

Research Paper: Comparing Job Satisfaction of Prehospital and Hospital Emergency Nurses in Mashhad, Iran



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ABSTRACT

Background: Job satisfaction and its effective factors are important issue in productivity improvement. The main purpose of this study is to determine the job satisfaction of nurses in pre-hospital and hospital emergency rooms of Mashhad health system.

Materials and Methods: The present study was descriptive-analytic with cross-sectional design carried out on nurses working in 168 pre-hospital emergency bases and 12 emergency departments of public hospitals of Mashhad affiliated to Mashhad University of Medical Sciences in 2017. A total of 232 nurses working in pre-hospital and hospital emergency units were selected and studied. A reliable and valid questionnaire including personal and professional information was used for collecting data based on the standardized Brayfield and Ruth Job Satisfaction test. Data analysis was performed by 1-sample t test, 1-way t test, two Independent samples, and linear regression analysis in SPSS V. 18.

Results: A total of 232 nurses answered to questionnaires. The average quality level of job satisfaction based on Brayfield and Ruth test was 62.6% in pre-hospital emergency nurses and 62.4% in nurses of emergency hospital. It was also found that the variables of age, gender, educational level, service record, working hours, income level and marital status were significant determinants of job satisfaction, so that these variables were altogether explain about 30% ($F=13.5$, $P<0.001$) of job satisfaction.

Conclusion: Based on the findings of this study, nurses' workplace is not associated with their job satisfaction. Also, job satisfaction is affected by many demographic variables, which change due to time and place and social conditions.

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1. Introduction

Job satisfaction is one of the effective variables of organizational performance [1]. Its high level can increase dynamism and productivity of the organization, while its low level can create problems such as job displacement, turnover, absenteeism, low motivation [2], marital conflicts and reduced efficiency and productivity in staff and organization [3]. There are many studies that assessed job satisfaction as an organizational variable. This issue can be studied at three levels [4]: 1. Individual level, i.e. job satisfaction is actually an emotional response to a job [5]; 2. Organizational level, i.e., dissatisfied staff are more likely to be absent, resign or quite the job [6], while satisfied employees have higher levels of physical and mental health, live longer [7], and engage more in their assigned tasks [8]; and 3. Social level, i.e. job satisfaction can increase self-esteem and life satisfaction. In fact, job satisfaction affects the entire community, and employees who are satisfied with their jobs satisfy their clients, too [9, 10].

There are several definitions for job satisfaction. For example, Fisher and Hanna defined job satisfaction as an internal factor that is a kind of emotional adaptation to occupation and employment conditions [11]. Locke defined job satisfaction as a pleasant or positive emotional state that comes from evaluating one's job or job experience [12]. Nowadays attention to job satisfaction in health care setting has become more important [13]. Nurses, as the largest and most important members of health care organizations, have an important role in promoting health community [14]. Nurses' job satisfaction is a phenomenon that is affected by many variables [15]. Several factors such as support of managers, communication with colleagues, the nature of the job, job security, and the amount of salary and benefits have impact on the job satisfaction of nurses [16].

In Iran, the job satisfaction of nurses has been investigated in several studies, mostly indicating that their job satisfaction is at moderate level [17]. Jafar Jalal et al. [18] In their study, reported that the majority of nurses (62%) had low job satisfaction. In the literature, almost no study was found comparing job satisfaction of prehospital and hospital emergency nurses. Prehospital and hospital emergency department, due to their particular work environment, shortage of locally trained staff [19], time limit to deal with the situation, patient's critical condition, expectations of patient's companions, openness of the workplace, and fear of incompetence in saving the lives of dying patients, have specific

conditions that create stress in the employees of this sector [20-22].

Considering the bad road traffic conditions in Iran, and given that the traffic death rate in this country is much higher compared to many other countries, and also, due to the state of its medical centers and the long distance that sometimes exists between the road hospitals, emergency teams are in stressful situations at all times throughout the day [23]. Certainly, these psychological stresses can affect the job satisfaction of prehospital and hospital emergency nurses [24].

In this regard and given that the difference in job satisfaction of prehospital and hospital emergency nurses is unknown, this study attempted to investigate the job satisfaction of prehospital and hospital emergency nurses in Mashhad, Iran and compare them with each other.

2. Materials and Methods

This study is an analytical and cross-sectional study conducted in 2017. Study population consisted of all nurses working in prehospital emergency departments of Khorasan Razavi Province and emergency departments of public hospitals in Mashhad City. Of 26 public hospitals, only 12 hospitals took part in the study, while all prehospital emergency departments accepted to participate in our study. All nurses in these centers in three working shifts (n=242) were selected as study samples (census method of sampling).

To collect data, a demographic form as well as the Persian version of Brayfield-Rothe's job satisfaction questionnaire were employed. The demographic form collected information about age, sex, level of education, marital status, type of emergency, work experience, employment status, average monthly working hours, monthly income, payment satisfaction, economic status, and insurance status. The Brayfield-Rothe's questionnaire consists of 19 items based on 5-point Likert-type scale ranging from "strongly agree" to "strongly disagree" which assesses the attitude of individuals towards their job. The score range is between 19 and 95, and the cut-off score is 57.

The validity and reliability of this questionnaire have been assessed and verified by many studies. The correlation coefficient of this test is more than 80%, and its reliability score was reported as 87% by Brayfield and Rothe (1951) [25]. Reliability of its Persian version was reported as 78% by Mokhtari (1994) using split-half reli-

ability method, and 93% by Abdollahzadeh and Karamlooei (1994) measuring Cronbach α coefficient [26].

While observing the ethical principles adopted by the Medical Ethics Committee of the University of Welfare and Rehabilitation Sciences, general description of the research objectives, how to fill in the questionnaire, and the confidentiality of information were given to all respondents.

The collected data were analyzed in SPSS V. 18 by performing 1-sample t test, Independent t test, and linear regression analysis. The data of the job satisfaction questionnaire were qualitatively analyzed and categorized at three low, moderate, and high levels.

3. Results

Of 242 distributed questionnaires, 232 questionnaires were completed and returned. In prehospital emergency departments where only male nurses were working, there were 115 subjects. In this group, most of the participants were in the age range of 31–40 years (58.3%). All of them had BS degree. Majority of them were married (n=100, 87%) with a work experience of 5 years or less (n=42, 36.5%) and under contractual employment (n=52, 45.2%). The highest monthly working hours was reported as 161–200 h (n=87, 75.7%) and the highest monthly income was 20 million IRR (n=92, 80%). Most of subjects in this group had moderate pay satisfaction (n=73, 63.5%) and economically were in a

moderate condition (n=83, 72.2%). Moreover, most of them had health insurance (n=111, 96.5%).

In hospital emergency group, there were 117 nurses mostly female (n=71, 60.7%) with an age range of 31–40 years. Most of subjects in this group were married (n=89, 76.1%), with a BS degree (n=97, 82.9%), work experience of 11–15 years (n=38, 32.5%), and under contractual employment (n=38, 32.5%). The highest working hours in this group was 161–200 hours per month (n=66, 56.4%) with a monthly income of more than 20 million IRR (n=99, 84.6%). Pay satisfaction of most of them was moderate (n=74, 63.2%), as well as their economic conditions (n=88, 75.2%) and all of them had health insurance.

One-sample t test results showed that most of hospital emergency nurses (62.44%) and prehospital emergency departments (62.6%) had moderate job satisfaction (Table 1). The results of the Independent t test presented in Table 2 indicate no significant difference between the mean job satisfaction scores of two groups (t=0.55, P=0.58). Since the job satisfaction was the same in terms of the type of emergency, the linear regression analysis was used to investigate the effect of other demographic factors. The regression analysis results revealed that variables of gender, educational level, work experience, and income level were significant determinants of job satisfaction (Table 3).

Table 1. One-sample t test results

Group	Mean	SD	t Test	
			t	Sig.
Hospital emergency	46.07	11.39	10.36	0.0001
Prehospital emergency	45.25	11.29	11.15	0.0001
Total	45.67	11.33	15.23	0.0001

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Table 2. The Independent t test results

Group	No.	Mean	Levene's Test for Equality of Variances		T Test for Equality of Means	
			F	Sig.	t	Sig.
Hospital emergency	117	46.07	0.001	0.99	0.55	0.58
Prehospital emergency	115	45.25				

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Table 3. Coefficients of linear regression model

Model	B	Standard Error	β	t	Sig.
(Constant)	17.68	5.88	-	3	0.003
Gender (Male)	-4.95	1.47	-0.202	-3.35	0.001
Educational level	9.40	2.42	0.233	3.88	0.0001
Monthly income	64.6	78.1	0.224	3.71	0.0001
Work experience	36.2	0.599	0.238	94.3	0.0001

R=0.448; R²=0.201; F=14.25; P<0.001

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4. Discussion

Based on the study findings, 62.6% of prehospital emergency nurses and 62.4% of hospital emergency nurses reported moderate job satisfaction. This is consistent with the results of Maštaneh and Mouseli and Fallahnejad and Sabagh Mollahoseiny studies [16, 27]. Maštaneh and Mouseli assessed job satisfaction and the effective demographic and job factors in nurses of teaching hospitals affiliated to Hormozgan University of Medical Sciences in Iran and found out that their job satisfaction was at moderate level.

Fallahnejad and Sabagh Mollahoseiny investigated the relationship between job satisfaction and marital satisfaction among nurses and reported that they had moderate level of job satisfaction. There is also a similar study conducted by Forouzanfar et al. examining job satisfaction of emergency nurses in hospitals affiliated to Shahid Beheshti University of Medical Sciences in Iran [28]. They reported a job satisfaction of 64%.

The findings of this study also revealed no significant difference between the mean score of job satisfaction of prehospital and hospital emergency groups, and the job satisfaction of nurses in both groups was at moderate level. Therefore, nurses' workplace was not related to their job satisfaction. These results are in agreement with the findings of Maštaneh and Mousel, Fallahnejad and Sabagh Mollahoseiny and Forouzanfar et al, and Lorber and Skela Savic [16, 27-29], but inconsistent with the findings of Keyvanara et al. who studied relationship between emotional labor and job satisfaction among the staff and nursing managers of the teaching hospitals affiliated to Isfahan University of Medical Sciences in Iran [30].

In their study, job satisfaction was above average. This difference may be because the type of nurses' workplace plays a role in their job satisfaction, and this satisfaction

is lower in emergency wards where there are unpredictable situations, higher pressure, and limited timeframe for assessing the impact of treatments.

Our results are not in agreement with the findings of Ahmadi et al. either [31]. They examined the structural relations between job satisfaction and organization citizenship behavior among nurses working in hospitals located in Qazvin and Isfahan cities in Iran. The level of job satisfaction was reported low among the nurses. Perhaps the reason lies in the difference in studied workplace and sample size. It should be noted that job satisfaction is different depending on the social and environmental conditions such as the position of nursing profession in the community, hospital facilities, benefits, payments, salaries, and even nurses' attitudes.

The variables that were significantly related to job satisfaction in this study were gender, education, income, and work experience. Job satisfaction is likely to be affected by a variety of variables, which also changes with respect to time and place and social conditions. It seems that social, economic, and cultural conditions governing society largely determine the factors affecting the job satisfaction of nurses. In this study, there was a negative and significant relationship between gender and job satisfaction, where the job satisfaction of female nurses was lower than male ones. This is consistent with the findings of Gholami Fesharaki et al. and Zarrin Taj and Soleymani [32], while in the study of Goetz et al., women were more satisfied than men [13, 32, 33]. Probably, the relationship between job satisfaction and gender is influenced by the cultural differences and the conditions of the studied communities such as being household head, being independent, or the expectations of women from their jobs.

A positive and significant relationship was found between education level and job satisfaction, i.e. the higher the level of education of the subjects, the higher the level

of job satisfaction. Rastgar Farghzadeh et al., Gholami Fesharaki et al. and Abbaschian et al. also found a significant association between these two variables [5, 13, 34], but Forouzanfar et al. results are against our findings [28]. The existing facilities in the community seem to provide more job satisfaction for nurses with higher degrees. On the other hand, it can be claimed that at higher levels of education, the factors such as competence and promotion increase the job satisfaction.

The relationship between work experience and job satisfaction was positive and significant; i.e. increased work experience means higher level of job satisfaction. This is in agreement with the findings of Ommen et al. and Hosseinzadeh et al. [35, 36], but contrary to the findings of Baboukani et al. [37]. This may be because in Baboukani, nurses had higher work pressure or a more difficult job [37].

Finally, in our study, it was found out that there was a positive and significant relationship between income level and job satisfaction of emergency nurses, and those with higher income, showed greater level of job satisfaction. In this regard, our study is consistent with the studies of Forouzanfar [16], Fuladvandi [17] and Marzoughi [38], but against the study of Karimi Baboukani [37]. Considering inflationary conditions prevailing in Iran's economy, in case of meeting the initial financial needs of the staff of an organization, job satisfaction can be changed into other forms such as job autonomy satisfaction or coworker relationship satisfaction.

5. Conclusion

Based on the findings of this study, nurses' workplace was not associated with their job satisfaction. Job satisfaction was affected by some demographic variables such as gender, education, income, and work experience. Payment satisfaction and the monthly working hours proportional to the performance, have an important role in improving the level of job satisfaction of prehospital and hospital emergency nurses. Since emergency care is more important because of its specific conditions and more vulnerable patients, it is suggested that more studies be conducted on the current situation throughout the country in order to provide valuable results for relevant authorities.

There were some limitations in conducting this study. For example, since this study examined the job satisfaction of prehospital and hospital emergency nurses in Mashhad, its results cannot be generalized to all nurses all over the country. The studied population may not be

a complete picture of the population, depending on the sample size.

Ethical Considerations

Compliance with ethical guidelines

This study has been approved by the Ethics Committee of the University of Welfare and Rehabilitation Sciences (code: IR.USWR.REC.1395.293).

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Authors contributions

All the authors have read and approved the manuscript.

Conflict of interest

The authors declare no conflict of interest.

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