

Healthcare workers' satisfaction with their working conditions after the implementation of the healthcare reform plan in Rafsanjan University of Medical Sciences, Iran, in 2015

Heidarzadeh A, MSc¹, Shahmohamadipoor P, MSc², Sadeghi T, PhD³, Kazemi M, PhD^{4*}

1- Instructor, Dept. of Medical-Surgical Nursing, Faculty of Nursing & Midwifery, Rafsanjan University of Medical Sciences, Rafsanjan, Iran. 2- Instructor, Dept. of Pediatric Nursing, Faculty of Nursing & Midwifery, Rafsanjan University of Medical Sciences, Rafsanjan, Iran. 3- Assistant Prof., of Nursing, Dept. of Pediatric Nursing, Faculty of Nursing & Midwifery, Rafsanjan University of Medical Sciences, Rafsanjan, Iran. 4- Assistant Prof., of Nursing, Dept. of Medical-Surgical Nursing, Faculty of Nursing & Midwifery, Rafsanjan University of Medical Sciences, Rafsanjan, Iran.

Abstract

Received: February 2015, Accepted: March 2015

Background: The objective of the health system reform plan is to review individuals' satisfaction in the field of health and to reduce their concerns and medical expenses. The disregarding of some workers in this plan seems to have resulted in their dissatisfaction, which can in turn cause problems such as neglecting of patients and patients' dissatisfaction. Therefore, the identification of the requirements of this plan from the perspective of nurses, as one of the main members of the healthcare team, can have a significant role in enhancing, promoting, and sustaining the objectives of this plan. This study aimed to evaluate the satisfaction of healthcare workers with their working conditions after the implementation of the healthcare reform plan in Rafsanjan University of Medical Sciences, Iran.

Materials and Methods: The participants of this descriptive study consisted of 191 medical personnel. Their satisfaction with their working conditions after the implementation of the healthcare reform plan was evaluated using a researcher-made questionnaire. The validity of the instrument was confirmed through content validity and immediate reliability was confirmed through Cronbach's alpha. Data were analyzed using independent t-test and ANOVA in SPSS software.

Results: The overall mean satisfaction was 2.22 ± 0.66 (out of 5). The lowest satisfaction score was related to the area of salary and welfare status and the highest satisfaction score was related to the work environment and conditions, and the health system reform plan.

Conclusions: Given the key role of the medical personnel in the health system reform plan, creating opportunities to improve their welfare and rights is recommended and must be considered by authorities.

Keywords: Satisfaction, Health Personnel, Healthcare Reform.

Introduction

Due to the important role of health systems in the field of disease prevention, care, and treatment, they have a distinct position in society. Therefore, the occupational dissatisfaction of their staff causes a reduction in the quality of their services which in turn leads to patient dissatisfaction (1-3). On the other hand, nurses constitute the largest group of personnel in the health team (4). Through the observation of the state of healthcare and treatment in the world, it is evident that at least 50% of health services are the nurses'

responsibilities. In some countries, 80% of the health and treatment services are performed by nurses. Therefore, the quality of healthcare to a large extent depends on the quality of nursing care (5, 6).

Numerous studies have shown that job satisfaction is an important factor in increasing productivity, employees' regard for the

* **Corresponding author:** Majeed Kazemi, Dept. of Medical-Surgical Nursing, Faculty of Nursing & Midwifery, Rafsanjan University of Medical Sciences, Rafsanjan, Iran.

Email: Maj_kaZ@yahoo.com

Copyright: © 2015 The Author(s); Published by Rafsanjan University of Medical Sciences. This is an open-access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited

organization and sense of belonging to the workplace, quantity and quality of work, good human relations in the workplace, correct relationships, morale, and love and passion towards work (7, 8). Different countries have reviewed the status of job satisfaction in the business system and have studied job satisfaction from different perspectives (2). Based on the results of previous studies, various factors such as the level of management support, workload, method of communication with colleagues and doctors, the predictable nature of the job, shifts, knowledge and skill, psychological support, authorization, rules and regulations, and rights and benefits had an impact on the job satisfaction of healthcare workers (2, 9, 10). The highest satisfaction rate of treatment personnel was related to America (41%), Scotland (38%), the UK (36%), Canada (33%), and Germany (17%), respectively (11). Job satisfaction forms a part of life satisfaction. On the enterprise-level, neglecting job satisfaction will disrupt the system of the organization in the long run and result in rebellion, absenteeism from work, and decreased sense of responsibility and commitment of the nurses. The study by Taylor in America showed that job satisfaction was associated with improved quality of services provided by nurses and increased productivity (2, 12). A study conducted by the American Nurses Association showed that during two years, with an increase of 25% in nurses' job satisfaction, their motivation to continue working had increased by 29% (13). On the other hand, infection rate, injuries due to falls from the bed, and bedsores had decreased by 78%, 17%, and 59%, respectively (13). Therefore, considering the importance of this issue, providing appropriate strategies to increase the satisfaction of healthcare workers, especially nurses who constitute the largest group of healthcare providers, is essential.

In recent years, the Ministry of Health of Iran has designed the healthcare reform plan with the aim of increasing patient satisfaction and

improving the quality of healthcare services. The healthcare reform plan is a framework of improvements for the healthcare system and it has been carried out since May 2014 with the aim of resolving the main problems of the health system. This plan is presently being implemented, with the emphasis of policy-makers and health planners in the country and the aim of financial protection of the people, equity in access to health services, and improvement of the quality of hospital services in the country. This plan includes seven aspects regarding the reduction of expenses of hospitalized patients, presence of resident doctors, improvement of the quality of visiting services, and hoteling quality improvement in hospitals affiliated to the Ministry of Health. This plan is also incorporates support for the retention of physicians in deprived regions, financial protection for the incurable, special, and disadvantaged patients, and promotion of vaginal delivery. It is hoped that its implementation will solve many of the existing problems (13).

The healthcare reform plan is placed at the beginning of the path to the improvement of society's health, and surely the continuance of this plan requires special attention. The overall objective of the healthcare reform plan is to review the people's satisfaction in healthcare and reduce public health costs. Some personnel have been overlooked in this plan; therefore, it seems to have resulted in their dissatisfaction which can cause problems such as neglecting of patients and patients' dissatisfaction.

Therefore, identification of the requirements of this plan from the nurses' perspective, as one of the main members of the health team, can have an important contribution in the promotion, advancement, and continuance of the objectives of this plan. Consequently, this study was conducted with the aim to evaluate the satisfaction of healthcare workers with their working conditions after the implementation of the healthcare reform plan in Rafsanjan University of Medical Sciences, Rafsanjan, Iran.

Material and Methods

This was a descriptive study. The study population included all clinical staff working in health centers of Rafsanjan University of Medical Sciences ($n = 335$). The sample size was calculated using Cochran's formula as 190 people.

$$n = \frac{\frac{z^2 pq}{d^2}}{1 + \frac{1}{N} \left(\frac{z^2 pq}{d^2} - 1 \right)}$$

The participants were selected using stratified random sampling according to their organizational positions (medics, nurses, operating room specialists, anesthesiologists, and obstetrician) from among those eligible for the study. Informed consents were obtained from all individuals. Data collection tools included a demographic characteristics questionnaire (marital status, age, gender, position, and employment status) and the Healthcare Workers Satisfaction Questionnaire. To design the study tool, standardized questionnaires which examined the satisfaction of clinical staff were gathered through literature review and 19 questions that were appropriate to the healthcare reform plan were extracted with the opinion of professors and experts in the field of reform plan. The designed questionnaire consisted of 19 questions with 4 subscales; satisfaction with the conditions and workload (7 items), satisfaction with welfare (5 items), satisfaction with their legal status (3 items), and satisfaction with the healthcare development plan (4 items). Moreover, one evaluation question was included to assess the satisfaction of the personnel with authorities. The questions were scores on a 5-point Likert scale ranging from 1 (completely dissatisfied) to 5 (completely satisfied). The obtained scores ranged from 19 to 95. To analyze the scores in each area, the scores of each area, which were in the range of 1 to 5, were divided by the number of the questions. The validity and reliability of the amended questionnaire were

evaluated. To obtain the content and face validity of the designed questionnaire, it was distributed among 10 experts in healthcare reform plan implementation. After applying their opinions, its reliability was also evaluated. To assess the reliability of the questionnaire, test-retest was used. The questionnaire was completed by 10 medical personnel and completed again 14 days later. After completion, the correlation coefficient was calculated and the reliability was obtained as 0.83. In addition, validity was also examined using Cronbach's alpha coefficient which was obtained as 0.83. The collected data were entered into SPSS software (version 18, SPSS Inc., Chicago, IL, USA) and then analyzed using central tendency and dispersion indices, such as mean and standard deviation, and independent t-test and ANOVA.

Results

A total of 191 medical personnel participated in this study. The mean age of the participants was 34.48 ± 6.9 , and their age ranged from 22 to 51 years. Among the participants, 146 individuals were women (76.8%) and 152 (80%) were married. Moreover, 86 individuals (45.3%) were formal employees, 87 (45.8%) were task-based contractual employees, and 8.9% were project and contractual employees. In terms of place of work, the highest percentage of individuals (77.2%) were working at Ali-ibn Abi Talib Hospital, Rafsanjan, and 12.5% were working at Niknafs Maternity Hospital, Rafsanjan. Among the participants, 135 (70.7%) were nurses and 17.2% were paramedics and assistant paramedics. Furthermore, 73.3% had a bachelor's degree and 14% had a diploma. Based on the results, the overall mean of satisfaction was 44.54 ± 13.2 (Total: 95). The mean overall satisfaction score of all the dimensions after the implementation of the healthcare reform plan was 2.22 ± 0.66 (Total: 5), which was less than average. The lowest satisfaction score was related to the questions of the wages and welfare status dimension,

while the highest satisfaction score was, respectively, related to the questions of the

conditions and workplace, and healthcare reform plan dimensions (Table 1).

Table 1: Mean and standard deviation of the total score of satisfaction with the healthcare reform plan and its components from the perspective of healthcare workers

Items (total score of the 5 items)	Mean	SD
Working place and condition	2.47	0.74
Welfare status	1.91	0.71
Income	1.82	0.84
Implementation of the healthcare reform plan	2.45	0.97
Total satisfaction score	2.22	0.66

No significant relationships were observed between any of the demographic variables and the overall score of satisfaction with the healthcare reform plan. However, the satisfaction score of the healthcare workers of Niknafs Maternity Hospital was higher than that of other medical centers. In addition, individuals with higher education degrees were less satisfied with the healthcare reform plan. The comparison of scores of satisfaction

dimensions revealed a statistically significant difference between gender and the dimension of satisfaction with the reform plan ($P = 0.030$). The score of this dimension was higher in women than men. There was also a statistically significant difference between work place and the dimension of satisfaction with the reform plan ($P = 0.002$). The medical personnel at Niknafs Maternity Hospital had higher satisfaction scores (Table 2).

Table 2: The relationship between demographic variables and the overall mean score of satisfaction with the healthcare reform plan

Demographic variables		Mean±SD	P-Value
Gender	Male	42.5 ± 12.4	0.2
	Female	45.1 ± 13.4	
Marital status	Marital	44.5 ± 13.5	0.9
	Single	44.5 ± 12	
Employment status	Official	45.5 ± 12.4	0.5
	Task-based contractual	44.1 ± 13.9	
	Contractual	43.8 ± 14.2	
	Project	37.6 ± 12.8	
Position	Paramedic and assistant paramedic	46.1 ± 11.7	0.06
	Nurse	42.9 ± 13.5	
	Midwife	52.88 ± 9.1	
	Operating room specialists and anesthesiologists	50.5 ± 12.8	
Education level	Diploma and lower	46.3 ± 12.2	0.6
	Bachelor's degree	44.3 ± 13.5	
	Master's degree	40.3 ± 7.9	
Place of work	Ali-ibn Abi Taleb hospital	43.3 ± 12.3	0.06
	Moradi hospital	43.8 ± 16.4	
	Niknafs hospital	50.3 ± 12.1	

Discussion

Health systems of different countries require modifications in their structure and function in order to adjust to the changing conditions and

continuously meet the needs of the society. Appropriate monitoring and evaluation are necessary in order to resolve the basic shortcomings of the system. The results of the

present study showed that the overall satisfaction score after implementation of the reform plan was lower than average. The study by Alavi et al. compared the satisfaction scores of employee of hospitals in Isfahan, Iran, before and after the implementation of the reform plan. They found that the mean satisfaction score before and after the reform plan was 2.54 ± 0.5 and 2.47 ± 0.67 , respectively. The score of satisfaction with motivational factors before the plan was 2.49 ± 0.65 and after the plan was 2.53 ± 0.91 (14). The results of other studies that examined the satisfaction of healthcare workers prior to the implementation of the healthcare reform plan also indicated low job satisfaction. Mastaneh et al. in 2014 reported average levels of staff satisfaction (11). In addition, foreign studies that investigated the satisfaction of the medical team, including the studies by Lorber and Savic in 2012 in hospitals in Slovenia (15), and Golbasi et al. in hospitals in Turkey in 2008 (16), also reported an average satisfaction level for healthcare workers. In addition, Ziapoor in 2012 (2) and Mahmodi et al. in 2012 reported a moderate rate of nursing job satisfaction (17). Results of other studies showed that the overall job satisfaction score of nurses was at a moderate level. The highest satisfaction rate was related to job descriptions and professional independence and the lowest satisfaction rate was related to the subscale of income and interaction (18). However, the results of Nolan et al. showed that 85% of the nurses were interested in their jobs and were satisfied (19).

The results of the present study also indicated that the lowest level of satisfaction of personnel with the reform plan was related to the rights and welfare status and the highest level of satisfaction was related to the dimension of the healthcare reform plan. In this regard, the study by Mardi et al. showed that the personnel of Kowsar Hospital were not satisfied with the healthcare reform plan because of the increased workload, unchanged salary, and personnel shortages (20). The results related to before the implementation of

the reform plan also indicated the dissatisfaction of the healthcare workers, especially nurses regarding salary and welfare facilities. In this regard, Mastaneh et al. reported that the lowest level of satisfaction of nurses was related to salaries and facilities (11). In addition, the results of the study by Greenslade and Jamieson showed that in units that the management provides rewards for and supports the personnel who provide high quality healthcare, the personnel will direct their efforts toward completing their job roles, and thus, will act more effectively (21). The findings of Mirzabeygi et al. also showed that 74.55% were dissatisfied with the work environment and facilities (13). Rajabiyekta also indicated in his study that 50% of the participants were dissatisfied with the welfare facilities (22). The comparison of countries in this regard showed nurses in Germany (61%) were satisfied with the opportunity of promotion, while the nurses in the United States of America (57%) and Canada (69%) reported the highest satisfaction with their rights. The British nurses compared to the Australian nurses were more dissatisfied (4, 10).

In addition, Sharma & Bajpai showed that payments and increased income were one of the most important factors of job satisfaction (23).

Based on the above results and the results of the mentioned studies, the medical personnel's satisfaction with the healthcare reform plan implementation was at a moderate level and the least satisfaction with the reform plan and before its implementation was related to the income and welfare status dimensions. If the health system is imagined as an organized whole the various components of which are connected with the output of the system, the necessity of considering the needs of all sectors of the system and especially the human resources dimension will become evident. The reality is that the implementation of the plan has resulted in skyrocketing medical staff income, while so far no revenue increase has been implemented for other personnel.

Experiences expressed in this area have illustrated that this plan has resulted in increase in earnings of doctors, but for other personnel, especially nurses, there has been no salary increase (19). On the other hand, in Iran, very limited welfare facilities are available specifically for medical personnel; this limits their use of these facilities. The medical profession is a very high stress line of work; therefore, planning for and providing these amenities are essential (13). The limitation of this study was the lack of precision in completing the questionnaires. Therefore, it is suggested that further studies be conducted with bigger sample sizes and in different towns.

Conclusion

Based on the findings, the main objective of the healthcare reform plan is to improve the quality of healthcare and to increase the satisfaction of the people. Increased satisfaction of the hospital staff will increase and improve health requirements, ultimately improving patients' satisfaction with medical services. Given the key role of the medical staff in the healthcare reform plan and that their vibrant presence can affect their productivity, creating facilities that provide peace of mind and reinvigorate the employees should be considered by the authorities. As personnel's dissatisfaction with work conditions increases, the rate of leaving the job, absenteeism, resignation, and escape from the organization will also increase. Therefore, job satisfaction will affect employee retention, productivity, and quality of work.

Acknowledgments

This article was extracted from a research study with the code of ethics of IR.RUMS.REC.1394.199 and was funded by the Rafsanjan University of Medical Sciences. Our sincere appreciation goes to all of the medical personnel who participated in this study and Rafsanjan University of Medical

Sciences for providing the possibility to conduct this study.

Conflict of interest: None declared.

References

- 1- Dashti S, Faradmal J, Pianvayse P, Salehiniya H. Factors affecting job satisfaction among the staff of health care workers of hamadan county in 2012. *Pajouhan Scientific Journal* 2014; 12(4): 28-34.
- 2- Ziapour A. An investigation of the job satisfaction and related factors in nurses of Kermanshah hospitals. *Journal of Paramedical Science and Rehabilitation* 2013; 2(2):27-34.
- 3- Schiestel C. Job satisfaction among Arizona adult nurse practitioners. *J Am Acad Nurse Pract* 2007; 19(1): 30-4.
- 4- Bagheri Sh, Kousha A, Janati A. Factors affecting nurses' job satisfaction: a systematic survey. *Hakim Health Systems Research Journal* 2012; 15(2):130-9.
- 5- Heydari A, Mazloun SR, Karimi Moonaghi H, Mojalli M, Hosseini Shahidi L, Namdar AreshtanabH. Educational challenges ahead of nursing from the perspective of faculty members of Mashhad University of medical sciences. *Journal of Advances in Medical Education & Professionalism* 2013; 1(4):125-8.
- 6- Mousavi SS, Movahedirad S. The study of job satisfaction among nurses in Tehran military hospitals in 2014. *Journal of Nurse and Physician within War* 2015; 2(5):183-8.
- 7- Nasiripour AA, Delgoshaie B, Kalhor R, Kiaei M, Shahbahrani E, Tabatabaee SS. Effective factors on staffs' job satisfaction based on herzberg theory in Qazvin teaching hospitals. *Journal of Payavard Salamat* 2013; 7(4):354-65.
- 8- Forouzanfar MM, Alitaleshi H, Hashemi B, Baratloo A, Motamedi M, Majidi A, et al. Emergency nurses job satisfaction and its determinants in the Hospitals of Shahid Beheshti University of Medical Sciences. *Journal of Shahid Beheshti School of Nursing and Midwifery* 2013; 23(80):10-4.
- 9- Papp I, Markkanen M, von Bonsdorff M. Clinical environment as a learning environment: student nurses' perceptions concerning clinical learning experiences. *Nurse Educ Today* 2003; 23(4):262-8.
- 10- Lu H, While AE, Barriball KL. Job satisfaction among nurses: a literature review. *Int J Nurs Stud* 2005; 42(2):211-27.
- 11- Mastaneh Z, Mouseli L, Zamani M, Boromand F, Dadipoor S, Beizaei F, et al. Investigation of nursing job satisfaction in university hospitals affiliated to Hormozgan University of medical

- sciences. Medical Journal of Hormozgan University 2014; 18(3):283-9.
- 12- Coomber B, Barriball KL. Impact of job satisfaction components on intent to leave and turnover for hospital-based nurses: a review of the research literature. *Int J Nurs Stud* 2007; 44(2):297-314.
 - 13- Mirzabeigi Gh, Salemi S, Sanjari M, Shirazi F, Heidari Sh, Maleki S. Job Satisfaction among Iranian Nurses. *Journal of Hayat* 2009;15(1):49-59.
 - 14- Alavi A, Askari H, Safdarian A. Comparison of employee satisfaction in Isfahan hospitals before and after the Health reform plan. Paper presented at: The International Conference on sustainable development in the health system: Approaches and Challenges; 2014 Feb 24-26; Esfahan, Iran.
 - 15- Lorber M, Skela Savič B. Job satisfaction of nurses and identifying factors of job satisfaction in Slovenian Hospitals. *Croat Med J* 2012; 53(3):263-70.
 - 16- Golbasi Z, Kelleci M, Dogan S. Relationship between coping strategies, individual characteristics and job satisfaction in a sample of hospital nurses: Cross-section questionnaire survey. *Int J Nurs Stud* 2008; 45(12):1800-6.
 - 17- Mahmoudi H, Soori laki A, Boulhasani M, Sepahvand MJ. The relationship between use of communication skills and job satisfaction of nurses 2012; 20 (101):77-82.
 - 18- Mirfarhadi N, Moosavi S, Tabari R, Kazemnejad E. Predictive factors of job satisfaction among nurses in therapeutic-educational centers of Guilan University of Medical Science. *Journal of Neyshabur University of Medical Sciences* 2014; 2(4):27-35.
 - 19- Nolan M, Nolan J, Grant G. Maintaining nurses' job satisfaction and morale. *Br J Nurs* 1995; 4(19):1149-54.
 - 20- Mardi R, Gholami S, Navabi A, Oveysi S. staff satisfaction of Qazvin Kosar hospital with the implementation of Health care reform plan. Paper presented at: The International Conference on sustainable development in the health system: Approaches and Challenges; 2014 Feb 24-26; Esfahan, Iran.
 - 21- Greenslade JH, Jimmieson NL. Organizational factors impacting on patient satisfaction: a cross sectional examination of service climate and linkages to nurses' effort and performance. *Int J Nurs Stud*. 2011; 48(10):1188-98.
 - 22- Rajabi Yekta F. The Assessment of related factors in satisfaction of nurses in delivered interventions. [MSc Thesis]. Tehran: Tehran University of Medical Sciences; 2004.
 - 23- Sharma JP, Bajpai N. Salary satisfaction as an antecedent of job satisfaction: development of a regression model to determine the linearity between salary satisfaction and job satisfaction in a public and a private organization. *European Journal of Social Sciences* 2011; 18(3):450-61.