

Nurses' job satisfaction and their perceived organizational justice in Kerman University of Medical Sciences: an evaluation for the Iranian health system transformation plan

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Abstract

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Background: Nurses' job satisfaction is a determining factor in providing high quality and safe care services and obtaining patient satisfaction. It seems that with the implementation of the Transformation Plan for the Iranian Health System and due to changes in various factors such as professional, individual, and organizational circumstances, nurses' perceived organizational justice, and as a result, their job satisfaction has changed. Therefore, the present study was conducted with the aim to determine nurses' perception of organizational justice and job satisfaction in the context of the Transformation Plan for the Iranian Health System.

Materials and Methods: In this descriptive study, the job satisfaction and perception of organizational justice of 345 nurses in hospitals affiliated with Kerman University of Medical Sciences, Iran, were assessed in the first half of 2016. The subjects were selected through stratified random sampling. The data collection tools consisted of the Perceived Organizational Justice Scale (Niehoff and Moorman) and Mueller/McCloskey Nurse Job Satisfaction Scale (MMSS). Data were analyzed using descriptive statistical tests, Pearson correlation, and multiple linear regression in SPSS software and with the consideration of the significance level of 0.05.

Results: Mean score of nurses' perceived organization justice and job satisfaction were 50.580 ± 12.93 and 76.000 ± 20.34 , respectively. A positive and significant correlation was observed between perceived organizational justice and job satisfaction of nurses ($r = 0.635$; $P = 0.001$). Based on the results of this study, nurses' perceived organizational justice can significantly predict their job satisfaction up to 39.3%.

Conclusion: The rate of perception of organizational justice is a predictive factor of nurses' job satisfaction. Therefore, in the context of the Transformation Plan for the Iranian Health System, the policymakers' consideration of factors effective on the establishment of organizational justice, and as result, improvement of nurses' job satisfaction seems necessary.

Keywords: Job Satisfaction, Nurses, Iran

Introduction

Today, due to the grave effect of nurses' job satisfaction on the performance of the health care system, this concept has become an important issue in the health industry. The high rate of nurses' satisfaction is an important factor in guaranteeing the provision of high quality and safe care services and has been recognized as the barrier to them leaving their

profession (1, 2). The shortage of competent, well trained, and experienced nurses is a fundamental and important problem in health care systems around the world, especially underdeveloped and developing countries (3).

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The job satisfaction model previously used focused on individuals' feelings toward their occupation. However, it is evident that factors which result in satisfaction or dissatisfaction with a job not only rely on the nature of that job, but also on the way the expectations of the individuals from their job are met (4). Researchers have shown that job satisfaction is mainly related to the cognitive and emotional dimension; thus, it depends on employees' beliefs and emotions regarding their occupation. Therefore, discussions on job satisfaction involve the individual's feelings toward the job, interpersonal relationships in the work environment, and managers' method of impacting employees (5). In a previous content analysis study, in addition to the 3 characteristics of autonomy, interpersonal relationships, and patient care, leadership method and organizational policies were also reported as important factors in nurses' job satisfaction (6).

Evidently, the chief goal of managers of organizations is having satisfied employees and the goal of each employee is to find a job which is suited to their interests and abilities, results in their success, and is an opportunity for their promotion. Researches have shown that satisfied employees want to be creative and are more committed to the organization and the employer (7, 8). In the nursing profession, scientific reports suggest that nurses who seem satisfied with their occupation have higher physical, mental, and emotional capabilities and show greater effort toward accomplishing their responsibilities, and thus, the promotion of the quality of the provided care (9). Therefore, the health care services provided by them result in high patient satisfaction (10).

Many factors can predict the level of job satisfaction among nurses, such as organizational environment (11), the quality of relationships with colleagues and managers (12, 13), income level, working hours (14), occupational promotion and safety processes (15), and professional effectiveness (16). Some studies on Iranian nurses have shown

that unsuitable work conditions, including personnel shortage, high work load, unspecified job description, lack of equipment, and limited clinical practice, conflict with doctors, administrative issues and lack of supportive working conditions (17), and low perceived organizational justice (18), result in job dissatisfaction.

Perceived organizational justice illustrates personnel's perception of fairness in organizational behavior toward them which includes the 3 components of distributive, procedural, and interactional justice (19). In an organization, in which justice is established, the efforts of the personnel for reaching their goals will not be futile. On the other hand, the clear perception of an unjust result by personnel will impact their feelings, understanding, and ultimately their behavior (20). Organizational justice has a relationship with individuals' emotional reactions. Decreased perceived organizational justice has an important role in personnel's health; it will result in increased risk of mental tensions (21), numerous absences and displacements (22), and psychiatric disorders such as aggression in the workplace (23). In the nursing profession, desirable perceived organizational justice provides the necessary conditions for nurses to achieve their career goals and has a positive effect on occupational enthusiasm, hope and optimism, effectiveness, and resiliency, and in general, the physiological capital of nurses (24).

In line with the implementation of the Transformation Plan for the Iranian Health System in the beginning of 2014 and due to the significant reduction in treatment costs, the number of referrals to governmental hospitals, and as a result, the rate of hospital bed occupancy increased. This occurrence without any variation in the environment of hospitals and increased manpower resulted in an increase in the work load of the health team including nurses. On the other hand, injustice and immense difference between the income of doctors and other health team members, and disregard for their role in the improvement of

the quality of care which was the philosophy behind this plan has turned into a new challenge regarding organizational justice and job satisfaction of Iranian nurses (25).

Nurses are the largest group of the health team; therefore, the World Health Organization (WHO) has announced their performance in the health system as important due to its direct impact on the health of the society (3). On the other hand, scientific texts show that a comprehensive understanding of nurses' job satisfaction and its related factors in Iran, especially after the implementation of the Transformation Plan for the Iranian Health System, does not exist. Evidently, acquiring objective evidence in this regard, in addition to attracting and maintaining experienced nurses, will assist in the empowerment of nurses. Thus, the present study was conducted with the aim to determine the relationship between nurses' perceived organizational justice and job satisfaction in the context of the Transformation Plan for the Iranian Health System.

Material and Methods

This descriptive study was conducted on nurses in Shahid Bahonar, Afzalipour, and Shafa Hospitals which are affiliated with Kerman University of Medical Sciences, Iran, in 2016. The study population consisted of 1400 nurses and sampling was performed through stratified random sampling. Sample volume was determined as 345 subjects using the following equation and consideration of $\alpha = 0.05$ and $P = 34\%$ for the nurses' job satisfaction (26) and $d = 0.05$.

$$n = \frac{(z_{1-\alpha/2})^2 \cdot P(1-P)}{d^2} \quad (\text{Equation 1})$$

The study inclusion criteria consisted of a minimum of 12 months of work experience, a bachelor's degree or higher, and willingness to participate in the study. The exclusion criteria consisted of lack willingness to take part in the

study, education level of lower than associate's degree, and work experience of less than 1 year. The data collection tools used were a demographic characteristics form (including questions on age, gender, work experience, employment status, education, and occupational position), and the Perceived Organizational Justice Scale (Niehoff and Moorman) (27) and Mueller/McCloskey Nurse Job Satisfaction Scale (MMSS) (28).

The Perceived Organizational Scale consists of 20 questions scored based on a 5-point Likert scale ranging from 1-5 (completely disagree-completely agree). The highest and lowest possible scores of this scale are 100 and 20, respectively. This scale consists of 3 subscales of distributive justice (5 questions), interactional justice (6 questions), and procedural justice (9 questions). The possible scores of the subscales of distributive, interactional, and procedural justice are, respectively, 5-25, 6-30, and 9-45. In the study by Mohammadi et al., the validity of this scale was approved and its reliability was determined as 0.91 using Cronbach's alpha (29).

The MMSS consists of 31 items scored based on a 5-point Likert scale ranging from 1-5 (completely dissatisfied-completely satisfied) (28). This scale was used after writing and gaining the permission of its authors. Since this scale was used for the first time in Iran in this study, the original version of the questionnaire was separately translated into Persian by 3 professors fluent in English using the forward-backward method. The final Persian version was reviewed by one of the professors. The validity of this tool was evaluated and approved by 10 specialists (clinical nurses, faculty members in nursing, and nursing managers). The reliability coefficient of the MMSS was determined at 0.93 using Cronbach's alpha. The MMSS consists of the subscales of satisfaction with external rewards and balance between work and family (each with 3 items and total scores of 3-15), satisfaction with work schedule (6 items and total score of 6-30), satisfaction with colleagues (2 items and total score of 2-10),

and satisfaction with interaction opportunities, professional opportunities, and rewards and acknowledgment (each 4 items and total score of 4-20), and satisfaction with control and accountability (5 items and total score of 5-25).

The researchers began the collection of data after obtaining approval and an introduction letter from the research council of Rafsanjan University of Medical Sciences, Iran, (ethical code: IR.IR.rums.REC.1394.232) and coordinating with the Research Deputy of Kerman University of Medical Sciences and its affiliated hospitals. The number of subjects from each hospital and each of their wards was determined in proportion to the population of nurses in each hospital affiliated to Kerman University of Medical Sciences, and then, subjects were randomly selected from each ward. The random table of numbers was used for sampling and sampling was conducted in morning, evening, and night shifts. The questionnaires were completed through self-report method. The participants entered the study voluntarily and verbal consent was obtained from each subject. The participants were assured of the confidentiality of their information and that their names will not be recorded. Data were analyzed using descriptive statistical tests, Pearson correlation coefficient, and multiple linear regression in SPSS software (version 16, SPSS Inc., Chicago, IL, USA).

Results

Among the 346 participants, 299 (86.4%) were women, and 116 (33.5%), 107 (30.9%), and 64 (18.5%) were, respectively, official, contract, and contractual employees and the rest were employed as part of the Supplying Human Resources Plan. Approximately 328 (94.8%) individuals had a bachelor's degree and the rest had master's degrees. The mean age of the subjects was 34.66 ± 7.46 years with a minimum and maximum of 22 years of age

and 53 years of age, respectively. Their mean work experience was 10.38 ± 7.59 years with a minimum and maximum of 1 year and 28 years, respectively. The mean total score of perceived organizational justice was 50.58 ± 12.93 with a minimum score of 19.05 and a maximum score of 88.25. The lowest and highest scores were obtained in the subscales of distributive (10.32 ± 3.71) and interactional justice (24.51 ± 7.34), respectively. The mean score obtained in the subscale of procedural justice was 15.73 ± 4.65 .

The mean MMSS score of the subjects was 76.00 ± 20.34 . The highest mean scores obtained were related to the subscales of satisfaction with interaction opportunities (2.79 ± 0.87) and rewards and acknowledgment (2.70 ± 0.83). The lowest mean scores were obtained in the subscales of external rewards (2.03 ± 0.89) and professional opportunities (2.18 ± 0.85).

Before performing correlation tests, the normality of the distribution of data was assessed. Based on the results obtained, the total scores of job satisfaction and perceived organizational justice, and the scores of the subscales of satisfaction with work schedule and procedural and interactional justice had normal distribution (Kolmogorov-Smirnov test: $P > 0.05$).

The results of Spearman's correlation coefficient presented in table 1 show that nurses' job satisfaction had a direct and statistically significant relationship with their perceived organizational justice (Pearson correlation coefficient: $P = 0.001$, $r_s = 0.635$); with increase in organizational justice score, the job satisfaction score also increased. All subscales of job satisfaction, except interaction opportunities, had a direct and statistically significant relationship with organizational justice and its subscales (interactional, procedural, and distributive justice) (Table 1).

Table 1: The relationship between perceived organizational justice and job satisfaction of nurses in hospitals affiliated with Kerman University of Medical Sciences, Iran, in 2016

Variable	Distributive justice	Procedural justice	Interactional justice	Total organizational justice
Job satisfaction	$r_s=0.615^*$	$r_s=0.502^*$	$r_s=0.575^*$	$r_s=0.635^*$
External reward	$r_s=0.478^*$	$r_s=0.261^*$	$r_s=0.251^*$	$r_s=0.345^*$
Work schedule	$r_s=0.671^*$	$r_s=0.910^*$	$r_s=0.734^*$	$r_s=0.888^*$
Balance between work and family	$r_s=0.430^*$	$r_s=0.871^*$	$r_s=0.792^*$	$r_s=0.850^*$
Colleagues	$r_s=0.366^*$	$r_s=0.676^*$	$r_s=0.846^*$	$r_s=0.809^*$
Interaction opportunities	$r_s=0.072$	$r_s=0.377$	$r_s=0.414$	$r_s=0.450$
Professional opportunities	$r_s=0.475^*$	$r_s=0.377^*$	$r_s=0.421^*$	$r_s=0.474^*$
Rewards and Acknowledgement	$r_s=0.441^*$	$r_s=0.493^*$	$r_s=0.544^*$	$r_s=0.571^*$
Control and accountability	$r_s=0.515^*$	$r_s=0.445^*$	$r_s=0.512^*$	$r_s=0.563^*$

Pearson correlation coefficient: $P = 0.001$

The results of multiple correlation analysis showed that perceived organizational justice of nurses can significantly predict their job satisfaction to 39.3% ($P = 0.001$). Based on the

correlational model, for 1 point increase in perceived organizational justice score of nurses, their job satisfaction will increase up to 0.42 points (Table 2).

Table 2: Correlation model between job satisfaction and organizational justice in nurses in Kerman University of Medical Sciences, Iran, in 2016

	Non-standardized coefficient		Standardized coefficient	Statistical test	P-value
	B	SD	β		
Organizational justice	0.420	0.028	0.625	14.79	0.001

Organizational justice $16.829 + 0.42 =$ job satisfaction

Discussion

In the present study, perceived organizational justice and job satisfaction of nurses and their correlation were evaluated in the context of the Transformation Plan for the Iranian Health System in hospitals affiliated to Kerman University of Medical Sciences. A positive and significant relationship was observed between perceived organizational justice and job satisfaction in nurses in the present study. This finding was in agreement with the results of the studies by Mortazavi et al. (30), Hassani and Jodat-Kordlor (31), Khosrozadeh et al. (32), and Safi et al. (18), all of which were conducted on Iranian nurses.

In the present study, using perceived organizational justice, the job satisfaction of nurses can be predicted up to approximately 39.3%. This finding was in accordance with that of the studies by Hassani and Jodat-Kordlor (31), ZinalZadeh (19), and Lotfi (33). However, in the study by Mahony et al., which evaluated the relationship between organizational justice and job satisfaction in the staff of higher education institutions in the USA, organizational justice only predicted job satisfaction 32% (34). Moreover, in the study by Xerri, which was performed on nurses in 3 hospitals in Australia, interactional justice only predicts job satisfaction to 15% (35). It seems that the correlation between perceived

organizational justice and job satisfaction will differ in different societies due to difference in conditions governing the work environment.

The findings showed that all subscales of organizational justice were correlated with job satisfaction in nurses. Therefore, no difference was observed between the subscales of organizational justice in terms of their correlation with job satisfaction. Nevertheless, in the study by Mortazavi et al., only procedural justice predicted job satisfaction and other subscales of organizational justice had no role in job satisfaction (30). However, in the study by Hassani and Jodat-Kordlor, distributive and interactional justice predicted job satisfaction up to about 40% and the role of distributive justice was greater in this prediction, but procedural justice did not have a significant relationship with job satisfaction (31). Khosrozadeh et al. studied the correlation between the subscales of organizational justice and job satisfaction in nurses and found that interactional and procedural justice had a significant correlation with job satisfaction (32). However, they found no significant relationship between distributive justice and job satisfaction (32).

In all the above-mentioned studies, a significant correlation was observed between perceived organizational justice and job satisfaction in nurses, but this correlation in the subscales of organizational justice differed between the studies. It seems that this relationship is affected by different individual and organizational factors and the share of each subscale differs in this correlation. One of the most important changes in organizational factors is the Transformation Plan for the Iranian Health System which may impact nurses' perception of different dimensions of organizational justice.

Based on the results of this study, the nurses' rate of perception of justice in the organization was average. This finding was in agreement with that of the studies by Khosrozadeh et al. on the nurses in Shiraz University of Medical Sciences, Iran (32), Amerioun et al. on nurses in the armed forces in Tehran, Iran (36),

Mortazavi et al. on the nurses in Mashhad University of Medical Sciences, Iran (30), and Manzari et al. in the personnel of Kerman University of Medical Sciences (37).

Among the subscales of organizational justice, interactional justice had the highest rate and procedural and distributive justice had the lowest rates, respectively. This order was the same in the studies by Keivanara et al. (38), Sayedin et al. (39), Ghasemian and Foroutan (40), Vatankhah et al. (41), and Khosrozadeh et al. (32). This shows the presence of shared factors creating nurses' perception of justice. Therefore, interactional justice, as the illustrator of personnel's perception of supervisors' and managers' fair behavior toward them, has the highest share in the rate of nurses' perception of justice. Moreover, the perception of unfair distribution of resources and lack of proportion of nurses' input and achievement is the main factor in the sense of injustice in the hospital.

In this study, the mean score of nurses' job satisfaction was 76. Considering the tool used, the minimum and maximum possible scores of nurses' job satisfaction were 31 and 155. In other words, the nurses' job satisfaction was 49.03% which is slightly less than the median and is at an average level. This finding was in accordance with that of the studies by Navidian et al. (42), Charkhabi et al. (43), Asghary et al. (44), Monjamed et al. (45), and Abushaikha et al. (46). Nevertheless, Jafar Jalal et al., in a study in Iran University of Medical Sciences, Iran, in 2015, found that 61% of nurses were dissatisfied with their job and only 4% were satisfied with their job (47). Furthermore, Mirzabeyghi et al. studied job satisfaction among nurses across the country in 2006 and found that 65.69% of nurses were dissatisfied with their occupation (26). These findings show that the rate of job satisfaction among nurses has had a descending trend.

The evaluation of the subscales of job satisfaction in nurses illustrated that the nurses' highest rate of satisfaction was with the dimensions of interaction opportunities and rewards and acknowledgment and their lowest

rate of satisfaction was with external rewards and professional opportunities. Based on the classification of the tool used in this study, external rewards includes salary and benefits and shows that the most important factor in the dissatisfaction of nurses with their occupation was related to income and benefits. The studies by Monjamed et al. (45) and Dashti et al. also reported that the lowest satisfaction of nurses was related to income and benefits(48). Nasiripour et al. studied the factors effective on the job satisfaction and performance of personnel of educational hospitals in Qazvin, Iran, and reported income and benefits and occupational safety as the most important factors effective on personnel's job satisfaction (49). Bahadori et al. analyzed the Herzberg factor pattern in health and treatment organizations (50). They found that income and benefits was the main factor effective on occupational satisfaction of personnel in health sector (50). The subscale of professional opportunities also obtained a low score. In the study by Mirfarhadi et al., profession status and satisfaction with income and benefits was the most important factor in the determination of nurses' job satisfaction (51). Considering the low score of the important and most effective subscales on nurses' job satisfaction, it seems that alteration and improvement of income and benefits and provision of professional opportunities for the independence and growth of nurses in the context of the Transformation Plan for the Iranian Health System is necessary.

Conclusion

Although there are limitations to generalizing the results of this study, it can be concluded that perceived organizational justice can be predictive factor for job satisfaction among nurses. Therefore, in the Transformation Plan for the Iranian Health System, the consideration of factors effective on establishing organizational justice, and thus, promoting nurses' job satisfaction by

policymakers of the health system seems necessary.

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