical practices or activity. In medical schools, should be arranged educational courses for raise concerns about high standards of ethical issues and behavior in medical students.

Keywords: Profession relation, Health system, Medical ethic

Study of Relationship Between Knowledge Level and Insight of Borujen County Health and Cure Organization Employees About Normal BMI in 2010

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Introduction: Today overweighting, obesity and low physical activity issues are important issues. Ideal weight calculation methods are various. One of the simplest and most effective methods is using body mass index (BMI). Using BMI we can find out whether we have normal weight, overweight or we are fat. Fat individuals are exposed to the risk of cardiovascular diseases, high blood pressure, diabetes and etc. Awareness, insight and proper performance can have a great role in keeping normal BMI. In this study we wanted to know that how much the health and cure personnel behave according to their scientific knowledge.

Materials and Methods: This was a descriptive cross-sectional study. Totally 100 men & women were randomly selected from the personnel. Data collected by a questionnaire which its validity was tested prior to study. The data was analyzed by SPSS and T test.

Results: In health and cure group, 19.8% had a moderate awareness score and 80% had high knowledge. In administrative group, 35.8 had low, 32.6 moderate and 31.6% high knowledge. The difference between the tow groups was significant \( p<0.05 \). From “insight level” point of view in health and cure group, 30.3% were moderate and 69.7% high. In administrative group 7.9% had low, 39.5% moderate and 52.6% high knowledge. The difference was not significant. The average values of BMI in the two groups were equal.

Discussion and conclusion: There was no significant difference between average BMI and relation of awareness level and insight with BMI of the two groups. The difference between the awareness degrees of the tow groups was significant. We should try to actualize the science of health and cure personnel.

Keywords: Body Mass Index, Obesity.

COMPARISON OF HEALTH EDUCATION BETWEEN HEALTH COOPERATIVES AND PUBLIC HEALTH CENTERS

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Introduction: Public-private partnership is some kind of privatization in which public sector participation in providing services is being continued. Based on an agreement between ministry of health and ministry of cooperation, Tabriz University of Medical Sciences started the establishment process of health cooperatives in Eastern Azerbaijan province. In this study we compared the function of health education processes and community health knowledge between public health centers and health cooperatives.

Materials and Methods: In this comparative study, health education, community participation and health knowledge of defined population in 9 cooperative health centers (CHC) and 18 public health centers (PHC) were investigated. Data related to knowledge of women were gathered through interview with them in their houses. Data were collected during three months long study period and analyzed using SPSS 16 statistical package. Chi-Square and t tests were used to analyze data.

Results: Each month, 17.8 and 13.1 health education programs were conducted in CHC and public health centers PHC, respectively. Monthly, 0.7 And 0.14 intersectional collaboration sessions were formed in CHC and PHC, respectively. There was statistically significant difference between two groups. About 50.7% and 45.6% of interviewed women in CHC and PHC respectively knew at least two preventive methods of AIDS. In CHC and PHC, 81.2% and 66% of mothers interpreted her child growth curve, respectively. There was statistically significant difference between the two groups.

Conclusion: Health education not only functions well in health cooperatives, but also better indices are achieved in many areas of education programs. This is an example that a private structure supervised by public sector can manage national plans as well as public centers.

Keywords: Health cooperatives, Public-private partnership, Health Education, Health Knowledge, Tabriz

DISTRIBUTION OF RESOURCES IN MEDICINE

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Introduction: Distribution of resources is dividing and allocation of services among people. This is obvious that it is becoming a more and more controversial issue in the world today. The main goal of medicine group is offering the best cares to patients with the least cost in system. It is true that no one can accurately predict what the combined effect of all environmental impacts of human activity will be, but it is certain that our world is changing and that these changes may not all be to our benefit. It is also true that only a small percentage of the world’s population, those living in the developed countries, is responsible for most of the resource use and emissions - figures vary but the average mentioned is a ration of 20/80. This realization has many implications for society. As, up to now there hasn’t any comprehensive study in our country on this subject, so we aimed to do this in the present paper. It is clear that cost-containment in health care has become a main issue in today’s practice of medicine. With its necessaries in progressive technologies and skilled personnel, intensive care is among the most expensive of all hospital activities. This fact makes the assessment of indications for intensive care unit admission, as well as early discharge, of paramount importance: patients who are not likely to benefit from intensive care are at the extremes of disease severity, since low-risk patients are not ill sufficient to need ICU admission and high-risk and susceptible patients have a very high fatality, irrespective of intensive care treatment. At the end, in this paper we
Quality of life

QUALITY OF LIFE AND ITS RELATED FACTORS AMONG CARDIAC PATIENTS AFTER HEART SURGERY

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Introduction: According to World Health Organization, 41.3% of all deaths in Iran in 2005 were due to cardiovascular disease. Cardiovascular diseases are the most common and important causes of death all over the world, which effect the patients, quality of life. The aim of this study was to determine the quality of life and factors related to it among cardiac patients after heart surgery and the relationship between quality of life and some demographic variables.

Materials and Methods: In this descriptive - cross sectional study, 110 heart surgery patients participated after heart surgery referring to Rasht Heshmat hospital were selected randomly and through a goal-oriented or purposive sampling method. Data collected through an interview, patients self report and referring to their records. Data collecting tool was a questionnaire in two parts, demographic characteristics and standard quality of life (sf-36) questionnaire. Data were analyzed using SPSS version 16 software and descriptive and analytical statistical methods significant level was $p \leq 0.05$.

Results: Findings showed that the mean value of age was 57.04 ±9.37 There was statistically significant relationship between quality of life and variables such as age( $p=0.000$), literacy level ( $p=0.000$), occupation( $p=0.002$), marital status( $p=0.002$), duration of disease ( $p=0.000$), number of hospitalization ( $p=0.000$), however gender and income level, had no significant relationship with quality of life.

Discussion and conclusion: Based on our results, there is a need to educate patients about self care behaviors and emphasize on performing it.

Keywords: Quality of life , Cardiac patients, Cardiovascular Surgery

EFFECT OF AEROBIC EXERCISE ON QUALITY OF LIFE OF MEN WITH SCHIZOPHRENIA

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Introduction: schizophrenia is a chronic disease in which the skill, abilities and opportunities and quality of life of patients is limited and damaged. Immobility is a favorable factor in decreasing quality of life of mental patients. Thus, this study was conducted to assess the effect of aerobic exercise on quality of life of men with schizophrenia admitted to the rehabilitation center resalat of rash in 1389.

Material and Methods: this study is a before and after clinical trial. For this purpose, 30 patients with schizophrenia were selected randomly. Exercise program for 10 weeks, every odd day, for 30 minutes was done. Data collective instrument included demographic and heinrich quality of life questionnaire. Quality of life was assessed in two stages, before and after the intervention. Data analysis by t- paired test and ANOVA and SPSS were used.

Results: based on research findings, mean age of participants was 45.03, mean duration of disease was 20.43 and 70 percent of participants had no history of exercise activity. Mean of quality of life before and after the intervention were 2.78 and 3.23 respectively($p<0.05$). Different dimensions of mean scores of quality of life was increased after the intervention. The maximum effects of aerobic exercise were on interpersonal relations and the minimum was on ordinary activities.

Discussion and conclusion: aerobic exercise leads to improve quality of life of schizophrenia patients in different dimensions, therefore using exercise programs in clinical centers to promote quality of life is essential for patients with schizophrenia.

Keywords: Schizophrenia, Quality of life, Aerobic exercise

QUALITY OF LIFE IN PATIENTS WITH CANCER IN QAZVIN, IRAN

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Introduction: Cancer as a chronic disease with special treatment such as chemotherapy, radiotherapy, and surgery can affect patients both psychologically and physiologically. Thus, assessing the patients’ quality of life for better care planning is of prime priority. Objective: To determine the level of quality of life in cancer patients considering the physiological, psychological, environmental, and social domains.

Materials and Methods: This was a cross-sectional descriptive analytical study performed on 63 patients with cancer who were referred to oncology clinic of Kosar hospital in Qazvin during 2007. The patients were interviewed by the researchers using the Persian version of the world health organization quality of life (WHOQOL-BREF) questionnaire. Analysis of data were carried out using SPSS and descriptive statistics including the chi-square test, t-test, ANOVA, Pearson correlation coefficient and regression.

Results: Among patients, 60.4% in physiological
domain, 55.5% in psychological domain, and 66.7% in environmental health domain showed low and moderate levels of quality of life. In social domain, 71.5% were found to have high level quality of life. Also, the study demonstrated that there was a correlation between the patients’ quality of life in physiological domain and the number of children while the duration of treatment was found to influence the other domains of quality of life.

Discussion and conclusion: Considering the data of the present study, most patients were middle aged, with low income, and unaware of their needs. Regarding the environmental health, psychological, and physiological domains, the patients were found to have low and moderate levels of quality of life. Hence, the serious intervention by physicians, nurses, and health politician towards improving the patients' quality of life is of prime necessity.

Keywords: Quality of life, Cancer, Chemotherapy

THE EFFECT OF SELF-CARE EDUCATION ON QUALITY OF LIFE IN PATIENTS WITH ANGINA IN KASHAN

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Introduction: Angina is one of the most common diseases in the world that leads to changes in patients, lifestyle and quality of life (QOL). This disease is the major health problem with numerous complications. This issue shows the importance of social protection and public education. Self-care education in the field of diet, exercise and environmental stresses reduction, can prevent diminish of quality of life. Considering the growing importance of secondary prevention in chronic disease, the aim of this study is to assess the effect of self-care education on QOL in patients with angina.

Materials and Methods: This quasi-experimental study accomplished by 35 patients. Instrument was SAQ Questionnaire (specific instrument for QOL in angina). Self-care education was performed by educational pamphlet including important points of care in angina. Questionnaires were completed by samples before and two months after training. Data were analyzed using SPSS software.

Results: There was significant difference between the QOL of patients before and after education (P<0.05). Assessing the relationship between demographic variables and QOL changes, only age and angina pain frequency per months had significant relationship with QOL changes and QOL was higher in those with lower age and less angina pain frequency.

Discussion and conclusion: Improving health through preventive measures and educations for providing well-being in chronic and disabling diseases is a basic function. Professional nurses address the life style of their clients to improve their physical, mental, emotional, and social health through different manners such as education.

Keywords: Angina, QOL, Self-care, Education

EXERCISE TRAINING ON HEALTH RELATED QUALITY OF LIFE (HRQOL) IN BREAST CANCER SURVIVORS

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Introduction: Breast cancer (BC) is the leading cause of death among women around the world. It is estimated that the number of BC patients will rise dramatically until 2030. Although surgery is the most common intervention in these patients, they can be influenced by both cancer and surgery for long-term, which leads to negative impact on their quality of life. On the other side, the nurse’s role has expanded greatly from clinic to community. Public health nurses devote themselves to the health and well-being of the communities by education for preventing from disease or its complications. They also identify common health problems and chronic disease in the community and work to create intervention plans to correct or prevent their long-term complications. One of these plans is complementary treatment such as exercise, that can improve fatigue, body mass index, attitude and quality of life. The purpose of this quasi-experimental study was to determine the impact of exercise training on HRQOL in mastectomized breast cancer survivors in Tehran.

Materials and Methods: 38 subjects with study sample characteristics, were selected by purposive and convenience sampling. Education performed by lecture and educational pamphlet about walking. A questionnaire was used to data collection. Questionnaire was incorporated with demographic information and quality of life section. The validity of questionnaire was determined by content validity and reliability by internal consistency. Quality of life questionnaire was completed at baseline and 2 months after education.

Results: The findings indicated that quality of life in physical (P=0.04), psychological (P<0.02), social (P=0.02) and (P<0.001) dimensions improved with walking intervention. Economical and spiritual dimensions improvement was not significant.

Discussion and conclusion: Focus on populations, working with individuals, groups, and families to improve the overall health of communities is the main dimension in nursing profession. Professional nurses address the life style of their clients to improve their physical, mental, emotional, and social health through different manners such as education.

Keywords: Walking, Quality of life, Mastectomy

INVESTIGATING THE EFFECT OF SAFE COMMUNITY PROJECT ON QUALITY OF LIFE IN SONGHOR

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**Introduction:** Injuries and accidents is the second cause of death in Songhor (Kermanshah province), safe community project started in 1997 in Iran and in 2004 started in Kermanshah, in 2005 this project started in Songhor and this town was become the eighth city of Iran that join to WHO safe communities network. In surveys that take place by health center of Songhor, accidents injuries especially motorcycle accident and burns are considered as the most common problem that threat the life in rural areas. As injuries and accidents could change an individual's quality of life and can bring about social problems for families, reducing the accident and injuries can improve the quality of life of community, the purpose of this study was to investigate the effect of safe community project on the quality of life in Songhor, in 2005.

**Materials and Methods:** Three hundred subjects were selected randomly and S-F 36 questionnaire were completed by a trained interviewer and then educational intervention was administered several times for 5 years that include face to face educational programs to all age groups about injuries and how to prevent accidents, using a lot of methods and many educational programs implemented by health practitioners. In 2010 after 5 years community-based intervention and educational programs, safe community project was approved by WHO deputies. Then the second questionnaire was completed with 288 subjects.

**Results:** Data analysis showed that the motorcycle injuries had reduced from 72% in 2004 to 66% in 2010, percent of deaths due to accidents and burns had reduced 46% and 22%, respectively.

**Discussion and conclusion:** Present study showed that safe community project can improve quality of life of Songhor residents.

**Keywords:** Safe community, Quality of life, Accidents, Injuries

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**EFFECT OF TAKING GINSENG CAPSULE ON QUALITY OF LIFE IN TYPE 2 DIABETIC PATIENTS**

Heshmati J*, Namazi N

**Introduction:** Type 2 diabetes is the most prevalence metabolic disease and forth cause of death in developed countries. Because of serious side effects of chemical mental drugs, studies on herbal drugs and their effects on mental health is usual now, one of this herbal drugs is Ginseng that its reducing effect on blood glucose proved in clinical studies. In this study we investigated the effect of taking Ginseng Capsule on quality of life in type 2 diabetic patients.

**Materials and Methods:** A double-blind clinical trial study was designed and patients were selected in Kermanshah Diabetes Center. 50 diabetes patients (20 men, 30 women) by mean age 50.2 ±6.6 were choose by random method, after similarities in sex and age divided randomly in two group that each group contain 25 subject, intervention group take 2 grams Ginseng that taking as 500 mg capsules 4 time a day before meals and control group take placebo in same way. Before and after 3 month intervention a questionnaire were completed from subject by interviewer, we use SF-36 questionnaire that contain 36 question about mental and physical status of subjects. Reliability of this questionnaire according the previous studies was R=68% (Cronbach alpha). Data analyzed by SPSS version 15 software. Kolmogorov-Smirnov test was used to investigate normal and not normal data. To compare the mean of data before and after intervention used Pair T-test. P<0.05 is significant.

**Results:** The mean score of quality of life before and after the study show that taking Ginseng could affect significantly on physical parameters (p<0.05), but has no significant effect on mental parameters.

**Discussion and conclusion:** It was concluded that taking Ginseng may be effective in increasing some domains in quality of life of diabetic patients. Conducting more studies in this regards is suggested.

**Keywords:** Type 2 diabetes, Ginseng, Quality of life

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**THE COMPARATIVE SURVEY OF QUALITY OF LIFE BETWEEN MOTHERS EXPERIENCING VAGINAL DELIVERY OR CESARIAN**

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**Introduction:** Mothers experience many physiological, mental and social changes at postpartum period. The aim of this study was to compare the quality of life of women with vaginal and cesarean delivery, referring to Dezful Health Centers in 1388.

**Materials and Methods:** This study was a prospective cohort study carried out in 1387. Quota sampling was used. The research data were collected using two questionnaires including demographic feature questionnaire and the 12-item Quality of life Questionnaire (GHQ-12), that were completed by 120 women, 60 women with vaginal delivery and 60 women with cesarean delivery in 10-12 weeks postpartum. Data were compared using t test, chi-square test, Paired – Sample T Test and Mann-Whitney U. The p value of less than 0.05 was considered significant.

**Results:** The Mean age of group with normal vaginal delivery was 23.45±2.4 and those of group with Cesarean delivery was 23.1±3.4. Results showed that the mean score of quality of life in women was 23.45±2.4 and those of group with Cesarean delivery was 23.1±3.4. Results showed that the mean score of quality of life in women with vaginal delivery were significantly higher than women who had cesarean delivery (p<0.001).

**Discussion and conclusion:** Quality of life at postpartum period is induced physiological, mental and social changes, which influenced on mother,s quality of life and her child. Thus, the recognition and assessment of this women, support of their husbands, other family members and health care personnel is necessary.
**Keywords:** General Health, Postpartum period, Type delivery.

**SURVEY OF QUALITY OF LIFE RELATED FACTORS IN PATIENTS WITH PEPTIC ULCER UTILIZING PRECEDE MODEL IN SANANDAJ**

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**Introduction:** Peptic Ulcer Disease (PUD), which is a prevalent disease, can have a considerable impact on patients’ quality of life (QOL). The aim of this study was to explore the factors related to QOL based on PRECEDE Model in patients with PUD in Sanandaj, Iran.

**Materials and Methods:** A non-probability sample of 120 outpatients with PUD, referring to Beasat Hospital, in the city of Sanandaj participated in the study. The study took place between March and June of 2009. A descriptive, cross-sectional design was employed and the data were collected using a survey questionnaire based on PRECEDE model, consisting of QOL, Health Status, predisposing, reinforcing and enabling factors and self-management behaviors constructs. The data collected by interview and analyzed by SPSS v. 11.5. The statistical analysis of the data included Pearson correlation, t-test, one-way ANOVA and linear regression.

**Results:** Health status (p<0.01), reinforcing (p<0.01) and enabling (p<0.05) factors and knowledge (p<0.05) as a predisposing factor were related to quality of life of peptic ulcer patients. Also, social support as a reinforcing factor (p<0.01) and health status (p<0.05) showed significant relationship with self-management behaviors. Finally, all of PRECEDE variables accounted for 68.9% of the variation of quality of life in PUD patients.

**Discussion and conclusion:** With respect to the results of this study, preparing an educational program to promote self-management behaviors and quality of life in peptic ulcer patients is proposed. It was concluded that the PRECEDE Model may be used in developing countries, like Iran, as a framework for planning intervention programs in an attempt to improve the quality of life of patients with PUD.

**Key words:** Quality of Life, Peptic Ulcer Disease, PRECEDE model, Health Status, Self-management behaviors

**HEALTH-RELATED QUALITY OF LIFE IN A SAMPLE OF IRANIAN PATIENTS ON HEMODIALYSIS**

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**Introduction:** This study evaluated the health-related quality of life (HRQOL) in a sample of Iranian patients undergoing maintenance hemodialysis. The data were compared with the HRQOL for the Iranian general population.

**Materials and Methods:** Two-hundred and fifty patients undergoing hemodialysis were included using a convenience sampling approach in a cross-sectional study. Data collection was performed using a Persian translation of the Short Form-36 questionnaire in combination with demographic and clinically related questions. The collected data were analyzed using a logistic regression model with physical and mental summary scales as dependent variables.

**Results:** The Cronbach α coefficients used to test for internally consistent reliability for each scale. In every case, the scales were found to have an acceptable reliability, as indicated by the measured values, which either met or exceeded 0.7, as recommended. The percentage of respondents scoring close to or at the upper limit (ceiling effect) was considerable for each of the scales. The patients’ mean Short Form-36 scores were significantly lower than those obtained for the general population for all scales. Patients with longer duration of being on hemodialysis, poor adherence to treatment, higher body mass index, and comorbidity diseases suffered from a poorer physical health. Poor mental health was associated with a lower level of education, longer duration of hemodialysis, lower economic status, a lower degree of knowledge on disease, and comorbidity diseases.

**Discussion and conclusion:** This study affirms the fact that patients undergoing hemodialysis suffer from poor HRQOL. In comparison with data from other studies from Asian and European countries, this sample of Iranian patients on hemodialysis had a lower HRQOL, a discrepancy that might be due to differences in life style, socioeconomic status, the general level of education of the patients, as well as physician patient communication.

**Keywords:** Quality of life, Hemodialysis, Questionnaires

**PSYCHOMETRIC PROPERTIES OF THE KIDNEY DISEASE QUALITY OF LIFE – SHORT FORM VERSION 1.3 IN A SAMPLE OF HEMODIALYSIS PATIENTS**

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**Introduction:** The aims of the study were to translate the Kidney Disease Quality of Life – Short Form version 1.3 (KDQOL–SF ver. 1.3) questionnaires into Iranian (Farsi), and to then assess it in terms of validity and reliability on Iranian patients.

**Materials and Methods:** The questionnaire was first translated into Farsi by two independent translators,
Assessment of Health-Related Quality of Life (HRQOL) Among Students Living in Dormitories of Tehran University of Medical Sciences, 2009-2010

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Introduction: In recent years, surveys of life perceptions as multi-dimensional issues have become more widespread. Quality of life is defined as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns (WHO). As students are the future makers of our country, survey of the quality of life among this population is necessary. This study was carried out with the aim of understanding the differences in lifestyle of the culture and value systems in which they live and their disciplines among students.

Materials and Methods: In this descriptive-analytical study, 360 students residing in dormitories were selected by systematic random sampling. Data was collected by (SF36) standard questionnaire. The analysis was performed using SPSS version 16 and nonparametric tests such as T-test and kruskal–Wallis test.

Results: In general, quality of life for about half of the students (47.5%) living in dormitories of Tehran University of Medical Sciences was reported as moderate levels. Quality of life for 38.1 percent of single students and 37.8% of married students was described as good. However, these differences were not statistically significant. On the other hand, there were significant correlations between the mean scores of HRQOL and some variables such as student employment, the major interest, concerns about career, personal consumption cost, and family income (p <0.05).

Discussion and conclusion: Results of the research supported the necessity of more planning to improve economic status, employment and more satisfaction with their disciplines among students.

Keywords: Quality of life, Students, SF-36 questionnaire, Dormitory

Effect of Education Through Group Discussion on Quality of Life of Patient with Multiple Sclerosis

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Introduction: Multiple sclerosis (MS) is one of the most common chronic neurological diseases in young adults Neurology and like other chronic diseases affects different aspects and quality of patient's life. one way of improving the health and therefore quality of life, patient education to deal with the effects and complications and more dominant and the disease is life. The present research attempted to investigate the effect of Learning through group discussion on the quality of life (QOL) of patient with multiple sclerosis.

Materials & Methods: The present clinical trial was performed on 32 (control group) and 30 (test group) patient with MS. The research tools included the questionnaires of demographic information patient and family member, multiple sclerosis quality of life (MSQOL-54). After the collection of pre-test data and Needs assessment of patients, Group discussion sessions in four groups of eight persons and during a five-hour sessions a day among was performed. The post test was carried out 1.5 months after the intervention.

Results: $\chi^2$ test showed that there was no significant difference between the test and control groups in terms of demographic characteristics. Also at the before intervention, we observed no significant difference in the QOL of the patient both in general independent t-test (P>0.05). While, after the intervention, independent t-test showed a significant difference between the two
The results showed that learning through group discussion was effective on increasing the quality of life in patients with multiple sclerosis so use this approach in patient care and research in other chronic diseases is recommended.

Keywords: Multiple sclerosis, Quality of life, Group discussion

CORRELATION BETWEEN SELF-EFFICACY AND QUALITY OF LIFE IN DIABETICS’ PATIENTS REFERRED TO DIABETIC CLINIC IN HAMADAN

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Introduction: Diabetes is a chronic disease which cause serious complications affecting the circulatory and nervous systems, kidneys, eyes, and feet and it is associated with high rates of morbidity and mortality. The improvement of the quality of life in diabetic patients has become an important goal in treatment. In the issue, self-efficacy is the belief that one has the capabilities to execute the courses of actions required to manage prospective situations. The purpose of our study was to determining association between self-efficacy and quality of life in diabetics’ patients who refer in diabetic clinic in Hamadan city.

Materials and Methods: In a cross-sectional study, 289 diabetics’ patients, was randomly selected for participation in study. Participants responded to the researcher designed self-efficacy questionnaire and moreover a WHO quality of life Brief questionnaire.

Results: It was found a significance correlation between self-efficacy and quality of Life (r: 0.461; sig: 0.000). The quality of Life in 20.1% was poor, in 43.3% was moderate and 37.2% had a good quality of life status. The average time of suffering from diabetes was 14.2 (years).

Discussion and conclusion: The results revealed that high level self-efficacy can predict higher level of quality of life. Because of managing diabetics’ patients in hospitals, health providers such as medical doctors and nurses have important role for improving quality of life through promoting self-efficacy among diabetics’ these.

Keywords: Quality of life, Diabetes, Self-efficacy

DETERMINANTS OF HEALTH-PROMOTING LIFESTYLE AND THEIR RELATIONSHIP WITH QUALITY OF LIFE AMONG B.SC. STUDENTS OF ISFAHAN UNIVERSITY OF MEDICAL SCIENCES

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Introduction: The study purpose was to determine (a) the health-Promoting lifestyle-related behaviors of B.Sc. students in school of health in Isfahan University of Medical Sciences (b) the differences in these behaviors by gender, and (c) the relationship between these behaviors and quality of life.

Materials &Methods: This was a cross-sectional study conducted on B.Sc. students in school of health in Isfahan University of Medical Sciences. A census sample of 81 subjects completed survey questionnaire. Health Promoting Lifestyle Profile 2 was used in order to measure health promoting lifestyle behavior and quality of life was measured by global quality of life (GQOL) subscale of EORTC QLQ-C30 questionnaire. For this purpose of data analysis, SPSS software was used.

Results: Data of 81 cases were available for analysis. 54.3% were female and 45.7% were male. The mean age of respondents was 21.12 year. »Spiritual Growth» & «Physical Activity» were the most and least common subscales of HPL practiced. General quality of life of the majority of cases was good(40.7%). The highest frequency of health related quality of life was very good(58.6%). There was no significant difference between male and female participants in practicing HPL except stress management. Female Students performed self-care behaviors and relaxation techniques more than male students. There was no significant difference between subscales of HPL and general quality of life except spiritual growth (P = 0.006). There was no significant difference between subscales of HPL and health related quality of life in practicing HPL except stress management (P = 0.03).

Discussion and Conclusion: According to the findings, majority of students had good general quality of life. According to the frequency of very good (58.6%) and best (9%).The least) answers about health related quality of life, It can be concluded that the students in the study have appropriate total quality of life. Finally, findings showed that »Health Promoting Lifestyle« and »Spiritual Growth« and »Stress Management« are positively related with global quality of life.

Keywords: Health promoting lifestyle, Global quality of life, Health related quality of life, General quality of life.

EVALUATING THE QUALITY OF HEALTH EDUCATION PROGRAMS IMPLEMENTED BY EDUCATION GROUP IN HEALTH CENTER OF IRAN UNIVERSITY OF MEDICAL SCIENCES, 1387

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Introduction and purposes: The aim of health education is to create a health behavior and health behavior change or adoption and continuance of new behavior. Evaluating health education programs can be the results of work programs, strengths and weaknesses and evaluate the process used toward desired changes helped. The aim of this project was to determine the quality of health education programs in health centers of Iran University of Medical Sciences in 1387.

Materials and Methods: This study was a cross sectional descriptive study. Interviewers were collecting data according to schedule training. A questionnaire was given to the participants in health education group and a checklist filled out by interviewers about educational equipment and also skills training, communication, educational planning of teacher. Then data analyzed by SPSS software.

Results: According to the results extracted from the data analysis, about educational planning, most of the problem was lack of evaluation design and study participants at the end of educational program. About the application of educational media and equipment assistance, 50% of teachers used educational assistance instruments.

Discussion and conclusion: Most problems were lack of facilities and equipment of health centers.

Keywords: Health education, Evaluation, Group education, Quality education program.

COMPARISON THE LIFESTYLE EFFECTIVE FACTORS BETWEEN DIABETIC TYPE II PATIENTS AND NON DIABETIC PEOPLE.

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Introduction: Diabetes Mellitus is one of the most costly chronic diseases of our time with an increasing trend of epidemic proportions throughout the world. Diabetes is a significant and expensive health problem which had influenced all the ages in almost all the countries. Increasing prevalence of this disease has been caused by continued changes in lifestyle such as unsuitable nutrition, lack of physical activities and fatness which is often related to modern city life, mechanization and industrialization. It is an expensive disease, both for patients and the health care systems. This research tried to examine the relationship between lifestyle risk factors and type II diabetes.

Materials and Methods: This research was a case-control study. Random sampling was used to study 51 diabetes type II patients as case group and 51 healthy people accompanying some other patients as the control group in Yazd Afshar hospital. The people were from both sexes, between 30 and 64 years of age and all were Yazd residents. The questionnaire used included demographic, eating behavior, physical activities, stress and smoking status information. The SPSS.15 was used for statistic calculation and for analysis of data; T and Chi-Square tests were applied.

Results: By analyzing the data collected, there was a meaningful statistical relationship between physical activities, eating behavior and the diabetes type II disease (P<0.05). Also, there was no meaningful statistical relationship between diabetes type II disease and stress score (P >0.05).

Discussion and conclusion: Results implied that some important risk factors in diabetes type II includes eating behavior and also lack of physical activities.

Keywords: diabetes type II, life style, nutrition, physical activity, smoking, stress

HEALTH-RELATED QUALITY OF LIFE AMONG ELDERLY MEMBER OF ELDERLY CENTERS IN TEHRAN

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Introduction: Growing elderly population is a phenomenon which has great political, economic, and social consequences. The aim of this study was to assess the determinants of quality of life and relationship between quality of life and social support among a sample of Iranians aged over 60 years.

Materials and Methods: This study examined health related quality of life and social support in randomly selected sample of elderly people in Tehran, Iran. A random sample of 400 elderly people was selected through multistage sampling. Data were collected using short-form-36 item quality of life and social support questionnaires. Data were analyzed using statistical tests like t test, and ANOVA and the spearman correlation coefficient test.

Results: Totally 400 elders with a mean age of 64.07(SD=4.49) were participated in the study. The majority of the participants were women (74.5%) and almost half of the participants were married (55%). 80% of elderly were no employed, 76.7% were living with their family or relatives and about 73% were overweight. The mean scores for the SF-36 subscales ranged from 64.62 (SD = 12.68) for physical component summary score of the SF-36 to 63.35 (SD = 4.7) for Mental component summary score of the SF-36. The results of this study revealed that men reported significantly poorer HRQoL. The analysis suggested body mass index, education, marital and economic status were significant determinants of health-related quality of life. The analysis indicated that there was a significant correlation between social support and health related of quality of life.

Discussions and Conclusion: the study findings indicates that elderly people who were older with lower education and higher body mass index, Suffer from poorer health quality of life.

Keywords: Elderly, Quality of life, SF-36
HEALTH RELATED QUALITY OF LIFE IN CHILDREN WITH THALASSAEMIA IN YAZD, IRAN: A CASE CONTROL STUDY

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Introduction: Thalassaemia is an increasingly serious public health problem throughout the Mediterranean region, Middle East, Indian subcontinents and also South East Asia. Its global prevalence is about 2 per 1000 newborn while its prevalence in Iran is 8-4 per 1000 newborn. Children with thalassaemia appear well at birth, but anemia develops and becomes progressively worse due to partial or total absence of haemoglobin. If left untreated, this could lead to early deaths. For those children that survived, this conditions impose serious implications on health related quality of life. The aim of this study was to compare the Health Related Quality of Life (HRQoL) of thalassaemia patients with the HRQoL of healthy children in terms of essential core domains for pediatric HRQoL measurement.

Materials and Methods: This cross sectional study has been done in Yazd, Iran. 60 thalassaemia patients were selected randomly as case group and 120 healthy children as control group who were matched with respect to age and gender. The health related quality of life was measured with a self – administrated short – form questionnaire of Medical Outcomes study (SF-20). The SF-20 measure contains three dimensions that both of them are about function (physical, social and role) and about well-being (mental health, health perception and pain). Data were analyzed using descriptive and inferential statistics.

Results: The results of this study showed significant difference between all dimension of SF-20 and QOL of patients in the case and control group (Pc 0.001). The QOL in the case group was 75.05(SD=9.38), but in the control group was 93.4(SD=6.42) out of 100.

Conclusions: The effect of thalassaemia on the HRQOL of these children has made reduction of their physical, social and mental capabilities. Patients with thalassaemia require self-managing their disease, which is a lifetime struggle to maintain and increase QOL. If one of the goals of health care is to improve QOL, then it seems important to understand how illness affects QOL1 and how we can control thalassaemia and increase the QOL. Indeed, one rationale for including QOL assessment in clinical trials is to train patients and promoting their information and care skills to help them in choosing treatment strategies that are consistent with their lifestyles.

Keywords: QOL, SF-20, Thalassemia

QUALITY OF LIFE AMONG THE ELDERLY

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Introduction: Elderly is a sensitive period and quality of life in elderly is of great importance that should not be ignored. Recognition of the elder’s health status is the first step toward the prevention of chronic diseases and promotion of health level among the aged people. The purpose of this study was to explore the quality of life among rural elderly people in Bahar, Hamedan Province.

Materials and Methods: This was a descriptive analytical study in which 430 participants aged 60 or more living in the province of Bahar were included. The sampling method was multistage random sampling. The data-gathering tool consisted of a 2-part questionnaire: a 36-item Short-Form Health Survey (SF-36) was used to measure quality of life and subjects’ demographic variables such as age, gender, education level, job, hypertension and teeth status were also recorded.

Results: Based on findings, the subjects reported to have received 63% of scores of quality of life and also indicated that they evaluated their quality of life as moderate. The lowest perceived well-being was general health perception and general mental health (psychological distress and psychological wellbeing). There was statistically significant correlation between quality of life among elderly and gender, education level, marital status, hypertension and teeth status with each other at 0.05 levels.

Discussion and conclusion: The quality of life is related meaningfully to each other indicating that older people should be considered as vulnerable group. The education priorities recommended for this age group can be presented through workshops, bulletins and educational pamphlets.

Keywords: Quality of life, Elderly, Hamedan

EVALUATION OF HEALTH-RELATED QUALITY OF LIFE

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Introduction: Quality of life has an inherent meaning for most of people. It is comprised of broad concepts that affect global life satisfaction, including good health, adequate housing, employment, personal and family safety, education, and leisure pursuits. For matters related to health care, quality of life has been applied specifically to those life concerns that are most affected by health or illness, hence the term «health-related quality of life» (HRQoL) is being used. HRQoL can be formally defined as: «The extents to which one's usual or expected physical, emotional and social well-being are
affected by a medical condition or its treatment. This definition incorporates the two widely accepted aspects of quality of life: subjectivity and multidimensionality. HRQoL represents a subjective appraisal of the impact of illness or its treatment; individual patients with the same objective health status can report dissimilar HRQoL due to unique differences in expectations and coping abilities. As a result, HRQoL must be measured from the individual's viewpoint rather than that of outside observers (ie, caregivers or healthcare professionals). Multidimensionality is the other important component of HRQoL. The multidimensionality of HRQoL is reflected in the work of the Patient Reported Outcomes Measurement Information System (PROMIS) Cooperative Group, an NIH-funded national effort that has produced a comprehensive, conceptual framework of self-reported health.

MEASURING HRQoL — A vast array of validated and reliable questionnaires are available for assessment of HRQoL. They include generic health status instruments, generic illness instruments, and disease-specific instruments.

Generic health status — Generic health status questionnaires are applicable to all populations and can be completed by individuals both with and without medical illness. These instruments provide benchmarks for comparison across diverse groups, such as healthy and ill populations, or different age groups. Examples include the Nottingham Health Profile (NHP) and the Short Form-36 (SF-36) from the Medical Outcomes Study.

Generic illness — Generic illness instruments are applicable to populations with any medical illness or condition, and can be used to compare different illnesses, levels of disease severity, or types of interventions. Such cross-disease comparisons are increasingly important in the allocation of limited health care resources. In addition to measuring general health status, these instruments typically assess the individual's perception of the functional impact of the illness or disability. Examples include the Sickness Impact Profile (SIP) and the Functional Assessment of Chronic Illness Therapy (FACIT).

Disease-specific — Disease-specific measures are designed to assess the QOL of individuals with specific illnesses (eg, cancer, diabetes), specific types of treatment (eg, chemotherapy, lung transplant), or specific symptoms (eg, nausea, urinary incontinence). Compared to other types of instruments, these measures provide a more detailed assessment for specific diseases and are also likely to be more sensitive to specific treatment-related changes in HRQoL.

Discussion and conclusion: Combined instruments for patient-reported outcomes PROMIS — The Patient-Reported Outcomes Measurement Information System (PROMIS), presents a new set of multidimensional HRQoL instruments that combine features of the three categories above. Normed on the general United States population, PROMIS instruments are applicable across chronic illness populations in addition to having cancer-specific scales. Neuro-QOL — The Quality of Life in Neurological Disorders (Neuro-QOL project) is a similar effort to PROMIS, funded by the National Institute of Neurological Disorders and Stroke, to develop and test HRQoL instruments that are applicable across the many neurological conditions. Utilizing a methodology similar to PROMIS, these instruments are currently being tested in five adult and two pediatric diseases (stroke, amyotrophic lateral sclerosis [ALS or Lou Gehrig's disease], multiple sclerosis, Parkinson's disease, adult and pediatric epilepsy, and the muscular dystrophies). It is hoped that the resulting HRQoL tools will be used to facilitate the comparison of results from clinical trials and other clinical research across conditions.

Keywords: Evaluation, Health-related quality of life, Measurement

 RELATIONSHIP BETWEEN LIFESTYLE AND HYPERTENSION IN RURAL POPULATION IN GORGAN, 2009

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Introduction: Lifestyle refers to people behavior and template that affects on their health. The aim of this study is determining the relationship between lifestyle and hypertension in rural population in Gorgan, 2009.

Materials & Methods: Target population in this descriptive analytic study was 200 patients with hypertension and 200 persons as control group in gorgan rural population. The data collected using a questionnaire that included demographic and health promotion lifestyle profile (HPLP) questions. After data collection, analysis was performed by SPSS software and T test and logistic regression tests were used and a p-value less than 0.05 considered as significant.

Results: The mean age for starting the disease was 53.2. Twelve percent of the cases and 20.5% of the controls were smoker, 57% of the cases and 51% of the controls had a family history of risk for hypertension, and 63% of the cases and 61.1% of the controls had a BMI higher than normal. The logistic regression test showed that there were significant relationship between lifestyle and physical activity, mental health, interpersonal relationship, and stress dimensions of having hypertension (p-value <0.05), and T-Test showed that the relationship between health responsibility, physical activity, nutrition, mental health, interpersonal relationship, stress in case and control group was significant (p-value <0.05).

Discussion and conclusion: The results showed that there are relationships between having a non-health behavior and having hypertension in rural population, so this is necessary to implement education program for them in order to help them complying a healthy life style.

Keywords: Lifestyle, Hypertension, Gorgan
PHYSICAL ACTIVITY, NUTRITION, STRESS AND OTHER LIFESTYLE-RELATED BEHAVIORS IN GORGAN UNIVERSITY STUDENTS, 2008

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Introduction: The role of individual healthy behaviors like physical activity, nutrition and stress management on reduction of diseases mortality and morbidity rate is well known. Because individual behaviors influence on university student health, this study was conducted to determine physical activity, nutrition, stress and other lifestyle-related behaviors in Gorgan University students.

Materials & Methods: Target population in this cross-sectional study was 800 students of Gorgan University of Medical Science, Agriculture science and Natural Resource, Payam-e-Noor and Azad University that were selected via random sampling method. The data collected using a questionnaire that included demographic questions and lifestyle questionnaires about nutrition, physical activity, stress, fastening seat belt and brushing. After the data collection and sort of them, analysis performed by SPSS software and nonparametric tests (Kruskal - Wallis and Mann-Whitney) and p-value <0.05 considered as significant.

Results: The mean age was 22.43. About 77% were single, 65.5% were native, BMI mean was 24.1%, 12% smoked always, 13% never fastened seat belt, 6% never brushed. About 24% of students had weak life style, 29% moderate, 22% good and 23% excellent. The relationship between physical activity, type of university and sex were statistically significant (p-value <0.05). We found significant relationships between stress and degree of education, father educational level, mother job, type of university and fastening seat belt (p-value <0.05). The relationship between nutrition and sex, degree of education, type of university and being native was significant (p-value <0.05).

Discussion and conclusion: Nutrition, physical activity and stress have an important role in individual health and according to change in disease trend we need to plan a program for retrieve university student lifestyle.

Keywords: Lifestyle, Nutrition, Physical activity, Stress, University

MODEL OF ULCER PEPTIC PATIENTS’ QUALITY OF LIFE PREDICTORS IN SANANDAJ BASED ON PATH ANALYSIS OF THE PRECEDE MODEL

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Introduction: Peptic Ulcer Disease (PUD) can have a considerable impact on patients’ quality of life. Path analysis is an exact statistical method for determining a best causative model of variables. So, the aim of this paper was application of regression based path analysis for Introduction of the best model of PUD quality of life determinants, using PRECEDE Model constructs.

Materials and Methods: A non-probability sample of 120 outpatients with PUD, referring to a Beasat Hospital in the city of Sanandaj in Iran, participated in this analytic cross-sectional study. Appropriate instruments included questions regarding PRECEDE model constructs were used to measure the variables. Reliability and validity of the instruments were examined and approved.

Results: Health status had a direct effect on quality of life. Self-management behaviors had an indirect effect on quality of life and health status through reinforcing factors. Also, predisposing, reinforcing and enabling factors had an indirect effect on quality of life through health status. After health status, reinforcing factors was the second powerful predictor of quality of life in PUD patients and then predisposing factors was the third one.

Discussion and conclusion: PRECEDE model could be used as an conceptual framework for designing and implementing educational intervention programs to promote quality of life in PUD patients. Reinforcing factors was found as the most powerful factor in the educational and ecological diagnostic stage of predictors of quality of life in PUD patients and need to be considered, carefully, while designing intervention programs.

Keywords: Quality of life, PRECEDE model, Path Analysis, Peptic Ulcer Disease

SURVEY OF LIFESTYLE AND ITS RELATED FACTORS AMONG UNIVERSITY STUDENT IN GORGAN

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Introduction: A person’s lifestyle is determined by behavior patterns and it affects individual and social health. The importance of lifestyle is its influence on quality of life and prevention of diseases. The aim of this study was to assess lifestyle among students in Gorgan universities in 1386.

Materials & Methods: Target population in this cross-sectional study was 800 students of Gorgan University of Medical Science, Agriculture sciences and Natural resource, Payam-e-Noor and Islamic Azad University who selected via random sampling method. The data collected by a questionnaire that includes demographic questions and lifestyle questionnaire. After the data collection and sort of them analysis performed by SPSS software and nonparametric tests (Kruskal - Wallis and Mann-Whitney) and (p-value <0.05).

Results: The mean age was 22.43, 53.9% of students were
BS student, 22/1 % were married, 65.5 % were native of Golestan, BMI mean was 24.1% and 21.8 % have smoke almost and sometimes, lifestyle score was categorized in 4 groups, 24.1% had weak, 29.6% moderate, 22.9% good and 23.4 % excellent lifestyle. The result shows that relation between lifestyle and gender, degree of education, family income, father educational level, mother job, being native of Golestan and university were significant (p-value <0.05).The relation between lifestyle and age, marriage status, BMI and major of education were not statistically significant (p-value >0.05).The lifestyle status of medical science students were better than other groups and female students had better lifestyle compare to male.

Discussion and conclusion: This results shows that more than half of the students have weak and moderate lifestyle status, that needs to plan for changing students behaviors and lifestyle status, particularly in physical activity, nutrition and stress management.

Keywords: Lifestyle, University Student, Gorgan

**STUDENTS’ LIFESTYLE BASED ON THE HEALTH PROMOTING BEHAVIORS IN TABRIZ FACULTY OF HEALTH AND NUTRITION**

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Introduction: With increasing life expectancy, increase the importance of health-promoting behaviors. Health-promoting behaviors are one of the most important determinants of health, which are taking in to account as the underlying factors in developing many diseases. This study aims to assess the health-promoting behaviors among students in Faculty of health and nutrition in Tabriz University of Medical Sciences.

Materials and Methods: This survey is a cross-sectional study to evaluate health-promoting behaviors among 173 students who were studied in Tabriz University of Medical Sciences, Faculty of Health and Nutrition in 2011. Data was collected using a reliable and validated researcher developed questionnaire. SPSS software, version 16 was used to analyze collected data. P value less than 0.05 was considered as the significant level.

Results: For four main indicators of health-promoting behaviors, around half of the students (50.3 and 51%) reported protective behaviors from infectious diseases and tooth brushing during the day and night, respectively. According to the driving behaviors, over one third (36.4 and 38.7%) reported using safety seat belt during driving, and considering safe driving behaviors, respectively.

Discussion and conclusion: The study findings revealed the acceptable behaviors about prevention of infectious diseases and tooth brushing and unsatisfactory behaviors of driving. It means that, this area needs more attention from policymakers to improve safe driving and seat belt using behaviors among students.

Keywords: lifestyle , health promotion, behavior

**SURVEY OF QUALITY OF LIFE IN PATIENTS WITH ULCER PEPTIC DISEASE IN SANANDAJ, IRAN**

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Introduction: Peptic Ulcer Disease (PUD) is one of the most prevalent diseases. Its prevalence is 6-15% and about 10% of people experience its symptom in their life. PUD can have a considerable impact on patients’ quality of life (QOL). The aim of this study was to examine the quality of life status in patients with PUD in Sanandaj, Iran.

Materials and Methods: A non-probability sample of 120 outpatients with PUD, referring to Beasat Hospital, in the city of Sanandaj, participated in the study. The study took place between March and June of 2009. MOS-SF-20 (Medical Outcome Survey-Short Form-20) questionnaire was used to measure the quality of life in these patients. The data collected by interview and analyzed by SPSS v. 11.5. The statistical analysis of the data included Spearmann Rho correlation, t- test, and one-way ANOVA.

Results: The respondents had a low quality of life, especially, in the case of “Pain” (68.5%; the higher percent, the worse QOL) and “Health Perception” (30.2%; the higher percent, the better QOL) however in terms of “Physical Function” (70.7%) had a better condition. Age, Education level and Income were significantly related to all domains of quality of life of the patients (p<0.05).

Discussion and conclusion: Educational interventions in order to promote the low level of QOL in these patients are necessary. Promotion of pain and the patients’ health perception should be priorities of any programs aimed at promoting quality of life among peptic ulcer patients. The findings of this study may be useful for health care providers who planning intervention programs in order to improve health status and quality of life in patients with ulcer peptic.

Keywords: Quality of Life, Peptic Ulcer Disease, Medical Outcome Survey-Short Form-20 (SF-20)

**QUALITY OF LIFE AND ITS RELATED FACTORS AMONG PATIENTS WITH ULCER PEPTIC DISEASE IN SANANDAJ, IRAN**

Fallahi H

Introduction: Peptic Ulcer Disease (PUD), which is a prevalent disease, can have a considerable impact on patients’ quality of life (QOL). The aim of this study was to explore the factors related to QOL based on PRECEDE Model in patients with PUD in Sanandaj, Iran.

Materials and Methods: A non-probability sample of 120 outpatients with PUD, referring to Beasat Hospital, in the city of Sanandaj participated in the study. The
study took place between March and June of 2009. A descriptive, cross-sectional design was employed and the data were collected using a survey questionnaire based on PRECEDE model, consisting of QOL, Health Status, predisposing, reinforcing and enabling factors and self-management behaviors constructs. The data collected by interview and analyzed by SPSS v. 11.5. The statistical analysis of the data included Pearson correlation, t-test, one-way ANOVA and linear regression.

**Results:** Health status (p<0.01), reinforcing (p<0.01) and enabling (p<0.05) factors and knowledge (p<0.05) as a predisposing factor were related to quality of life of peptic ulcer patients. Also, social support as a reinforcing factor (p<0.01) and health status (p<0.05) showed significant relationship with self-management behaviors. Finally, all of PRECEDE variables accounted for 68.9% of the variation of quality of life in PUD patients.

**Discussion and conclusion:** With respect to the results of this study, preparing an educational program to promote self-management behaviors and quality of life in peptic ulcer patients is proposed. It was concluded that the PRECEDE Model may be used in developing countries, like Iran, as a framework for planning intervention programs in an attempt to improve the quality of life of patients with PUD.

**Keywords:** Quality of Life, Peptic Ulcer Disease, PRECEDE model, Health Status, Self-management behaviors

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**Safety promotion**

**USING PRECEDE MODEL TO PROMOTE SAFETY BEHAVIORS IN CHILDREN**

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**Introduction:** Pedestrian injuries are a significant source of morbidity, mortality and disability among children. Children are injured or killed as pedestrians, but behavioral factors in pedestrian injury etiology remain poorly understood. Prevention of these injuries is thus a major priority for public health and requires a comprehensive approach and educational strategies. The purpose of this study was to design and evaluate an educational program based on PRECEDE model to improve safety behaviors in primary school boys.

**Materials & Methods:** This study was a field trial design to evaluate an educational intervention based on PRECEED Model to improve health related safety behavior in primary school boys. This study carried out in 6 areas of Tehran in 1386. Participants were 10 – 11 years old (N=88) who followed by items measuring the PRECEED model before and after two months of intervention. The data were then analyzed with T test, X2 and pair T test in SPSS software.

**Results:** Significant improvements were found in the following components of PRECEDE model measures (knowledge, attitude, behavior, enabling and reinforcing factors) after participating in educational program.

**Discussion and conclusion:** The implementation of a pedestrian safety education program in public schools can change the knowledge and beliefs about safe pedestrian behaviors among students. The findings suggest beneficial effects of educational intervention based on the PRECEDE Model on improving safety behavior. It is recommended that health education plan could be used on educational models. Road safety training programs for children may need to take into account the development of children’s attention.

**Keywords:** PRECEDE model, Safety behavior, Health education

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**FALLING SAFETY PROMOTION IN RURAL COMMUNITIES: INPUT FROM INJURY DATA AND COMMUNITY HEALTH WORKERS IN TWISERKAN, IRAN**

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**Introduction:** Falling are one of important cause of injury morbidity. Knowledge is limited about fall-related injuries in low- and middle-income countries in general and in Iran in particular. This study aims to document the epidemiology of injuries among rural community and to determine how fall injury control and prevention are conceived by community health workers (known as Behvarzes), given the role that they are expected to done for promotion of local people health and safety.

**Materials and Methods:** The study was a six-month prospective injury data collection (from July 15th 2007 to January 15th 2008) that took place in one of the Iranian district and focused on severe injuries (leading to hospitalization over six hours or death). About 100 community health workers (Behvarzes) collected data according to a special assignment. They used a pre-determined form (a logbook) for data collection on injuries of various causes, including falls. At the end of data collection Behvarzes were asked, by questionnaire, about injury prevention measures and barriers in the community.

**Results:** A total of 23 severe fall injuries (two fatal) were reported during the follow-up period with an annual estimated incidence rate of 8/10 000 (95% CI: 6-11). The incidence rate of severe falls was significantly higher among males than females (12/10 000 vs. 3/10 000 person-years). Fall incidence rates was also higher among people 65 years and over (24/10 000 person-years). Severe falls led commonly to fractures and lower limb was the most common single body region. Most falls were from height, mainly from roof and tree, and about half were work-related. The injury analyses revealed...
that the Behvarzes often considered that the adoption of safe behavior/practice could help preventing fall injuries (17 out of 23). Their post follow-up reflection on fall prevention indicates that education, provided by them could help prevent fall injuries (71 out of 87) and so could environmental improvement, people training, instruction, cooperation and consultation by other performers in this field. Also the barriers or risk factors for fall injury prevention identified related mostly to human factors (for all 23 cases) followed by physical environmental factors. At the end of the follow-up, however, they identified several physical environmental factors (44 out of 87), followed by social and legal environmental factors, and then, individual factors.

Discussion and conclusion: Community health workers can provide a variety of recommendations for falling injury prevention and highlight potential barriers to their implementation among their catchment area.

Keywords: Fall injuries; Countermeasures for prevention; Rural communities; Community health worker

THE PREVENTION AND CONTROL OF ROAD TRAFFIC INJURIES IN RURAL COMMUNITIES: INPUT FROM COMMUNITY HEALTH WORKERS IN RURAL TWISERKAN, IRAN

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Introduction: Preventing road traffic injuries (RTIs) in rural areas poses particular challenges. This study highlights potential countermeasures and barriers as identified by health workers (known as Behvarzes) responsible for local community health and safety matters.

Materials and Methods: The study enrolled the rural health workers of Twiserkan district (Iran), all of whom (n= nearly 100) were trained for the purpose of prospectively gathering data on any severe injury occurring in their catchment population over a six-month period, proposing preventive measures and identifying potential barriers. The data collection finished with a questionnaire session covering similar issues but addressed in more general terms.

Results: The health workers reported a total of 59 persons who were severely injured in 41 crashes during the 6 month follow-up. Of those, 14 (24%) died in or as a consequence of the crash. A total of 28 people were injured in a “one victim” crash, 18 in a “two victim” crash and 13 in a “three or more victims” crash. The health workers emphasized the adoption of safe behavior/practice as an important means for RTI prevention (90%), with a focus on the use of motorcycle helmet and compliance with traffic rules. Their suggestions covered the three “Es” – education, engineering and enforcement. They saw their own contribution as being health and safety educators and promoters. The barriers they identified dealt with both individual and environmental factors.

Discussion and conclusion: Health workers are in a good position to identify both a variety of context-relevant countermeasures for RTI control and prevention and potential barriers to their implementation and uptake. They can help to bridge the knowledge-practice gap in the field of safety promotion among rural community.

Keywords: Countermeasures; Social diagnosis; Road infrastructure; Haddon matrix

EFFECTS OF HEALTH BELIEF MODEL BASED SAFETY EDUCATION ON SAFETY BEHAVIOR OF SUPERVISORS IN A WORKSHOP CONSTRUCTING CEMENT FACTORY

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Introduction: Healthy occupation power is important for socioeconomic development and industry investment. The current research examine the effect of a safety education program based on HBM Model regarding environmental safety on supervisors of constructing unit of cement factory.

Materials and Methods: A Quasi experimental study through a before and after method was conducted to examine the effect of a safety education program. Thirty four supervisors working in a constructing unit of cement factory were selected through a simplified sampling technique to collect the data a questionnaire including 30 questions (6 question for each part of H.B.M named; benefits, barriers, perceived severity and sensitivity and cue to action); an observational form of using personal protection equipment, a form for recording were applied. The validity and reliability of instruments were tested. In the second step, according to the collected data form the first step a HBM based educational intention was conducted on the supervisors. Focus group discussion, Buzz group, educator leaflet, pamphlet, and poster were used in educational program. Finally, one month later, same data was collected and analyzed.

Results: According to the finding, the mean (standard deviation) of perceived severity, barriers, and cue to action increased significantly from 12.09 (2.54) to 12.59 (1/79) and 11.82, (2.88) to 14.21 (2.37), 14.21 (2.25) to 13.44 (3.025) respectively after the intervention. Using personal protected equipment by labors had increased by the intervention too. Unsafe cases and also were reduced following the applied education.

Discussion and conclusion: The findings of this investigation indicated the H.B.M. based education will promote the safety of workplace environment and health
PREDICTION OF HELMET USE AMONG IRANIAN MOTORCYCLE DRIVERS: AN APPLICATION OF HEALTH BELIEF MODEL AND THEORY OF PLANNED BEHAVIOR

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Introduction: In many countries, head and neck injuries are the leading causes of death related to motorcycle crashes. In Iran, motorcycling is an essential method of transportation and is common among adults. According to the World Health Organization (WHO) report in 2005, approximately 40% of all registered vehicles in Iran were motorcycles. The aim of this study was to investigate the predictors of self-reported motorcycle helmet use in a sample of motorcycle riders in Bandar Abbas, Iran. The theory of planned behavior and the health belief model served as the conceptual framework for the study.

Materials and Methods: This population-based study was conducted in Bandar Abbas, in the south of Iran. In total, 221 male motorcycle drivers participated in this cross-sectional study. A self-administered questionnaire, including demographic characteristics and items related to both the theory of planned behavior and the health belief model constructs, was used to collect data.

Results: The mean age of the subjects was 26.8 years (SD=7.2). Multiple regression analysis revealed that perceived behavioral control significantly predicted the intention to use a motorcycle helmet (R²=0.47, F=19.5, p<0.001); also, perceived behavioral control and behavioral intention significantly predicted motorcycle helmet use (R²=0.49, F=51.7, p<0.001). Moreover, perceived barriers, self-efficacy and cues to action significantly predicted motorcycle helmet use (R²=0.35, F=19.5, p<0.001).

Discussion and conclusion: It was concluded that motorcycle drivers who perceived a high level of behavioral control, intention to use a motorcycle helmet, few barriers, high self-efficacy and a high number of cues to action were the most likely to use a motorcycle helmet.

Keywords: Helmet, Theory of Planned Behavior, Health Belief Model, Motorcycle driver, Prediction

DETERMINANTS OF ROAD CROSSING SAFE BEHAVIORS AMONG THE FOURTH GRADE STUDENTS BASED ON THEORY OF PLANNED BEHAVIOR IN TEHRAN

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Introduction: Pedestrians' traffic accidents are one of the most important causes of death throughout the world. Access to the information or status que can pave the way for educational interventions in traffic accidents prevention. Theory of Planned Behavior shows the relationship between some constructs relating to behavioral intention, attitude, perceived behavioral control, normative belief and behavior. This research aims to determine the relationship between constructs of the planned behavior theory and road crossing safe behaviors among the fourth grade students of Tehran city in 2010.

Materials and Methods: In this descriptive-analytic research, 160 students were selected among schools in Dist. 4 of Tehran city through random sampling method. These students answered standard questionnaire of which validity and reliability were evaluated. Finally, the gathered data was analyzed with software SPSS (version16).

Results: research results showed that there was significant relationship between road crossing safe behavior and constructs of intention (p<0.001), perceived behavioral control (p<0.001), compliance motive (p<0.001), outcome evaluation (p=0.04), and normative beliefs (p<0.001) and there was no significant relationship between road crossing safe behavior and construct of behavioral belief. Linear regression test result specified that behavioral intention with B=2.35 was suitable predictor of road crossing safe behavior.

Discussion and conclusion: finding showed that constructs of planned behavior theory especially construct of behavioral intention are closely related with road-crossing behaviors and the planned behavior theory can be used as suitable framework for design of educational interventions in improvement of students' road crossing behaviors.

Keywords: theory of planned behavior, road crossing safe behaviors, students, behavioral intention

SURVEY OF HELMET USE IN MOTORCYCLE DRIVERS BASED ON HEALTH BELIEF MODEL IN KHOMEIN CITY, 2010

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In a Cross-sectional study, a population-based cross-sectional study carried out on 267 Motorcycle riding in Tabriz.

Materials and Methods: This was a cross-sectional analytical study carried out on 267 Motorcycle riding in 2008 (all were male). The instrument used was a questionnaire including demographic information and Health belief model constructs (perceived severity, perceived susceptibility, perceived benefits, perceived barriers and cues to action). Data were analyzed using chi-square test and ANOVA.

Results: The subjects mean age was 30.6±10 years and the range was between 15-65 years. According to self-report, 25.9 percent always use helmet, 22 percent never wear it, 19 percent had an accident while riding the motorcycle. According to findings subjects got the highest score in perceived benefits (87.1/100). There was a meaningful relationship between using helmet and Health belief model constructs (P<0.001). Based on subjects, opinion cues to action were mass-media (69%) and rigorous law enforcement (61%).

Discussion and conclusion: the results indicated a low level of helmet wearing among the subjects. Wearing a helmet is the single most effective measure for preventing head injury in motorcycle users. Health belief model could be used as a theoretical framework in the instructional programs in order to increase wearing of helmet by motorcyclists.

Keywords: Health belief model, Helmet, Motorcycle riding

THE TREND OF SEAT BELT USE AMONG DRIVERS IN THE NORTH OF IRAN, 2007-2010: AN EPIDEMIOLOGIC STUDY.

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Introduction: Using seat belt has a considerable role in reducing human damage. The aim of this study was to compare trend of seat belt use rate during 4 years, from 2007 to 2010, in Golestan province (northern Iran).

Materials and Methods: This was a population-based cross-sectional study that enrolled 3999 subjects aged 15-65 years during four years (2007 = 1000 cases, 2008 = 1000 cases, 2009 = 999 cases and 2010 = 1000 cases) using stratified cluster sampling. Interviewers recorded the data using a multidimensional questionnaire including anthropometric indexes. Using seat belt in the case of sitting in the front seat of car (as a driver or passenger) of all samples was asked. SPSS 16.0 software was used for statistical data analysis.

Results: The rate of seat belt use in the years 2007, 2008, 2009 and 2010 were 71%, 69.8%, 74.5 and 86.4%, respectively. Seat belt use during the four years increased up to 15.4%. Statistical differences among four years was

THE IMPLICATION OF HEALTH BELIEF MODEL TO ASSESS HELMET USE AMONG MOTORCYCLE RIDING IN TABRIZ

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Introduction: Road traffic injuries constitute a major public health problem. Trauma to the head and neck is the primary cause of death and severe disability in motorcycle-related accidents. Although helmet wearing can significantly decrease the risk of head injury, few motorcyclists make use of it. Health belief model is one of the important models which explain the major mechanism for accepting health behaviors. In the present study Health belief model was applied in predicting helmet wearing among motorcycle riding in Tabriz.
**APPLICATION AND COMPARISON OF THEORY OF PLANNED BEHAVIOR AND HEALTH BELIEF MODEL IN PREDICTING SEAT BELT USE AMONG AUTOMOBILE DRIVERS IN SABZEVAR(2010)**

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**Introduction:** After heart diseases, traffic accidents are accounted for the main cause of mortality in Iran. Although seat belt use can significantly decrease the risk of mortality (41%-50%), about 3%-56% of drivers in Iran make use of it. In the present study the Theory of Planned Behavior (TPB) and Health Belief Model (HBM) were applied in predicting seat belt use among drivers in Sabzevar.

**Materials and Methods:** In this descriptive analytical and cross-sectional study, 340 drivers in Sabzevar from ten regions (10×35) selected through clustered random sampling were surveyed. Means of data collection was a questionnaire designed according to TPB and HBM and completed by self-Administration. A panel of experts approved the validity of the questionnaire and its reliability was verified by means of Cronbach Alpha test (α=0.65%-0.83%). The obtained data was analyzed by SPSS (15.0) using Spearman Coefficient, ANOVA, T test and Path analysis.

**Results:** The subjects reported 63% of receivable scores of seat belt use. Statistically significant differences were found in seat belt use by parent education, there was a significant correlation between all the the variables of TPB and HBM (except perceived severity) and intention to wear seat belt (p<0.01). The variables of TPB (Attitude, Subjective norms and Perceived Behavior Control) explained 37.9% of variance of intention to wear seat belt among the subjects, and for intention, subjective norms was the strongest predictor (β=0.313). Also the variables of HBM (Perceived Barrier and Cue to action and Perceived Sensitive) explained 15.4% of variance of intention to wear seat belt among the subjects, among these variables, cues to action was the strongest predictor (β=0.210).

**Discussion and conclusion:** The results indicated a moderate level of seat belt use among the subjects, but it should be promoted because the high prevalence of mortality among drivers and the great importance of seat belt on decreasing mortality rate. TPB could be used as a theoretical framework in instructional programs than HBM in order to predict the intention and wearing of seat belt use by drivers.

**Keywords:** Theory of planned behavior, Health belief model, Seat belt use, Drivers

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**DETERMINANTS OF HELMET USE BEHAVIOR AMONG EMPLOYED MOTORCYCLE RIDERS IN YAZD, IRAN BASED ON THEORY OF PLANNED BEHAVIOUR**

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**Introduction:** This paper reports on predictors of helmet use behavior, using variables based on the theory of planned behavior model among the employed motorcycle riders in Yazd-Iran, in an attempt to identify influential factors that may be addressed through intervention efforts. In 2007, a cluster random sample of 130 employed motorcycle riders in the city of Yazd in central Iran, participated in the study. Appropriate instruments were designed to measure the variables of interest (attitude, subjective norms, perceived behavior control, intention along with helmet use behavior). Reliability and validity of the instruments were examined and approved. The statistical analysis of the data included descriptive statistics, bivariate correlations, and multiple regressions. Based on the results, 56 out of all the respondents (43.1%) had history of accident by motorcycle. Of these motorcycle riders only 10.7% were wearing their helmet at the time of their accident. Intention and perceived behavioral control showed a significant relationship with helmet use behaviour and perceived behaviour control was the strongest predictor of helmet use intention, followed by subjective norms, and attitude. It was found that that helmet use rate among motorcycle riders was very low. The findings of present study provide preliminary support for the TPB model as an effective framework for examining helmet use in motorcycle riders. Understanding motorcycle rider’s thoughts, feelings and beliefs about helmet use behavior can assist intervention specialists to develop and implement effective programs in order to promote helmet use among motorcycle riders.

**Keywords:** Theory of planned behavior, Helmet use, Motorcycle riders
COMPARISON OF TWO TEACHING METHODS IN TRAFFIC RULES EDUCATION IN PRESCHOOL AGE CHILDREN

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Introduction: Children are one of the most susceptible groups involved in traffic accident injuries. It is the most common cause of hospital admission and death in the age group of 5 to 9 years, and second cause of death in school age children after cancer disorders. To overcome this problem education of pre-school children may be an effective plan, and this study was designed to evaluate such an effect.

Materials and Methods: This study was carried out on 579 students of 33 kindergardens of Kashan during 1388, using two methods of narration, and poster presentation of the events in streets. Then all of the children were evaluated and scored by the use of coloring, and marking the right pictures, or connecting the relevant pictures with each other. ANOVA, Chi square, and t-tests were used for the analysis of the findings. P< 0.01 was considered as significant.

Results: From 759 children, 407 (53.5%) were female and 302 (46.5%) male. Four hundred and two (53%) were in poster presentation and 357 (47%) in narration group. The obtained scores in poster group (53.5±9.1) was significantly higher than the narration group (51.1±10.5), (P= 0.001).

Mean total score in girls was 53.5±8.2, and in boys 51.1±11.2, P= 0.001.

In poster group mean score for girls was 54.3±8.3, and 52.5±9.8 for boys, P= 0.007.

In narration group mean score for girls was 52.5±8.3, and for boys it was 49.4±12.5, P = 0.007.

Parents’ level of education was significantly related with the scores. There was significant difference between those with fathers under diploma and those with fathers above it (P = 0.009), and those with mothers in master level and above diploma and under diploma (P= 0.001), respectively.

Discussion and conclusion: Teaching traffic rules in preschool age group particularly with the use of auditory and visual methods which are more attractive to this age group, may be effective in reducing traffic accidents

Keywords: Traffic; accident; Education; Kindergarten; Narration; Poster presentation

PERCEIVED UNSAFE DRIVING REWARDS AND SAFE DRIVING COSTS AMONG DRIVERS IN YAZD: AN APPLICATION OF PROTECTION MOTIVATION THEORY

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Introduction: Road traffic injuries are a major but neglected public health challenge that requires coordinated efforts for effective and sustainable prevention. Perceived rewards and costs are protection motivation theory constructs’ that their characteristics have not explored exactly, but there are some evidences regarding their effects on driving status. So this study aimed surveying the status of these constructs.

Materials and Methods: In this descriptive cross-sectional study, total number of 379, 19 years old and above people, which had a driving license from population under coverage of 10 health care centers entered in the study with a clustered random sampling. A valid and reliable questionnaire was used for data collection which was included a part or demographic variables and constructs of Perceived rewards, costs and unsafe driving behaviors. It was completed as self-report. The data were analyzed using SPSS software and T-test, ANOVA, Correlation coefficient and Liner Regression statistical tests.

Results: Subject earned 44.8, 46.5, and 17.4 percent of possible scores of perceived rewards, perceived costs and unsafe driving behaviors in turn. The most reported rewards of unsafe driving was «excitement of speeding»(56.4%) and the most reported cost was «taking longer time to get to destination because of avoiding driving while fatigue»(51.2%). There was a significant difference on Perceived rewards and costs by sex, marriage status and age. Also there was a significant correlation between them and unsafe driving at 0.01 levels. Both of constructs explained 28% of the variances in unsafe driving which the predictability of Perceived rewards (g=0.382) was higher than Perceived costs (g=0.194).

Discussion and conclusion: Perceived rewards and costs have an important role on driving status. Decreasing perceived rewards and costs aimed increasing safe driving could be an important principle in road safety education and policy. Moreover these two constructs are difference from each other and could be considered as independent predictors of driving status.

Keywords: Perceived rewards, Perceived costs, Unsafe Driving

PATIENT SAFETY CULTURE AMONG STAFF IN RASOUL AKRAM HOSPITAL

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Introduction: Efforts to obtain improvement in patient safety are one of the key actions for health services in the onset of 21st century. Patient safety Improvement is a joint international priority because so many errors and other unnecessary losses in patient care and treatment is occurring now and therefore millions of people may die

...
from medical injuries resulting from medical errors. Also these accidents create a huge financial burden include avoidable long-term services, additional treatment and legal costs. In this way it has been indicated that the safety culture is a major factor affecting patient safety.

**Materials and Methods:** The purpose of this study was to determine the culture of health care providers about patient safety among hospital staff training Hazrat Rasoul Hospital in Tehran. This research is a cross-sectional, descriptive-analytical study. Study population was Rasoul Akram Hospital personnel within which 177 staffs were randomly selected. A reliable and validated Questionnaire related to patient safety culture distributed among desired staff and collected data were analyzed using spss15 Pearson and ANOVA test, and t test and analysis.

**Results:** Based on the result of this study, patient safety culture among physician was less than the other personnel and plan staff personnel considered the safety patient more than the others. In this study, there was a significant relationship between types of employment and the culture of patient safety. Totally findings showed that the rate of patient safety culture in this hospital was poor and a desirable patient safety culture may not exist.

**Discussion and conclusion:** According to the results of this study, required measures should implement to improve the safety patient culture.

**Keywords:** Patient safety, Safety culture, Hospital stafftrrition education

**School health**

**STUDY OF PRIMARY HEALTH CARE (PHC) SYSTEM PERFORMANCE ABOUT STUDENTS' HEALTH PROMOTION IN EAST AZERBAIJAN**

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**Introduction:** This study was conducted to describe PHC system performance in field of students’ health promotion.

Method: This cross sectional and descriptive study carried out to measure public health centers activities in their regions schools. In first, 135 health centers were selected with systematic random sampling. From schools around each health center, at least one school was selected in any levels of elementary, junior high school and high school.

Data were gathered by interview with managers of schools. Main variables of study were: health education, monitoring, case finding and collaboration. Data were analyzed with Spsss 16

**Results:** 85.2% of schools conducted health education programs. In every school, 3.55 education programs were conducted for students, 0.62 for parents and 1.26 for teachers annually. 46% of these programs were performed by regional health centers and 51.78% by schools. 26.52 of them were about diseases, 21.76 about individual hygiene, 13.1% about environment health and 12% about nutrition. 62.6% of schools conducted non education sessions that 38.34% of them were about collaboration and 19.1% about planning. Health service providers visited averagely five bouts from every school in one year. 1.13 of these visits was accomplished for environment health and 0.89 for case finding. Almost 60% of schools have access to health related consultation services.

**Conclusion:** The health care system should use other sectors potentials in health promotion. Students should participate in improving their health.

**Keywords:** Participation, Students health, PHC

**MOTILITY AND PHYSICAL ACTIVITY IN THE FIRST GRADE OF HIGH SCHOOL STUDENTS IN TABRIZ , 2009**

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**Introduction:** Participating in adequate physical activity throughout life and maintaining proper weight, are the most effective ways to prevent many chronic diseases such as cardiovascular diseases and diabetes. It is estimated that approximately 60% of the world’s population do not have enough physical activities. Global development and expansion of industrialization and technologies reduce people physical activities. The researches show that many disorders begin in childhood and adolescence period. The purpose of study is to measure mobility and physical activities of students in Tabriz.

Materials and Methods: Using a multi – stage cluster and stratified sampling technique, 480 students of first grade high schools of Tabriz city was selected. Modified Iranian version of Global School Health Survey (GSHS) questionnaire was used for measuring the physical activity. The data were analyzed by SPSS 13.

**Results:** Only 9% of students had every seven days of physical activities that lasts at least 60 minutes,. 29.6% had no activities during the week. 64.1% of students had only one hour physical training in school during the year. 39.7% of students had three hours or more sedentary works like watching TV, playing computer, talking with friends and studying. 53.6% of them had trained in school about the benefits of physical activity.

**Discussion and conclusion:** The prevalence of poor physical activity in this city, comparing with studies of similar countries and a sedentary lifestyle among these students were higher. Increasing the training of physical activity sessions and practical training sessions about the benefits of physical activity and hazards of doing sedentary works is recommended.

Key word: Motility - Physical activity – GSHS - Standard questionnaire
THE EFFECT OF HEALTH EDUCATION PROGRAM ON TINEA CAPITIS INFECTION AND ITS K.A.P AMONG PRIMARY BOY STUDENTS IN CHABAHAR

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Introduction: In many parts of the world, Tinea Capitis is a public health problem especially in primary boy students. The control of the disease is largely depends on patients' education to increase knowledge, attitude, practice about Tinea Capitis. Tinea capitis is endemic in tropical areas and warm climate. The infection may damage the hair follicle leading to secondary cicatricial alopecia. Tinea capitis is an importance public health especially in Chabahar city with 15% prevalence in primary boy students. The present study conducted to evaluate the effect of health education program on knowledge, attitude, practice and Tinea capitis in Chabahar primary boy students.

Materials and Methods: This research was a RCT (Randomized Controlled Trial) study. Data gathering tools were questionnaire, check list and laboratory samples of scalp and hair. Two schools were randomly selected among male primary schools in Chabhar city. Totally, 115 third grade students were divided into case (55) and control (60) groups. The students were matched in demographic variables and Tinea capitis infection. After performing the pre-test, educational program was designed and conducted in the experimental group. The intervention was evaluated after two months.

Results: The findings showed significant increases in the knowledge, attitude, practice scores (P <0.0001) and decrease of Tinea Capitis rate in the experimental group (P =0.008). There were no differences in the control group, significantly. Tinea Capitis was significantly associated with some background variables such as low weight, greasy skin and low levels of education in parents.

Discussion & conclusion: The study showed that the health education is a suitable response to prevention and control of Tinea Capitis. It is recommended to apply effective educational strategies such participating subjects, their parents and school staffs in health education program along with simple materials and methods in order to effect on knowledge, attitude and practice concerning Tinea Capitis.

Keywords: Health education program, Tinea Capitis, Primary students

ASSESSING NUTRITIONAL BEHAVIORS IN THE FIRST GRADE HIGH SCHOOL STUDENTS USING GLOBAL SCHOOL HEALTH SURVEY QUESTIONNAIRE IN TABRIZ IN 2009

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Introduction: GHS was developed by WHO in 2001 in collaboration with United Nations' UNICEF, UNESCO, and UNAIDS; and with technical assistance from CDC. GHS is a school-based survey conducted primarily among students aged 13–15 years. The purpose of GHS is to provide data on health behaviors and protective factors among students, because many searches show that most of risk factors begin from childhood and teen-ages.

The aim of this study was to provide data on nutritional knowledge and behaviors among students to improve advocacy programs of schools.

Materials and Methods: 480 students of first grade of high schools in Tabriz were selected in a multi – stage cluster sampling and stratified random sampling. GHS standard questionnaire translated to Farsi and modified was distributed between the students and after completion was gathered and the data was entered in SPSS 13 processed and analyzed.

Results: Overall, 45.4% of respondents were male and 50.4% were female. Most participants reported being 14–15 years of age. 25.4% of students were at risk of becoming overweight and 18.5% were obese. 60.3% of participants had breakfast almost all of last 30 days. 23.5% seldom or never had breakfast. 27.9% of them don't like breakfast in the early morning. 10.5% because of lack of time and only 2% have no thing for eating. 78.8% had at least one exchange of fruit daily. 47.8% during 30 days ago had 3 times and more milk and it's products.

Discussion and conclusion: The prevalence of obesity shows that the students have imbalanced diet because obesity is lower in other countries. Over than 70% of participants had fruit and vegetable but most of them were eager to drink carbonated beverages, that can result in disorders in calcium absorption. It seems health policy makers must plan healthy nutrition programs to do essential cultural changes in community especially on teen-ages.

Key word: Nutritional behaviors – GHS - Standard questionnaire.

CONTRIBUTION OF PARENTS AND CHILDREN IN SELECTION AND USE OF SCHOOL BAGS AMONG PRIMARY SCHOOL CHILDREN IN TABRIZ

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Introduction: Consideration of the needs of school-aged children is an important factor that influences children's health and performance. One important consideration in this respect includes selection and use of school bags among school children and attitudes of parents and children toward this issue. This information can be used
to promote child and parent awareness about selection of appropriate school bags. Unfortunately, there are limited studies in our country in this respect.

**Materials & Methods:** Therefore, the present cross-sectional, descriptive study was conducted in Tabriz city to address this issue in more detail. Data were collected from a sample of 250 parents that were randomly selected from different educational regions of Tabriz city as participants in the study. The participants were asked to complete self-reported questionnaires and the data were analyzed using SPSS software.

**Results:** The results of this study showed that only 10% of school bags were selected by both parents and children. Most school bags were selected by children (54%), followed by mothers (21%) and fathers (12%), respectively. Most of the students (89%) carried their school bags to or from school, whereas 11% of parents carried the school bags for their children. About half of the students (49%) walked to or from school and 51% carried their school bags for more than 15 minutes a day.

**Discussion & Conclusions:** The findings of the present study suggest that parent’s awareness about contribution for school bag selection and the use of school bags should be promoted to prevent future prevalence of musculoskeletal problems among school children. It is recommended that these measures are better to be considered in school's health promotion programs.

**Keywords:** School health; Awareness; School bag; Parents

**PREVALENCE OF BMI AND ITS RELATED FACTORS AMONG PRIMARY SCHOOL STUDENTS IN SANANDAJ, IRAN**

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**Introduction:** Over the past 3-2 decades, the prevalence of obesity among children has been increased significantly. The aim if this study was to assess the prevalence of BMI and its related factors among primary school students in Sanandaj, Iran in 1389.

**Materials and Methods:** This research was a descriptive - analytical study. The population included the primary school students in Sanandaj, who were selected by random cluster sampling (800 samples -400 girls and 400 boys). At first, their height and weight measured and secondly their BMI calculated. Moreover, a questionnaire about BMI related factors were completed by the respondents. After calculating BMI and determining the values of the top percentile and the values between 85 and 95 percentiles in proportion to the respective age and gender, obese, overweight and low weight students were determined. Data analyzed by SPSS software using CHISQUARE and Man-Whitney U Test.

**Results:** Prevalence of overweight and obesity in this study were 1.6% and 16.3%, respectively. Only, 23% of the students had normal weight. There was a significant difference in obesity by students' age, duration of walking to school, and students’ appearance. Also, significant differences were found in obesity by the number of hours watching television per day, entertainment type, place of living, parents’ education and job.

**Discussion and Conclusion:** Unfortunately, the prevalence of childhood obesity in our country is high. Considering this high (16.3%) prevalence of obesity in this study and similar studies in the country and also its associated factors such as duration of walking to school, the number of hours watching television per day, entertainment type and place of living, designing more appropriate interventions is suggested.

**Keywords:** Overweight, Obesity, Body Mass Index, Primary school, Children

**VIOLENCE AND UNINTENTIONAL INJURIES IN TABRIZ HIGH SCHOOLS – A GLOBAL SCHOOL BASED STUDENT HEALTH SURVEY (GSHS) BASED STUDY**

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**Introduction:** Unintentional injuries are a major cause of death and disability among young children. Each year about 875,000 children under the age of 18 die from injuries worldwide and 10 to 30 million have their lives affected by injury. Even victims of bullying experience increased stress and a reduced ability to concentrate, and are at increased risk for substance abuse, aggressive behaviors and suicide attempts. The purpose of the GSHS is to provide accurate data on health behaviors and protective factors among students to help countries develop priorities, establish programmes, and advocate for resources for school health and youth health programmes and policies; establish trends in the prevalence of health behaviors and protective factors for use in evaluation of school health and youth health promotion. Assessing the prevalence of violence and unintentional injuries is a part of this survey which has been done in Tabriz high schools in order to determine their prevalence and related factors.

**Materials and Methods:** A cross-sectional survey was done by a cluster sample design to produce a representative sample of 400 students in first year of high school. Data collection was conducted for three months. Data was collected in such a way that student confidentiality was upheld by allowing for anonymity and voluntary participation as research ethics requirements. Students completed the self-administered questionnaire. The students were asked about any violence, bullying, unintentional injuries in last school year.

**Results:** Among respondents, 21% had corporal
A cross-sectional survey of being worried were also high with 12% of students or always felt lonely during the past 12 months. Levels of an individual to cope and adapt to the demands of life state of being mentally sound, it also refers to the ability to respond to stress and to regulate emotions. Physical injury due to traffic accidents was reported by 27% of students, 26% of all students did not use safety belts. There was no special education about violence and unintentional injuries in school in 58% of cases.

Discussion and conclusion: The prevalence of violence and injuries is high in high schools of Tabriz and there is a need to introduce interventions and intensive educational programs to reduce the injuries.

Keywords: Violence, Unintentional injury, School health

MENTAL HEALTH IN HIGH SCHOOL STUDENTS IN TABRIZ, BASED ON GLOBAL SCHOOL-BASED STUDENT HEALTH SURVEY (GSHS).

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Introduction: Adolescents are the future of society. As statistics shows, adolescents who are healthy and happy are better equipped to contribute to their communities. Since 2003, Ministries/ Department of Health and Education around the world have been using the GSHS to periodically monitor the prevalence of important health risk behaviors and protective factors among students. The aim of this study was to determine mental health of high school students in Tabriz.

Materials and Methods: A cross-sectional survey was done using a cluster sample design to produce a representative sample of 400 students in first year of high school. Data collection was conducted for three months. All students in the sampled classes were eligible to participate in the GSHS. Data was collected in such a way that student confidentiality was upheld by allowing for anonymity and voluntary participation as research ethics requirements. Students completed the self-administered questionnaire. The students were asked about mental health issues in last 30 days. Feeling sad and hopelessness was reported by 27% of students. Feeling sad and hopelessness was 36%. History of smoking was positive in 5.3% of students. Mean age of smoking initiation was 12.5 years old.

Discussion and conclusion: The status of mental health is not satisfactory in Tabriz high schools. Moderate to high prevalence of sadness, hopelessness, insomnia are the alarming signs to develop and reform the school health programs in order to improve mental health of students.

Keywords: School health, Mental health, Adolescent

HEALTH RELATED LIFESTYLE AMONG HIGH SCHOOL STUDENTS IN TABRIZ BASED ON GLOBAL SCHOOL-BASED STUDENT HEALTH SURVEY (GSHS).

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Introduction: In 2001, the World Health Organization, in collaboration with UNAIDS, UNESCO, and UNICEF, with technical assistance from the US Centers for Disease Control and Prevention (CDC), initiated development of the Global School-based Student Health Survey (GSHS). Since 2003, Ministries/ Department of Health and Education around the world have been using the GSHS to periodically monitor the prevalence of important health risk behaviors and protective factors among students. The aim of this study was to determine the health related lifestyle among high school students in Tabriz based on Global School-based Student Health Survey.

Materials and Methods: A cross-sectional survey was done using a cluster sample design to produce a representative sample of 400 students in first year of high school. Data collection was conducted for three months. All students in the sampled classes were eligible to participate in the GSHS. Data was collected in such a way that student confidentiality was upheld by allowing for anonymity and voluntary participation as per research ethics requirements. Students completed the self-administered questionnaire. The students were asked about health related lifestyle in last 30 days of filling the questionnaire.

Results: Mean Body Mass Index of students was 21.5. Fruit and vegetables consumption once or more in a day was reported by 78% of students. Thirty six percent drank two or more times a day carbonated beverages. Two percent never brushed teeth and 16% had not any dentist visit. Among all students 3% never wash their hands with soap after toilet. Using safety belts in the car was positive among 26% of students. Sitting in front of
television or computer more than 3 hours a day (sedentary life) was reported by 40 of students. There was a positive significant relationship between socioeconomic state, parents’ education and health related lifestyle. **Discussion and conclusion:** health related life style was not appropriate among high school students. There is a need to develop more efficient health education methods in schools. **Keywords:** School health, Health related lifestyle

**PROMOTING STUDENTS AWARENESS REGARDING MILK BENEFITS IN ABADEH, IRAN**

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**Introduction:** The aim of this study was to promote students awareness regarding milk benefits in Abadeh, Iran. **Materials and Methods:** The research was based on intervention method. Ten schools have been selected by random and experts taught them the necessary knowledge then 5% of the students have been selected by random in each class and asked them some question in this regard. **Results:** The above survey showed that the students’ trainings were useful and most of them knew about the necessary daily rate, the benefits, rich materials and its maintenance. **Discussion and conclusion:** The results showed that the students were very happy when using milk and not only it promotes the suitable feeding and provides a useful unit of dairy products for the students but also has some effective influences on the hygienic mental aspects of the students, so if this positive steps and some training has continued in the schools and promoted the students awareness, it would be more effective. Hope that this research help us to improve the feeding difficulties in the children. **Keywords:** Schools milk, Students, Primary and Guidance schools.

**COMPARATIVE RESEARCH ABOUT THE EFFECT OF PUBERTY HEALTH EDUCATION ON HEALTH BEHAVIORS OF SECONDARY SCHOOL GIRLS IN REGION 1 OF TEHRAN 87**

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**Introduction:** Adolescence is one of the most important and valuable period of life for everyone. it is a critical period that include puberty. The most important changes of adolescence is puberty. It is the turning point of adolescent’s life. Health education can perform most important role for preventing and solving the problems of puberty ages. **Materials and Methods:** In this quasi experimental research, the effect of health education (independent variable) on puberty health behavior (dependent variable) of girl students through 3 information sources (mothers, teachers and community health nurse) was studied. We compare these sources to understand which of these sources are more effective. Data collection tool were questionnaire. Anova and pair t test were used for statistical analysis. **Results:** Results showed that there weren’t any differences in total average score of health behaviors (in 9 items) before intervention through 3 educational groups, but the differences were meaningful after intervention. Comparison of the average scores before and after intervention in every 3 groups, showed that the differences were meaningful \((P \text{ mothers } = 0/005, P \text{ teachers } = 0/001, P \text{ nurse } = 0/001)\).

**Discussion and conclusion:** Totally, in this study we found that teaching puberty health behaviors by mothers, teachers and community health nurses were effective and these educations by 3 sources results improving adolescent girl’s health behaviors. Educating health behavior by nurses were more effective than conveying information by teachers or mothers (community health nurse > teachers > mothers). Totally, teaching the puberty health educations through 3 mentioned reliable and trusted educational sources can improves health behaviors of adolescent girls and we can get help from these sources (exactly nurses) in schools. **Keywords:** Health Education, Puberty Health, Adolescence, Health Behaviors

**THE SURVEY OF HIGH SCHOOL STUDENTS’ ACCEPTANCE OF MILK DISTRIBUTED BY THE GOVERNMENT IN IRAN-YAZD – 2010**

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**Introduction:** Consumption of dairy products in teenagers, especially girls, is very important to earn optimum growth and to prevent of osteoporosis in future. According to this, the related government offices have distributed free-milk in girl’s high schools in recent years to improve the consumption of milk among student girls. This study was intended to determine acceptance of these intervention in high school girls in Yezad. **Materials and Methods:** The present descriptive-analytic research was carried out in 2010 and 703 girls from Yazd high schools participated in this study. Random sampling was used for both Education and Training Organization...
regions. Data were gathered through a questionnaire containing questions about students' demographic and questionnaire about the number of consumed milks weekly. The acceptance status of milk consumption was determined by the number of consumed milk packs that was distributed in the schools. The data were analyzed by the SPSS software version 16.

Results: Results of this research showed that 33% of participants didn't consume distributed milk. Among the students who consumed milks (67%), 30% consumed less than 3 times a week and 60% consumed more than 4.5 times a week. Among students who did not consume distributed milks 65% expressed bad taste as their major reason. The consumer expressed health benefits of milk as the major reason.

Discussion and conclusion: Considering to this study, the major reason of not to use of distributed milk was poor quality and undesirable flavor of it, therefore enhancement of quality and taste of milk distributed by government can help boosting the student's interest to consume it and to obtain most advantage of this strategy.

Keywords: Milk, High School, Milk Acceptance

EVALUATION OF KNOWLEDGE, ATTITUDE AND PRACTICE OF YAZD HIGH-SCHOOL GIRLS ABOUT CONSUMPTION OF MILK AND DAIRY PRODUCTS IN 2010

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Introduction: Good nutrition and sufficient consumption of calcium is important for adolescent girls. Adequate intake of this mineral is necessary for desirable bone growth in this stage of life. The dietary intake of calcium is milk and other dairy products, so this work investigated the knowledge, attitude and practice (KAP) of high school girls about consumption of milk and dairy products.

Materials and Methods: It was an interventional study of quasi-empirical type. In need assessment phase, among all the statistical community, that includes all of girl students in the third year of high school having parents with high school degrees and their teachers and counselors, 200 were selected using multi-stage cluster sampling. In the training phase, 45 two-person case and control group among all the third high school girl students were selected. Data collection tool included researcher-made need assessment questionnaires, and the questionnaire of assessing knowledge, attitude, performance and advocacy about the first three skills. Validity and reliability of scales were approved. After need assessment and doing pre-test, intervention as skills training in the form of lecture, slide show, group discussion and role playing during the eight sessions for the case group and a lecture session for parents was conducted. Education was completed through distribution of educational booklets, posters and leaflet among case group, their parents and teachers. One month after the educational intervention, case and control groups, again were evaluated by the mentioned tools. Data analyzed and compared by using descriptive and analytical tests and spss version 16 statistical software.

Results: Knowledge, self-awareness, effective communication with others and decision making as three first priority

THE EFFECT OF EDUCATION BASED ON BLOOM EMPOWERMENT MODEL ON LIFE SKILLS PROMOTION AMONG GIRL STUDENTS IN JAHROM 2009-10

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Introduction: Life skills abilities are adaptive behaviors and positive manners that by which a person can come over challenges and daily necessities of life. The main purpose of this study was to survey the effect of applying Bloom Model in promoting life skills in high school girl students.

Materials and Methods: It was an interventional study of quasi-empirical type. In need assessment phase, among all the statistical community, that includes all of girl students in the third year of high school having parents with high school degrees and their teachers and counselors, 200 were selected using multi-stage cluster sampling. In the training phase, 45 two-person case and control group among all the third high school girl students were selected. Data collection tool included researcher-made need assessment questionnaires, and the questionnaire of assessing knowledge, attitude, performance and advocacy about the first three skills. Validity and reliability of scales were approved. After need assessment and doing pre-test, intervention as skills training in the form of lecture, slide show, group discussion and role playing during the eight sessions for the case group and a lecture session for parents was conducted. Education was completed through distribution of educational booklets, posters and leaflet among case group, their parents and teachers. One month after the educational intervention, case and control groups, again were evaluated by the mentioned tools. Data analyzed and compared by using descriptive and analytical tests and spss version 16 statistical software.

Results: Skills, self-awareness, effective communication with others and decision making as three first priority
were identified. After intervention, there was a significant difference between the two groups in the scores of knowledge, attitude, performance and environmental support and life skills. But, there was not significant difference in scores of social support between the two groups.

Discussion and conclusion: Educational program using Bloom Empowerment Model with components such as strengthening support system in the family, school environment and community in addition to training students, can be effective on promoting life skills of students.

Keywords: Life skills-Bloom-Empowerment-Need assessment- Advocacy

BREAKFAST CONSUMPTION AND ITS’ RELATION WITH INDIVIDUAL FACTORS AMONGST HIGH SCHOOL STUDENTS IN TABRIZ, IRAN

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Introduction: High-quality nutrition is one of the health determinants and it has an important role in adolescents’ health. Breakfast consumption has been labeled as the most important meal of the day. Evidences suggest that breakfast consumption may improve cognitive function related to memory, test grad, and school attendance. In other hand, many factors can contribute students breakfast skipping. The purpose of this study was to explore the relationship between students breakfast skipping and some individual factors.

Materials and Methods: In a descriptive study, a sample of 507 high school students was selected using a cluster and stratified sampling. The self-report researcher-designed questionnaire gathered data about breakfast eating pattern. The data were analyzed using SPSS software. Binary logistic regressions were performed to explain association between breakfast skipping and individual factors.

Results: The average age of the participants was 16.5 years. High school students reported some barriers that were common reason of their breakfast skipping included lack of delicious bread (54.9%), lack of time (56.8%), eating alone (50.8%), tasteless material (42%), and lack of prepared breakfast (40.6%). Females more than males said that being alone is the reason of their breakfast skipping (p > 0.05).

Discussion and Conclusion: Trait of perceived insusceptibility to get disease or unhealthy status among youth people is one of the important factors that community health services and parents should focus on adolescent’s health and be commitment to adolescent health promotion through promoting school health and family health programs. Effective programs on improving nutritional status of youth people must be known as infrastructure of creative and productive community in the future.

Keywords: Breakfast skipping, High school students, Individual factors

PROMOTING PHYSICAL ACTIVITY-RELATED KNOWLEDGE AMONG STUDENTS OF BAVANAT HIGH SCHOOLS: AN INTERVENTIONAL STUDY

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Introduction: Regular physical activity has a positive effect on physical, mental, and social aspects of individual and community health. The present research aims to determine the effect of educational intervention on knowledge of the first grade students in male high schools of Bavanat about physical activity in the year 2010.

Materials & Methods: In this prospective experimental study, after selection of schools (that have study conditions) from 5 high schools of Bavanat, all students in a school (two classes including 42 individuals) randomly assigned to experimental group and all students of other high school (two classes including 43 individuals) randomly assigned to control group. Data gathering tool was self-administered and include 2 parts (demographic and physical activity-related knowledge questions). Its validity was done by the face and content validity methods. Test-retest was used to determine the reliability of questionnaire. After pre-test, the educational intervention was implemented for the experimental group. Post-tests were conducted immediately and one month after education. Collecting data was analyzed using statistical software SPSS 18 (t-test and repeated measure ANOVA). Participation of students in this research was voluntary and with informed consent.

Results: Regarding no significant difference between groups about mean scores of knowledge before the intervention (P=0.934), results showed significant difference between groups in both follow-ups (P<0.001). In addition, repeated measure ANOVA indicate significant difference between before and follow-ups scores in experimental group (P<0.001). Result of this test was not significant for control group (P=0.136).

Discussion & Conclusion: Findings of present study confirmed the effectiveness of educational intervention, resulting in greater awareness of students about physical activity in experimental group compared with control group. By increasing physical activity-related information among students, maybe, more likelihood of behavior adoption would be expectable.

Keywords: Physical Activity, Knowledge, Education, Student
BREAKFAST CONSUMPTION PATTERNS AND ITS ASSOCIATION WITH BELIEFS ABOUT “WHETHER IT’S EASY OR DIFFICULT TO PREPARE BREAKFAST?” AMONG HIGH SCHOOL STUDENTS IN TABRIZ, IRAN

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Introduction: Students are the most important part of each population that is at risk of disease and unhealthy conditions. In this regard, good nutrition is the essential determinant to promote health. Regular breakfast consumption is important for school aged children and adolescents health. In school aged population, skipping breakfast has been associated with decreased total energy intake, poor school performance and learning. And it interferes with time on task. Skipping breakfast is one of the behaviors that increase the risk of becoming overweight and obesity. In spite of increasing breakfast skipping among adolescents less study was found about behavioral determinant of this problem. As a result, this research was conducted with the aim of identifying high school students’ breakfast consumption patterns, and their associations with how they feel about the feasibility of preparing breakfast by them?

Materials and Methods: In a cross sectional study, 507 high school students from all educational areas of Tabriz assigned to participate in this study by applying the clustered and stratified sampling method. In the next step a researcher designed questionnaire was applied to gather data.

Results: Our findings showed that 41% of the students were skippers of breakfast and 46.3% reported that breakfast preparing is difficult versus 53.7 % of students who reported it’s easy to prepare breakfast. In addition 62.5% of students were regular consumers of breakfast among students who reported it is easy to prepare breakfast versus 37.5% among students who reported it is hard to prepare which there were significant relation between regular consumers and feasibility of breakfast preparing. In addition, 61.8% of the students that reported preparing breakfast is easy had been consuming at home versus 38.2% among students who reported it is hard to prepare at home. More time have been spent to have breakfast among the group who reported it’s easy to prepare.

Discussion and conclusion: Behaviors associated with breakfast eating are one of the important determinants of students’ health promotion. School health program must emphasize on parent education for improving breakfast consumption at home and provide and implement breakfast eating programs in the schools.

Keywords: Adolescents – Breakfast consumption – School health

EFFECTS OF NUTRITION TRAINING AND WEEKLY IRON SUPPLEMENTATION ON THE RATE OF LEARNING AMONG GIRL STUDENTS IN GONABAD

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Introduction: Iron deficiency anemia is one of the main nutrition and public health problems in the world. Teenagers especially girls are those who are in the risk of anemia. Side-effects of anemia like decrease of IQ and learning ability and physical growth disorders that cause mental retardation and physical capabilities endanger development of countries. This research has been done to determine the influence of nutrition training and weekly iron supplementation in the rate of girl student learning of Gonabad high schools.

Materials and Methods: this research was a semi experimental of two variables in two groups and was done to survey influence of nutrition training and weekly iron supplementation on the rate of girl student learning of Gonabad high schools. In this experimental study 10 high schools were chosen in cluster from different parts of Gonabad. The samples were 385 students from grade one, two and three. Data were collected by using a questionnaire for demographic data and a standard test of speed and accuracy of learning. Finally all data analyzed.

Results: the results of this study showed that there is not any relationship between demographic data and student learning scores based on chi- square test. But at the end of the study learning level increased in both groups and it was more in the case group. Also using independent T and even T for suit nutrition training showed that average score increased from 44.80 to 72.4, in the case group, but in the control group increased from 43.89 to 69.8.

Discussion and conclusion: This average scores show that we have increase in both groups, but it is more in case group that means 16- week iron supplementation has positive effect on the increase of average learning score.

Keywords: Optimum nutrition- weekly iron supplementation – learning

THE EFFECT OF EDUCATIONAL PROGRAM ON NUTRITIONAL KNOWLEDGE AND BEHAVIOR AMONG SECOND GRADE MIDDLE SCHOOL FEMALE STUDENTS IN ESFAHAN, 2009

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Introduction: Many studies indicate that nutritional knowledge and behavior of adolescent girls are inadequate.
In attention to importance of improving nutrition in this group the aim of this study was to determine the effects of educational program based on the BASNEF (Belief, Attitude, Subjective Norm and Enabling Factors) Model on the nutritional behavior among second grade middle school female students in Esfahan city.

**Materials and Methods:** This quasi - experimental study, performed on 72 students from 2 middle schools in Esfahan city, randomly divided to two groups, experimental and controls. The instruments for data collecting were two questionnaires. The BASNEF Model questionnaire and 24 recall questionnaire was completed 2 times (before intervention and 1 month after intervention). Educational interventions were performed based on BASNEF model about food pyramid and healthy eating in 3 sessions. Finally data were collected and analyzed by SPSS computer software and t-paired, independent t-test was used.

**Results:** Our findings indicated that mean scores of knowledge and BASNEF Model variables (Beliefs, Attitudes, Subjective Norms, Enabling factors) were significantly increased in the experimental group compared to the controls after intervention. 30(83.3%) of students had inadequate nutritional behavior in the experimental group before intervention but, 13(36.1%) of them had inadequate nutrition after intervention.

About control group, 32(88.9%) of students had inadequate nutritional behavior in 2 times. Also, the post –test showed the mean scores of consumption status of milk, meat, fruit, vegetable were significant different in 2 times in experimental group.

**Discussion and conclusion:** Finding shows the importance of nutritional education based on BASNEF Model on improving nutritional behaviors in students.

**Keywords:** Knowledge, Nutritional behavior, Education, BASNEF Model

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**EVALUATING THE PERFORMANCE OF TRADES SCHOOL ON AWARENESS, ATTITUDE AND FOOD STUFFS TRADES IN FARSAN COUNTY**

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**Introduction:** Education is considered as a key and indivisible element in sustainable development of society. Providing correct education is the only optimal way to achieve health. Increasing the level of health awareness of those who involve in production, distribution and supplying food stuffs can influence directly on improving food safety and quality of services and finally protection of people health as costumers. This study has been designed and implemented to determine an appropriate model for training trades and evaluating its impact.

**Material and Methods:** This study was a semi-experimental study. The society under study included 454 operators of centers of production , distribution and selling soods in Farsan which divided into 5 main groups ( grocery ,restaurants , confectionery ,bakery and butchery ) a pre- test (before beginning educational period) and a post test (after passing 40- hour training course) were held based on questionnaire .

To evaluate the performance of society under study, regulations from health rules were complied by inspectors of environmental health (before training). And
about 1-2 months after training, this form was completed again for that center and results were analyzed by SPSS software.

**Results:** After training, average of awareness scores of subjects under study has been increased from 6.99 to 13.86. Average of performance scores in all trades was statistically significant. The most increase was in bakery (from 69.9% to 29.1%) and the least increase was in grocery (from 36.6 to 69.7).

Discussion and Conclusion: Holding such courses by using appropriate educational literature will have great impact on increasing health awareness of foods production and distribution centers and finally will improve the health of society. It is better to do broader researches for studying the other impacts of performing educational health courses.

**Keywords:** Health Training, Foods, Performance, Farsan Township

### THE EFFECT OF ASSERTIVENESS TRAINING ON ACADEMIC ANXIETY AMONG STUDENTS

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**Introduction:** Academic anxiety is an important educational problem that affects millions of students in colleges and schools over the world each year. Although low level of anxiety can cause positive motivation for educational functioning improvement, high level of it can be a disturbance in concentration, attention, storage, recall and educational reduction. It is also determined today that there is a relationship between anxiety and assertiveness. Therefore, this study is an attempt to determine the effect of assertiveness training on reducing anxiety level in precollege academic students in Gonabad city in 2008.

**Materials and Methods:** In this clinical trail study, all the precollege students of Gonabad city were invited to this research and, in general, 89 students were divided into experimental and control groups. There were 3 questionnaires: demographic, academic anxiety and assertiveness. The validity and reliability of questionnaires were approved. The interventions for experimental group was 5 sessions of assertiveness training based on PRECEDE model and 1 session for parents and teachers to help and support the intervention program. We had a post-test 8 weeks after the last training session for each group. The data was analyzed by SPSS.

**Results:** The results showed that anxiety levels and decisiveness in the target group were moderate to high and it is seen a significant reverse relationship between these two factors ($r=-0.69$ and $p<0.001$). The results also showed that there was a significant anxiety decrease in experimental group after the intervention. On the one hand, there was a significant increase in decisiveness in both groups. But there was not a significant difference between academic anxiety and assertiveness in control group before and after the intervention.

**Discussion and conclusion:** Due to a significant decreased in anxiety and increased decisiveness in experimental group, it can be pointed out that assertiveness training is an effective non pharmacological method for reducing academic anxiety and it can improve academic performance.

**Keywords:** Academic anxiety, Assertiveness training, Students, PRECEDE model

### RELATIONSHIP BETWEEN AGGRESSION AND PERCEIVED SELF-EFFICACY IN HIGH SCHOOL STUDENTS IN Hamadan

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**Introduction:** Aggression has an important role in the prediction of psycho-social adjustment. Self-efficacy, as a cognitive factor, mediates the relationships between individual judgments about the ability of thinking, emotion and action, and determines why people with similar skills and knowledge have a different performance. In this study, we investigate the status and relationship between aggression and perceived self-efficacy among high school students.

**Method:** Four hundred and ninety nine students from Hamadan city were selected with multistage cluster sampling and completed Buss and Perry’s Aggression Questionnaire and Morri’s perceived self-efficacy. Data was analyzed with Pearson correlation and one-way analysis of variance.

**Results:** Results showed that only 16.1% of students had high self-efficacy perceptions, and 48% of students were highly aggressive. Students from different areas of the city had a different amount of aggression, but there was no difference in self-efficacy. There was a negative relationship between aggression and perceived-efficacy.

**Discussion and conclusion:** High aggressiveness and low self-efficacy in adolescents are important factors in determining the future life, especially in areas of social, emotional and educational. It is important to consider these variables in the mental health education and health promotion programs. There is a need to support vulnerable families that have children with the risk of aggression and low self-efficacy and therefore, emotional and educational problems.

**Keywords:** Aggression, Perceived self-efficacy, Hamadan.
**A GSBS-BASED SURVEY OF HEALTH STATUS IN SECONDARY SCHOOL STUDENTS IN BAFQ CITY**

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**Introduction:** GSBS (Global school-based student health survey) is a school-based survey conducted primarily among students aged 13–15 years. The purpose of GSBS is to provide data on the prevalence of high-risk behaviors that cause certain diseases and possible death of students such as dietary behaviors, personal hygiene, mental health, physical activity, protective factors and sexual behaviors contributing to HIV infection and other sexually transmitted diseases. GSBS is also utilized to investigate violence and unintentional injury. GSBS was developed by the World Health Organization (WHO) in collaboration with UNICEF, UNESCO, and UNAIDS, and with technical assistance from CDC (Center for Disease Control and Prevention in America). Since 2003 different countries have frequently used this survey.

**Materials and Methods:** In this cross-sectional analytical study, 400 secondary school students were selected from six schools in Bafq city through cluster sampling. Data were collected using a questionnaire which was translated from the standard questionnaire of World Health Organization (WHO) and were analyzed using SPSS software.

**Results:** The participants aged 13 to 15 years with mean age of 13.72 ± 0.81 years. The survey on the dietary behaviors showed that 63.3 percent of students during 30 days commonly consumed soft drinks. 57.3 percent of students consumed milk or milk products more than one time during 30 days. The results of the survey of personal hygiene showed that 9.8 percent of students did not brush their teeth during the same time interval. Concerning the survey of physical activity it was found that 32.8 percent of students had at least 60 minutes of exercise in last 7 days, and among the female students more exercise was observed.

As for the survey of violence and unintentional injuries 13 percent of the participants were found to have been in one or more physical conflicts with other students in the past 12 months. This percentage is significantly higher among boys compared to their female counterparts. Also 20.4 percent of participants in the past 12 months were severely injured due to an accident or during exercise or due to burns which is higher among boys. The results of the survey of Mental Health showed that 11.3 percent of participants during the past 12 months had often/always felt alone that was higher among female students than boys.

**Discussion and conclusion:** The results of the study can help diagnose high-risk behaviors among students and prevent such behaviors through the training of parents, students and teachers through applying different health strategies and planning.

**Keywords:** GSBS, Secondary school students, WHO, Health.

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**THE EFFECT OF EDUCATION ON KNOWLEDGE OF GIRL STUDENTS IN ILAM’S VOCATIONAL SCHOOLS REGARDING URINARY TRACT INFECTIONS IN 2008**

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**Introduction:** Urinary Tract Infection (UTI) is one of the widespread diseases among girls and is, also, the second reason for patients’ need of health care whose diagnosis and treatment is important; the aim of this study was to investigate the impact of instruction on knowledge of female students in Ilam’s vocational schools concerning Urinary Tract Infections.

**Materials and Methods:** This was a quasi-experimental study done on two groups; Experimental and control. The population included female students in Ilam’s vocational schools. Samples were 45 students from second and third grades as control group and 45 students from second and third grades as experiment group both of which had been chosen randomly. The instrument used for gathering materials was questionnaire aiming at assessing the students’ knowledge on UTI which its validity and reliability was confirmed. The intervention included pamphlets and class teaching for case group only. Finally the results were analyzed using SPSS Software.

**Results:** The results showed that experiment group’s UTI knowledge before the exam was 2.2 percent (1 person) with good knowledge and 11.1 percent (5 people) with weak knowledge, which turned to 75.6 percent (34 people) and 0 percent respectively; whereas, for the control group which had not been trained the results were 6.7 percent (3 people) with good knowledge and 17.8 percent (8 people) with weak knowledge before intervention, and after the intervention the results turned into 0 percent and 28.9 (13 people) respectively. Trained students attained a large amount of information concerning UTI (p<0.05); however, in control group we did not observe this fact (p>0.05).

**Discussion and conclusion:** giving UTI information is an effective way of increasing knowledge level of girl students and we recommend it as a part of their formal education.

**Keywords:** Training, knowledge, Urinary Tract Infection, Student.

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**SCHOOL BASED PHYSICAL ACTIVITY AND PHYSICAL FITNESS OF ADOLESCENT GIRLS AND THEIR MOTHERS**

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**Introduction:** The physical activity level and physical fitness of Iranian adolescent girls and their mothers were compared in this study.

**Materials and Methods:** The participants included 250 girls and their mothers from the target age of 13 to 15 years. The sample size was calculated according to the assumption of a 5 percent error rate and a 90 percent confidence level. The sample size was determined to be 130 participants for each group. The study was performed in Rasht city, Mazandaran Province, Iran. The participants were selected from 30 high schools of the city using a multistage cluster sampling method. The sample size was determined according to the assumptions of a 5 percent error rate and a 90 percent confidence level. The sample size was determined to be 130 participants for each group. The study was performed in Rasht city, Mazandaran Province, Iran. The participants were selected from 30 high schools of the city using a multistage cluster sampling method.

**Results:** The average age of the participants was 14.5 ± 1.8 years. The study revealed that the average physical activity level of girls was 122.8 ± 28.5 minutes per day and was higher than their mothers (99.1 ± 24.6 minutes). The physical fitness of girls was also higher than their mothers in the Z scores of most of the measured parameters.

**Discussion and conclusion:** the results of the study showed that the physical activity level and physical fitness of girls were higher than their mothers. Therefore, it is recommended that parents and health professionals should encourage girls to be physically active and to maintain a healthy lifestyle.

**Keywords:** Physical activity, Physical fitness, Adolescent girls, Mothers.
**Introduction:** Iranian Adolescent girls are at high risk for physical inactivity due to cultural barriers such as restrictions on public exercise. The aim of this study was to assess the effectiveness of a school-based exercise program on body composition and physical fitness of girls and their mothers.

**Materials and Methods:** In a semi-experimental study we included 70 subjects (35 high-school girl students as well as their mothers) in 308. All the students, whose mothers volunteered to take part in the study, were in first to third grades of high school and randomly selected from five high schools in the city. The study has been conducted in Neda high schools in Sanandaj-Iran. Eligible subjects participated in an exercise program for 12 weeks, ninety minutes per session, two times per week. The subjects followed the same exercise programme, at the same time in the same place. Measurements included cardiovascular endurance, muscle strength, flexibility, height, weight, body-mass index (BMI), waist and hip circumference.

**Results:** The mean age (standard deviation) of girls and mothers was 15.00 (1.60) and 40.00 (3.80), respectively. In girls, the intervention had significant effect on weight, BMI, waist and hip circumference (p<0.05). Physical fitness tests including muscle strength, flexibility and cardiovascular endurance were significantly different between the pre-test and post-test measurements (p<0.05). In mothers body weight, BMI, waist and hip circumference declined significantly (p<0.05). Flexibility test was not significantly affected over time, despite an increase in muscle strength and cardiovascular endurance (p<0.05). The highest correlations were found between the mother’s participation index and the girl’s participation index (r=0.48, p<0.001).

**Discussion and conclusion:** The exercise program was effective in improving Physical fitness.

**Keywords:** Obesity, Physical activity, Physical fitness

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**AGGRESSION AMONG GUIDANCE SCHOOL STUDENTS**

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**Introduction:** Aggressive behaviors in adolescents have increased dramatically for the four past decades. The emotional and physical consequences of these behaviors don’t exclusively involve the aggressive perpetrator; in other word they will affect the safety of whole society. The aim of the study was to evaluate aggressive behavior among students of guidance schools and assessing the effect of developed participatory intervention plan on aggressive behavior.

**Material & Methods:** This study was a community based participatory research. At first a cross sectional survey conducted. The subjects of the study were consisted of 1030 guidance school students in zone 17 of Tehran who were selected through random stratified cluster sampling.

Data was collected using a aggression questionnaire consisted of 30 items: Anger (14 item), Hostility (8 item) and Insult (8 item). Content validity and internal consistency reliability of questionnaire were confirmed. To select the aggressive children for involving them in prepared educational intervention, they were selected using a combination of teacher rating and peer nomination. One aggressive student from each class and the three students among their close friends, their teachers and their family members attended in a session to devise the educational content and strategies with participation of the related stakeholders. Sample size for education was 73 students in each group (case and control). Rate of aggression among children compared before and after intervention, and between cases and controls.

**Results:** Result finding showed that 51.1% of the students were aggressive. Also there was a significant relationship between aggression and factors such as: age (p=0.03), educational level (p=0.01), size of household (p=0.03), income level of the family, history of witnessing insults (P=0.00), child physical and emotional abuse history (P=0.00). The participatory plan had a significant effect on aggression rate in case group.

**Discussion and conclusion:** According to the results a participatory approach can lead to reduce aggressive behavior. The result can be implemented as a model to create safe schools.

**Keywords:** Aggression, Adolescents, Participation

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**EFFECTIVENESS OF A HEALTH PROMOTION MODEL-BASED EDUCATIONAL PROGRAM ON NUTRITIONAL BEHAVIORS OF MIDDLE SCHOOL STUDENTS IN MASHHAD, 2010**

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**Introduction:** The aim of this study was to assess the effectiveness of a Health Promotion Model-based educational program on nutritional behaviors of middle school students in Mashhad, 2010.

**Materials and Methods:** This was an interventional study in which data collected using a questionnaire for Middle school students. The questionnaire included demographic details and data related to preventive behaviors of anemia. Subjects were at the same age group (from 11 to 15 year old) with similar sex distribution. Intervention was conducted in five session. Study group were compared with control group after 45 days. Data analysis performed using descriptive and inferential statistic.

**Results:** This study showed that after intervention, efficiency, define, control, perceived health benefits, barriers, interpersonal and behavioral factors had statistically significant relationship with control group and with study group before intervention. The most positive correlation was found between efficacy and perceived barriers (r=.609, p<.05).

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Discussion and conclusion: Iron deficiency anemia is a preventable disease and teenage girls are highly at risk of the disease. It seems that more preventive programs such as educating the eating habits can reduce the risk of the disease. So more education, sensitization and developing appropriate health beliefs is recommended.

Keywords: Nutrition, Health Promotion Model, Student, Education

EFFECTIVENESS OF PEER EDUCATION ON THE KNOWLEDGE OF HIGH SCHOOL STUDENTS REGARDING HOOKAH DISADVANTAGES IN SHIRAZ

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Introduction: According to WHO, about 80,000-100,000 teenagers start smoking everyday, most of which live in developing countries. This study aims to evaluate the effectiveness of peer education on both male and female student’s knowledge about hookah disadvantages in Shiraz.

Materials and Methods: In this study 291 students were evaluated. 27.6% of both students and their families used to smoke hookah. 33.5% of them declared that their families used to smoke hookah. 58% of them believed that parks are suitable places for smoking hookah. 29.6% of them used to smoke hookah for curiosity, 17.7% did it for enjoyment. 60.3% of them had experienced smoking hookah.

Discussion and conclusion: Results This study revealed that the difference between mean scores before and after intervention was 3.5 ±1.9 in male students and 0.46 ± 2.1 in female students. Difference between mean scores of female experimental group was 3.32 ±2.3 and it was 0.5 ± 2.1 in female students. Difference between mean scores before and after intervention was 3.5 ±1.9 in male students and 0.46 ± 2.1 in female students. Difference between mean scores of female experimental group was 3.32 ±2.3 and it was 0.5 ± 2.1 in female students. Difference between mean scores of male experimental group was 5.2 ± 2.1 and it was 3.4 ± 1.9 in male students.

Keywords: evaluation, effectiveness, peer education, pipe harmfulness

Self Care Behaviors

SELF MANAGEMENT SUPPORT BASED ON 5A MODEL AS A MODEL OF BEHAVIORAL CHANGE IN PATIENTS WITH DIABETES

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Introduction: Self management support is one of the patterns that focus on patient,s role in his/her health management and is performed through five stages: Assessment, Advice, Agreement, Assist and Arrangement.

Materials and Methods: This study is a part of a larger study that was conducted to determine the effect of a self-management program based on 5A Model (assessment, advice, agreement, assist, arrangement) on indicators of metabolic control and predisposing factors in diabetic patients. In this descriptive study, self management support based on 5A Model was performed in 35 diabetic insulin dependent patients in 3 months. In the first step, assessment, patients and their related behaviors were assessed exactly by use of results of lab tests, scores of some of questionnaires. In the second step, advice, patients were advised about health risks by using of results of assessment step. In step three, agreement, patient and care giver set collaboratively specific goals by using of the results of the first step. In step four, assisting, book, CD, pamphlet were given to the individuals. Fifth step, arrangement, starts after last session and then continues biweekly and even sooner. This step is done by telephone or patient visit in clinic. At the end of intervention, questionnaire of self management program evaluation filled by all subjects.

Results: After analysis, mean scores in each domain demonstrated: assessment: 3.96, advise: 4.46, agreement: 4.25, assist: 4.45, arrange: 4.28.

Discussion and conclusion: Regarding the results, it can be concluded that a 3-month self-management program based on the 5A Model is an effective way and lead us to recommend the performance of self management program based on 5A Model in diabetic clinics.

Keywords: Self management, 5A Model, diabetes.

EFFECTS OF EDUCATION USING OREM SELF-CARE PROGRAM ON HEADACHE INDICES IN MIGRAINEURS

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Introduction: This study aims to determine the effect of education of Orem self care programs on headache indices patients whose suffers migraine.

Materials and Methods: In this controlled clinical trial, 83 patients with migraine who were referred to the neurology clinic of one of Tehran,s hospitals in year 2010, chosen. Patients were divided into two groups by random allocation: 43 of patients in experimental group and 40 patients in control group. Data collection instrument were demographic questionnaire, indices of migraine headache questionnaire and Orem cognition form, self care checklist and form of headache diary.
Introduction: Ischemic Heart Disease, the main cause of mortality in most countries such as Iran, creates some problems in different aspects of quality of life. One of the goals of health care provider team is to improve quality of life which is not achieved just during hospitalization period, and need to be continued after self care education. So the present study was done to determine the effect of self care education planning on ischemic heart disease patients’ quality of life.

Materials and Methods: In this clinical trial study, 74 ischemic heart disease patients were assigned randomly in two groups (self care education planning and routine care). In self care education planning group, besides of the routine care, educational need-assessment, self-care education, consultation and coordination with the health care provider team were done during patients’ hospitalization by face to face method and followed by phone follow-up for a three-month period. In routine care group, the patients were received just the routine care. Average frequency, intensity and duration of headache attacks of experimental group showed a significant difference after intervention, compared to the control group (p<0.05).

Discussion and conclusion: Self care education program reduces migraine headache indices in patients suffering from migraine.

Keywords: Migraine Headache, Education, Orem Self Care Model, Headache Index

PERCEIVED SEVERITY AND SUSCEPTIBILITY OF DIABETES: COMPLICATIONS AND ITS RELATION TO SELF-CARE BEHAVIORS AMONG DIABETIC PATIENTS

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Introduction: Diabetes is a disease with long cardiovascular, renal, eye and neural complications. It is prevalent all around the world including Iran and especially in Yazd province and its prevalence is increasing. Higher perceived severity and susceptibility of its complications may cause a higher level of self care behaviors in these patients. The aim of this study was to determine the constructs’ status and their related factors in diabetic patients.

Materials & Methods: This analytical study was carried out on 120 diabetic patients referred to Yazd Diabetes Research Center which were recruited with a sampling method. A questionnaire was used for data collection which measured the perceived severity and susceptibility and self care behaviors. Subjects’ demographic variables such as age, sex, education level, occupation, history of diabetes duration and type of diabetes were also recorded.

Results: The subjects reported 86.72, 55.72 and 62.79% of receivable scores of perceived severity, perceive susceptibility and self care score, respectively. Deteriorating eyesight was perceived at the highest level of severity and circulatory problems in the feet were at the lowest level. Deteriorating eyesight and aching legs and blurred vision was at the highest level of perceived susceptibility while high and low sugar coma was at the lowest level. Men had a higher level of perceived severity than women. There was a significant correlation between history of diabetes duration and perceived susceptibility and severity × susceptibility. Perceived susceptibility and severity, and severity × susceptibility and self care behaviors had a significant correlation with each other at 0.01 level. Perceived susceptibility and severity predicted 12.1% of variances in self care behaviors while severity × susceptibility predicted 12% of variances in self care behaviors.

Discussion and conclusion: Self care education program may improve quality of life in patients with ischemic heart disease. As quality of life is considered as an index for treatment and care, using self care education planning in clinical settings to improve the ischemic heart disease patients’ quality of life is recommended.

Keywords: Self care education program, Ischemic Heart Disease, Quality of life
**Discussion and conclusion:** Despite the fact that perceived severity of diabetes complications among subjects was at a favorable level, their perceived susceptibility was low. Diabetic foot complications are more important and in general, increasing perceived susceptibility and severity may induce an increase in self-care behaviors among diabetic patients.

**Keywords:** Perceived susceptibility, perceived severity, Diabetes Self-Care

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**EFFECTIVENESS OF AN EDUCATIONAL PROGRAM ON SELF MANAGEMENT AMONG TYPE 2 DIABETIC PATIENTS**

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**Introduction:** Diabetes is the most common human metabolic disorder that increases the risk of heart disease and vascular diseases. Mortality related to diabetes is 2 to 3 times more than healthy people. Diabetes self-care behaviors are required as a special lifetime act and is to promote quality of care in life and is cost effective. The purposes in this study determined the effect of self-management education program among type 2 diabetic patients referred to health centers in rural Gachsaran.

**Materials and Methods:** This quasi-experimental research conducted by choosing 120 diabetic patients in two randomly divided experimental and control groups. Educational programs designed for patients in the intervention group included six sessions and two sessions for their families. The major training method was lecture and group discussion. Two months after educational intervention results were evaluated.

**Results:** The results indicated a positive impact on knowledge (t= - 8/476 & p< 0.000) and self-management (t= - 8/975 & p< 0.000) among patients intervention group.

**Discussion and conclusion:** The results showed positive role of education program to increase self-management among diabetic patients and seems that running these programs can be effective in the treatment and prevention of diabetes complications.

**Keywords:** Type 2 diabetic, Self management, Knowledge

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**SOCIAL SUPPORT AND SELF-CARE BEHAVIORS IN DIABETIC PATIENTS REFERRING TO YAZD DIABETES RESEARCH CENTER**

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**Introduction:** Social support is known as a health behavior facilitator which is correlated with adherence of self-care behaviors among diabetic patients. The aim of this study was determining the status of this construct and its correlated factors and also its association with self-care behaviors in diabetic patients.

**Materials and Methods:** This analytical and cross-sectional study was carried out on 120 patients who referred to Yazd diabetes research center. A questionnaire was used for data collection which measured perceived social support and self-care behaviors constructs. Questionnaire was completed with a private interview of subjects. Subjects, demographic variables were also enquired. Validity and reliability of the questionnaire was assessed and approved.

**Results:** Subjects earned 58.1% of earnable score of social support which was due to 56.4% of earnable score of supportive family behaviors and 39.4% of earnable score of no supportive family behaviors. Among self-care dimensions, correct taking of drugs was at the lowest rate of perceived support and general cares of diabetes was at the highest level. Perceived no supportive family behaviors, was significantly more common among women. Perceived social support was positively associated with self-care behaviors (r=0.253); perceived supportive family behaviors also was correlated with self-care behaviors but the correlation of perceived no supportive family behaviors and self-care behaviors was not statistically significant. Perceived social support predicted only 6.4% of variance in self-care behaviors while perceived supportive family behaviors predicted 9.1% of variance in self-care behaviors.

**Discussion and conclusion:** perceived family support level was not at a favorite level and some dimensions of self-care behaviors such as correct taking of drugs was at a worse situation. Attention to family support in educational programs for increasing self-care behaviors among diabetic patients is highly recommended.

**Keywords:** Perceived Social Support, Self care, Diabetes.

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**EFFECTS OF A SELF-CARE EDUCATION PROGRAM ON QUALITY OF LIFE IN PATIENTS WITH ESOPHAGEAL CANCER AFTER SURGERY**

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**Introduction:** In recent years, the number quality of life (QOL) studies on patients with esophageal cancer have been increased. However, the number of studies related to the effects of self-care education programs on QOL of these patients is scarce. This paper reports on the effects of a self-care education program on QOL of patients with esophageal cancer in Babol, Iran.

**Materials and Methods:** This was a quasi-experimental study. A non-randomized sample of 105 patients with esophageal cancer referring to oncology centers in Babol City was recruited to participate in the study. The...
sample, randomly, divided into experimental (n = 55) and control (n = 50) groups. Appropriate instruments were used to measure the QOL (EORTC QLQ-30 and QLQ-OES18). Before and 3 months after implementing the educational program through group discussion, lectures and pamphlets the questionnaires were completed by the respondents. The statistical analysis of the data conducted using descriptive and analytical statistics.

Results: There was no significant difference between QOL mean score of both groups before the intervention, however, after implementing the educational program, the QOL significantly improved in the experimental group (P= 0.001), while the QOL decreased in control group.

Discussion and conclusion: It was concluded that self-care education programs have positive effects on the QOL of patients with esophageal cancer. Planning and implementing such self-care education programs when the patients are under the current treatment regimens, can help them improve their quality of life.

Keywords: Quality of Life, Self-Care Education Program, Esophageal Cancer.

DEVELOPMENT OF ORAL SELF-CARE, DECISION BALANCE AND SELF EFFICACY QUESTIONNAIRES

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Introduction: Regular dental flossing has been widely recommended to prevent periodontal diseases. The common, preventable risk factors of oral health diseases are linked to oral health-related self-efficacy, attitudes and behaviors. The purpose of this study was to assess the validity and reliability of an instrument for measuring oral self-care among Iranian adolescents, based on the Transtheoretical model.

Materials and Methods: The finding from qualitative research with a convenience sample of 28 adolescents from Sanandaj, Iran, was used to generate the initial items. A stratified sampling frame was used to select a convenience sample of 365 students 12-17 years old. Construct validity was tested using a principal component analysis with Varimax rotation to extract factors and was further tested using known-group technique too in another sample of students (n=360).

Results: Factor analysis yielded 7 factors (28 items) related to interdental cleaning: 1 self-efficacy factor, 3 factors related to perceived benefits and 3 factors related to perceived barriers. All the items on each factor were from the same construct. Cronbach alpha reliability coefficient ranged from .83 to .87.

Discussion and conclusion: Results provided support for using the instrument to measure decisional balance and self-efficacy of interdental cleaning in Iranian adolescents.

Keywords: Dental floss; Transtheoretical Model; Reliability; Validity; Iranian adolescents

Substance abuse

CONTRIBUTING FACTORS IN TAKING ACTION TO STOP ADDICTION: A BEHAVIORAL MODEL

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Introduction: Addiction along with malnutrition and ecologic pollution are among the main concern of human societies. In our country, to tackle this predicament, the principle of drug request reduction has been developed in recent years, that is composed of 3 components: prevention, treatment, and harm reduction. For the treatment, out patient clinics serve the addicted patients to stop drug abuse. The reason for taking action to stop addiction is a very seminal parameter to give up drug abuse. This research designed to determine the contributing factors of taking action in patients referring to outpatient drug abuse clinics in North-Khorasan. We incorporated these factors as a new behavioral model.

Materials and Methods: This is a descriptive-analytic study conducted on addicted patients referring to patient clinics in North-khorasan province during the second half of the year 1386. Samples selected using convenient sampling method. Data gathered by a questionnaire which filled out at the first contact of the clients to the clinic before initiating therapy. Factors which studied in addition to demographic parameters, were benefits and threats, self efficiency, cues to action, enabling factors and attitude to behavior.

Results: Total number of clients was 387 amongst them 343 (88.5%) were male and 44 (11.5) were female with the mean age 32.84±9.65 years; and the mean age for beginning addiction was 22.87±7.14 years. The most frequently abused drugs were opium, opium extract (shireh), crystal and heroin in a descending order. 49.6% of clients had the history of addiction in family. The most strongly related factors were economical factors, social, enabling factors, personal factors, cues to action and family, in a descending order. The most important factor leading the patient not to take action to stop addiction was absence of self efficiency.

Discussion and conclusion: According to the proposed model, if personal, social, familial, and economical factors together with cues to action, and on the other hand, enabling factors such as addiction stop clinics develop in number, then taking action will increase. Absence of self efficiency can be considered as a deterring factor for taking action to stop addiction.

Keywords: Addiction, Behavioral model, Cues to action, self efficiency, Enabling factors.

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THE STATUS OF TOBACCO USE AND ATTITUDE RELATING TO SMOKING AMONG POSTGRADUATE MALE STUDENTS IN SHIRAZ UNIVERSITY OF MEDICAL SCIENCES

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Introduction: Tobacco use is one of the major preventable causes of premature death and disease in the world. Tobacco use is associated with many chronic diseases, such as cardiovascular disease, cancer, chronic respiratory diseases, and diseases of the digestive tract. Smoking is responsible for some four million deaths worldwide each year. One specific objective of university programs in the health sciences should be to provide the community with knowledgeable student who are fully cognizant of the importance of smoking as a health problem. The aim of this study was to assess the status of tobacco use, and the attitudes among postgraduate male students in Shiraz university of Medical Science.

Materials and Methods: In a cross-sectional survey, questionnaires were completed by 83 male’s students in the Shiraz University of Medical Sciences in 2011, including the prevalence of current smoking, their attitudes towards of the effects of tobacco use on health, and correlation Demographics Factors with attitude.

Results: 33.7% of postgraduate male students were smoking, about one-third are current smokers, attitudes scores towards smoking and its damage were 66.7±9.9. There was no relationship between age and attitude toward cigarette usage. The non-smokers had more positive attitudes against smoking and were more aware of the adverse effects of smoking. The reasons smokers gave for starting smoking were pleasure, followed by stress and curiosity. Some smokers disagreed with some criticisms against smoking, and reasons they did not want to quit included social attitudes, addiction, and not knowing how to quit.

Discussion and conclusion: Results of this study may provide baseline data to develop an anti-smoking program in the university and encourage policy makers to limit smoking in the university by strengthening the policies against smoking.

Keywords: Tobacco use; Attitude; Male medical students

SMOKING HABITS OF ADOLESCENT STUDENTS IN TEHRAN

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Introduction: Cigarette smoking is among the main preventable causes of untimely death, morbidity and mortality in the world. Various reasons have been suggested for cigarette smoking among students which are mostly related to the culture and customs of a country. This study aimed to evaluate the factory associated with cigarette smoking among students.

Materials and Methods: This cross-sectional analytical study was conducted in Tehran in 2008 and used «Global Youth Tobacco Survey» (GYTS) self-administered questionnaire for data collection. A total of 4523 students (2251 girls and 2272 boys) were selected by using randomized multi-stage cluster sampling. SPSS version 16 software, chi-square test and logistic regression test were used for data analysis.

Results: A total of 4523 students (49.8% girls and 50.2% boys) with a mean age of 14.69±2.09 yrs were evaluated. The prevalence of smoking experience, current smoking, and current regular smoking among students was 25.5%, 7.4%, and 1.9% respectively. The score of knowledge was 5.29±1.29 for all students, 5.34±1.23 for nonsmoker students, and 4.57±1.74 for current smokers (p<0.01). The mean score of attitude towards smoking was 27.29±7.41 for all students, 27.56±7.20 for nonsmoker and 21.10±7.69 for current smokers. The difference between the scores of current smokers and nonsmoker was statistically significant (p<0.01). In evaluation of the correlation between cigarette smoking and different variables, several factors were found to increase the likelihood of smoking among students including the male gender, older age, low grades, having smoker friends, pocket money more than 300,000 Rials per month, exposure to family members' smoking, lack of parental advice, low score of knowledge, low score for attitude, passive smoking (exposure to secondhand smoke at home or outside), poor perception of anti-smoking message broadcasting by the media, watching actors smoking (cigarette or hookah) in movies, and last but not least viewing smoking advertisement and cigarette commercials (OR= 1.46±57.707).

Discussion and conclusion: Considering our study findings, planning and implementation of educational tobacco control programs are required at schools aiming at preventing cigarette smoking by increasing the knowledge and correcting the attitude of students.

Keywords: Smoking, Students, Adolescent, Cigarette

PREVALENCE AND REASONS OF TENDENCY TO USE HOOKAH, CIGARETTE AND ALCOHOL AMONG STUDENTS IN TEHRAN UNIVERSITY OF MEDICAL SCIENCES

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Introduction: In Iran, the young population structure and increase in the use of narcotics among students is investigated in different researches. This study is designed to determine the prevalence using cigarette, alcoholic liquors and hookah and the reasons of tendency to these narcotics among the students of Tehran University of Medical sciences.

Materials and Methods: In 1389, this research investigated 780 students of different colleges in Tehran University of Medical Sciences using the descriptive study. Collecting data is done by a four part questionnaire that its reliability and validity was approved. The first part of questions is about demographic factors; the second part refers to cigarette and the factors affecting its use; the third part is about hookah and the factors affecting its use, the fourth part is the questions about alcoholic liquors. Researchers collected the answer sheets in a box, without the presence of university officials. To analyze data, SPSS software and chi-square test was used.

Results: In examined samples, the frequency of cigarette use was 23%, hookah 24.3% and alcoholic liquors 13%. Among the factors affecting the use of these narcotics, the most important factors were using as entertainment(24.5%), enjoyment (%16), curiosity (11.6%) and decreasing stress an emotional pressures (7.8%). The most important reason for not using them was taking care about their health.

Discussion and Conclusion: Our results showed that the use of cigarette, hookah and alcoholic liquors is decreasing among the students of Tehran University of Medical Sciences in recent years. But we should continue the programs for training health care and prevention of diseases. Conducting these program should be done in high schools and follow at university. It is proposed to solve the problems of students in the term of entertainment.

Keywords: Students, A buse substance

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**DRUG ADDICTION IN FAMILIES AND ITS RELATED EFFECTS ON CHILDREN**

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Introduction: Drug addiction is recognized as one of the social problems of the current century. Drug addiction is not only led to severe physical and psychological injuries but also covers social injuries such as divorce, crime and unemployment. Every problem and abnormality in family's generation structure has a direct effect on children. The most destructive problem of the family is addiction. Addiction in any form leads to decay, generation constraint, loses in addicted person's personality and after all unorganized family. Addiction is a problem for the individual himself and a bigger problem for his family. Addicted person not only endangers his self which is a big asset for the society but also spoils his wife and children. A child who deals with addicted father and mother does not have an appropriate status. Addicted person has been a very bad guide for him. There is a strong possibility of his being led toward addiction. Feeling of insecurity which is caused by mind and behavioral disorder of addicted parent secures the ground for child's anxiety. He feels unrest at home and school for sometimes and this is one of the reasons of children's failure at school. Being ashamed of having addicted parent is a big problem for them both at school and in society. Feeling of not being able to afford the family is a big burden on child's shoulder. He is always in extreme anxiety and distress. He is sometimes ashamed and sometimes feels temerity. He sometimes is in the thought of escaping family and sometimes is in search of shelter, honor and life.

The objective of this study is to define the meaning of addiction and its effect on children, to define the negative results of its effects on children's health and finally to propose guidelines to destroy this social disaster.

**Keywords:** Drug addiction, Child, Family

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**USING COMMUNITY BASED PARTICIPATORY RESEARCH TO REDUCE RISK FACTORS AND PROMOTE PROTECTIVE FACTORS AGAINST DRUG ABUSE**

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Introduction: Drug abuse has serious consequences in families, schools, and communities. The goal of Drug Abuse prevention is to help the public understanding the causes of drug abuse and to prevent its onset. This article describes how components of Community based Participatory Research methodology were used to develop Drug Resistance Strategies and implement the participatory program to reduce drug abuse risk factors and increase protective factors. Priorities from community on the zone 17 of Tehran helped to shape the data collection and developing participatory interventions and implementations.

Materials and Methods: Community participants were involved in multiple stages of creation and implementation. The research team developed a systematic review of literatures on programs for creating strong theoretical foundations. This article describes how CBPR methodology ensured that researchers collaborated with community members, trustees, local community based Organizations and schools develop this promising drug prevention program. The first step started with developing the best practice list, and then it marketed through personal meetings with project stakeholders. In-depth interviews were conducted with different subgroups of stakeholders to identify what milestone were more meaningful, how could be implemented. Best practices based on literature review and themes were
extracted from interviews used for designing effective interventions. Once the program developed, a pilot study was implemented on secondary schools in two control and case group by using a standard questionnaire on risk and protective factors of drug abuse. Data were analyzed through pair t test and one way ANOVAs.

**Results:** The findings indicated that the list of “best practice” which was produced from evidence-based practice in drug prevention field has been emerged. Data gathered through interviews showed school based joint program with parents can provide better protection against drug abuse and should be started in earlier ages. The school based interventions had significant impact on reducing risk factors in short term.

**Discussion and conclusion:** These results, based on CBPR methodology support the conclusion that participatory prevention program can be effective on drug use prevention if the cultural differences and sense of ownership reinforces.

**Keywords:** Community Based participatory research, Drug abuse, Prevention

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**SURVEY OF SMOKING BEHAVIOR BASED ON THE TRANSTHEORETICAL MODEL AMONG ISFAHAN UNIVERSITY STUDENTS IN 2009-2010**

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**Introduction:** The Transtheoretical model implies that an individual's readiness to change is an immediate precursor of behavior change, which is specifically important in smoking behavior. The aim of the current study was to consider smoking behavior among Isfahan Medical Sciences and Isfahan University Students in the 2009-2010 academic year.

**Materials and Methods:** A cross-sectional study was performed and convenience sampling was done. The data gathering instrument was a short questionnaire based on the transtheoretical model. The instruments were translated using the Banvill method, for cultural adaptation. Data was analyzed by SPSS software using descriptive statistics (frequency distribution, mean and standard deviation) and ANOVA analytic statistics.

**Results:** From the one hundred and ninety eight (198) students who participated, 131 students (66.2 %) were in precontemplation stage, 30 (15.2 %) in contemplation stage, 26 (13.1 %) in preparation stage, 8 (4 %) in action stage and 3 (1.5 %) in maintenance stage. Advancing across the stages from precontemplation to maintenance, self efficacy increased and temptation decreased (p < 0.05). The pros of smoking through the stages increased although it was not significant (p > 0.05). The cons of smoking behavior decreased significantly through the stages from contemplation to maintenance (p < 0.05). Meanwhile, people moving through the stages used more from the behavioral process and less from the cognitive process.

**Discussion and conclusion:** The majority of the subjects were in precontemplation stage and according to their age situation and the known harmful effects of smoking on health, it is necessary to discourage them from smoking using model base interventions.

**Keywords:** Smoking, Transtheoretical Model, Stages of Change, Self-Efficacy, Decisional Balance, Process of Change.

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**MOTIVES OF INDIVIDUAL FOR TOBACCO USE IN ADOLESCENT BOYS: A QUALITATIVE STUDY**

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**Introduction:** Tobacco use is a global problem, resulting in a wide range of diseases and death and with great economic costs. Especially, the age at which the first use of tobacco occurs is crucial, because early initiation of smoking as well as early experimentation increases the likelihood of Eventual habitual smoking and adult tobacco dependence. Additionally, adolescents who begin smoking at an early age are at high risk for developing long-term serious health consequences. The purpose of this study was to identify motives of individual related to tobacco use tendency in adolescent boys.

**Materials and Methods:** We conducted 5 focus groups with a total of 47 high school student and participants were male students aged 15 to 18 years adolescent in Zarandieh, Iran. In Each group was composed of 9-10 students. Participants were asked, what are the motives of individual for Tobacco use in adolescent? Focus groups data were analyzed according coding and organization.

**Results:** Several common motivators for initiation emerged. A majority of discussions centered on components as: curiosity, perceived prevalence of peer smoking, beliefs about social consequences, normative expectations, normative beliefs, friends’ Approval of smoking, parents’ approval of smoking, Easy availability and relative accessibility (cheapness of cigarettes), lack of information of health effects, relieve feeling of anxiety, stress, failure.

**Discussion and conclusion:** A qualitative research should be conducted on the adolescent smokers group to explore social factors of smokers, and how to quit from tobacco smoking, etc. Indeed, by identifying variables that may be important in the initial decision to try (or not to try) smoking, intervention efforts to combat smoking initiation among adolescent may be better armed.

**Keywords:** Adolescent, Tobacco use, Qualitative study
IDENTIFICATION OF FACTORS RELATED TO THE USE OF DOPING DRUGS AND ITS SIDE EFFECTS ON BODY BUILDING ATHLETES IN GONABAD BASED ON HEALTH BELIEF MODEL

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Introduction: The use of doping drugs for increasing the efficiency of sports has a long record dating back to 3rd century BC in ancient Olympic Games. Today, one of the barriers in the field of body building is the irrational use of these drugs for muscle mass increase and improvement of body shape. Health Belief Model has been used to determine the causes of behaviors and factors affecting the use these power creating material.

Materials and Methods: This is a descriptive analytical study and the population under study is all the body building athletes consisting 245 people in Gonabad. Data gathering was a questionnaire based on HBM items which was completed together with a planned interview. These data were analyzed by SPSS software.

Results: The mean age of the population under study was 22.4 years, 72.7 percent of them were males and 49 percent of them were students having secondary education. 34.4 percent of these individuals had a weak knowledge and the perceived susceptibility was 73.1 percent which was average. Age, housing status and perceived benefits and barriers had meaningful relationships (P=0.002). Residence in their Fathers house slowed the least barriers. There was not a significant relationship between knowledge and perceived threat. There also was no significant relationship between sex and perceived threat. The prevalence of use was 22.4 percent.

Discussion and conclusion: Males were more interested in this sport. Students formed the biggest group. Most of these athletes were not aware of side effects and dependence to these drugs and older athletes were mainly their guides for action. Perceived susceptibility was far from the desirable condition. By using HBM model factors affecting on use and the coefficient of impact for every factor was determined so that these resources in line with components be exactly used by order of priority in future interventions.

Keywords: Doping drugs – Health Belief Model – Athletes – Gonabad

STUDY OF THE SMOKING BEHAVIOR BASED ON STAGES OF CHANGE MODEL AMONG IRANIAN STUDENTS IN 2009-2010.

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Introduction: Based on the Ministry of Health report in 2006, about 75000 of Iranian people die annually from smoking. Transtheorethical model implies that an individual's readiness to change is an immediate precursor of behavior change which is specifically important in smoking behavior. The aim of current study was survey of the smoking behavior based on Stages of Change Models among Iranian Students in 2009-2010 academic year.

Materials and Methods: The study was cross-sectional and convenience sample were 578. In order to identify smoking behavior, stage of smoking behavior was assessed by using 5-item, dichotomous scale (yes/no) related to current smoking behavior and intention to quit smoking, used by Diclemente et al. (1991). Data was analyzed by SPSS software by using descriptive statistics.

Results: Subjects ages ranged between 18-49 years, with a mean age of 23.26±2.33. Smoking Start age was 18.43±3.25 and duration of smoking was 4.46±3.36 years and the mean of cigarette smoking per day was 9.09±7.44. 268(46.4%) and 83(14.4%) announced half and more than half of their friends are current smoker, respectively. 321 people (55.5%) were in precontemplation, 109 people (18.9%) in contemplation, 99 people (17.1%) in preparation, 27 people (4.7%) in action and 22 people (3.8%) in maintenance stage.

Discussion and conclusion: About Three- Fourths of the subjects were in precontemplation and contemplation stage and according to their age situation and known effect of smoking on their health it is necessary to encourage them to advanced stages. Meanwhile, 17.8% were in preparation stage and it’s a good opportunity for smoking cessation programs.

Keywords: Smoking, Stages of Change Model, Students.

A STUDY OF STAGES OF CHANGE IN SMOKING CESSATION AMONG EMPLOYEES IN KHORRAMABAD

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Introduction: Based on the Ministry of Health report in 2006, about 75000 of Iranian people die annually from smoking. Transtheorethical model implies that an individual's readiness to change is an immediate precursor of behavior change which is specifically important in smoking behavior. The aim of current study was survey of the smoking behavior based on Stages of Change Models among Iranian Students in 2009-2010 academic year.

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Discussion and conclusion: About Three- Fourths of the subjects were in precontemplation and contemplation stage and according to their age situation and known effect of smoking on their health it is necessary to encourage them to advanced stages. Meanwhile, 17.8% were in preparation stage and it’s a good opportunity for smoking cessation programs.

Keywords: Smoking, Stages of Change Model, Students.
Improper lifestyle is one of the factors affect the incidence of chronic diseases. According to the World Health Organization statistics, smoking causes four million annual deaths in the foundation. Studies show that in 1371, 28.6% of men and 3.6% of women upper 15 in the country were smokers. The most practical stage of behavior change model is Transetheoretical model. Therefore, this model was used in this study.

Materials and Methods: This was a cross-sectional study. A total of 200 official personnel’s were selected from all the administrative offices in Korramabad. The subjects were selected through 2-stage cluster-sampling. Data were collected by a questionnaire that it's validity and reliability had been approved. Data were analyzed by using statistical software SPSS11.5 and descriptive statistics. The level of significance was p<0.05.

Results: The mean age was 42.5±7.85. According to the results, 39.5% of the subjects were in precontemplation stage, 25.5% in contemplation stage, 12% in preparation stage, 5.5% in action stage and 17.5% were in maintenance stage. There were a significant relationship Between years of smoking(p<0.001), complication of smoking(0.000), And age(p<0.04) and stages of change. and there were not a significant difference between marital status, education, family and income, and stages of change.

Discussion and conclusion: In this study, the majority of people were in earlier stages, so it is necessary to provide educational programs, including strategies for this process to be developed. Due to the significant relationship between age and years of smoking and exposure to advanced stages of change it is required that in early years of smoking people to be aware of problems, diseases and complications of tobacco materials.

Keywords: Stage of change, Smoking cessation, Employees, Khorramabad

GENDER DIFFERENCES IN HOOKAH SMOKING AMONG IRANIAN ADOLESCENTS

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Introduction: The prevalence of Hookah smoking among adolescents has revealed a discrepancy from country to country due to socio-cultural differences. The aim of this study was to evaluate the influence of gender on the prevalence of Hookah smoking and its associated factors among Iranian adolescents.

Materials & Methods: A population based cross-sectional study was conducted among 1201 adolescents, aged 15 to 18 years. The participants were recruited through random sampling in Tehran, Iran in 2010. Data were collected using the Youth Risky Behavior System self-administered questionnaire. Univariate and multivariate logistic regression analyses determined factors associated with waterpipe use.

Results: The current prevalence of Hookah smoking was 21.35% in female and 34.80% in male adolescents. Based on the multivariate logistic regression analysis, having a Hookah smoker friend (Odds Ratio [OR]: 2.19, 95%, Confidence Interval [CI]: 1.08 - 4.41) or family member (OR: 3.17, 95%, CI: 1.70-5.96) were significant factors of current Hookah use among female adolescents, however, older age (OR: 3.24, 95% CI: 1.14-9.22), education failures (OR: 2.89, 95% CI: 1.21-6.92), having a Hookah smoker friend (OR: 4.17, 95% CI: 1.82-9.57), or family member (OR: 3.29, 95% CI: 1.57-6.91) were significant factors of current Hookah use among male adolescents.

Discussion and conclusion: The results of the present study showed that the prevalence of Hookah use was higher among boys than girls and highlight the importance of developing intervention programs to prevent and control tobacco consumption among the youth in Iran.

Keywords: Gender, Hookah, Adolescents

PATTERNS OF CIGARETTE SMOKING AMONG ADOLESCENT STUDENTS IN TEHRAN

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Introduction: According to World Health Organization (WHO) reports, 80000-100000 young begin to consume the narcotic substances that most of them live in developing countries. Whereas more than 70 % of adolescences (10-19 years) are educating. After family, the school has important role in forming the one's behaviors as first educating social environment. So it has decided to do this survey in schools. This study has been done to assigning the smoking pattern in Tehran students in 2008.

Materials and Methods: This research was a cross-sectional study with a cluster multi stage randomized sampling using the GYTS (Global Youth Tobacco Survey), and demographic questionnaires was conducted in 4523 students in Tehran in 2008. Data analyzing has done by spss16 program and Chi-Square Test.

Results: Overall, 4523 students (50.2 % boys and 49.8% girls) studied. Mean age of the responders was 14.69±2.09 years. 25.5% of students have ever smoked cigarettes, 54.9 % ever smoked waterpipe. The most common age initiation was 14-15 years (27.6%).38.8% of user have taken cigarette from store or market. The most location of smoking in present boys were public places (36.6%), and girls were house (51.6%). 22% of
user smoked more than 5 cigarettes per day. Almost one in five current smoking had gave up and tried to stop smoking. Present boy users more than girls had gave up the smoking (p<0.01). Most recommend and help for giving up the smoking is declared via friends (63.6%).

**Discussion and conclusion:** The result has congeniality with most of studies in the world. Noticeable incidence of experience and consumption of tobacco , designing and accomplishment of preventive program with first level of approach for lower ages , inspection and execution of tobacco sale prohibition for adolescences and effective usage agents considering , are seem to be need.

**Keywords:** Cigarette, Student, Adolescence, Tehran

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**KNOWLEDGE OF ECSTASY PILLS USAGE AND ITS RELATED FACTORS AMONG INTERN MEDICAL STUDENTS IN YAZD SHAHID SADOGHII UNIVERSITY OF MEDICAL SCIENCES – AN APPLICATION OF HEALTH-BELIEF MODEL**


**Introduction:** Todays, drug abuse is one of the world’s important problems. Statistics indicate that the use of stimulant drugs especially Amphetamine – Like drugs in the country has increased. The goal of this study was to investigate knowledge of intern students of the Shahid Sadoughi University of Medical Sciences based on Health-Belief Model.

**Materials and Methods:** It was a cross-sectional study that was conducted on 130 intern medical students in 1986-1987. The data which was collected from the researcher designed questionnaire contained two sections of demographic data and 56 questions based on the Health-Belief Model. The data were entered to Spss. Chi Squire,T-test ,One way – Anova were used for data analysis.

**Results:** From the 130 students in the study there were 66 males and 64 females. The mean score of knowledge was 27.69 out of 48 maximum score. Between knowledge, Perceived Barriers and Benefits with practice was statistically significant relationship (P<.05). Perceived Benefits was significantly related to sex, living location and family size. Perceived Susceptibility (p<0.05) and Barriers (p<0.013) had statistically significant relationship with the living location. Depending on Cues to Action 64.6 % of students obtained the information from television.

**Discussion and conclusion:** Based on the low degree of knowledge in the intern medical students and the existence of the relationship between their knowledge and practice in handling stimulant and psychotic, educational programming in the area seems to be necessary and based on programs Perceived Susceptibility and Severity should be increased.

**Keywords:** Health Belief Model, Ecstasy, Medical Students

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**Women Health**

**THE EFFECT OF MENTAL HEALTH EDUCATION COURSES ON THE RATE OF DOMESTIC VIOLENCE IN PREGNANT MOTHERS REFERRING TO ALZAHRA EDUCATIONAL HOSPITAL TABRIZ-2010**


**Introduction:** Domestic violence is a major health problem which affects family life. Pregnancy and the nursing period are critical times for this problem, as its effects on the health of women and fetus-infant multiplies. Mothers in such condition fail to create a deep emotional relationship with their new born child; they are not successful in exclusive & long- term breastfeeding and etc as well. All these issues have great influences on children’s future personal and social character.

**Materials and Methods:** In a quasi-experimental study, the effect of Training Courses on the range of domestic violence against pregnant women was assessed. Data were collected by a standard questionnaire including 32 questions, which measured domestic violence in four mental, physical, sexual and economic areas. Questions were ranged by Likert criterion from 0 to 3. The range of scores were from 0-64. The higher the score, the more violence. Seventy couples completed the questionnaire (pre-test) and then took part in educational courses in 3 sessions; again they received the questionnaire as post test. Data were analyzed using SPSS soft ware and Pair T-test. (P<0.005) is significant.

**Results:** A general decrease in Violence scores and in all 4 sections was shown; general violence (57.9 versus 39.3) mental Violence (29.7 versus 14.7), physical violence (19.8 versus 11.2), sexual violence (5.1 versus 2.2) and economical violence (3.3 versus 1.4). All above differences was statistically significant (P ≤ 0.005).

**Conclusions:** Domestic violence has negative outcomes which affect women, family and society. This study shows that educational courses for couples could be helpful in this regard.

**Keywords:** Domestic violence , Education course, pregnancy
COMPARISON OF PHYSICAL ACTIVITY IN WOMEN WITH AND WITHOUT UTERINE LEIOMYOMA IN TABRIZ EDUCATIONAL MEDICAL CENTERS, 2010

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Introduction: Uterine leiomyoma is one of the most common benign tumors of the uterus that causes so many problems for women such as uterine bleeding. Medical treatment of this disease is temporary so women may be compelled to hysterectomy that is definitive treatment of leiomyoma. Nowadays researches show that most of the disease can be prevented by changing the life style. Since researches emphasis the role of exercise in prevention of disease, so the present study was done with the aim of comparing physical activity in women with and without uterine leiomyoma in Tabriz in 2010.

Materials and Methods: This was a case control study by random sampling. We have selected 200 women with uterine leiomyoma that were diagnosed for the first time by sonography (case group). The control group comprises 200 women without uterine leiomyoma which match the case group in age and parity. The study place was sonography section of Alzahra Hospital in Tabriz. The study has been conducted using questionnaires which contain questions in relation to demographic, reproductivity and physical activity information. The data has been analyzed using SPSS software.

Results: There was a significant relationship between physical activity and uterine leiomyoma in two group. So 85% of women without uterine leiomyoma had regular physical activity while 14.3% women with leiomyoma had regular physical activity.

Conclusion: Finding of this research regarding physical activity and uterine leiomyoma, showed the necessity of encouraging women in doing exercise to prevent leiomyoma.

Keywords: Uterine leiomyoma, Physical activity, Exercise, Fibroid

THE EFFECT OF HEALTH BELIEF MODEL IN PROMOTING PREVENTIVE BEHAVIORS AGAINST OSTEOPOROSIS IN RURAL WOMEN IN MALAYER CITY, 2010

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Introduction: Osteoporosis is a worldwide public health problem and has an increasing prevalence. Evidence suggests that adoption of some changes in life styles can prevent or delay the development of Osteoporosis. The purpose of this study was to assess the effectiveness of a health education intervention based on the Health Belief Model in promotion of osteoporosis preventive behaviors in rural women.

Materials and Methods: This was a quasi-experimental research that included two groups, experimental (n=55) and control (n=55). Samples were selected from 2 health house in Malayer city. The experimental group participated in four health education sessions that was based on the components of Health Belief Model. Data collection tool was a questionnaire including 37 questions based on HBM and demographic information and preventive behaviors of osteoporosis. Data were collected at two points. Before intervention and two month after intervention. Statistical analysis was performed by SPSS 15.

Results: Before intervention, there was no statistically significant difference between two groups regarding health belief constructs. However after intervention, Independent Sample T-Test showed a statistically significant difference between two groups (p<0.05) in perceived susceptibility and severity, perceived benefits and barriers, cues to action and self-efficacy.

Discussion and conclusion: The results of this survey showed that by increasing the score of Health Belief Model components, including; perceived susceptibility and severity, perceived benefits and barriers, cues to action and self-efficacy adopting preventive actions of Osteoporosis is being increased. Therefore, the results of this survey confirm the efficiency of Health Belief Model in adopting preventive actions of Osteoporosis.

Keywords: Health Belief Model, Osteoporosis preventive behaviors.

SOCIAL SUPPORT AND ITS SOCIO-DEMOGRAPHIC DETERMINANTS IN WOMEN OF REPRODUCTIVE AGE

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Introduction: Social support is an exchange of resources between at least two individuals perceived by the provider or recipient to be intended to promote the health of the recipient. Social support is a major determinant of health. The purpose of this study was to determine social support and related socio-demographic factors in women of reproductive age in Tehran, Iran.

Materials and Methods: In this cross-sectional study, 1359 women of reproductive age were selected by multistage cluster sampling of the 22 main municipal sectors of Tehran. Data were collected using a questionnaire on socio-demographic characteristics;
perceived social support was measured by the Personal Resource Questionnaire-85-Part-2 (PRQ-85-PART2). The questionnaires were completed through a face-to-face interview; possible total scores ranging from 25 to 175 and for subscales, from 7 to 35. Linear regression coefficients were used to estimate the adjusted association between independent variables (socio-demographic variables) and the dependent variable (social support).

**Results:** The mean score of social support was 134.3 (SD= 17.9). The highest dimension of social support was an indication that one is valued and the lowest dimension of social support was the feeling of being an integral part of group. In the multiple regression analyses, education, primary support source, income sufficiency for living costs and husband’s occupation were significant variables in the final model, explaining 8.7% of the variance.

**Discussion and conclusion:** The perceived social support is relatively high in women of reproductive age. Socio-demographic factors should be considered in intervention planning for promoting social support for women of reproductive age.

**Keywords:** social support, socio-demographic determinants, women of reproductive age

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**LIFE STYLE CHANGE USING THE HEALTH BELIEF MODEL TO IMPROVE CARDIOVASCULAR RISK FACTORS AMONG POSTMENOPAUSAL WOMEN**

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1. Mary Huang Soo Lee PhD- Mirnalini Kandiah PhD-

**Introduction:** Globally, CVD is the number one cause of death and are projected to remain so in the future. The main cause of death in Iran is CVD which accounts for almost half (42%) of total deaths.

**Materials and Methods:** It was a randomized controlled trial to determine the impact of a 6-month lifestyle changes using the Health Belief Model (HBM) on cardiovascular risk factors in sedentary, postmenopausal Iranian women. This study started on June 2007 and completed on May 2008. A total of 67 healthy and sedentary postmenopausal women recruited and randomly assigned to two groups namely; exercise (38), and control (29). Over the six months follow-up, the intervention group received five educational sessions (one face to face education in the first session and one in the 3rd month and three lecture discussion classes with slide demonstration) at the first month about physical activity according to the Health Belief Model. Every participant received a telephone call at the end of each month starting with the second month to remain on the exercise. Pre-intervention and post-intervention HBM components, anthropometric measurements, blood pressure (BP), blood lipids and physical activity were assessed. Data analyzed using the SPSS version 15. Descriptive, univariate and multivariate statistics were used.

**Results:** The women in the exercise group experienced significant decrease in their LDL (-15mg/dl), FBS (-7.4mg/dl), and increased their physical activity compared to the control group (272 minutes/week, p=0.02). All components of HBM except for knowledge improved significantly in the exercise group compared to the control group (p=0.001).

**Discussion and conclusion:** Lifestyle change intervention using the HBM can be an effective means of reducing cardiovascular risk in obese and sedentary postmenopausal women.

**Keywords:** Postmenopausal women, Cardiovascular disease, Lifestyle change, Health Belief Model

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**PHYSICAL ACTIVITY AND NUTRITION ASSOCIATED WITH DYSLIPIDEMIA IN IRANIAN MIDDLE-AGED WOMEN**

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2. Department of Community Health, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia

**Introduction:** Cardiovascular diseases are a major cause of death throughout the world. The aim of this study was to assess the prevalence of overweight/obesity, central obesity, hypertension and dyslipidemia, and dietary factors contributing to the development of dyslipidemia among middle-aged women.

**Materials & Methods:** The research design of the present study was a population-based cross-sectional study, their anthropometric measures and chemistries were obtained. The physical activities were measured using the original International Physical Activity Questionnaires Long form while, food frequency questionnaire (FFQ) was also used in assessing individual’s habitual intake. A total of 809 individuals, aged 30-50 year old from fourteen active urban Primary Healthcare Centers in Babol (Iran), were selected using a systematic random sampling method and sampling proportionate to size.

**Results:** The prevalence rates of overweight/obesity, central obesity, hypertension and dyslipidemia were 82.8%, 75.5%, 14.6%, and 63.4%, respectively. Total physical activity did not correlate with cholesterol ratio. Soybean protein was inversely associated with cholesterol ratio (rho=-0.18, p≤0.0001). The adjusted OR for dyslipidemia in women with moderate protein intake was significantly higher than in women with high and low intake (OR=2.31; 95% CI =1.61, 3.30). No significant associations were found between dyslipidemia and carbohydrate, fat intake or physical activity.

**Discussion & Conclusions:** This study showed a very high prevalence of cardiovascular disease risk factor among Iranian middle aged women. It would be more fruitful to conduct a study involving a larger population and to make recommendations for the primary and
Introduction: Prematurity is still one of the main causes of neonatal mortality and morbidity which makes a lot of financial, psychosocial and emotional problems. Although the main cause of preterm delivery is unknown but knowledge of its risk factors is important for planning health policies aimed at its prevention and decreasing the rate of preterm delivery. The purpose of this study was to examine the associated risk factors between lifestyle and preterm labor.

Materials and Methods: This research was a descriptive-comparative study which was applied on 132 women with preterm delivery and 268 women with term delivery referring to Educational and Medical Center of Alzahra, all matching in some sociodemographic factors of mother and all were selected by convenience method. And then data were collected by questionnaire containing 2 sections, the first part was containing demographic characteristics and the second part was consisted of woman’s lifestyle including, exercise, nutrition, smoking and use of alcohol and substance abuse, social support, stress management and self care during pregnancy. Data were analyzed by SPSS/win 13 with descriptive statistics and statistical tests of t test, u man withny, χ² and exact fisher test.

Results: The results of this study showed that relationship between nutrition, exercise, smoking and the use of alcohol and substance abuse, social support, stress management and self care and preterm delivery statically was significant but there was no significant relationship between exercise and preterm birth.

Discussion and conclusion: The findings of our study suggest that there is a relation between lifestyle in pregnancy and preterm birth. On the other hand, lifestyle can be changeable and achieving this aim is possible by efforts to increase health education, Positive Behavioral Modification and healthy environments.

Keywords: lifestyle , Preterm labor , Term labor

THE EFFECTIVENESS OF LIFE SKILLS WORKSHOPS HELD IN HOUSEWIVES' GENERAL HEALTH IN TABRIZ IN 1388

Taghavi S¹, Ebadi A, Ahmadian S, Sattarzadeh N, Poozeshi M, Mizaei A, Aghakhanlo M

INTRODUCTION

The findings of our study

Present research is a semi-

Promotion of health,

*1

370

Poozeshi M, Mizaei A, Aghakhanlo M Taghavi S

GENERAL HEALTH IN TABRIZ IN 1388

WORKSHOPS HELD IN HOUSEWIVES'

THE EFFECTIVENESS OF LIFE SKILLS

WITH PRETERM AND TERM DELIVERY

REFERRING TO MEDICAL CENTERS IN

TABRIZ

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PREPARATION THE PERSIAN VERSION OF BODY WEIGHT – BODY IMAGE AND SELF ESTEEM ASSESSMENT TOOLS IN MIDDLE-AGED WOMEN YASUJ 1389

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3. Department of Nutrition, Faculty of Health, yasuj university of Medical Sciences, yasuj Iran.

Introduction: To determine the influence of weight changes on psychological disorders, and collect research data, there are several tools available. The key issue in health-related research is determining the exact measurements of psychological factors related to health that affects behavior, resulting in increased activation of health behaviors. After reviewing psychological scales measuring variables associated with nutritional status, it was necessary to tailor this assessment measures to the

1. Alzahra Hospital, Associated Professor, Perinatalogist, Tabriz University of Medical Sciences.

INTRODUCTION: The multidimensional health and resulting improvement in life is a part of essential human goals; on the other hand, mother’s mental and physical health has a great effect on children's multidimensional growth. Therefore, nowadays mental disturbance of family health is an important problem to provide healthy family with much emphasis on mothers’ idea, mind and body.

Materials and Methods: Present research is a semi-experimental study (pre-test, post-test with control group). After ending education in 2 stages (with 6 months interval) post-tests were carried out and the results were compared. The instrument used in this research was General Health Questionnaire - 28(GHQ-28) in which four indices of somatic, anxiety and depressive symptoms and social function were examined. The people tested in this research were housewives conferred to educational workshops on life skills among that 200 were in control and 200 in experiment group.

Results: Before education, the two groups showed no difference in general health index. But the outcomes showed that there was a significant difference both in the first (F= -7.09, d.f = 1, p<0.05) and in the second post-test (F = -10.08, d.f = 1, p <0.001). Details relating to general health factors will be reported elsewhere.

Discussion and conclusion: Promotion of health, education and individual capabilities must be taken into consideration. Because contrary to other family life aspects, it can be simply examined and improved. The effect of multidimensional educations are important because education to one member of the family especially “mother” causes inspiration of instructions to all of the family members and improvement of family health.

Keywords: Life skills - General health-Women-Housewife

PREPARATION THE PERSIAN VERSION OF BODY WEIGHT – BODY IMAGE AND SELF ESTEEM ASSESSMENT TOOLS IN MIDDLE-AGED WOMEN YASUJ 1389

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1. Alzahra Hospital, Associated Professor, Perinatalogist, Tabriz University of Medical Sciences.
This study is about building a larger scale on study of the nutritional status on 110 middle aged women 40-60 years old from 5 health centers in Yasuj, Iran; who were randomly selected and participated in the study.

This scale, B-WISE (body weight - body images- self esteem) was first presented by George Avad. A scale of a 12 question questionnaire that included three options of 1-3 scores in each section was allocated by utilizing translation techniques from English to Farsi to generate an equivalent cultural questionnaire coherent to Iranian culture.

First, the two dominant behavioral science specialist fluent in two languages, Persian and English translated the questionnaire into Farsi. Then two other behavioral science specialists separately translated the questionnaire back to English. A formed assembly of experts made the final decision to determine the terms and clearly the differences between the two questionnaires translated. This was done in such a manner that was clear and understood by providing quality tools and eventually changing after two questions. Next, a pilot study was performed to see how the target group would understand the questions; then final version was prepared. Its validity in international studies to determine its reliability was achieved by a test trial opened in a two-week period of 14 days that was set to equal. Respondents were asked if there were any particular problem in the questions, and asked to check through the interviews so the problem could be determined.

Results: Cronbach's alpha coefficients (92%) and mean test-retest reliability and internal solidarity statements have proved validity and reliability. In an interview with interviewers, ease of management tools was evident. Participation rates were 100% with accountability of all individuals responding to all questions.

Discussion and conclusion: The Persian version of B-WISE Questionnaire has desirable features for use in behavioral research related to nutrition.

Keywords: Body weight assessment, Body images, Self-esteem, Middle-age.

EFFECTIVENESS OF EDUCATIONAL PROGRAM ON PERSUADING WOMEN TO PERFORM NORMAL VAGINAL DELIVERY (NVD) BASED ON THEORY OF PLANNED BEHAVIOR (TPB) IN RASHT.

Besharati F, Moeini Babak, Hazavehei S.M.M, Moghimbeigi A

Introduction: Cesarean delivery is more dangerous than normal delivery for mother and neonate. Unfortunately, the rate of cesarean delivery is rising. In our country despite all efforts the cesarean rate is very high. The purpose of this study was to determine the effectiveness of educational program on persuading women to perform Normal Vaginal Delivery (NVD) based on Theory of Planned Behavior (TPB) in Rasht.

Materials and Methods: This quasi experimental study carried out on 72 pregnant women (28-32 week) referred to health centers in spring and summer 2010 in Rasht. According to results of pilot study, 6 health centers as target group were studied. Then randomly from 3 Health centers 36 pregnant women as intervention group and from other 3 health centers 36 pregnant woman as control group were selected. After pretest, using a questionnaire in both groups, specific training was performed in the intervention group based on Theory of Planned Behavior. After training at the end of pregnancy, posttest was performed in both group and the results were analyzed by SPSS-13.

Results: The results showed that there were significant
The results showed that if anti fungal agent used with education may be effective than when we used only one method.

Discussion and Conclusion: The results showed that maternal education in field persuade women to do normal delivery was effective. Therefore designing and implementing training programs to persuade pregnant women to do Normal Delivery and decrease Cesarean Section based on Theory of Planned Behavior were suggested.

Keywords: Normal delivery, Cesarean section, Pregnant women, Theory of Planned Behavior

EDUCATION AND ANTI FUNGAL AGENT IN FEMALES INFECTED WITH VAGINAL CANDIDIASIS IN RURAL REGIONS IN EAST AZERBAIJAN PROVINCE IRAN 2010

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Introduction: Female reproductive system, the sensitive part of women body, is involved by many microorganisms. Candida is the fungi that frequently involve the vagina. Its prevalence rate in many developing country and Iran is high. we can prevent and treat this infection by education and anti fungal agent. In this study we try to know which way is effective.

Materials and Methods: we choose 138 girls ( 14-19 years old ) with vaginal candidiasis (without systematic diseases and immunodeficiency disease) and divided into 3 groups (A,B,C). Group A was taken fluconazol capsule 150 mg( order : 1th 500mg, per 72h 150) for 3 weeks, group B recieved education about the prevention from this microorganism and group C recieved both ( anti fungal, education ) we use the SPSS16 for analyzing the data.

Results: In group A there was not seen the Candida but after 3 weeks in 29 persons infection came back. In group B, 5 persons out of 23 persons missed and 18 persons need anti fungal agent. In group C, 2 person missed in 42 no infection and replacing the infection after 3weeks seen in 7 person

Discussion and Conclusion: Results showed that If anti fungal agent used with education may be effective than when we used only one method.

Keywords: health education, anti fungal agent, candida

EFFECT OF DISCUSSION GROUP ON KNOWLEDGE AND ATTITUDE ABOUT SOCIAL DETERMINATES OF HEALTH IN THE RURAL WOMEN OF REPRODUCTIVE AGE IN MARVDASHT CITY

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Introduction: Women's Health can be influenced by biological, psychological, social, emotional, economic, cultural and environmental factores which may be started from the embryonic period. This study was aimed at assess the effects of education on knowledge and attitude of women about social determinates of health.

Materials and Methods: The study was an intervention cross sectional study and the respondents selected using stratified sampling method. Marvdasht city health houses were considered as classes. Among the eligible women 1102 women were selected as case and control groups. After receiving written consent the questionnaires were filed out and data was analyzed by using pair t-test and anova test.

Results: Results showed increase in the level of knowledge and attitude. In other words, training program significantly increased knowledge and attitudes of the subjects compering to the control group (P <0.001).

Discussion and Conclusion: Education plays an important role in raising women awareness about some factors, especially nutritional status of their health, mental health and reproductive health. The position of women in their families depend on their income, health education and their knowledge about all aspects of health.

Keywords: Discussion group, Knowledge, Health, Women

EMOTIONAL INTELLIGENCE IN THE VICTIMIZED PREGNANT WOMEN DUE TO DOMESTIC VIOLENCE IN ALZAHRA HOSPITAL, 1387-88

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Introduction: Domestic violence in pregnancy is a serious and common problem which happens in all cultures. The violence effects on pregnant women are more critical than other factors, because in addition to physical and mental consequences on pregnancy, it affects on the health of coming baby. Lack of knowledge and information about incidence, reasons and outcomes of domestic violence prevents this problem. Increasing public awareness about
domestic violence and influencing factors is part of the duties of health organization.

**Materials and Methods:** In this descriptive-correlative study, first violence questionnaires were completed by all the pregnant referred to Alzahra hospital. Then, those questionnaires showing domestic violence were selected (105 people). Emotional intelligence questionnaire was completed by victims. After analyzing two questionnaire scores, correlation between emotional intelligence and domestic violence in general, and also physical, sexual, economic and mental violence types were evaluated.

**Results:** The results showed that there is much correlation between domestic violence and emotional intelligence (P≤0.001) and also there is a significant relation among emotional intelligence and mental violence (r=0.66), physical violence (r=0.52), and economic violence (r=0.49), (p≤0.05). Details relating to emotional intelligence factors will be reported elsewhere.

**Discussion and conclusion:** Considering that domestic violence can put mother and fetal-neonatal health in danger from different dimensions, confrontation with this social complex issue by education and improving preventive effective factors before and after pregnancy can be very helpful. One of those relative skill factors of a person is in the form of emotional intelligence. Determination of structural factors of emotional intelligence and its effective use for personal efficiency and interpersonal relations improvement and attention to emotional intelligence betterment and efficiency for understanding acceptance of thoughts, feelings and each other’s emotions in married life can increase wife and husband endeavors partnership in being satisfied in life and solving their problems.

**Keywords:** Emotional Intelligence- Pregnancy-Victimize- Domestic Violence

**EFFECT OF EDUCATION ON KNOWLEDGE AND PERFORMANCE OF WOMEN TOWARD OSTEOPOROSIS IN TABRIZ, 1385-1388**

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**Introduction:** Osteoporosis is a disease that is characterized by low bone mass. Differences in race, nutritional status, physical activity and lifestyle all contribute to its variability, but all of factors that play an important role in osteoporosis can be changed by increasing people’s awareness. Unfortunately most of women do not have enough knowledge about importance of preventing Osteoporosis and there are not suitable information source about this issue. The aim of this research is to survey the effectiveness of education on the knowledge and performance of women.

**Materials and Methods:** This semi-experimental research was done on 78 housewives of Tabriz between 1385-1388. The knowledge and performance of the women were assessed by questionnaire. Educational sessions were hold in the life skill classes by welfare organization. Knowledge and performance of women were assessed before and after workshop. We asked our questionnaire for four times after workshop: immediately after education, 6 month later, one year later, 2 years later.

**Results:** Results of comparing pretest and post tests showed that the education is effective on knowledge of women (P=0.001). Although improvement of people’s performance in post tests was more significant (P=0.000), but after one year of education the performance decreased. This result proved the requirement for continuous public education (P≤0.05). Details relating to Knowledge, Performance factors will be in final report.

**Discussion and conclusion:** Results of this study showed that education is one of the most important factors that affect multidimensional performance of people in life. For example they pay attention to nutrition, physical activity and other important factors. On the other hand safe motherhood programs are on top of the world health programs.

**Keywords:** Education - Knowledge - Performance - Women – Osteoporosis- Health

**WOMEN’S KNOWLEDGE AND ATTITUDE TOWARD MENOPAUSE**

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**Introduction:** Menopause is a normal developmental transition that all women undergo with advancing age. During menopause, women may experience certain physical, mental, social and psychological changes. Health education is one of the most important ways to women’s empowerment; as we know, the first step in any training is recognition and analysis of subject’s knowledge and attitude. The purpose of this study was to assess the knowledge and attitude towards menopause among premenopausal women.

**Materials and Methods:** This cross-sectional study was conducted among 400 healthy-non menopausal women aged 40-45 attending urban primary health care centers. Samples were selected based on stratified sampling. The study was conducted after human subject was obtained. The data gathering instrument was a tree part questionnaire: demographic characteristics, questions to assess knowledge and attitude questions. The collected data were analyzed by Pearson correlation, independent t test, Spearman correlation and ANOVA statistical tests using SPSS software.
**Results:** The results of this research showed that Average score of knowledge was 63.57± 10.79 and Average score of attitude was 61.21± 12.73. In this study 8% of the subjects had poor knowledge, 68% had moderate and 38.5% had good. Furthermore, 81.5% of women had positive attitude and 18.5% had negative attitude towards menopause. Pearson correlation showed that the relationship between knowledge and attitude was no significant and Spearman correlation showed that between knowledge and attitude with economic status and levels of education was significant relationship (p< .001).

**Discussion and conclusion:** Providing greater access to information and support are essential steps in improving the women health during menopausal years.

**Keywords:** Knowledge, Attitude, Menopause

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**HOME VIOLENCE AGAINST PREGNANT WOMEN: PREVALENCE AND ASSOCIATED FACTORS**

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**Introduction:** Home violence toward pregnant women is one of the high risk behaviors. Violence against women is defined as any act of physical, emotional or sexual violence that results in, or is likely to result in, any suffering or harm to women, including threats and deprivation of liberty, occurring either in public or private life. Such violence is one of the particular concerns because of the risks it cause for women, unborn child, family and society. This study was performed to determine the prevalence of home violence and associated factors in Mahabad, Miandoab and Bonab cities, West Azarbayean, Iran, 2010.

**Materials and Methods:** A cross-sectional survey was conducted among pregnant women living in above mentioned cities. A total of 1300 hospitalized pregnant women were selected by accessible sampling method. Data were collected by Structural interview as well as questionnaire and analyzed by SPSS version 17.

**Results:** During pregnancy 78% of women in Miandoab, 67.4% in Mahabad and 94.5% in Bonab were exposed to any form of violence .Low maternal marital age (Miandoab),high number of children (Mahabad, Miandoab, Bonab), Low family income (Miandoab,mahabad), low natal family support of women in a crisis(three mention cities),smoking cigarette by women(Mahabad and Bonab)were determined to be the main predictors of overall violence during pregnancy.

**Discussion and conclusion:** violence during pregnancy is common public health problem in Iran. Reproductive health programs, prenatal care services like continuously screening for domestic violence, increasing women’s strength in relationships and in society relative to men in particular; provide a unique window of opportunity to address the needs of abused women, to safeguard the health of both mothers and infants, to prevent and decrease of home violence during pregnancy.

**Keywords:** Home violence, Prevalence, Associated Factors

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**SOCIO DEMOGRAPHIC CORRELATES OF PHYSICAL ACTIVITY AMONGST IRANIAN WOMEN OF REPRODUCTIVE AGE**

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**Introduction:** Determining the physical activity of women during the important period of reproduction provides valuable information to design efficient interventions for advancing women’s health. The aim of this study was to examine the sociodemographic factors associated with physical activity among Iranian women of reproductive age.

**Materials & Methods:** This study was a population-based cross-sectional survey in which, 1359 women of reproductive age (15-49 years) were selected by proportional random multistage cluster sampling of the 22 main municipal sectors of Tehran, Iran. Data were collected using a questionnaire about socio-demographic characteristics and physical activity subscale of Health Promoting Lifestyle Profile (HPLP-II). Questionnaires were completed through a face-to-face interview. Linear regression coefficients were used to estimate the adjusted association between each of the independent variables and the dependent variable.

**Results:** The mean score of physical activity was 2.04±0.64 (mean ± SD; range: 1 to 3.88). The multivariable results showed that marital status, number of children, crowding index, education and wealth index were predictors of physical activity (P<0.001).

**Discussion & Conclusions:** The results of this study shows physical inactivity is common among Iranian women of reproductive age and provides some insights on factors predictive of physical inactivity that need to be considered if effective interventions are to be designed to promote women’s health.

**Keywords:** Physical activity, Women’s health, Health promotion

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**PREVALENCE AND ASSOCIATED FACTORS OF DOMESTIC VIOLENCE AGAINST WOMEN IN ILAM CITY**

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**Introduction:** Domestic violence, done usually by men is one of the negative concerns among families. As a social
and human right and also as a health issue, it can threat health care system and structure of the society.

Even though domestic violence is a common problem and is seen in every society, the prevalence, severity and effects of domestic violence becomes more important in poorer, less modern and civilized communities. This study is a survey to determine the prevalence and effective factors of domestic violence among women who referred to health care centers of Ilam city

Materials and Methods: This research is a descriptive-analytical study with subjects who were selected randomly. They included 366 women attending health centers of Ilam city during January to April 2009. Twenty two women excluded from the study because of accidental attendance in centers or living separately from their husbands during the survey. The number of women selected from each health center was proportional to the size of the population served by that center. Data was collected by standard standardized questioner by face to face interviews and analyzed by statistical tests and spss soft ware.

Results: the prevalence of general violence in women was 62% consisted of physical violence: 33.8%, emotional violence: 54.2%, sexual violence: 23.7%. There was significant association between the prevalence of domestic violence and women education (p<0.03), the age of the husband and wife at marriage (p= 0.00), number of children (p< 0.3), women’s job (p <0.01), educational level of spouse (p= 000) and the rate of husbands bounding to ethical principles (p<0.01).

Discussion and conclusion: domestic violence has high prevalence in Ilam city due to different factors and variables. Preventing this unpleasant phenomenon and its terrible outcomes and complications need to serious measures and precautions

Keywords: Domestic violence, Prevalence, Health care centers

THE EFFECT OF SEX EDUCATION ON WOMEN’S SEXUAL ATTITUDE AND KNOWLEDGE IN ISFAHAN IN 2009

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Introduction: Sexual knowledge is obtained during puberty through studying, friends in schools in different ways. At the beginning of adulthood couples start their life without real and complete information. Thirty to fifty percent of men and women have sexual problems. The effect of sex education on women’s sexual attitude and knowledge is the purpose of this research.

Materials and Methods: The research method was quasi-experimental with pre-test, post-test in two groups of experimental and control .The sample contained 60 couples who were randomly selected from cultural centers in Isfahan and divided into two groups of experimental and control. All the data are gathered by Anna Hooper’s sexual attitude and knowledge questionnaires (15 true-false questions) and demographic characteristics.

Results: This study showed that average age of women is 33, average age of their marriage is 22.50% have diploma and marriage length is 7 years. Also the covariance analysis showed that the effect of sex education in sexual knowledge increase is (p<0.001, F=31.03) and in sexual attitude is (p<0.001, F=91.03).

Discussion and conclusion: Sexual relationship is essential for psychological health and healthy generation existence. Men’s misbehaviors related to lack of information in suitable sexual behaviors, not enough sexual knowledge to sexual techniques and arousal, lack of enough foreplay, rash sexual relationship, women’s unawareness and incorrect beliefs and culture in sexual relationship, all cause sexual problems in women that tends to life satisfaction and marital life quality decrease.

Keywords: Sex education - Sexual knowledge - Sexual attitudes - Women

PREVALENCE AND DETERMINANTS OF INTIMATE PARTNER VIOLENCE AMONG WOMEN IN ARAK

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Introduction: Domestic violence is a serious public health problem. The prevalence of domestic violence in couples is of different degrees. Effective factors of abuse for women are dependent on economic status of society. The purpose of this study was to determine the prevalence of intimate partner violence and effects of some factors among women in arak.

Materials & Methods: This cross-sectional study was carried out on 1037 women in arak. Data were collected using a questionnaire including demographic information, domestic violence (physical, emotional, verbal and economical) and effects of some factors. To analyze data, descriptive and analytical statistics were used through SPSS software.

Results: Findings of this study showed that common types of abuse were: emotional (64.6%), verbal (57.1%), economical (32.3%) and physical (26.8%). A correlation was found between violence and education, Job, income, mental disorder; addiction of husband, number of Children and location (P <0.05).

Discussion and conclusion: Results of this study showed that most of the women were abused with kind violence. Results appear to Justify the necessity of family consultation and education for women and girls at high school before marriage in order to promote women’s health and relinquish these problems.

Keywords: Intimate violence, Effective factors, Women, Arak city
APPLICATION OF BASNEF MODEL IN PREDICTING DOMESTIC VIOLENCE AGAINST WOMEN IN SABZEVAR

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Introduction: Violence against women by an intimate partner is a major contributor to the ill-health of women. WHO study indicated that 15–71% of women experience physical and/or sexual violence by an intimate partner at some point in their lives. Primary and secondary prevention are central point in domestic violence concept, therefore looking at violence against women from a public health perspective offers a way of capturing the many dimensions of the phenomenon in order to develop multispectral responses. Now governments and agencies are increasingly applying science-based public health approaches for the development of violence prevention programmes that focus on addressing the root causes. BASNEF model is one of the planning and intervention models that because of the constructs can be used for understanding behavior such as domestic violence. This study has examined the application of BASNEF model in prediction of domestic violence against women in Sabzevar.

Materials and Methods: This is an analytical-descriptive and causality study conducted on 256 women who referred to the health centers in Sabzevar. The sampling method was proportionally stratified and randomized. Data was collected by self-reported questionnaire based on BASNEF model and Conflicts Tactics Scale (CTS). The instrument was validated and reliable through content validity and internal consistency (α=0.84), respectively. Data was analyzed by descriptive and analytical statistics including Pearson Correlation and Structural Equation Modeling. SPSS (16) for data entry and primary analysis was used. Lisrel software (8.1) for the Structural Equation Modeling (SEM) was applied.

Results: The mean age of women was 27(5.5) and the mean length of women's marriages with their husbands was 7 (5.5) years. The results of t-value were: attitude and intention=3.32, subjective norms and intention =3.67, intention and domestic violence =3.25, enabling factors 0.98. The standardized values were: 0.55, 0.38, 0.39, for subjective norms, attitude toward domestic violence, intention respectively. RMSEA was 0.10. Chi-square statistic divided by degrees of freedom equals to 3.96 and P-Value for Test of Close Fit (RMSEA < 0.05) = 0.00048

Discussion and conclusion: The effect of subjective norms on domestic violence was significantly higher. Although the effect of subjective norms and attitude toward domestic violence were significant, the goodness of fit of this model on this data was not very good. (RMSE>0.09 and X2/df >3). Due to the importance of domestic violence prevention, more researches, applying and comprising health education and health promotion planning models and intervention programs are suggested

Keywords: Domestic violence, BASNEF, Women, Sabzevar health centers.

STUDY OF NUTRITIONAL BEHAVIOR AND PREVENTIVE ACTIVITIES FOR OSTEOPOROSIS AMONG WOMEN IN QAZVIN

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Introduction: The lifetime overall risk of a fracture from osteoporosis is 1 out of 4 among women and 1 out of 8 among men; prevalence of osteoporosis in women is twice as men. This disease starts with decline of bone mass. Demographic changes should lead to dramatic increased costs and risk as population ages. Numerous studies show that lifestyle is the most important factor in determining the risk of osteoporosis. Modification of lifestyle can have the best effect on incidence of osteoporosis in women. Consumption of Foods with protein and calcium, physical training and sports activities and daily exposure to the sun, are best prevention methods of osteoporosis. The present study was undertaken to investigate nutritional behavior and preventive activities of osteoporosis among women in Qazvin in 2009.

Materials and Methods: The present study is a cross-sectional study. Sample consisted of 265 women 20 to 60 year which were collected by random cluster sampling. Data were collected by a questionnaire containing 15 questions due to objectives. (Questions included nutritional patterns, specific activity and preventive behaviors of osteoporosis and demographic factors). Using SPSS version 16, the data were analyzed by chi-square and Fisher's exact tests.

Results: Findings showed that the majority of samples (61.5%) consumed 1-2 glasses of milk products per day. And 48% of the subjects consumed foods containing vitamins D once a week. Seven percent of the subjects did not consume foods containing vitamin D. The majority of the samples (44.5%) consumed meat three times a week, and 66.5% consumed meat once a week. The majority of samples (51%) have discussed that did not consume Carbonated drinks and 25.1% consumed less than one glass per week. More samples consumed 3 to 4 glasses of tea and coffee per day. Due to regular exercise activities the majority of samples (73.6%) have declared that they did not do regular exercise. The most sports activity done was swimming (15%), exercise (45%) and bodybuilding (15%). About 63.1% of the samples have random exposure to sunlight. Thirteen of the samples used Oral Contraceptive Pill (OCP) up to 2 years and 37% had a history of corticosteroids consumption. None of the subjects were smokers. In the majority of samples
APPLICATION OF HEALTH BELIEF MODEL IN PREDICTING OSTEOPOROSIS-PROTECTIVE BEHAVIORS AMONG IRANIAN WOMEN.

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Introduction: Osteoporosis is one of the major problems among women and older people. The disease may continue its progress until even a slight twisting or bending motion may cause bones to fracture and break. Risk factors for developing osteoporosis include controllable factors such as nutrition, physical activity level, smoking, and consumption of alcohol, and uncontrollable factors like sex, family history, and ethnicity. Many people in any ages appear to be unaware of the risk factors and preventive behaviors. Preventing osteoporosis, and subsequent fractures, had become a goal of many health care practitioners. The purpose of this study was to describe relationships between Health Belief Model components and osteoporosis-protective behaviors among a random sample of Iranian women.

Materials and Methods: This study is a cross-sectional study among 400 women over 40 who referred to health center in Hamadan, Iran. Sampling was performed via random classification and data were collected by standard questionnaire. A questionnaire was developed to measure each of the expanded health belief model components. Data were analyzed by SPSS-13.

Results: Perceived severity had a significant relationship with performing preventive behaviors. Also there was a significant relationship between having a person with osteoporosis in the family, age, education, occupation, knowledge and performing preventive behaviors (p<0.05).

Discussion and conclusion: As it was revealed by statistical analysis, perceived severity was the most effective factor between women for predicting osteoporosis-protective behaviors. The results show the need to train women, especially for women with lower education.

Keywords: Osteoporosis, Health Belief Model, Education, Women, Perceived severity

CHANGES IN WOMEN SEXUAL RESPONSES USING CONSULTATION BASED ON PLISSIT MODEL

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Introduction: Sexual problems are common among women and affect all aspects of their life. Majority of these problems can treated in early stages with counseling and education; but a few number of them need to refer to specialists. The aim of this study was to determine changes in women sexual responses using consultation based on PLISSIT model.

Materials and Methods: This was a controlled quasi-experimental study that was conducted in an urban health center in Zanjan. Eighty women, married in the last 5 years and with sexual problems, were randomly assigned to control and experimental groups. The experimental group received consultation based on PLISSIT model (Permission-limited Information-Specific Suggestion-Intensive Therapy) by trained midwife and the control group received routine sexual consultation. Demographic and obstetric information were gathered through a standard questionnaire. FSFI (Female Sexual Function Index) questionnaire was used for assessing sexual function. Data were collected from participants at three points: before consultation, 2 weeks and 4 weeks after consultation. Mann-Whitney U test, T-tests and X2 were used for data analysis.

Results: Mean scores of sexual function were 25.3 before consultation, 28.8 two weeks after and 29.4 four weeks after consultation in experimental group. These differences were statistically significant (P<0.001 and P<0.001, respectively). In control group, mean scores of sexual function were 24.48, 24.44, 23.74 before, 2 weeks, 4 weeks after consultation, respectively. These differences were not statistically significant (P=0.946 and P=0.375). There was no significant difference in mean score of sexual function between control and experimental groups before intervention (p=0.408). However, 2 weeks and 4 weeks after the consultation, this difference was significant (p<0.001 and p<0.001, respectively).

Discussion and conclusion: Based on the result of this study, we can claim that sexual problem in women decreased by PLISSIT model. Using this model is recommended in health care settings.

Keywords: Sexual responses, Consultation, PLISSIT model, Sexual problem
PREVALENCE AND RISK FACTORS OF DOMESTIC VIOLENCE AGAINST WOMEN IN NOWSHAHR

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Introduction: Domestic violence is recognized as a global public health problem. Domestic violence is any psychological emotional or physical abuse that impairs the ability of the abused person to function in a healthy way or causes the person to be afraid. Besides physical abuse, this could mean threats that make a person afraid to act, or serious berating that undermines one’s self-esteem. The purpose of this study was to investigate the prevalence and determinants of domestic violence among women in Nowshahr in 1388.

Materials and Methods: A descriptive and analytical cross-sectional survey was conducted among 800 women attending Nowshahr health care centers who selected via probable multistage sampling. We used two instruments in this study: 1) demographic questionnaire 2) Domestic Violence Standard Questionnaire. Validity and reliability of tool was respectively done using content validity and test retest. The statistical analysis of the data conducted using descriptive and analytical statistics.

Results: The results showed that 62.6% of the respondents reported that they were affected by some type of domestic violence; 30.62% reported physical violence, 5.92% reported emotional violence, and 10.13% reported sexual violence. There were significant correlations between domestic violence and age, literacy, job, income, addiction and marriage period (p<0.05).

Discussion and conclusion: We concluded that domestic violence is widespread in Nowshahr and major risk factors for violence against women included having only a primary education or less, low income, having unemployed partners who uses narcotic as well as low socioeconomic status. This study suggests that increasing employment for men, the knowledge of society and culture plat may help reduce violence against women. Governments of the world have to commit themselves providing necessary care for all women and working toward the elimination of all forms of violence against women.

Keywords: Prevalence, Risk factors, Domestic violence, Women, Nowshahr

COMPARING THE EFFECTS OF TWO EDUCATIONAL METHODS ON IMPROVING THE KNOWLEDGE AND ATTITUDE OF WOMEN ABOUT OSTEOPOROSIS IN KHORAMABAD CITY

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Introduction: This study showed that, women's knowledge and attitudes regarding osteoporosis. Therefore, using of educational programs especially in health women, it could effective role in prevent from osteoporosis

Materials and Methods: This was a descriptive-analytical study, carried out in 2006-2007 to compare the effects of two educational methods on perimenopause women. For this purpose, 103 women aged 40-55 years, educated and under the coverage of medical health centers in Khoramabad city were randomly selected. Samples were divided into two groups: lecture with booklet (n=51) and only booklet receivers (n=52). The tool of collecting data consisted of demographic characteristics, knowledge and attitude questionnaires. The questionnaire was fill out in two time interval 3 months. Pretest was done, and then participants received information about knowledge and attitudes from two methods. Three months after received information about knowledge and attitudes from two methods, post test was done for two groups and data were analyzed by spss.

Results: Results were as follows: there was significant improve in two groups (p<0.000). At lecture with booklet group increased as follows: knowledge from (mean = 4.2, SD=0.03) to (mean = 4.2, SD=0.03), and attitude from (mean = 4.2, SD=0.03) to (mean = 4.2, SD=0.03), At booklet group increased as follows: knowledge from (mean = 4.2, SD=0.03) to (mean = 4.2, SD=0.03), and attitude from (mean = 4.2, SD=0.03) to (mean = 4.2, SD=0.03).

Discussion and conclusion: This study showed that, there was significant improvement in two groups. Therefore, using of educational programs especially in health women, it could effective role in prevent from osteoporosis.

Keywords: Education, Perimenopause, Women, Osteoporosis, Booklet, Lecture

EXAMINATION OF AWARENESS LEVEL OF WOMEN BETWEEN 40-60 YEARS OLD IN RELATION TO MENOPAUSE SIGNS, TREATMENT AND PREVENTION OF ITS COMPLICATIONS IN KHALILABAD CITY IN 1388

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Introduction: Menopause is a physiologic event within which physicians and patients cooperate together to hold patients healthy and continue natural living with peace. The aim of this study was to examining the women awareness in relation to menopause signs and prevention of its complications.

Materials and Methods: This was a descriptive-analytical study to examining women awareness regarding menopause signs and prevention of its complications. The community under study was all the women between 40-60 years old who referred to women health center.
The sample number was 600 persons.

**Results:** the findings showed that majority of under research units (51.8% of signs and menopause complications) had ideal awareness and 48.2% had little awareness. 80.5% of them had little awareness about ways and methods for prevention of complications and 19.5% had ideal awareness about methods. There was a meaningful relation between awareness of menopause signs and residence (p<0.05). In this study determined that awareness level of villagers in relation to menopause complications is more than city dwellers. Also there wasn’t a meaningful relation between awareness of menopause signs and income (p>0.05)

**Discussion and conclusion:** With respect to little awareness regarding prevention and treatment for complications in menopause duration, there should be noticed to the necessity of training women in this field.

**Keywords:** Menopause, Awareness, Women, Signs, Prevention, Treatment, Khalilabad

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**PREVALENCE AND DETERMINANTS OF INTIMATE PARTNER VIOLENCE AGAINST WOMEN IN MARIVAN, IRAN**

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**Introduction:** Intimate partner violence (IPV) is a major health risk factor that affects people from all ethnic and socioeconomic groups. IPV defined as the use of actual or threatened physical, sexual, and psychological violence, by current husband, is a significant public health problem. This paper reports the prevalence of IPV as well as individual, socioeconomic, and family function characteristics associated with IPV among women attending public health services in Marivan County, Iran.

**Materials and Methods:** Multistage cluster sampling was employed to recruit 770 women to participate in the study. This descriptive, cross-sectional study took place from May to November 2009. Data were collected, using a survey questionnaire, which was developed by the researchers. The statistical analysis of data included ANOVA, t-test, bivariate correlations, and binary logistic regression.

**Results:** The majority of the women (94.3%) had experienced psychological violence, followed by sexual violence (64%), and physical violence (60%). There was a positive significant relationship between IPV and education level of women, level of religious commitment in both women and husbands. Husband’s smoking, addiction to drugs, mental illness, and weakness in religious persuasion were statistically significant predictors of IPV and accounted for 36% of the variation.

**Discussion and conclusion:** The study suggests that major strategies for prevention of IPV may be empowering women by establishing economic basis for job creation for them and also increasing their level of education. Further research, especially in developing countries, is suggested to enhance our understanding of IPV against women.

**Keywords:** Intimate Partner Violence; Women; Marivan County; Iran

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**WOMEN’S SURFING HIGH-RISK SEXUAL BEHAVIOR**

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**Introduction:** This article depicts the idea of the modern scientists about the half bodies social of the society (females) and talks about the injustice and what injury their souls through years.

The only way that makes them to feel happiness and proud is the emancipatory religion that is nominated Islam. Finally, the happiness of woman through the dominant religion will be discussed. One of the controversial arguments which has been talked is ‘women’s right.

International experts say that sexual disease risk is increasing among women and one of the reasons for this trend is that in females the sexually transmitted infections in women and girls are four times more than men are.

In addition, in many societies women are expected to unconditionally meet the demands of men so their domination on sexual relations is less. In these communities, women are not allowed to control medicinal ways in their sexual relations and even finish their relationship with a man with high risk of sexual disease groups.

In any program which is hold against the epidemic sexual risk behavior. It should be considered to give power for women to control their sexual relations with men.

This study is done by using a library books in order to study and underline the factors of high-risk behaviors and sexual abuse and the destructive effects of these behaviors among girls and women to reduce their harms and rolls.

**Keywords:** Sexual Instinct, Violence, Social Inequality, Damage, Road Work

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**THE PATTERN OF AGE AT NATURAL MENOPAUSE IN DAMGHAN**

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**Introduction:** Based on WHO, menopause is defined as the permanent cessation of menstruation resulting
from the loss of ovarian follicular activity which is recognized to have occurred after 12 consecutive months of amenorrhea, for which there is no other obvious pathological or physiological cause. It is the beginning of a phase of women's' life with somatic and metabolic changes which leads to decrease in quality of life, osteoporosis and heart diseases. Because of increasing the number of women experiencing post-menopausal life, studying the pattern of age in onset of menopause seems necessary. In this paper the pattern of age at menopause in Damghan was studied.

Materials & Methods: A total 635 women, 30 years or older, were selected randomly using a cluster sampling method and interviewed to fill out a questionnaire. Since the object of the study was determination of the pattern of age at natural menopause, some cases with abnormal, operative and so on, were ignored and finally 614 women were enrolled in the study and the pattern of the age at menopause was estimated for them using prevalence of menopause in each age group.

Results: The mean and median age of natural menopause were 52.7± 4.5 and 52.4, respectively. Increasing of menopause was slow from age 30 to 43, but its speed increased until 55 years old, next decrease slowly.

Discussion and conclusion: In comparison with the other regions of Iran, the mean age of natural menopause in Damghan seems greater.

Keywords: Age at natural menopause, Pattern, Prevalence, Cross-sectional study, Damghan

EFFECTS OF INDIRECT TRAINING ON MOTHERS KNOWLEDGE AND PRACTICE REGARDING OSTEOPOROSIS PREVENTION IN TEHRAN

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Introduction: Osteoporosis is a worldwide silent epidemic. The aim of this study was to evaluate the effects of two educational models for improving knowledge and practice of mothers.

Materials and Methods: This study was an interventional study that conducted in 17 th District of Municipitaly of Tehran in 2007. Two public secondary schools were selected by random sampling for two training models (booklet group and children group). In this study two training models as well as a control group were taken into consideration. In training model 1, mothers of students were trained with the use of training manuals (booklet group); and, in model 2, mothers were trained indirectly in such a way that the students were trained in school in the form of groups in one hour in week meeting trains in 10 weeks duration and then they transferred the materials gained to their mothers (children group). In order to evaluate the effect of such trainings, mothers were asked to complete the pre-training and post-training questionnaire (valid questionnaire). Data obtained from the questionnaires were finally analyzed by SPSS software and statistical methods.

Results: There was significant difference between after and before mean scores of knowledge and nutritional activity in all groups. There was significant difference between after and before mean score of source of calcium knowledge in model 2. Mean score of after and before physical activity and use of sun light in all objects were different. Mean score of after study knowledge in (control group and model 1) and in (control group and model 2) were significant.

Discussion and conclusion: Our study showed that using students power as an educator in transferring information to mothers and improving nutritional activity is effective.

Keywords: Osteoporosis, Indirect training, Knowledge, Practice, Woman

Working population Health

ASSESSING THE JOINT APPLICATION OF PRECDE-PROCEED MODEL AND THEORY OF REASONED ACTION (TRA) ON PROMOTING SAFETY RELATED BEHAVIORS IN WORKPLACE

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Introduction: According to results due to analysis of thousands occurred accidents in industry, it may be found that about 85% to 95% of all accidents are because of unsafe behaviors, so focusing on educational interventions in workplace is the most important way to increase safe behaviors and to prevent accidents; hence this study aimed at analyzing improved safe behaviors of workers using combination of Precede-Proceed Model and Reasoned Action Theory.

Materials and Methods: this study was a quasi-experimental study which conducted as pretest-post test through Salmon Method. Eighty-five workers of Borujerd Textiles Factories were employed in this study. Questionnaires and behavior observation checklists were used to collect required data. The required substantial data for intervention planning were resulted based on findings due to conducting four first phases of PRECDE-PROCEED model. After that, while emphasizing on combination of PRECDE-PROCEED Model and Reasoned Action Theory the intervention plan was designed. The aforementioned intervention was implemented through group discussion method as well as distributing training pamphlets and education via spouses. Then after 1 month education and 3 months after that, the information was recollected.

Results: The mean difference of acquired scores by groups 1 and 3, prior to education was not significant. Likewise,
the mean of acquired score for all four groups, 1 month after education, was significant. On the other hand, three months after intervention, there was a significant difference between acquired scores by different groups.

**Discussion and conclusion:** The impact of combined model application on improvement, and maintenance of safe behaviors of such workers was confirmed. On the other hand, after three months the difference amongst acquired scores by the participant groups in intervention (1 and 2) and control groups (3 and 4) rather than 1 month after education represent necessity of educational plans continuance to improve workers’ safe behaviors.

**Keywords:** PRECDE-PROCEED Model, Theory Reasoned Action (TRA), Promoting safety behavior, Worker

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**SELF-EFFICACY: IS IT IMPORTANT IN NURSING STRESS MANAGEMENT?**

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**Introduction:** Over the past two decades, there has been a growing belief that the experience of stress at work has undesirable effects, both on the health and safety of workers and on the health and effectiveness of their organizations. Particular concerns have been expressed for the effects of stress on health-care professionals and, in particular, nurses. The present study examined whether or not there was a correlation between nurses’ level of self-efficacy and how they perceive job stress. The program was based on social cognitive theory and was primarily aimed at increasing self-efficacy, knowledge of stress and the use of problem solving behavior.

**Materials and Methods:** A total of 100 female nurses were invited to participate in the study. Participants were randomly divided to intervention and control groups. Participants completed a demographic questionnaire and Nursing Stress, General Self-Efficacy Scale. Those in the intervention group have 12 sessions lasting 90-100 minutes.

**Results:** We detected a marginally significant difference between groups in job satisfaction from pre- to post-intervention (p=0.051). Participants in the intervention group showed an increase in job satisfaction score, while those in the control group showed a decrease in it. Nurses, who reported high levels of self-efficacy, also reported high levels of job satisfaction. Significant negative correlations were obtained between the number of reported nursing stressors and job satisfaction. The data also indicated that higher levels of self-efficacy were strongly related to both job satisfaction and lower job stresses. We detected significant intervention effects on self-efficacy, problem solving behavior, stress responses, and job satisfaction among younger individuals.

**Discussion & conclusion:** By using the theory based learning we can provide an adaptive learning experience that is suitable for different target audiences. Some comments, interpretation, and implications of findings are presented

**Keywords:** Education, self-efficacy Theory, Job stress

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**INVESTIGATION ON THE RADIATION HEALTH IN RADIOLOGY CENTERS IN TABRIZ**

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**Introduction:** One of the important promotions of public health understands of correct using radiation in diagnosis and treatment. Nowadays, Radiology and radiotherapy are accompanied for diagnosis and cure of patients.

**Materials and Methods:** In this study we have investigated some recommendation of International commission of radiation protection (ICRP) about radiation health for personal and patient by questioner assay in radiology centers.

**Results:** Four radiology centers had 150 daily patients by mean. Radiography was doing 81% by bachelor of radiology educated person, Chest x-ray 15%. Lumbar radiography and Abdomen12% were high rate of requested radiographies. Patient radiation protection equipment in 57% centers was available but 43% did not had it. Gonad shields were not use in 39%. Radio worker used filmbach in 94% of cases. Quality control in 30% of centers performed annually. Supporting equipment for emergency and children was not in 37% of cases. Finally 93% of radio worker was interesting to participant and learn more about radiation protection in personal and patients.

**Keywords:** Radiation health, Protection, personal-patient

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**A GLANCE ON OCCUPATIONAL HEALTH EDUCATION AMONG STUDENTS AND MEDICINE GRADUATES**

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**Introduction:** The aims of this study was to: 1. Report the condition of occupational health education in Iranian medical schools, 2. Present the results about awareness and exposure of General Practitioners (GP) about occupational health, and 3. Compare these conditions with other countries.

**Materials and Methods:** A descriptive survey designed to assess the how's and why's of occupational health education in medical schools all over Iran, and another project, occupational health information and exposure among GPs were collected through direct visit. Finally, our results were analyzed accompanied with data in literature.

**Results:** Our results showed that 28 out of 30 responded schools had program about occupational health education. The mean of occupational health training time was 4.2
In comparison with the Serum concentrations of The results suggest that in the randomized controlled factors, Iranian worker

Keywords: Education, Occupational health, Medicine

SERUM URIC ACID LEVELS AND ITS ASSOCIATION WITH CARDIOVASCULAR RISK FACTORS AMONG IRANIAN WORKER.

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Introduction: Epidemiological studies have identified a strong correlation between elevated uric acid levels and elevated cardiovascular risk in the general population and high-risk groups, including chronic heart failure (CHF) sufferers. There are few data available on possible independent association between uric acid and risk factor for cardiovascular disease. The aim of this study was to assess the distribution of serum uric acid level in workers and its association with risk factors.

Materials and Methods: This cross-sectional study carried out on 350 worker aged 17 to 50 years who underwent general health screening. Demographic and anthropometric characteristics were assessed by questionnaire. HDL-C, Triglycerides, total cholesterol and serum uric acid were measured enzymatically by colorimetric methods. FBS concentration was measured by enzymatic methods.

Results: Serum Uric Acid level (P<0.01) and Fast Blood Sugar (P<0.05), Triglyceride, HDL.C/TC/HDL-C, LDL.C/HDL-C (P<0.001), waist circumference, waist/hip ratio (P<0.001), Systolic Blood Pressure (SBP) and Diastolic Blood Pressure (DBP) were significantly higher in men than in women. The prevalence of Hyperuricemia and Metabolic syndrome in men and women was (15.9%, 20.6% P= 0.001) and (12.7,10.7% P= 0.01), respectively. Hyperuricemia was more prevalent in subjects who suffer from metabolic syndrome independent of age and sex.

Discussion and conclusion: Serum concentrations of Uric Acid were strongly associated with the prevalence of the metabolic syndrome and its components. Weight, waist circumference, triglyceride level and DBP were the major determinants of the variations in Serum Uric Acid levels. This could be attributed to the insulin resistance status.

Keywords: Serum Uric Acid, Cardiovascular Risk Factors, Iranian worker

STUDY OF STAGE – MATCHED EDUCATIONAL INTERVENTION TO PREVENT MUSCULOSKELETAL DISORDERS

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Introduction: Computer users are susceptible to the development of musculoskeletal symptoms, with prevalence as high as 50%. The association between musculoskeletal disorders and sitting posture in the occupational setting has been confirmed. This study was designed to develop and evaluate a stage-matched intervention (SMI) in order to prevent and decrease musculoskeletal disorders among Iranian computer users, in Qazvin.

Materials and Methods: In the randomized controlled trial, 75 computer users who spent at least 20 hours per week were selected randomly to receive the staged matched intervention. The stage matched intervention was based on main constructs derived from the theory of planned behavior match to the individual’s stages of readiness for musculoskeletal disorders preventive behavior. A control group pre-and post-test design was used for evaluating the impact of the SMI. Finally, data was analyzed by χ², Mann-Whitney U, T-test and Wilcoxon.

Results: Comparing control group, the intervention group showed significant improvements in stages of change for musculoskeletal disorders preventive behavior (P < 0.001), attitude (P < 0.05), perceived behavior control (P<0.001) and ergonomic knowledge (P<0.001). The overall incidence of musculoskeletal problems in the intervention group showed a greater trend towards reduction, falling significantly from 40.16% to 35.33% compared with the control group, which fell from 40.11% to 42.0% (non-significant).

Discussion and conclusion: The results suggest that preventive ergonomic campaigns would be more successful if educational intervention considered as a part of multifaceted interventions that include at least two of the following: analysis and elimination of risk factors, engineering controls and administrative controls.

Keywords: Educational intervention, Musculoskeletal disorder, Stages of change, Theory of planned behavior, Ergonomic

RELATIONSHIP BETWEEN PERFECTIONISM AND COPING STRATEGIES WITH MENTAL WELL-BEING IN NURSES

Pooladi A, Afsharpour Sh, Bahramkhani. M*

Introduction: The present study investigates the relationship between perfectionism and coping strategies with psychological well-being of nurses in Bushehr community.
Materials and Methods: Two hundred fourteen nurses from the province hospitals were selected by simple random sampling. Participants completed the Perfectionism Scale of Alhaz, Lazarus-Folkman Coping Strategies Questionnaire and international well-being indicator questionnaire for adults. Reliability and validity of these tools had acceptable.

Results: Analysis of the results showed that perfectionism had a negative correlation with psychological well-being. Also there was positive relationship between social support, accountability and re-estimate with well-being but negative relationship between avoidant coping with psychological well-being. Stepwise regression analysis showed that 59% of the variance of well-being is justified by perfectionism and coping components of social support.

Discussion and conclusion: Coping strategies and perfectionism are variables contribute in mental well-being of nurses.

Keywords: Nurses, Perfectionism, Coping strategies, Mental well-being.

MUSCULOSKELETAL PAIN SEVERITY INCREASING, HEALTH AWARENESS EFFECTS AND ERROR IN HEALTH EDUCATION PROCESS

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Introduction: The purpose of this study was to assess the effectiveness of an intervention based on integration of theory of planned behavior and stage of change model to modify body posture, ergonomic risk factors and musculoskeletal pain severity in computer users.

Materials and Methods: In this Quasi-experimental randomized controlled study, computer users were assigned to one of two study groups: a group (n =75) receiving the theory based intervention by using construct of theory of planned behavior and stage of change, and a control group (n =75). Both groups were evaluated at the beginning of the study and at a follow-up 3 and 6 months later. The following tools were used: the Rapid upper limp Assessment (RULA) method to assess upper-extremity work-related posture, self administered questionnaire that evaluated TPB constructs, ergonomic risk factors checklist, ergo – knowledge quiz and VAS for assessing musculoskeletal pain severity. The intervention included two program elements: staged matched informative brochure and personalized preventive educational counseling.

Results: The intervention group had significantly higher scores than controls in ergo-knowledge, attitudes, perceived behavior control, intention, as well as nonneutral posture maintenance as goal behavior (P< 0.05). Also, finding showed that significant diminish in musculoskeletal pain severity (P< 0.05). At 3 and 6 months follow up, no significant differences were found between the two groups for subjective norms constructs. Intervention couldn’t improve RULA risk level to low and very low area (1, 2 level) and only decrease risk exposure to medium level. The intervention included two program elements: staged matched informative brochure and personalized preventive educational counseling.

Discussion and conclusion: The results suggest that preventive ergonomic campaigns would be more successful if educational intervention regarded as a part of multifaceted interventions that include at least two of the following: analysis and elimination of risk factors, engineering controls and administrative controls.

Keywords: Ergonomics, Theory of planned behavior, Stage of change, Posture, Musculoskeletal disorder

EFFECTS OF STAGE–MATCHED EDUCATIONAL INTERVENTION ON MUSCULOSKELETAL DISORDERS AMONG COMPUTER USERS

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Introduction: Computer users are susceptible to the development of musculoskeletal symptoms, with a prevalence as high as 50% and the association between musculoskeletal disorders and sitting posture in the occupational setting has been confirmed. This study was designed to develop and evaluate a stage-matched intervention (SMI) in order to prevent and decrease musculoskeletal disorders among Iranian computer users, in Qazvin.

Materials & Methods: In a randomized controlled trial, 75 computer users who spent at least 20 hours per week were selected randomly to receive the staged matched intervention whereas equal numbers were assigned to a control group. The stage matched intervention was based on main constructs derived from the Theory of Planned Behavior matched to the individual’s stages of readiness for MSDs preventive behavior. A control group pre-and post-test design was used for evaluating the impact of the SMI. Finally, data was analyzed by χ2, Mann-Whitney U, T-test and Wilcoxon.

Results: The intervention group, compared to the control group, showed significant improvements in stages of change for musculoskeletal disorders preventive behavior (P < 0.001), attitude (P < 0.05), perceived behavior control (P<0.001) and ergo-knowledge (P<0.001). The overall incidence of musculoskeletal problems in the intervention group showed a greater trend towards reduction, falling significantly from 40.16% to 35.33% compared with the control group, which fell from 40.11% to 42.0% (non-significant).

Discussion and conclusion: The results suggested that preventive ergonomic campaigns would be more successful if educational intervention considered as a part of multifaceted interventions that include at least two of the following: analysis and elimination of risk
factors, engineering controls and administrative controls.

**Keywords:** Educational intervention, Musculoskeletal disorder, Stages of change, Theory of planned behavior, Ergonomic.

**THE COMPARISON OF THEORY OF PLANNED BEHAVIOUR-BASED EDUCATIONAL INTERVENTION AND LECTURE REGARDING PHYSICAL ACTIVITY IN HEALTH CENTER'S STAFF IN KERMAN**

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**Introduction:** It has been estimated that physical inactivity causes around 2 million deaths in the world each year. This study carried out to compare educational intervention through the Theory of Planned Behavior and lecture regarding physical activity in Kerman Health Center’s staff.

**Materials & Methods:** This is a before and after quasi experimental research. This study, implemented on 78 and 71 persons of Kerman province health Center’s staff and health city Center’s staff in two groups of theory base intervention. Through a questionnaire provided by the researcher, the constructs of this theory were measured before and after interventions. The theory base intervention was used based on TPB intervention for 6 weeks for Kerman province health Center’s staff and for the other group just lecture was used.

**Results:** The findings revealed that both groups didn’t have any significant difference before intervention based on demographic characteristics. And also before interventions, there was no significant difference between the grade point average of both groups of constructs of theory (p > 0.05). After interventions there was a significant increase in the mean of knowledge and behavioral intention of theory base group’s grades and in the other group only behavioral intention was increased (p < 0.05). and other constructs didn’t have demonstrated any significant difference. Also in mean difference of grades constructs of theory didn’t have revealed any significant difference between both groups.

**Discussion and conclusion:** The 6 weeks implementation of theory of planned behavior-based intervention and lecture has shown no significant effect on the physical activities of Kerman health Center’s staff.

**Keywords:** Physical activity - Health education - Intervention

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**EFFECTS OF HEALTH EDUCATION BASED ON BASNEF MODEL ON THE USE OF PERSONAL PROTECTIVE RESPIRATORY EQUIPMENT IN THE WORKERS OF AHVAZ CARBON BLOCK FACTORY IN 2009-10**

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**Introduction:** Respiratory disease due to working conditions involve 50 million cases per year. One of the effective patterns is giving the workers training on health and specifically safety. The aim of this study was to use this pattern of training so as to change behaviors and consequently increase the use of protective personal respiratory equipment by workers of Carbon Black Factory.

**Materials and Methods:** This was a quasi-experimental intervention study. In this study intervention was conducted on 100 workers (test and control) of the factory based on the training program designed according to the BASNEF model. SPSS software was used for analyzing the data.

**Results:** Results showed that the average of knowledge, attitude, intention, enabling factors and performance score in the test group showed a noticeable increase (p < 0.0001) in comparison with the control group after the intervention. Furthermore, the average of subjective norms in the test and control groups did not show a significant difference.

**Discussion and conclusion:** It was found that training intervention based on BASNEF model results in increasing the use of protective personal respiratory equipment by workers. Finally, follow-up is recommended after implementing such programs.

**Keywords:** BASNEF Model, respiratory protection equipment, education

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**INVESTIGATION THE MOST EFFECTIVE METHOD FOR OCCUPATIONAL HEALTH EDUCATION TO THE WORKERS OF PERSONAL PROTECTIVE EQUIPMENT (P.P.E)**

Hatami F

**Introduction:** Among all of the workers of the textile companies of Broujerd, we chose 120 workers as the samples of this investigation which were divided into 4 groups (three case-groups plus one control group) each containing 30 workers. The case-groups were chosen from three different shifts by the method of «classified random sampling» in order to investigate the effect of three methods of «lecture», «lecture and movie show» and group discussion. According to the findings, the relationship between the factors of «age», «educational level», «job background» and the mean scores of the behavior before and after the education was statistically significant (P ≤ 0.005). In addition, comparing the mean score of initial case (before education) and the second
case (after education) using t statistical tests in a set of case-groups indicated a significant statistical difference (P ≤ 0.005). The comparison of the mean score of the second case (after education) indicated a significant statistical difference between the means in each case-group. The three case-groups had better mean score than the control group. In addition, there was a significant difference between the mean score of the second case of the third group (group discussion method) and the mean score of the second case of the two groups of «lecture» and «lecture and movie show.» Therefore, we proved that the group discussion method was more effective in increasing the knowledge of vision and behavior of workers. In addition, the observation of the resultant change of behavior as a result of education through comparison of the mean utilization periods of personal protective equipment (headset and mask) before and after education in each of the control and education groups indicated a significant statistical difference. Therefore, from the viewpoint of using personal protective equipment (headset and mask), first the group discussion method, second the method of lecture plus movie show and finally the lecture method were more effective methods.

**Keywords:** Health education, Education methods

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**MANAGERS AND PERSONNEL INSIGHTS TOWARD ORGANIZATIONAL CLIMATE STATUS IN HOSPITALS OF HAMEDAN UNIVERSITY OF MEDICAL SCIENCES.**

Kermani B^1^

**Introduction:** The aim of present study was to describe the status of organizational climate in Hospitals of Hamedan University of Medical Sciences and presenting solutions to improve organizational climate status.

**Materials and Methods:** It was a descriptive study. This study employed as a cross-sectional design. Number of the sample was 137 managers and employees of teaching Hospitals of Hamedan University of Medical Science (Ekbatan, Besat, Farschchian and Mobasher Kashani). Time scope of the research was 2008.

**Results:** Mobasher Kashani hospital has desirable climate in comparison with others and Besat hospital did not have a suitable status.

**Discussions and Conclusion:** Unsuitable organizational climate can waste a huge amount of organization's capital and staff efforts for accessing organizational productivity. So, the continuous improvement process of organizational climate is one of critical principles in organization management.

**Keywords:** Organizational Climate, Hospital, Human resource

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**PHYSICAL AND PSYCHOSOCIAL JOB STRESSORS AMONG NURSES WORKING IN TABRIZ HOSPITALS**

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1. Nursing Education, Nursing Department, Islamic Azad University, Tabriz, Iran.

**Introduction:** The aim of this study was to determine the stressors affecting nurses who have been used to work in Tabriz hospitals in 2010.

**Materials & Methods:** this study was descriptive in nature. The research population was all nurses used to work in public and private sectors in Tabriz hospital of which 342 nurses had been working in various shifts and attended in the study based on a Quota sampling. data gathering tools contained 2 sections:

Section1: Personal and professional characteristics of individuals.

Section2: (a) National Institute for Occupational Safety and Health questionnaire (b):Expanded Nurses Stress Scale. Data analysis was done by SPSS.

**Results:** the study showed that the strongest physical stressors as far as the study population concerns was the overcrowding in wards (M=3.73) and the strongest psychosocial stressor was lack of manpower (M=3.36).

**Discussion & Conclusion:** Considering the above mentioned results which try to identify the physical and psychosocial stressors from nurses point of views, authorities could take any appropriate action in order to decrease or even eliminate stressors.

**Keywords:** Job stressor, Nurses, Hospitals

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**COPING STRATEGIES AGAINST JOB STRESSORS AMONG NURSES IN TABRIZ HOSPITALS**

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**Introduction:** As a reason for confronting the various stressors at work place, nurses are frequently exposed to different physical and mental side effects which decrease their performance quality.

Appropriate coping ability and flexibility will reduce negative aspects of stressors, will improve service provided by nurses, will create job satisfaction and ultimately will raise the communities’ health level. The goal of this study was to clarify strategies which could help nurses to cope with job stressors.

**Materials & Methods:** This study was descriptive in nature. The research population was all nurses used to work in Tabriz hospitals of which 342 nurses had been working in various shifts in 2010 and attended in the study based on a Quota sampling. Data gathering tools contained 2 questionnaires: Personal and professional characteristics of individual questionnaire and Cooper
copings skills. Data analysis were done using SPSS. For analysing the relation between Personal and professional characteristics and Coping strategies, T test and ANOVA tables distribution were used.

**Results:** majority of applied methods by nurses to fight against stressors was separating the problems of their work place from home and have a place to get relaxed at their own home (M=74.4). The result of this research revealed a meaningful relation between coping methods and the number of children hospitalized in each unit.

Discussion & Conclusion: Determining the coping methods that nurses use in hospitals and its relation with their individual and social identity, will provide a possibility for health authorities to review and provide the management structure and execute educational activities.

**Keywords:** Job stressors, Nurses, Coping strategies

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**MEASURING THE USE OF PERSONAL PROTECTION EQUIPMENTS BY THE WORKERS OF ISFAHAN GITIPASAND INDUSTRIES BASED ON HEALTH BELIEF MODEL STRUCTURES IN 2010**


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**Introduction:** According to International Labor Organization (ILO), 250 millions accidents occur in the world annually, of which 22124 happen in Iran. This organization announced that 50 millions injuries are caused by occupation-related factors every year which is equal to 137,000 accidents per day. However, the use of personal protection equipments can lead to the prevention of these accidents to a large extent. This study was conducted to determine the use of personal protection equipments on the basis of health belief model (HBM) structures among the workers having high-risk positions in Isfahan Gitipasand industries in the year 2010.

**Materials and Methods:** This is a descriptive-analytic and cross-sectional study in which 164 workers of Isfahan Gitipasand industries were selected by randomized sampling. The data were collected by means of a researcher-made questionnaire including seven parts with 57 questions. These questions were constructed on the basis of HBM structures (knowledge, perceived susceptibility, perceived severity, perceived benefits, perceived barriers, demographic information) and also personal protection equipments checklist. In this study, the scores were considered out of 100. Reliability and validity of this questionnaire were established prior to data collection. Data were then analyzed through SPSS software and through statistical tests such as central statistical index, T-independent, One-way ANOVA, Chi-square and Correlation Coefficient.

**Results:** The results showed that the average age of workers was 27.9 years, their average knowledge, perceived susceptibility, perceived benefits, perceived barriers and also checklist were 78.16, 77.53, 77.95, 77.84 and 69.25, respectively. Chi-square test showed a significant relationship between education level and previous accident record (P=0.003); moreover, there was no significant relationship between marital status and previous accident record (P=0.199). At the same time, T-independent test showed significant relationship between average checklist score and marital status (P=0.015), so that married workers achieved higher averages out of checklist score. However, this test did not show any other significant relationship between marital status and other measured factors. One-way ANOVA showed significant relationships between education level and the average of perceived susceptibility, perceived severity, perceived barriers, perceived benefits and the checklist of personal protection equipments use.

**Discussion and conclusion:** Based on the findings of the study, workers were in acceptable situation with regard to measured variables. Although the use of personal protection equipments was rather satisfactory, it was not as suitable as seen in measured HBM structures. It might be due to educational programs carried out in the past, pervasive worker’s knowledge of personal protection equipments, accessibility of these equipments in those industries, regular monitoring done by officials, intimate communication between workers and professional health officials.

**Keywords:** Personal protection equipments, Health Belief Model, Occupational accidents

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**ERGONOMICS AND OCCUPATIONAL HEALTH PROMOTION: THE ROLE OF OCCUPATIONAL HEALTH EDUCATION IN LIBRARIES**

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**Introduction:** Ergonomics is a scientific discipline concerned with improving productivity, health, safety, and comfort, as well as helping people and technology work together. Ergonomics is the study of work in relation to the environment in which it is performed (the workplace) and those who perform it (workers). In the past, libraries were designed more, for their aesthetic and service functions, rather than for “industrial process” mind. Given the increasing demand for information in today’s world, library design is forced to embrace tile technologies and materials flow considerations long employed in manufacturing.

**Materials and Methods:** This study was conducted as a systematic review method. A search strategy was used to find out the extent literatures in the databases. Citations were then assessed for subject and duplication records. The review was only done on the remaining citation
which was not duplicated and met the reviews objective

**Results:** For the total of 23 articles investigated, results showed that a large percentage of the libraries didn’t have ergonomic principle and librarians exposed serious injuries related with their jobs due to awareness of ergonomic principles.

**Discussion and conclusion:** Within the library environment there is a growing awareness of ergonomic issues and the literature reflects the concerns with workstation design, purchase of ergonomic equipment and furnishings, posture and work habits, development of ergonomic programs, and staff training in ergonomics. Every workstation should be designed with both the worker and the task in mind, so that the work can be performed comfortably, smoothly, and efficiently. Libraries must seek to move materials as quickly and efficiently as possible by utilizing new technologies and processes while helping reduce the physical stresses and straining experience by employees.

**Keywords:** Education, Ergonomics, Occupational Health

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**THE ROLE OF ERGONOMIC EDUCATION IN OCCUPATIONAL HEALTH**

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**Introduction:** In recent years researchers have began to pay attention to how workplace design can affect the health of workers. Design education has an ergonomic component and this will help in promoting healthy posture and prevent any work-related health problems. The aim of this study was to highlight the role of ergonomics education in people occupational health.

**Materials and Methods:** This was a descriptive study; it uses a systematic review method to extract all related publications. A search strategy was developed to find out the extent literatures in the Pub med and Google. Citations were then assessed manually for subject and duplication records. The review was only done on the remaining citation which was not duplicated and met the reviews objective.

**Results:** A total of 26 articles were investigated, results show the injuries and diseases caused by poorly designed or unsuitable tools and workstations often develop slowly over a period of months or years. However, a worker will usually have some signs and symptoms for a long period of time indicating that something is wrong.

**Discussion and conclusion:** Ergonomics applies principles of biology, psychology, anatomy and physiology to remove from the work environment the conditions that may cause workers to experience discomfort. Ergonomics can be used to prevent bad design workstations. No matter what small or major ergonomic changes are discussed or implemented in the workplace, it is vital for the workers who will be affected by the changes to be involved in the discussions. Their input can be very helpful in determining what changes are necessary and appropriate.

**Keywords:** Ergonomics, Worker, Workplace, Posture
RELATIONSHIP BETWEEN JOB STRESS AND ABSENTEEISM

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Introduction: One of the major problems in recent decades that have induced many difficulties in human societies is stress. The phenomenon of job stress is an inevitable part in people’s professional life. Job Stress occurs when there is no coordination between job requirements with capabilities, skills and individual’s wishes. Job stress has adverse psychological, physiological and behavioral effects such as depression, absenteeism of staff working, job accidents and … on organizations. International Labor Organization (ILO) has estimated that the incurred cost on the countries due to job stress is 1-3.5 percent of gross domestics of countries. It is believed that stress is an effective agent in reduction of job performance and also increase of absenteeism in employees. This paper investigated the rate of job stress and its relation to absenteeism in workers.

Materials and Methods: In this cross-sectional study, 82 persons from personnel of Provincial Health Center of Isfahan were randomly selected based on simple sampling. Data collection instrument was a questionnaire including demographic information variables along with Davis and colleagues job stress questionnaire. Minimum score of stress was zero and maximum score was 48. The subjects, who have received scores of 0-25, probably have enough adaptability with job stress, 40-26 suffers from job stress, and 41-55 need to avoid job burnout with a preventive action, 84-56 burnout that a comprehensive management program for their job stress is necessary. The study data were analyzed by Pearson correlation, independent t test, Spearman correlation and ANOVA statistical tests using SPSS software.

Results: In this study, 62.2% of subjects were female and 37.8% were male. Mean and standard deviation of stress was 19.05±12.04. Mean ±SD number of days of absence was 2.7 ±7.6. Pearson correlation test also showed that, there was a negative significant relation between stress score and income (r= -0.221 and p=0.023).

Discussion and conclusion: In this study 20.7 percent of people suffered from job stress (score 26-40). Regarding the physical, mental and social problems caused by job stress, it’s necessary to emphasize on method of prevention.

Keywords: Job stress – Absenteeism

THE EFFECT OF EDUCATION ON THE USE OF PERSONAL PROTECTIVE EQUIPMENTS BASED ON HEALTH BELIEF MODEL AMONG WORKERS IN GONABAD

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Introduction: Annually around 250 million events resulting from work takes place worldwide. In Iran this statistic is near 22124 instances. Utilization of personal protective equipments to some extent can prevent these events. The aim of this study is to determine the impact of education on basis of HBM on the use of personal protective equipments for workers working in stone cutting plants which includes part of these eventful professions.

Materials and Methods: This study is of the semi experimental type. In this study 10 stone cutting plants were randomly and simply selected as a sample. A questionnaire consisting of 33 items was prepared whose validity and reliability was confirmed by experts, and a pilot test was done for it. Before start of education, questionnaires were filled out by the target group and afterward; education was presented by lecture and face to face, using educational aids. After a month, these trained individuals completed the questionnaires again. The data obtained were analyzed by statistical tests.

Results: About 31 percent of the subjects had elementary education and 44 percent were illiterate. Education on parts of the model included awareness, susceptibility and perceived severity as well as performance and application of some protective equipment had desirable and effective impacts. The average score of all components after education had been promoted. Most workers showed that the barriers of protective equipments had lowered the speed of their work.

Discussion and conclusion: on basis of this study HBM has been effective in using personal protective equipments by workers and with respect to its being complete and comprehensive, this model can be used in preventive behaviors, particularly in difficult professions for undereducated as well. If accompanied by other effective factors, this model can prevent accidents in eventful professions.

Keywords: Health Belief model; Personal protective equipments; Stone cutting; Workers

SURVEY OF SOCIAL CAPITAL AMONG FEMALE NURSES IN HASHEMI NEJAD HOSPITAL, TEHRAN: 1389

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Introduction: social capital is a multi-dimensional concept in the social sciences and affects many areas
of society and also may affect quality and the output of services and increase staff productivity. Considering that nurses are important people in care and treatment, the aim of this study was the survey of social capital and its dimensions in female nurses that work in Hashemi Nejad hospital.

Materials and Methods: This study was a cross-sectional and the statistical population was nurses in Hashemi Nejad hospital. Due to specific and limited female nurses that working in this hospital, the sample was included all the statistical population. Data collection instrument was a questionnaire with 15 questions about social capital that its reliability and validity had been evaluated. Data analyzed by SPSS.16.

Results: Seventy nurses responded to the questionnaire. Results showed that the level of nurses in three components of trust, social relations and diversity were less than moderate and their level in volunteer spirit of forgiveness and civic participation were moderate.

Discussion and conclusion: Results showed that nurses have high burnout in some components, and social capital is so effective to it. Since much research have cited the impact of social capital on burnout and our research findings also showed this effect, there is a need to increase and enhance social capital in hospitals that are most service provider organizations. In this aim, managers have the important roles support activity in nurses and other personnel working in hospital.

Keywords: Social capital, Female nurses, Health promotion

PERCEIVED REWARD OF NOT USING AND COSTS OF USING HEARING PROTECTION DEVICES AND THEIR RELATIONS WITH WORKERS’ HEARING PROTECTION MOTIVATION

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Introduction: Hearing loss is the main problem in textile industry and second occupational disease. According to WHO reports, about 16 percent of the world population suffer from occupational hearing loss. Therefore, this study aimed determination of perceived reward of not using and costs of using hearing protection devices and their relations with workers’ hearing protection motivation among workers of Knitting & spinning factories in Yazd city.

Materials and Methods: In a cross-sectional design, total number of 280 workers entered in the study using cluster random sampling. Data was collected by a researcher designed questionnaire which measured workers’ perceived reward of not using and costs of using hearing protection devices and their hearing protection motivation. The reliability and validity of the questionnaire were measured and approved.

Results: Only 42.5% of workers always used hearing protection devices in the work environment. The mean score of perceived costs of using hearing protection devices was 20.88 ± 5.87 out of 36 and perceived rewards of not using hearing protection devices was 9.29 ± 2.72 out of 16. The most important cost was «not hearing of warning sounds» and also the most important Perceived reward was «better hearing of warning sounds». 73.2% agreed that not using hearing protection devices causes the ears to feel healthier and 67.8% expressed that using hearing protection devices causes talking disruption. Perceived costs (r= −0.193) and rewards (r=−0.182) were negatively correlated with protection motivation at 0.01 level. They also had a positive correlation with each other at 0.01 level(r=0.389). These two variables accounted only 4.1% of variances in hearing protection motivation which only Perceived rewards (β = 0.150) was a significant predictor.

Discussion and conclusion: Increasing workers’ perceived rewards of not using hearing protection devices is recommended in any attempt aims promoting usage of these devices among workers. The effects of other constructs in protection motivation theory should be addressed in future studies in this area.

Keywords: Perceived reward -Protection motivation -Costs

EFFECT OF A NEED ASSESSMENT-BASED SAFETY EDUCATION ON SAFETY BEHAVIOR OF WORKERS IN BORUJEN INDUSTRIAL TOWN IN 2009

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Introduction: Every year 50-158 million occupational diseases and accidents in job occur in the world. Studies on the job injuries show that about 150000 injuries occur in Iran. Unhealthy behaviors are important problems in public health. Education is one of the best ways to change unhealthy behaviors. Interventions based on need assessment have many capacities for behavior change in developing countries. This research has been performed in order to assign the effect of a need assessment-based health education program on preventive actions of occupational diseases among workers.

Materials and Methods: It was an interventional (Quasi-Experimental) study, within which 88 workers of Borujen Industrial Town, participated. The participants randomly have been divided into experimental and control groups. Data collecting tools were a self-made questionnaire including 53 questions based on need assessment that filled out by the workers themselves, and also a performance check list about safety behavior was filled out by researcher via insensible controlling of the workers (validity and reliability of the data collection
The results of this survey showed efficacy. Results: The results of the study have shown that the mean score of awareness, attitude, and performance of the workers about safety and use of personal preventive equipments in the experimental group after educational intervention increased in proportion to the control group and significant differences were found.

Discussion and conclusion: The results of this survey showed that by increasing the awareness and attitude about a behavior, adopting the preventive actions will increase. Therefore, the results of this survey confirmed the effect and efficiency of a need assessment-based safety education on safety education and adopting preventive actions in worker's behaviors.

Keywords: Safety, Need assessment, Worker's behaviors.

THE EFFECT OF JOB STRESS MANAGEMENT PROGRAM ON NURSES JOB STRESS BASED ON PRECEDE MODEL

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Introduction: Job stress is a problem in the work place and nursing is the most stressful job and this stress leads to a decrease in quality of nursing care and abandon occupation. The purpose of this study was to determine the effect of stress management educational program based on PRECEDE model on the level of stress in nurses.

Material sand Methods: It was a quasi experimental study. The sample size was 29 nurses from Fatemie hospital in experimental group and 29 nurses from Beheshi hospital of Hamedan in control group who were selected randomly. Then NSS and PSS were used to determine job stress and perceived stress and in order to intervention a PRECEDE-based scale was used. The six session interventions were done and each session was 60-180 minutes. Nurses were followed for 1.5 months. The data were analyzed by descriptive and inferential statistic (mean-chi square – t test –pair t test- Mann Withney-Willxocon) through SPSS-13.

Results: Average score of job stress before intervention in experimental group was 113 and in control group was 109.82 and there were no significant difference between them. But after intervention the average score of job stress in experimental group decreased to 94.03 and in control group was 109.2 (P=0.000). Perceived stress average score before intervention in experimental group was 25.17 and in control group was 27.65 and there were no significant difference between them, after intervention perceived stress average score in experimental group decreased to 24.03 as compared to control group (29.51) (P=0.008). After intervention predisposing, reinforcing and enabling factors rate and stress management behavior in experimental group rather than control group were increased.

Discussion and conclusion: Results showed efficacy and effectiveness of educational intervention based on PRECEDE model to decrease nursing stress.

Key words: Nursing Stress, Perceived Stress, PRECEDE

PROMOTION OF THE OCCUPATIONAL HEALTH AND SAFETY CULTURE BASED ON ISLAMIC TEACHINGS

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Introduction: A large body of literature documents that religion has important effects on various aspects of the demographic behavior of individuals and health. Islam is a lively constructive religion, which is calling for development for its followers in the all aspects of life. Islam proposed the health and established the sciences. Therefore preserve and promotion of health, safety needs to harmonize the related worth and participation and collaboration every body.

Materials and Methods: This is a review-documented study to survey the health, safety indices. Data collected based on verses and interpretation of the Holy Quran, hadith books.

Results: To show the way of Health and safety to those who seek His pleasure, to bring them out of darkness into light through His will and to guide them to the right path. Those who have accepted the faith and have kept it pure from injustice have achieved security and guidance. Truly, Allah loves those who make themselves clean and pure. Remember we made the House, a place of safety. By this safe city, Mecca. We made the house (in Mecca) as a place of refuge and sanctuary for men. Adopt the place where Abraham stood as a place for prayer. We advised Abraham and Ishmael to keep my house clean for the pilgrims, the worshippers and for those who bow down and prostrate themselves in worship. When Abraham prayed to the Lord saying,” Lord, make this town a place of security. God tells a parable about a behavior, adopting the preventive actions will increase. Therefore, the results of this survey confirmed the effect and efficiency of a need assessment-based safety education on safety education and adopting preventive actions in worker’s behaviors.

Keywords: Safety, Need assessment, Worker's behaviors.
IMPACT OF EDUCATION ON THE KNOWLEDGE AND PERFORMANCE OF THE PROTECTIVE MEASURES OF ANTICANCER DRUGS IN CLINICAL STAFF

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Introduction: The aim of present semi-experimental survey was to find the impacts of education on the knowledge and performance of the protective measures of anticancer drugs in clinical staff of Shiraz University of medical sciences.

Materials and Methods: The studied units include all working nursing staff (48) in oncology, clinic and CSR wards in pediatric oncology ward; the internal medicine ward and radiotherapy department of Namazi Hospital; chemotherapy departments in Motahari Clinic and Faghihi Hospital; and finally ten laboratory staff. The data gathering procedure was as follows:

1- A questionnaire for pre and post test evaluation, consisting of two parts: one for general information in which the demographic information was obtained and the other was concerned with protective measures of anticancer drugs. The second part included 40 questions for nurses and auxiliary nurses 23 for nurse aides and 7 for the laboratory staff.

2- A checklist which also consisted of two parts, the first part studied the use of protective tools (gloves, gown, mask and glasses) when preparing and being in contact with anticancer drugs and the second part studied the use of protective tools (gloves, gown and mask) when confronting the metabolites of the drugs (In the fluids of the patients' bodies under chemotherapy).

Data gathering was performed through several stages. First the researcher and her assistants went to the research environment everyday and observing the performance of the subjects in contact with anticancer drugs and the metabolites of the drugs (In the fluids of patients' bodies under chemotherapy), completed the checklist for all units under study, then the questionnaires containing pre-test items were distributed among the units under study. After collecting the completed questionnaires, the researcher held 7 educational classes on the principles of protective measures against anticancer drugs and their metabolites. The lessons were presented in lectures for two hours and if necessary were extended for half an hour to answer all the questions. Then the questionnaires containing post-test items were completed by each unit and were collected for further analysis. Furthermore, each person was given an illustrated guide booklet. To study the rate of recalling the materials taught in the units under study, the questionnaires containing post-exam items were distributed and collected after one month. Finally to find out the performance of the subjects on the observance of protective measures, the researcher with three assistants went to the subjects' research environment and completed the checklist when observing the subjects' performance.

Results: The findings revealed that before the education only 69% of the subjects had relatively enough knowledge of the measures (70-100 points out of 100), while immediately and one month after the education almost all the subjects obtained 70-100 points out of 100. (p=0.00001). On the other hand, following the education in comparison with pre-education status, subjects followed the protective measures concerning the anticancer drugs and their metabolites more carefully (p=0.00001).

Discussion and Conclusion: Education has positive impacts on the knowledge and performance of protective measures of handling anticancer drugs in clinical staff of Shiraz University of medical sciences.

Keywords: Education, Clinical staff, chemotherapy, knowledge, performance.

MEASURING SELF-ESTEEM AND SOCIAL SUPPORT HEALTH PERSONNEL, A CRITERION FOR PREDICTING HEALTH CENTER STAFF BURNOUT Mashhad

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Introduction: One of the problems of modern society, lack of development and satisfy basic human needs is complete. Social support to the enjoyment level of affection and attention to family members, friends and other people is defined. Today, one of the major factors in decreased efficiency and loss of human resources, is burnout employee. This study to determine the relationship between burnout syndrome and prevalence of self-esteem and social support in health centers in Mashhad staff have been conducted.

Materials and Methods: This descriptive - analytical study, workers in 30 health centers of Mashhad, the research instrument that includes demographic information and self-esteem - social support (MBI) questionnaires were completed and analysis
Data by computer software SPSS and statistical tests (descriptive - analytic) took appropriate.

**Results:** Results showed 27 percent of personnel, Mr. and Mrs. have been 73 percent. In terms of educational level: 10.2 percent of school education, 22.5 percent of high school diploma, Associate Degree 27.4 percent, 24.6 percent of BA, 1.7 percent and 14.4 percent have MD Professionals. The results showed that 92.3 percent of high self-esteem subjects, 72.3 percent had high social support staff. With three dimensions of burnout frequency: low frequency of 50.2 percent staff levels of emotional exhaustion, 97.2 percent of low levels of depersonalization and frequency of high frequency of 79.3 percent reported personal adequacy. Also the results showed a significant direct correlation between Sense of personal adequacy with the level of social support and significant inverse relationship between self-esteem with a feeling of emotional exhaustion and depersonalization with feelings of social support was (p < 0.05).

**Discussion and conclusion:** Overall the staff burnout in emotional exhaustion and depersonalization after low and high personal adequacy is later. Social support and self-esteem in middle to high staff and the results indicate that with this rate rise Social support and self esteem in staff levels of burnout in emotional exhaustion and depersonalization dimensions decreased.

Key words: Burnout Levels - Health Workers - Self-Esteem - Social Support.

**MEASURING LEVELS OF WORK PRESSURE ON STAFF AT HOSPITALS IN MASHHAD AND DETERMINE ITS RELATIONSHIP WITH CLINICAL STAFF BURNOUT**

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**Introduction:** Today, one of the major factors in decreased efficiency and loss of human resources, staff burnout. This problem in addition to physical adverse effects, adverse effects also carry numerous psychological and especially helpful in the professions of including health personnel due to the stressful nature of the jobs created are more burnout.

**Materials and Methods:** In this descriptive - analytical study sample included 660 clinical staff working in hospitals composed under the Mashhad University of Medical Sciences, which used stratified, cluster and stage are chosen randomly. Data analysis by SPSS computer software was done.

**Results:** Results showed that 25.3 percent of subjects were male and 74.7 percent .16.5 percent of the women were single and 83.5 per cent were married too. In terms of education, school education 6.1 percent, 17.1 percent of high school, 15 percent high school diploma, 55.2 percent BA, MA 0.6 percent, 3.6 percent and 2.4 percent of doctoral professionals have the PhD. in terms of work time, 25.3 percent work in the morning, evening shifts 1.5 percent, 11.7 percent and 61.5 percent of morning shifts have been in circulation. Results Staff also showed 91.2 percent and 67.1 percent of high self-esteem also have had high social support. The results showed in relation to the frequency of the three dimensions of burnout: 6.38 percent prevalence of low levels of employee emotional exhaustion, 58 percent of low levels of depersonalization and frequency of 62.9 percent prevalence of low levels of personal adequacy were reported. Results showed significant correlation between the variables of emotional exhaustion and depersonalization feel with the variable rate was at work, so that once staff have experience working with more depersonalization and emotional exhaustion have also reported more. (P <0.05 ) Findings also indicate the existence of a significant relationship between personal variables and adequacy of the existing workload, so that people who have experienced moderate Work pressure of personal adequacy have been higher. (p <0.05).

**Discussion and conclusion:** Overall the staff burnout in emotional exhaustion and depersonalization after low and low for the next person is adequate. Work pressure rate on the other hand, employees were higher than average. These results indicate that this is a higher rate workload adequacy of private health care workers has been reduced.

Key words: Burnout Levels - Health Care Workers - Work Pressure Levels - Educational Hospital

**ASSESSMENT OF BURNOUT SYNDROME IN HEALTH WORKERS; STRATEGY FOR PROMOTING REVERENCE AND HEALTH SERVICES PERSONNEL TO THE TARGET GROUP**

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**Introduction:** Today, one of the major factors in decreased efficiency and loss of human resources, is staff burnout. This problem, in addition to physical adverse effects, adverse effects also carry numerous psychological and especially helpful in professions including health personnel due to the stressful nature of the jobs created are more burnout.

This study to determine the prevalence of burnout syndrome in three dimensions emotional exhaustion - the adequacy of depersonalization and reduced personal staff health centers in Mashhad have been done.

**Materials and Methods:** In this descriptive - analytical study using census workers 30 health centers of Mashhad, the research instrument that includes demographic information and questionnaire Mazlak burnout (MBI) was completed. Data analysis by SPSS computer software was done.

**Results:** The results showed in relation to the frequency of the three dimensions of burnout: 50.2 percent of employees low frequency levels of emotional exhaustion,
97.2 percent of low levels of depersonalization and frequency of high frequency of 0.379 percent were reported personal adequacy.

Results also showed a significant correlation between emotional fatigue with work area, job status, offline and having leisure time was available so that workers in marginal areas of the city staff involved in planning the family doctor and staff who have the least leisure have experienced more emotional exhaustion (p <0.05) findings also showed a significant relationship between personal variables and adequacy of local service unit, education and smoking was available so that employees working in the laboratory and pharmacy personnel and doctoral education The staff of the school education and cigarette smoking have lower personal adequacy have reported more (p <0.05) showed between smoking and depersonalization also a significant relationship exists so that personnel have been smoking less depersonalization less well reported. (p <0.05)

**Discussion and conclusion:** Overall the staff burnout in emotional exhaustion and depersonalization after low and high personal adequacy is later. In other words, the health staff burnout in the extent that it leads to a decrease in servicing their clients will have not experienced.

**Keywords:** Burnout - Health workers - personal adequacy - depersonalization - emotional exhaustion
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