

## Job Satisfaction Differences between Primary Health Care and Treatment Sectors: An Experience from Iran

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### ABSTRACT

**Background:** The aim of this study was to compare the levels of job satisfaction and its predictors among primary health care and treatment sectors' staff in East Azerbaijan Province, Iran.

**Methods:** This comparative study was conducted in East Azerbaijan Province, Iran in 2011. A questionnaire survey was performed on 420 staff from health care and treatment sectors using multi-stage proportional cluster sampling method. Job satisfaction was measured in five aspects namely: structural and managerial; individual; social; work-itself; environmental and welfare job satisfaction factors. The job satisfaction measurement score was normalized to fall into a range of zero to 100. Statistical analyses were performed using Friedman and independent sample *t*-tests.

**Results:** Overall satisfaction in health and treatment sectors was moderate with a mean score above 50. Hospital General Practitioners reported significantly higher job satisfaction score (mean  $\pm$  SD=57.34  $\pm$  17.02) compared to health care center General Practitioners (mean  $\pm$  SD= 31.74 $\pm$ 14.99). The highest satisfaction scores belonged to individual factors both in health care sector staff (64.83 $\pm$ 18.50) and treatment sector staff (63.55 $\pm$ 17.44). The lowest job satisfaction was observed with environmental and welfare factors (38.47 $\pm$ 19.86 and 36.83 $\pm$ 19.86, respectively).

**Conclusion:** The job satisfaction significantly differs between primary health care and treatment sectors. Based on the results, environmental and welfare factors may be targeted to improve the job satisfaction in public health care system.

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## Introduction

A competitive health treatment system is indeed quality oriented, and improving the quality of health treatment services is a contin-

uing challenge to managers in the health treatment system<sup>1</sup>. Job satisfaction in health treatment workers is a very important factor that

impacts on productivity as well as quality of patient treatment<sup>2</sup>. However, it has been negatively linked with absenteeism and turnover in an organization<sup>3</sup>. It is reported that 68% of the physicians working in the teaching hospital of Karachi are not satisfied with their job<sup>4</sup>. Job satisfaction is a multi-dimensional concept which includes personality traits and environmental factors. Personality has been accounted for up to 45% of the variance in job satisfaction<sup>5</sup>.

The factors that impact job satisfaction are often decomposed into extrinsic and intrinsic factors<sup>6</sup>. Intrinsic factors are related to the work itself (such as ability to develop one's skills, feeling of independence, feeling of victory, feeling of achievement, feeling of control and other similar feelings obtained from job), whereas extrinsic factors are not directly related to work itself (such as, good welfare and utilities, high salary, good relationship with colleagues)<sup>6-7</sup>.

Moreover, many factors such as autonomy, task variety, cohesion with colleagues, feedback, promotional opportunities, task identity (professional status), praise by supervisors, working conditions, collaboration with the staff and strength of the organizational culture have been associated with job satisfaction<sup>5</sup>. For example, Sengin (2003) recognizes variables that impact on staff job satisfaction such as: (1) demographic variables: education, experience, and position in the hierarchy; (2) Job characteristics: autonomy and salaries; and (3) organizational environmental factors: degree of professionalization, type of unit<sup>7</sup>.

In China more than half of the nurses were much satisfied with their job<sup>8</sup>. But, in Iran, only about one third of nurses were satisfied with their job. With respect to the acquired results, the highest scores for job satisfaction go to job security in nursery profession (44.5%) and the nurses' satisfaction rate with workplace and welfare facilities (44.26%), and on the other hand, the highest scores of dissatisfaction among nurses go to the explanation of nursery profession tasks (74.75%), the so-

cial status of nursery profession in the society (70.3%) and ways and approaches to communicate with the managers (70%) respectively<sup>9</sup>.

The lack of reliable evidence on the definition and measurement of job satisfaction and its relationship to other concepts such as job performance, absenteeism and the similar items, show that the explanation of job satisfaction in many studies is not accurate and the dimension of explanation is not complete in many studies<sup>10</sup>.

Studies that are able to resolve shortcomings and failures related to the measurement of job satisfaction are essential. Moreover data obtained from the comparative study in this field is limited, so a comparative study in a subset of a large organization such as health and treatment sectors with similar management can raise policymakers' awareness and may inspire them to take steps to improve the level of staff's job satisfaction in health and treatment sector.

The aim of this study was to compare the levels of job satisfaction and related factors among staff of health care and treatment sectors in East Azerbaijan Province, Iran.

## **Materials and Methods**

This descriptive comparative study was conducted in 2011 in East Azerbaijan Province of Iran. According to Iran statistics center in 2006, the population of East Azerbaijan Province is over 3.500.000 (<http://www.amar.org.ir>). There are 31 public hospitals and 61 urban health care centers, above 100 rural health care centers, 81 urban-rural health care centers and above 1000 health houses in East Azerbaijan Province. The target population selected for this research was health care and treatment sectors. In Iran, this sector is merged with medical education in form of Medical Sciences of Tabriz University. The research population consisted of staff working in both sectors. Six different types of jobs were considered to enroll research participants

being: General practitioners, nurses, midwives, occupational health experts, environmental health experts and public health experts. The study was conducted in two phases. Phase 1: developing the job satisfaction questionnaire. Phase 2: measurement of job satisfaction

***Phase 1: Developing the job satisfaction questionnaire***

The first phase of study was a qualitative investigation, with the aim of designing a standard tool for measuring the job satisfaction proportional scheme in Iranian setting. In this phase, Focus Group Discussion (FGD) was used. Seventy health care and treatment staff participated in 8 FGDs (focus group discussion) from March to June in 2011 in two locations: East Azerbaijan provincial health center and treatment center. At first, after the literature review a semi-structured questionnaire was designed. This semi-structured interview guide was used in the qualitative study, which allowed flexibility within the discussion.

Sampling method in the first phase of study was purposeful sampling. With the selection sampling, criteria included work experience more than 5 years and good expression were detected. Each group discussion was managed by an experienced facilitator, an observer and a note-taker. Each of the FGDs was opened with a broad study question from the facilitator. The opening question focused on identifying the most important issues related to their job satisfaction. All sessions were audio taped and notes were taken simultaneously by a note-taker. After each session, the recorded information was transcribed verbatim immediately. In order to assess respondent validity, all recorders were checked with the notes before thematic analysis. All notes were checked for correctness with participants too. In order to assess expert validation, interview contents were already checked with two academic member's specialists in qualitative research and then combined.

After analyzing the results of FGDs, 5 theme and many sub themes related to job satisfaction were obtained. Then the items were selected by importance. The items that were repeated in 3 sessions and more than a total of eight focus group discussions, and the items that were the most frequent in the standardized questionnaire, were selected. At the end, 84 items were used for constructing the questionnaire.

Content validity was established by a panel of 14 experts consisting of faculty members at Tabriz University, Iran and specialists in health care management. Moreover, given the large number of items in addition to assessing the items related to validity including necessity, transparency, simplicity and relevance of items, 84 items, which had the highest frequency in FGD sessions, were analyzed in the first stage of Delphi. In addition, the degree of importance of each of the questions was based on a scale of 1 to 9 (least to most important). After collecting the forms, content validity questions with the median importance of 7 and higher, were accepted. In this stage 67 questions were accepted. The degree of rating importance for 17 questions was between 4 and 7 and therefore made the researchers proceed to the second stage of Delphi. In addition, a number of items (20 items) which were similar to each other specialists view were entered into the second round of Delphi, and 60 items remained in the final questionnaire.

A pilot test was conducted with 50 members of health care and treatment workers who were not included in the analysis. The reliability (internal consistency) of the scales of the questionnaire was confirmed by Cronach's  $\alpha > 0.7$  (Structural and managerial factors = 0.81, individual factors = 0.84, social factors = 0.77, work itself factors = 0.76, environmental and welfare factors = 0.82). At the end 60 questions remained.

### ***Instrument***

The questionnaire rated on a 5-point Likert-type scale ranging from “very dissatisfied” (1), “dissatisfied”, “moderately satisfied”, “satisfied”, and “very satisfied” (5), that consisted of two parts. The first part included 60 items to measure the degree of job satisfaction and the factors namely structural and managerial factors (24 items); individual factors (9 items); social factors (6 items); work-itself factors (10 items); environmental and welfare factors (9 items) and 2 general questions related to assessing overall job satisfaction regarding all aspects of your job and offer of employment with your organization to friends and others in the form of yes / no question were made .

Ten demographic factors exist on the second part of the questionnaire and is composed of 10 variables including age (20-24:1, 25-29:2, 30-34:3, 35-39:4, 40-44:5, 45 and over:6), gender (M:1, F:2), marital status (Single:1, married:2, divorced:3), working position (hospitals:1, health care center:2, provincial health center:3, provincial treatment center:4), educational level (GP:1, nurses:2, midwife:3, environmental health expert:4, occupational health expert:5, diploma:6), organizational post (hospital GP:1, health care center GP:2, health expert:3, treatment expert:4, nurse:5, midwife:6, practical :7, rural practical nurse 8), shift type (fixed shift:1, rotation shift:2), employment status 1: formal and 2:contract, tenure (under 5 years:1, 5-9 years:2, 10-14 years:3, 15-19 years:4, 20 years and more:5) and monthly income (less than \$275:1, \$275 to less than \$415:2, \$415 to less than \$550:3, \$550 to less than \$690:4, \$690 or more:5).

### ***Phase 2: measurement of job satisfaction***

Sampling method in phase 2 of this study was three-stage Proportion to Size clus-

ter sampling. Details of sampling are provided in Fig. 1. The target population selected through health care and treatment sectors including 1185 staffs. A general rule of thumb states that there should be at least 6 to 10 cases for every variable in the models<sup>11</sup>, based on this criteria a total of 420 samples have been included in this study.

### ***Statistical analysis***

Data were entered and processed using the statistical package for the social sciences (SPSS.11.5) software, (SPSS Inc, Chicago, Illinois). Responses of each item were transferred to a 0-100 scale and the score of each scale has been constructed by averaging over related items. Data for the qualitative and quantitative variables were summarized by mean (SD) and frequency (percent) respectively. For ranking items related to satisfaction, Friedman rating test was used. Differences in the responses between the groups including hospital GP with health care centers' GP; staff of provincial health center with staff of provincial treatment center; experts in hospital with experts in health care centers and health care worker with hospital practical nurse were tested by Independent Samples *t*-test. *P* value <0.05 was considered as statistically significant.

### **Results**

A total of 420 questionnaires were distributed and 374 questionnaires (response rate: 89%) were completed and returned. The frequencies of demographic factors in total and health care and treatment sectors are presented in Table 1.

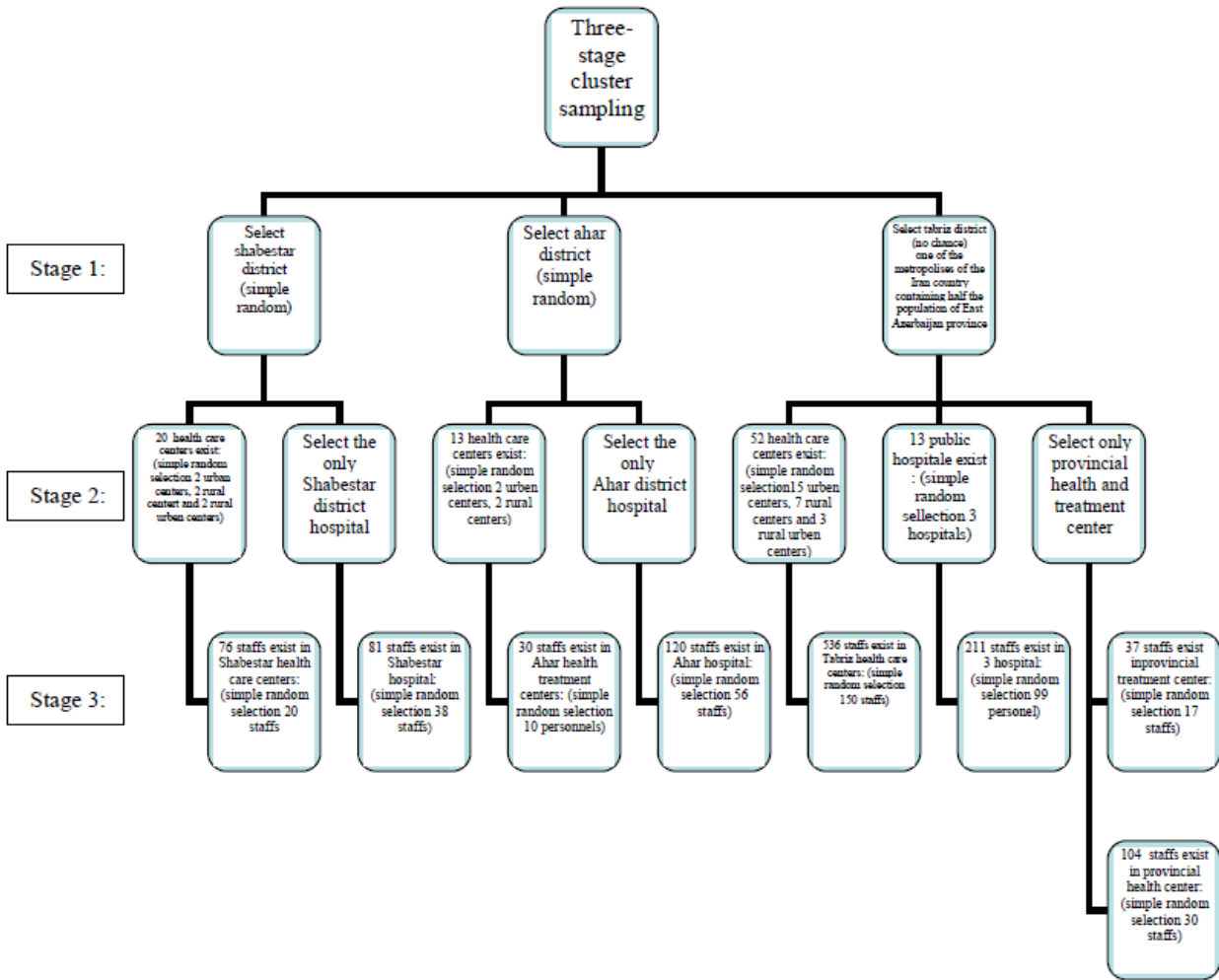


Fig. 1: Three-stage PPS cluster sampling in this study

The majority of respondents 218 (58.3%) were in the middle-age group (30-45 years). The majority of our respondents were males (n=290, 77.5%).

Higher than 80% of respondents were married, whereas 19.8% were single and there were no divorcee cases. On the other hand, the majority of respondents worked in hospitals and health care centers (89.1%). Moreover, nurses, midwives and GPs comprise 74.9% of participants. The majority of respondents (29.7%) were nurses and (51.3%) staff employed on contract. Totally, 237 out of 374 staff (63.4%) was fixed shift staff, whereas 36.6% of staff was rotation shift staff. The majority of respondents were experienced

(29.7%), as ranked in the range of 15-20 years and over. Majority of respondents 223 (59.6%) had an income \$275 to less than \$415, which is classified as low income group in Iranian context.

The mean of Overall Job Satisfaction Score OJSS in total was 51.18 (15.67). The mean of OJSS in health care and treatment sectors were 51.07 (16.60) and 51.29(14.65) respectively.

Overall, the health care and treatment staff were moderately satisfied with their jobs. Mean of (JSS) in health care centers and hospitals staff in each district (Tabriz, Shabestar and Ahar) were almost the same (Table 2).

**Table 1:** Demographic statistics of the respondents compared between health and treatment sectors

Variables	Frequency (percent %)		
	Health sector	Treatment sector	Total
<b>Age (yr)</b>			
20-24	3 (1.6)	9 (5)	12 (3.2)
25-29	36 (18.7)	37 (20.4)	73(19.5)
30-34	45 (23.3)	41 (22.7)	86(23)
35-39	38 (19.7)	33 (18.2)	71(19)
40-44	38 (19.7)	23 (12.8)	61(16.3)
45 and over	33 (17)	35 (19.3)	71(19)
<b>Sex</b>			
Male	49 (25.4)	35 (19.4)	84 (22.5)
Female	144 (74.6)	146 (80.6)	290 (77.5)
<b>Marital Status</b>			
Single	37 (19.2)	37 (20.4)	74 (19.8)
Married	156 (80.8)	144 (79.6)	300 (80.2)
<b>Working position</b>			
Hospitals	-	167 (92.3)	167 (44.7)
Health care centers	166 (86)	-	166(44.4)
Provincial health center	27 (14)	-	27 (7.2)
Provincial treatment center	-	14 (7.7)	14 (3.7)
<b>Education Level</b>			
General practitioners	51 (26.4)	28 (15.5)	79 (21.1)
Nurses	4 (2.1)	119 (65.7)	123 (32.9)
Midwife	53 (27.5)	25 (13.8)	78 (20.9)
Environment health expert	20 (10.4)	2 (1.1)	22 (5.9)
Occupation health expert	7 (3.4)	-	7 (1.9)
Public health expert	36 (18.7)	-	36 (9.7)
Diploma	22 (11.4)	7 (3.9)	29 (7.6)
<b>Organizational post</b>			
Hospital GP	-	21 (11.7)	21(5.6)
Health care center GP	42 (21.7)	-	42 (11.2)
Health expert	70 (36.3)	2 (1.1)	72 (19.3)
Treatment expert	-	14 (7.7)	14(3.7)
Nurse	-	111 (61.3)	111(29.7)
Midwife	50 (25.9)	23 (12.7)	73(19.5)
Hospital practical nurse*	11 (5.7)	10 (5.5)	21(5.6)
Rural practical nurse**	20 (10.4)	-	20(5.3)
<b>Employment status</b>			
Formal	102 (52.8)	80 (44.3)	182 (48.7)
Informal	91 (47.2)	13 (7.2)	192 (51.3)
<b>Shift type</b>			
Fixed shift	176 (91.2)	61 (33.7)	237 (63.4)
Rotation shift	17 (8.8)	120 (66.3)	137 (36.6)
<b>Work Experience</b>			
Under 5 years	42 (21.8)	57 (31.5)	99 (26.5)
5-9 years	47(24.4)	41 (22.7)	88 (23.5)
10-14 years	39 (20.2)	37 (20.4)	76 (20.3)
15-19 years	38 (19.7)	12 (6.6)	50 (13.4)
20 years and over	27 (14.0)	34 (18.8)	61 (16.3)
<b>income</b>			
less than \$275	22 (11.4)	16 (8.8)	38 (10.2)
\$275 to less than \$415	112 (58.0)	111 (61.3)	223 (59.6)
\$415 to less than \$550	34 (17.6)	36 (19.9)	70 (18.7)
\$550 to less than \$690	16 (8.3)	13 (7.2)	29 (7.8)
\$ 690 or more	9 (4.7)	5 (2.8)	14 (3.7)

**Table 2:** Mean of job satisfaction score in different districts\*

District	Tabriz	Ahar	Shabestar
<b>Location</b>			
<b>Hospital</b>	49.94 (14.34)	54.99 (14.40)	48.00 (16.15)
<b>Health care centers</b>	50.05 (16.68)	55.61 (17.98)	48.58 (20.07)

Reported on a 5-point Likert-Type scale\*

The observed difference in mean OJSS between provincial health center staff with provincial treatment center staff, hospital practical nurses with rural practical nurses, hospital practical nurses with health care centers practical nurses, hospital experts with health care center experts that was not found

to be statistically significant. (All ( $P > 0.05$ )) (Table3).

Hospital GPs reported higher level of JSS compared to health care centre GPs. This difference between the groups was statistically significant ( $P < 0.05$ ) (Table 4).

**Table 3:** Comparison mean overall job satisfaction score in different groups

Groups	N	Mean	SD*	P value**
Provincial health center GPs	9	56.64	4.73	0.333
Provincial treatment center GPs	7	51.90	13.21	
Provincial health center experts	18	54.58	10.77	0.537
Provincial health center experts	7	57.51	9.65	
Hospital practical nurses	10	51.20	11.59	0.512
Rural practical nurse	20	55.58	19.02	
Health care centers practical nurses Rural practical nurse	11	45.57	17.03	0.384
Hospital midwives	23	45.83	12.70	0.134
Health care centers midwives	50	52.06	17.65	
Hospital nurses and environmental health	113	50.87	14.86	
Health care centers experts	43	53.52	17.52	0.345

\*SD: Standard Deviation

\*\*P < 0.05 is significant

**Table 4:** Mean, Standard Deviation and Independent Samples T-Test Results for GP groups

Aspects	Groups	N	Mean	SD*	P value**
Structural and managerial factors	Hospital GPs	21	53.67	21.46	0.024
	Health care center GPs	42	41.81	17.98	
Individual factors	Hospital GPs	21	72.61	13.21	<0.001
	Health care center GPs	42	55.95	16.67	
social factors	Hospital GPs	21	61.90	19.55	0.055
	Health care center GPs	42	51.98	18.66	
Work itself factors	Hospital GPs	21	60.95	15.50	0.001
	Health care center GPs	42	44.70	17.21	
Environmental and welfare factors	Hospital GPs	21	44.84	23.47	0.020
	Health care center GPs	42	31.74	18.79	
Job satisfaction	Hospital GPs	21	57.34	17.02	0.002
	Health care center GPs	42	44.00	14.99	

\*SD: Standard Deviation

\*\*P < 0.05 is significant

In individual aspect, health care center experts reported high level of JSS compared to hospital nurses and environmental health, health care center experts mean  $\pm$  SD =  $69.31 \pm 19.99$ ; hospital nurses and environmental health experts mean  $\pm$  SD =  $62.09 \pm 18.10$ . This difference between the groups was statistically significant ( $P < 0.05$ )

In environmental and welfare factors, hospital midwives reported lower level mean of JSS compared to health care centre midwives hospital midwives mean  $\pm$  SD =  $25.72 \pm 16.75$ ; health care centre midwives mean  $\pm$  SD =  $39.27 \pm 20.61$ .

This difference between the groups was statistically significant ( $P < 0.05$ ).

In the first set of "structural and managerial factors", the mean of JSS in health care and treatment sectors were  $47.90 \pm 18.81$  and  $50.79 \pm 17.62$  respectively. Also in the second

set of "individual factors", both health care and treatment sectors staff reported the highest level of (JSS) ( $64.83 \pm 18.50$  and  $63.55 \pm 17.44$ , respectively). In the third set of "social factors", the mean of (JSS) in health care and treatment sectors were  $60.51 \pm 20.46$  and  $57.87 \pm 17.46$  respectively. For the fourth set "work-itself factors", the mean of JSS in health care and treatment sectors were  $51.95 \pm 18.84$  and  $50.56 \pm 16.44$  respectively. Also in the fifth set of "environmental and welfare factors", both health care and treatment sector staff reported the lowest level of (JSS) ( $38.47 \pm 19.86$  and  $36.83 \pm 19.86$ , respectively).

Ranking of the factors affecting job satisfaction in the health care and treatment sectors staff based on the Friedman test method is given in Table 5.

**Table 5:** Ranking of the factors affecting job satisfaction in the health and treatment sector staffs based on the Friedman test

Aspects	Job satisfaction level	Health sector	Friedman rate	Treatment sector	Friedman rate
<b>Structural and managerial factors</b>	Max	The competence of direct manager	15.25	Access to direct manager	15.93
	Min	Recognition system	7.57	Recognition system	8.90
<b>Individual factors</b>	Max	The level of their mastery and professional skills	5.92	The degree of their professional self-esteem	5.80
	Min	Sense of valuableness in organization	3.95	The degree of balance between job and their private life	4.01
<b>Social factors</b>	Max	The degree of customer's satisfaction in organization	3.99	Relationship between co-workers	3.66
	Min	Relationship between manager and co-workers	3.19	The degree of patient involvement	3.26
<b>Work-itself factors</b>	Max	The level of usefulness of their job in society	8.01	The level of usefulness of their job in society	5.92
	Min	The degree of clarity in promotion path for employee in organization	4.21	Occupational stress	3.75
<b>Environmental and welfare factors</b>	Max	The possibility to use their leaves in needed times	7.32	Equipment in work place	6.49
	Min	Welfare facilities available in their organizations	3.35	Welfare facilities available in their organizations	3.72



## Discussion

The results of the present study demonstrated that the mean of OJSS in both health care and treatment sectors was above the 50. The main researcher (one of the authors) is the manager in provincial health center. The job satisfaction differences between health care center staff and hospitals staff was an intellectual preoccupation for him, and the fact that the health care and treatment sector staff had the same mean of OJSS was against his expectation. A possible explanation for this result is that job satisfaction has many dimensions and these different dimensions leads to the calculation of the mean of OJSS.

Our results are in agreement with results of Fernandez in Madrid, Monjamed in Tehran, Iran, Mirmolaie in Tehran, Iran and Jahani in Arak, Iran<sup>12-15</sup>.

Regarding structural and managerial factors, it was shown that the highest job satisfaction in health care system belongs to "The competence of direct manager", while in treatment sector, the staff were more satisfied with "Access to direct manager". Zahedi et al. expressed in their study that the majority of staff are satisfied with their direct manager and one of the main factors in success of health care and treatment sectors is the appropriate management of the officials<sup>16</sup>. Moreover, findings by Monjamed revealed the majority of staff were satisfied with authorities accessibility in urgent moments<sup>12</sup>. However, the results of Mirmolaie et al., investigation showed that the majority of midwives are dissatisfied with accessibility of authorities in urgent moments<sup>13</sup>. The reason behind such discrepancy goes back to the mode of system managing and the period that manager spends in order to make relationship with his/her staff. At the same factor, the highest job dissatisfaction of staff in both health care and treatment sectors are about the recognition system. It was also in agreement with results of Mirmolaie and Jahani investigation<sup>13-14</sup>. The Findings of the study by

Sengin showed the lack of recognition has been linked to decreased job satisfaction and decreased nurse retention<sup>17</sup>. Certainly, encouraging and acknowledging the staff leads to their appropriate functions and increase their professional motivation and satisfactions. This issue should be considered by the authorities and all necessary steps should be taken to improve staff's corporal and intellectual encouragement.

Regarding to individual factors, health care systems staff were more satisfied with "the level of their mastery and professional skills", while treatment sector staff were more satisfied with "the degree of their professional self-esteem". The results of the Sengin's study revealed that professionalism is one of the most effective factors upon the nurses' professional satisfaction<sup>17</sup>. Moreover and looking at the same factor, the highest degree of dissatisfaction among health care sector staff was "about their sense of valuableness in organization", The health organization needs to know what health care staff do and can do, not what they used to do decades ago. As well, health care staff should become more involved in organization policy-making. Health care staffs need to present themselves as though they belong to an important job and to demonstrate their caring role more completely. While with treatment staff, the most dissatisfaction was caused by the "degree of balance between job and their private life". Mirzabeigi et al. study results showed that more than half of nurses were dissatisfied with the relationship between job and personal life<sup>18</sup>. A possible explanation could be that the workloads of treatment staff are very high and the majority of these personnel are shift work staff, that causes unbalance between job and their private life.

Regarding to social factors, health care staff were more satisfied with "the degree of customer's satisfaction in their organizations". Findings of the study by Newman & Maylors indicate that nurses enjoy providing good patient care, meeting patients' needs, seeing them

progress and receive praise for their care<sup>19</sup>. Having a good relationship with patients and a strong and deep human connection with patients seem to have a significant impact on job satisfaction<sup>20</sup>. While treatment staff were highly satisfied with "the mode of relationship between co-workers" which was in agreement with the findings of Jahani et al. At the same factor, health staff had the most dissatisfaction with "the mode of relationship between managers and co-workers". And thus, it was parallel with the studies of Mirzabeigi, monjamed et al. and Jahani et al.<sup>12,14,18</sup>. While, on the contrary, it was shown by Lundh's study that about 68 percent of Swedish nurses are satisfied with the mode of the relationship with their supervisors<sup>18</sup>. Hopefully by providing such adequate interferences to improve the relationship between managers and staff, the differences with other countries would be decreased to its minimum level. On the same factor, it can be said that treatment staff had the lowest satisfaction with "the degree of patient involvement".

Regarding the work-itself factors, both health care and treatment staff had the most satisfaction with "the level of usefulness of their job in society", that our findings is in agreement with Jahany's et al. research<sup>14</sup>. Additionally, the most dissatisfaction of health staff was about "the degree of clarity in promotion path for staff in Organization". This finding was in agreement with the result of Zahedi et al.<sup>14</sup>. Djukic et al. in their studies mentioned the factor of opportunities for promotion as one of the effective issues upon job satisfaction<sup>21</sup>. At the same factor, staff of treatment sector had the most dissatisfaction with "the degree of stress in their work". A meta-analysis carried out by Zangaro et al., showed that job stress has the strongest negative linkage with job satisfaction<sup>22</sup>. Stress has been mentioned for a long period of time as a key factor which can influence job satisfaction and retention<sup>23</sup>. Job stress is common in all professions. Whereas all organizations experienced flux and changes so that ways

which originate job stress should be detected in order to decrease them.

Regarding environmental and welfare factors, health staff were more satisfied with "the possibility to use their leaves in needed times", the issue which was in agreement with results of Monjamed et al.<sup>12</sup>. While treatment staff had the most satisfaction with the "equipment in work place", which is parallel with Jahany's et al. results<sup>14</sup>. On this factor, the most dissatisfaction in both health care and treatment staff was the "welfare facilities available in their organizations", the issue which confirmed Monjamed's study<sup>12</sup>. The more staff satisfied from work conditions, the less is the possibility of their leave of job and the more they dissatisfied, the more they become absent, resign and deserted from organization<sup>24</sup>. Thus, job satisfaction is an influential issue upon staff retention, efficiency and the quality of his/her works<sup>25</sup>. The energetic presence of staff is effective upon their efficiency. Authorities must consider the importance of establishing facilities of tranquillity, and reflection. Regarding research findings, it can be suggested to the officials working in Ministry of Health to increase the levels of payments and facilities for this group of society. The mean of JSS of the staff of both provincial health and treatment centres was similar. Probably it can be traced to the similarity of payment levels in both deputies. Also the average point of job satisfaction between hospital GPs and those health care centre GPs was quite meaningfully different except for social factors. The reason behind such discrepancy may goes back to the low level of payments in health care centres and lack of pensions. Based on the study by Bodur carried out in Turkey, the pensions and salaries of staff who work in health care centres were more critical in comparison with those who work in hospitals<sup>26</sup>.

The mean of (JSS) among health care centre midwives in comparison with hospital midwives was meaningfully different in environmental and welfare factors. Hospital mid-

wives were less satisfied by this factor. In the case of environmental and welfare factors the most cases of dissatisfaction of staff in 2 mentioned locations were related to welfare facilities outside work area, such as transportation facilities, nursery schools and the like. It was also in agreement with results of Monjameds' et al. study<sup>12</sup>. Moreover the mean of JSS between hospital and health care centres experts, in factor of individual factors was meaningfully different. It may be inferred that the lack of balance between job and private life has caused such significant difference between nurses and environmental health experts, as they were dissatisfied from this issue.

One of the characteristics of present study was the participation of the majority of staff in health care and treatment sectors, such as nurses, midwives, general practitioners, and health experts and so on. While in most of the studies, only one group of nurses incorporated and satisfaction was considered.

It should be mentioned that one limitation of present study was lack of willing among some hospital and health care centre staff to participate in this study, for the reason that they were dissatisfied with system situations and work conditions. As another limitation, the study population of East Azerbaijan may not be representative for the whole country and other studies in various locations of Iran are recommended.

## **Conclusion**

The job satisfactions mean does significantly differ between primary health care and treatment sectors. Primary health care employees had more satisfaction with their job compared to treatment sector employees. According to the results, considering environmental and welfare factors belonging to workplace can probably lead to an increase in job satisfaction among staff working in these two sections.

## **Suggestions**

- Job satisfaction would improve by applying these factors:
- Establishing appropriate reward and promote the recognition systems
- Reducing staff's workload
- Improving communication between managers and staff
- Making clear the promotion path for staff in the organization
- Establishing appropriate standards to reduce occupational stress
- Increasing facilities for staff

## **Ethical consideration**

Ethical Committee of Tabriz University of Medical Sciences approved the study protocol. The questionnaire data were kept confidential and respondents were assured of their right to withdraw at any time. The names of the respondents were not recorded on the questionnaire, thus rendering the data anonymous.

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## **Competing interests**

The authors declare that there is no conflict of interests.

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