

Job satisfaction among nurses in Iran: does gender matter?

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Objective: Job satisfaction has attracted increasing attention of scholars of different disciplines in recent years. However, there are limited studies on nurses' job satisfaction and the impact of gender on nurses' satisfaction with their job, particularly in Iran as a developing economy. The paper aimed to examine job satisfaction among Iranian nurses. Specifically, this study aimed to explore how Iranian male and female nurses are different in their overall and the dimensions of their job satisfaction.

Methods: The population for this study was nurses who worked in public and private hospitals in Tehran, the capital city of Iran. A sample of 146 nurses in eight different hospitals was selected to participate in this survey using the random sampling method. The sample consisted of 81 female and 65 male nurses.

Results: Our findings revealed that job satisfaction of both male and female nurses was at a median level. Furthermore, the level of overall job satisfaction among female was low, and the mean score of the dimensions of their job satisfaction was lower than their male counterparts. Furthermore, according to the independent *t*-test analysis, the difference between all dimensions of job satisfaction of females and males was significant, except for their satisfaction with the specific job of nursing.

Conclusion: The findings of this study suggested that overall female nurses' nursing job satisfaction was lower than males in all dimensions except for their satisfaction with their job. Yet, there was no significant difference between female and male nurses in all of the dimensions of their job satisfaction except for their satisfaction with their specific nursing job. This finding forms a basis for the development of management principles and practices, specifically in relation to human resource management in public and private hospitals in Iran.

Keywords: job satisfaction, gender, nurses, health care system, human resource management, health care organizational management, Iran

Introduction

Health care systems (HCS) have been undergoing significant transformations and changes all over the world¹ and the daily activities of health care organizations have increasingly changed in recent years. The advent of modern diagnostic and therapeutic methods and technologies, information technology and a new generation of purchasers and providers have faced health care systems with unpredictable environmental consumer culture. These changes caused health care organizations to continuously redesign and restructure health care systems to survive in a highly competitive health care marketplace.²

In this context, health care managers have been encountering critical challenges including the decreasing number of nurses and, the high rate and negative effects of

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nurses' turnover all over the world.³ Regardless of being a developed and developing nation, countries are struggling with these challenges.⁴

Health care organizational behavior researchers and practitioners have long been focused on employees' job satisfaction.^{4,5} In fact, job satisfaction has been examined more than any other variable in health care organizations due to its influential impact on the performance of individual employees and the organization.⁶ While nurses are an important part of HCS and are engaged in about 90% of direct patient-related activities, there are wide gaps in the research on nurses.³ Despite its prevalence in the past 80 years, there is no consensus on the definition of job satisfaction.⁷ Kantek and Kaya⁸ defined job satisfaction as the correspondence between the expectations of employees and the gains they receive from their organization that is demonstrated in their attitudes, beliefs, knowledge, behavior and assessments of their organization.

Job satisfaction of nurses highly influence the quality of the services they provide to patients,^{4,7} their commitment to health care organizations⁷ their health and well-being, absenteeism and turnover, and their relationships with their colleagues.⁶ Kantek and Kaya also showed that there is a significant relationship between job satisfaction and nurses' values, while a negative relationship between intent to leave job and nurses' values. In addition, dissatisfied nurses are inclined to excessive turnover.⁸ While, satisfied workers are less likely to be absent or withdraw from their job.⁶

Prior studies suggested work condition and environment⁹ and the prevalence of organizational culture among hospital care providers⁷ as influential on nurses' job satisfaction.

Research on nurses' job satisfaction across countries showed that job dissatisfaction was different among nurses. For example, Aiken et al showed that nurses' job dissatisfaction in the United States (41%) was at the highest level and in Germany (17%) was at the lowest level.¹⁰ In a recent cross-country study, organized nurses' job satisfaction from highest to lowest level in Germany, the U.S., New Zealand, and Canada, South Korea, UK, China, and Japan respectively.¹¹ In general, researchers found that nurses' job satisfaction in developed countries was higher than their counterparts in the less developed nations. Park, Jeoung, Lee, and Sok showed that Korean nurses' job satisfaction was weak and lower than the median level.¹² The findings of Al Maqbali's study in Oman showed nurses have a medium level of satisfaction.¹³ More specifically, the nurses in Oman were highly satisfied with their

interactions with coworkers and their lowest job satisfaction was related to the extrinsic rewards they receive.

In Iran, the results of studies on nurses' job satisfaction showed that the majority of nurses have moderate to low levels of job satisfaction. Particularly, researchers found that most of nurses are moderately satisfied with their job conditions, communication with their coworkers, occupational positions, supervision, policy-making and management, link with private work and their satisfaction with nursing job security, pay and benefits were low.¹⁴

A variety of individual characteristics influence nurses' job satisfaction. Of these personal characteristics, previous research suggested a significant association between gender and job satisfaction of nurses.¹⁵ Specifically in Iran, the majority of female nurses complained about gender discriminations in their workplaces and their unequal rights and job promotions with their male colleagues. The results of previous researches also showed that male nurses in hospitals are more satisfied with their job than females.¹⁶ However, research comparing job satisfaction between males and females is scarce. This study aimed to narrow the gap by examining job satisfaction among nurses and if there is a significant difference between male and female nurses in their nursing job satisfaction in the context of public and private hospitals in Tehran province, Iran. More specifically, the present study addressed the following objectives:

1. Assessing the degree of Iranian nurses' job satisfaction in public and private hospitals;
2. Examining the differences between female and male nurses' job satisfaction.

Literature review

In a broad perspective, job satisfaction is defined as individuals' feelings about their jobs. Previous studies defined job satisfaction as "the positive or negative assessment judgments that people make about their jobs"¹⁷ (p. 175). Researchers have also defined the concept as an intrinsic attitude derived from the attainment of wants and needs from one's career experiences.¹⁸

Job satisfaction has been considered as one of the key factors related to the quality of nurses' performances in HCS. Job satisfaction is frequently understood as the degree of balance between the expectations of personnel of a job and its features.^{19,20} According to Seo et al,²¹ job satisfaction is the level to which individuals like their work. It is broadly accepted that job satisfaction is a multidimensional

variable and includes how people feel about a variety of both intrinsic and extrinsic job components.²²

Of demographic variables, gender, as a result of its nature and its influence on the physical differences between men and women and their opinion plays a important role in job satisfaction of the individuals.²³ Even though the fact that women receive less and enjoy considerably less autonomy and status in the workplace than men, studies has revealed that women be inclined to show higher degree of satisfaction than men.²⁴ Researches have showed that while male select jobs with high income, responsibility, and opportunities for leadership; female select jobs with good co-workers, good managers, and the chance to aid co-workers.²⁵

Previous research revealed that women have higher job satisfaction than men.²⁶ Researchers have also explored gender differences among nurses at hospitals. In recent years, an extant of research has examined the association between gender and job satisfaction.²⁷ However, the results of these studies have been contradictory and inconsistent.²⁸ Some studies indicated that females are more satisfied with their nursing jobs than males,²⁹ while others have found that males have higher nursing job satisfaction than females.¹⁵ However, other studies showed a non-significant influence of gender on nurses' perceived job satisfaction.^{27,30}

Researches have also focused on measuring job satisfaction. Of different dimensions of nursing job satisfaction, these studies examined the influence of pay and benefits,^{9,19,31} autonomy,⁹ task requirements,⁹ quality of hospital management,³¹ promotion,^{19,22} communication,^{19,22,31} supervision,^{19,31} co-workers,^{19,22} relationships,⁹ hospital organisation,^{9,19,31} working relationships,³¹ the job itself,^{19,31} safety on the job,³¹ quality standards,³¹ and recognition²² on overall nurses' perceived job satisfaction.

Materials and methods

The study used a survey method aimed to examine the association between gender and job satisfaction among nurses in Iran. All of the nurses in Tehran province, the capital city of Iran, with at least one-year nursing experience were included in this research. The sample in this study consisted of nurses in eight public and private hospitals (namely Sajad; Najmieh, Masihe Daneshvari, Loqman, Imam Khomai, Mahdieh, Akhtar, and Baqiyatallah hospitals).

Using the random sampling method with 5% of error, 160 nurses were selected to complete the questionnaire. First, the nurses were categorized based on their gender in

each hospital. First, we defined the nurses in 8 hospitals in Tehran and then we assigned numbers to the nurses in each hospital. Therefore, the nurses had an equal chance to be selected as a sample for our study. Of the 160 questionnaires administered, 146 responses were used in the final analysis and 14 were deleted because some items were not answered (the response rate was 73%).

The sample consisted of 81 (55%) female and 65 (45%) male nurses. The questionnaire was developed based on the previous literature. Nursing job satisfaction was measured using the Job Satisfaction Index.^{5,7,31,32} The questionnaire contained two parts. Part I asked the participants' demographic information including their gender, age, education, type of hospital (public, private), work experience in health care system, work experience in that particular hospital and the current area of job. Part II contained the scale to measure the level of nurses' job satisfaction. This scale consisted of 44 questions measuring 10 dimensions of nurses' job satisfaction. All items were assessed on a 5-point Likert scale, ranged from 1="strongly disagree" to 5="strongly agree".

The instrument was translated from English into Persian and then back-translated with minor modifications. The validity of the questionnaire was checked by a panel of management and hospital experts including faculty members and nurses. The questionnaire was modified based on the findings of a pilot test using a group of 30 nurses. Table 1 represents the coefficients of Cronbach's alpha, means, and standard deviations for job satisfaction of the participants and its dimensions. As Table 1 shows, the reliability coefficients were ranged between 0.70–0.93 indicating high reliability of the questionnaire and its items.

We employed the following techniques to provide informed consent to participants of our study:

1. Before distributing the questionnaires, a member of the management committee of each hospital in this study examined and ethically approved the questionnaires and made sure that the items will not affect the participants in any ways.
2. We also ensured that the items did not have any conflict with the interests of the participants by asking a panel of researchers to examine the questionnaires.
3. The participants in this study filled written informed consents for their details to be used in the analysis. In the informed consents, the authors briefly described

Table 1 Cronbach's alpha coefficients, means and standard deviations of variables

Job satisfaction and its dimensions	General (female and male)		Male		Female		Cronbach's alpha
	Mean	SD	Mean	SD	Mean	SD	
Satisfaction with the specific job of nursing (SSJN)	3.61	0.81	3.64	0.90	3.59	0.74	0.70
Safety (SAF)	2.71	1.09	3.00	1.21	2.48	0.93	0.89
Quality of Management (QM)	2.84	0.9	3.1	1.01	2.63	0.74	0.81
Composite Satisfaction (CS)	2.97	1.02	3.25	1.15	2.75	0.85	0.89
Feelings about the Hospital (FH)	5.215	1.46	5.7	1.61	4.83	1.21	0.86
Communications (COM)	2.81	0.80	3.04	0.9	2.63	0.64	0.72
Pay and Benefits (P&B)	2.585	0.86	2.79	0.98	2.42	0.72	0.75
Support for Quality (SQ)	2.96	0.81	3.15	0.93	2.80	0.66	0.82
Supervision (S)	3.21	0.73	3.42	0.85	3.04	0.57	0.89
Work Relationships (WR)	3.40	0.77	3.60	0.82	3.24	0.68	0.70
Job satisfaction (overall)	2.96	0.64	3.18	0.80	2.79	0.41	0.936

the research project objectives and benefits for the development of innovation behavior in health care organizations and asked the participants' agreement to participate in the study. The researchers assured the participants that they are ready to answer any of their questions at any time about the research and the questionnaire items. The participants also were not asked to provide any personal information such as their name, address, place of employment, date of birth, telephone number, email address and position in the hospital to ensure their anonymity. Then, the researchers described the process of the research in details and why the participants have been selected to participate in the research. We also explained that participation in this study will not take more than 20 mins from the participants.

- The researchers also assured the participants that participation in the study had no risk and was completely voluntary and the participants could withdraw from the study at any time. We also ensured the participants their withdrawal from the study will not affect their work in any ways. The participants were ensured that that their personal information and their answers to the questions will be kept totally confidential and will be analyzed in group. The participants also could refuse to answer any questions if they would not like to answer the questions.

Before analyzing the data, the missing values for each item in the questionnaire were checked (if the participants did not answer more than 10% of items, they were deleted from the analysis). In case the missing data was less than

10 percent, the missing responses were replaced by the mean of related items. The normality of the 10 dimensions was tested using the Kolmogorov–Smirnov statistic test with all variables displaying normality at the 0.05 significance level. To examine correlations among all of the 10 dimensions of the scale, we used the Pearson's correlation coefficient. As Table 2 indicates, all of the dimensions of nursing job satisfaction had significant correlations. This indicates the dimensions belong to the nursing job satisfaction construct. Then, we examined the differences between job satisfaction between male and female nurses using the *t*-test.

Results and discussion

Analysis of nurses' demographic characteristics

Our analysis indicated the average age of the female nurses was 41.1 (SD=20.53) years old and the mean age for male nurses was 35.6 (SD=14.5) years old. About 79% of the nurses had a Bachelor degree, followed by those having a Diploma (14.4%) and a Master's degree (5.9%). About 86% of the female nurses and 69% of the male nurses had Bachelor degrees. The average of work experience for the nurses was 9.87±6.73 (female, 10.06±6.43; male, 9.61±7.15) and the average of work experience in their hospital was 8.15±6.63 (female, 8.21±6.04; male, 8.06±7.47).

Job satisfaction of male and female nurses

As shown in Table 3, 58 percent of female nurses had a medium job satisfaction (138.45±11.53) and for 42 percent had a low satisfaction (108.57±9.32). Importantly, no female had a high level of nursing job satisfaction.

Table 2 Correlation matrix of satisfaction scales

Job satisfaction dimensions	1	2	3	4	5	6	7	8	9	10
1-Satisfaction with the specific job of nursing	1									
2-Safety	0.292**	1								
3-Quality of Management	0.367**	0.676**	1							
4-Composite Satisfaction	0.521**	0.695**	0.658**	1						
5-Feelings about the Hospital	0.505**	0.686**	0.729**	0.823**	1					
6-Communications	0.320**	0.603**	0.682**	0.564**	0.607**	1				
7-Pay and Benefits	0.306**	0.553**	0.566**	0.548**	0.608**	0.682**	1			
8-Support for Quality	0.496**	0.499**	0.667**	0.589**	0.606**	0.568**	0.607**	1		
9-Supervision	0.461**	0.462**	0.619**	0.604**	0.607**	0.417**	0.487**	0.713**	1	
10-Working Relationships	0.252**	0.345**	0.537**	0.383**	0.578**	0.371**	0.379**	0.508**	0.588**	1

Notes: ** $p < 0.01$.

Table 3 Frequency distribution of nurses by their different level of job satisfaction (n=146)

	Level of job satisfaction	F	Percent	Average job satisfaction Scores	Average age years	Average experience Years	Average experience years in this hospital
Female	High (above 170)	–	–	–	–	–	–
	Medium (123–169)	47	58	138.45±11.53	33.17	10.14	8.57
	Low (upto122)	34	42	108.57±9.32	32.7	9.96	7.77
Male	High (above 170)	15	23.1	191±15.99	34.5	9.92	8.70
	Medium (123–169)	31	47.7	147.53±12.26	32.46	9.00	7.54
	Low (upto122)	19	29.2	100.15±14.46	33.16	10.35	8.53

While almost 23 percent of male nurses scored in the high level of job satisfaction (191±15.99), 47 percent had a medium level (147.53±12.26) and 29 percent had a low level (100.15±14.46) of job satisfaction. The results also showed that there was no positive significant relationship between age, years of experience in the hospital, and years of experience in the current area of work with the nurses' job satisfaction respectively ($r = -0.077$, $p=0.357$; $r = 0.058$, $p=0.539$; $r = 0.025$, $p=0.773$).

We used the one-sample t-test to compare the nurses' mean responses with the midpoint of the dimensions of their job satisfaction (value = 3*). Our analysis showed that females are categorized in two groups (medium and low) and males are categorized into three groups (high, medium and low) (Table 3). In confidence level of 95%, responses below, above or equal to 3 were respectively considered as indicative of a negative, positive and neutral satisfaction. This examined whether the mean of job satisfaction of male or female is significantly different from the mean of expected satisfaction (=3) (Table 4).

Gender and nursing job satisfaction

Independent sample *t*-test was used by calculating a sum-up of the items for assessing differences between male and female nurses in the dimensions of their job satisfaction. Results revealed a significant difference in all dimensions of job satisfaction of male and female nurses except for one dimension that is their satisfaction with nursing job. More specifically, the results of this study showed that safety, quality of management, composite satisfaction, communications, and pay and benefits were significantly different among the male and female participants ($p=0.05$) and there were significant differences in their feelings about the hospital, support for quality, supervision and working relationships ($p=0.01$). Also, the results suggested that there were significant differences between male and female nurses in their overall job satisfaction ($p=0.01$). The results also indicated that job satisfaction of male nurses was higher than female in all dimensions.

Table 5, represents the results of the independent sample *t*-test with the two-tailed probability which is less than 0.05 for safety, quality of management, composite

Table 4 Frequency distribution of nurses by their different level of job satisfaction dimension (n=146)

Job satisfaction dimension	Level of satisfaction											
	Female			Male			Female			Male		
	M	SD		M	SD		Low	Medium	High	Low	Medium	High
Satisfaction with the specific job of nursing	10.77**	2.23		10.93**	2.69		10.06±2.32	11.30±2.03	13.67±1.40	8.37±2.63	11.19±1.56	13.67±1.40
Safety	4.96**	1.86		6.00 ^{ns}	2.41		3.74±1.42	5.85±1.64	8.60±1.30	3.95±1.31	6.00±2.13	8.60±1.30
Quality of Management	10.53**	2.97		12.4 ^{ns}	4.05		8.56±2.32	11.96±2.55	17.27±1.94	7.79±2.10	12.87±2.26	17.27±1.94
Composite Satisfaction	8.25**	2.54		9.73 ^{ns}	3.45		6.41±1.96	9.60±2.05	13.53±1.81	5.68±2.06	10.39±1.84	13.53±1.81
Feelings about the Hospital	19.32*	4.84		22.80*	6.46		15.44±3.49	22.13±3.60	30.80±3.28	15.53±3.70	23.39±3.17	30.80±3.28
Communications	7.90 ^{ns}	1.92		9.12 ^{ns}	2.76		7.15±1.79	8.45±1.84	12.40±1.59	6.58±2.29	9.10±1.58	12.40±1.59
Pay and Benefits	9.69 ^{ns}	2.88		11.1 ^{ns}	3.95		8.59±3.12	10.49±2.44	16.07±2.60	7.37±2.03	11.13±2.57	16.07±2.60
Support for Quality	14.00*	3.28		15.7 ^{ns}	4.66		12.03±3.57	15.43±2.15	21.20±2.37	10.74±2.38	16.23±3.07	21.20±2.37
Supervision	30.37 ^{ns}	5.73		34.24**	8.48		27.00±5.00	32.81±4.98	44.13±3.94	24.37±4.42	35.52±4.72	44.13±3.94
Working Relationships	9.72**	2.05		10.80**	2.46		9.12±2.33	10.17±1.72	13.33±1.40	8.58±1.74	10.94±1.98	13.33±1.40

Notes: **p*<0.05; ***p*<0.01.

satisfaction, communications, and pay and benefits. As the table shows, the coefficient for feelings about the hospital, support for quality, supervision, and working relationships is less than 0.01. However, there were no significant difference between female and male in their satisfaction with the specific job of nursing (*t*=−0.394).

Discussion

Health care systems are undergoing dramatic changes and challenges in structure and financing and effective human resource management facilities to deal with these challenges. In order to improve human resource management in health care organizations, our research examined nurses' job satisfaction and if gender plays a role in their perceptions toward nursing job satisfaction. Our research showed significant differences between male and female nurses' job satisfaction in all dimensions (*p*<0.01) except for one dimension that is satisfaction with the nursing job. In general, this study supported the finding of previous researches both in Iran¹⁴ and in other Asian countries such as China and Japan concluded that nurses' job satisfaction was at a medium level.¹¹

Our result in this study showed that the most satisfied nurses had a Diploma degree, while many researchers found that nurses who had a master's degree were the most satisfied.³³ The findings approved that job satisfaction of Iranian nurses was at a medium level. Golbasi et al,³⁴ Muhammad Masum et al,³⁵ in Turkish hospitals. Lorber and Skela Savič³⁶ also found a medium nurses' job satisfaction level in Slovenian hospitals. We found that men nurses were more satisfied with their job than women nurses. The lowest levels of satisfaction were shown for pay and benefits level, safety, communications and quality of management. Similar results were found by Lorber and Skela Savič,³⁶ who revealed that the lowest degree of satisfaction were for pay level.

Research on the relationship between gender and job satisfaction are inconsistent in the literature. The result of this study showed that there were significant differences between female and male nurses in their job satisfaction. Our result indicated that females' job satisfaction was lower than males in all dimensions. These results are opposite to previous researches suggested that females were more satisfied with their job than male and are in accordance with those studies indicated that males were more satisfied than female.^{33,37}

Table 5 Comparison of dimensions of job satisfaction between female and male

Job satisfaction dimensions	Female		Male		df	t-value
	Mean	SD	Mean	SD		
Satisfaction with the specific job of nursing	10.777	2.230	10.938	2.691	144	-0.394 ^{ns}
Safety	4.96	1.86	6.00	2.41	118.45	-2.84*
Quality of Management	10.530	2.971	12.400	4.053	114.110	-3.108*
Composite Satisfaction	8.259	2.548	9.738	3.456	114.576	-2.879*
Feelings about the Hospital	19.321	4.849	22.800	6.464	115.948	-3.601**
Communications	7.901	1.920	9.123	2.764	110.001	-3.025*
Pay and Benefits	9.691	2.883	11.169	3.955	113.700	-2.522*
Support for Quality	14.000	3.282	15.769	4.666	110.928	-2.586**
Supervision	30.370	5.734	34.246	8.487	107.899	-3.150**
Working Relationships	9.728	2.055	10.800	2.469	124.219	-2.804**
Overall Satisfaction	125.54	18.26	142.98	36.18	89.84	-3.54**

Notes: * $p < 0.05$; ** $p < 0.01$.

Conclusion

According to the review of the literature, our research investigates different components of job satisfaction of nurses based on the perceptions of males and females who were worked in public and private hospitals in Tehran, Iran. This study can be seen as one of the first studies of the field of nurses' job satisfaction with emphasize on gender analysis. Nurses totally expressed their job satisfaction at a moderate level. The findings of our research would be a helpful guideline for health care system managers who want to reduce turnover of nurses. Improving the job satisfaction of nurses in the workplace may reduce their turnover, absentees and withdraw from their job.⁶

Amongst the ten job satisfaction factors, female nurses showed a higher satisfaction level with their feelings about the hospital, satisfaction with the specific job of nursing and work relationships, also male nurses showed satisfaction with the specific job of nursing, feelings about the hospital, work relationships and supervision.

This study has some limitations that should be considered in future studies. This study focused on nurses from only 8 public and private hospitals in Iran and only a limited number of nurses included in this study. Therefore, the generalizability of the findings to other groups of nurses is limited. In the future, researchers should investigate nurses' job satisfaction using a larger sample size and in other cities than Tehran. Future research can also examine the impact of other variables than gender both at the individual (such as age, level of education, personal characteristics) and organizational

levels (organizational structure, management, and culture) on nursing job satisfaction.

Disclosure

The authors report no conflicts of interest in this work.

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