A study of relationship Quality of Working Life and its relation with the productivity of nurses in hospitals in Qom: 2016

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Abstract

Background and objectives: Nurses' productivity is a worthy goal of organizations tending to grow. Improving nurse' QWL is a prerequisite to increase their productivity. The purpose of this study was to explore the relationship between quality of work-life (QWL) and productivity among nursing staff of hospitals of Qom, Iran.

Methods: This descriptive-analytical study was performed on 250 individuals among nursing staff of private, public and social security hospitals of Qom, during 2016. The samples were selected by random sampling method. Data was collected using Mosadeghrad's survey of Quality of Work Life, Dehghan Nayeryand's productivity of questionnaire and demographic data questions. Using SPSS software (V22), data analysis was performed by Spearman correlation.

Results: Hospital nurses reported low QWL and moderate levels productivity. There were significant correlations between productivity and participation, job promotion, disturbance handling, communication, motivation for work, job security and job stress (P < 0.05). In addition, the result of spearman showed a significant relationship between productivity and one's QWL (p < 0.001, r=0.469).

Conclusion: It is important to consider the QWL of the nurses to improve productivity and performance of the nurses. In addition, the managers should adopt appropriate policies to promote the QWL and productivity.

Keywords: Quality of Working Life, Productivity, Nurses, Hospital

Introduction

Nowadays, the shortage in nursing staff has caused some challenges in delivery of safe and high-quality health services (1). One of the main reasons for this problem is that nurses leave their profession because of the low quality of work life (2). Quality of work life is a comprehensive and extensive plan that enhances learning capacity and management skills when dealing with workplace-related changes, thus increasing employees' satisfaction (3, 4). Studies have shown that reduced quality of work life leads to increased rate of absenteeism, workplace accidents, job dissatisfaction and resignation (2, 5). Assessing the quality of work life creates positive attitudes in employees towards their occupation and the organization, and promotes productivity and organizational effectiveness (6). On the other hand, workforce productivity and its in-depth study are one of the priorities for an organization's progress and development. Productivity is defined as the feeling of effectiveness, efficiency and individual capability in an organization (7). By increasing productivity, organizations can provide services at a higher quality (8).

Nurses are a vital part of the healthcare system and make up about 65% of the hospital staff. Approximately 60% of the hospitals operating budget is allocated to nurses (9, 10). Nurses influence the organizational productivity and performance more than any other health worker does. In fact, no healthcare organization can continue to operate without a nursing care unit (11, 12). Therefore, hiring nursing staff and their retention are crucial. Recently, the status of nurses has become a subject of interest for hospital and health system managers (13). Studies show that promoting the quality of work life is one of the best ways to achieve greater productivity and efficiency in an organization (2, 5, 14). Today, productivity and quality of work-life are the main drivers of organizational performance (15). Hence, one of the main tasks of the management is to evaluate productivity and related factors and respond appropriately for its promotion (16). Several studies in Iran have shown a significant positive correlation between the quality of work life and productivity (5, 6, 17-19). To our knowledge, no study has yet investigated this issue in the city of Qom, Iran. Therefore, the present study aimed to determine the relationship between quality of work-life and productivity in nurses of hospitals in Qom, Iran.

Materials and Methods

This descriptive-analytical study was carried out in the city of Qom in 2016. Study population consisted of 900 nurses working in hospitals of Qom, including two public hospitals, two private hospitals, and a social security hospital. The Inclusion criteria were at least one year of work experience and employment in just one hospital. Nurses who were unwilling to participate in the study or those who were working in non-clinical sectors were excluded. According to the Cochran formula, sample size of 269 nurses was determined at 95% confidence interval. With a response rate of 93.9%, 250 completed questionnaires were collected. The number of nurses in each hospital divided the number of participants; therefore, 100 nurses from public hospitals, 100 nurses from private hospitals and 50 nurses from the social security hospital were enrolled in the study. Nurses were randomly selected from three working shifts (morning, evening and night). A questionnaire consisting of three parts was used to collect data. The first part included demographic variables including age, gender, marital status, educational status, work experience, type of employment, salary, and average

working hours per week. The second part was a quality of work-life questionnaire designed by Mosadeghrad (2), which included 36 items in nine dimensions of participation, job promotion, anxiety control, communication, work motivation, job security, salary, job involvement, and occupational stress. Each item was scored based on a 5-point Likert scale (1: very low, 2: low, 3: average, 4: high and 5: very high). Validity and reliability of the questionnaire were confirmed in a previous study (2). In order to normalize the scores, the total score of the quality of work-life and its dimensions were divided by the total number of questions and each dimension, and a score of 1 to 5 was obtained. A score of ≤ 2 indicated very low quality, scores between 2.1 and 2.75 indicated low quality of work life, scores between 2.76 and 3.5 indicated average quality =, scores ranging from 3.51 to 4.25 indicated high quality, and scores >4.26 indicated very high quality of work-life. The third part was a questionnaire developed by Dehghan Nayeri et al. (5) to measure productivity. This questionnaire consists of 22 questions in four dimensions of effectiveness (5 items), efficiency (7 items), commitment (7 items) and availability to patients (3 items). The items were scored based on a 5-point Likert scale (1: absolutely disagree, 2: disagree, 3: no comment, 4: agree, 5: absolutely agree). The validity and reliability of the questionnaire were confirmed in previous studies (5, 7). A score of 1 to 2 indicated low productivity, a score of 1.2 to 4 indicated average productivity, and scores between 4.1 and 5 indicated optimal productivity. The study was approved by the ethics committee of Islamic Azad University. After explaining the study objectives and filling instructions, the questionnaires were given to the participants and collected the next week. Data was analyzed by SPSS-16 software. Descriptive statistics including mean, standard deviation (SD), frequency and percentage were used to describe the data. Given a violation of the normality assumption, nonparametric tests were used to analyze the data. Correlation between the variables was investigated by Spearman rank correlation coefficient. The significance level for all statistical analyses was set at 0.05.

Results

More than half of the nurses in this study were in the 20-30 year age group. The mean age was 32.26 ± 6.4. Moreover, 54.4% were female and over 60% were married. The majority (87.2%) of the respondents had a bachelor's degree. Mean of clinical experience was 8.57 ± 6.4 years and 67.2% of the participants had a work experience of less than 10 years. Approximately, 70% of the nurses had a permanent contract. The salary of most nurses (83.6%) was between 15 to 3o million Rials. The mean of working hour was 57.49 ± 14.8 hours per week.

The total quality of work-life score was 2.4 ± 0.37. Among the dimensions of quality of work-life, the lowest mean score was related to the dimensions of participation and anxiety control, while the highest mean score was related to work motivation (Table 1).

Table1. Mean scores of the quality of work life dimensions in nurses

Dimension	Mean	SD
Participation	1.93	0.58
Job promotion	1.99	0.55
Anxiety control	1.93	0.55
Communication	2.28	0.69
Work motivation	3.25	0.58
Job security	2.61	0.51
Salary	1.97	0.58
Prejudice	2.45	0.69
Occupational stress	2.20	0.73
Total score of quality of work life	2.40	

The mean score of productivity was 3.95 ± 0.35. The mean score for all dimensions of quality of work life was higher than 3 . The lowest mean score was related to availability to patients (Table 2).

Table 2. Mean scores of productivity dimensions in nurses

Dimension	Mean	SD
Effectiveness	4.03	0.43
Efficiency	3.58	0.43
Commitment	4.12	0.47
Availability to patients	3.06	0.56
Overall productivity score	3.95	0.35

The dimensions of participation (r= 0.459, P=0.006), anxiety control (r= 0.433, P= 0.008), job promotion (r= 0.385, P= 0.03), job security (r = 0.208, P= 0.04), work motivation (r=0.185, P= 0.003) and communication (r= 0.112, P= 0.043) had a significant positive correlation with the nursing productivity (Table 3). However, there was a significant negative correlation between the dimension of occupational stress and productivity (r= -0.45, P= 0.001).

Table 3. Correlation between quality of work life dimensions and nursing productivity

	Quality of Work life	Participation	Job promotion	Anxiety control	Communication	Work motivation	Job security	Salary	Prejudice	Occupational stress	Overall productivity score
Quality of work life	-	-	-	-	-	-	-	-	-	-	-
Participation	0.58**	-	-	-	-	-	-	-	-	-	-
Job promotion	0.614**	0.480**	-	-	-		-	-	-	-	-
Anxiety control	0.513**	0.497**	0.499**	-	-	-	-	-	-	-	-
Communication	0.785**	0.433**	0.462**	0.37**	-	-	-	-	-	-	-
Work motivation	0.499**	0.077	0.112	0.112	0.239**	-	-	-	-	-	-
Job security	0.480**	0.221**	0.207**	0.11	0.307**	0.166**	-	-	-	-	-
Salary	0.569**	0.359**	0.398**	0.38**	0.413**	0.099	0.197**	-	-	-	-
Prejudice	0.756**	0.351**	0.411**	0.29**	0.533**	0.406**	0.267**	0.364**	-	-	-
Occupational stress	-0.412**	- 0.061	- 0.023	-0.13*	0.306**	0.351**	0.187**	- 0.018	0.24**	-	-
Overall productivity score	0.469**	0.459**	0.385*	0.43**	0.112*	0.185**	0.208*	0.028	0.057	-0.45**	-

*P<0.05, **P<0.001
The numbers represent the Spearman correlation coefficient, which is between -1 and 1.

Discussion

The results of our study showed that the quality of work-life is in low level among nurses working in hospitals of Qom, Iran. This could be attributed to poor participation of nurses in the organization, lack of anxiety control, low salary, lack of job promotion, high occupational stress, poor communication, low job involvement, low job security and low motivation. This finding is in line with the findings of two previous studies (2, 20). In all hospitals, nurses were suffering from occupational stress. Nursing is inherently stressful and demanding (13, 21, 22), which negatively affects the quality of nursing work-life. Our findings demonstrated that dissatisfaction among the nurses was primarily related to the dimensions of participation in the organization, job promotion, anxiety control and salary. In previous studies, the most important reasons for the poor quality of work-life among hospital nurses were heavy workload, low job security, career prospect, and low salary and benefits (2, 20), all of which contribute to occupational stress (2, 23, 24). Stressors can have harmful effects on the physical, spiritual and mental health of individuals (25, 26). According to Mosadeghrad and Mogharab, job insecurity negatively affects the quality of working-life (2, 20).

In the present study, quality of work-life dimensions including participation, anxiety control, job promotion, job security, work

motivation and communication had a significant positive correlation with productivity of nurses. This finding is consistent with the results of some other studies (5, 8). Evidence suggests that inappropriate management practices, lack of support and respect for nurses' opinions are associated with low productivity. Conversely, a respectful relationship between managers and nurses increases productivity (27). Improving nurses' participation in the organization increases motivation, which ultimately improves productivity (6, 28). Implementing an effective feedback system in the workplace. In addition, considering collaborative views of nurses in decision-making and problem solving help improve the quality of work life and productivity. Moreover, we found a significant negative correlation between occupational stress and productivity, which is in line with the findings of other studies (6, 29). Therefore, nursing managers should adopt strategies to reduce nursing-related stress in order to improve productivity.

In this study, there was no significant correlation between the amount of salary and productivity, which is not consistent with the findings of two studies (6, 18). Nurses who are aware of the expectations and receive feedback and benefits for their contribution are generally more productive (26). Productivity is not merely promoted through salary and benefits, but motivation and increased self-esteem at workplace can impact on the productivity of nurses (30).

We found a significant positive correlation between quality of work-life and productivity. This finding suggests that improving the quality of work life in nurses also improve their productivity. This is in agreement with the findings of previous study (5, 6, 17-19). Other studies have also shown that improving quality of work life is essential for improving

productivity (28, 31). Stanowski and Thompson also reported that receiving supportive services increases nursing productivity (16). Rastegari stated that improving all aspects of quality of work-life improves nursing performance (32).

The results of this study can help hospital managers improve working conditions and quality of nursing work-life to increase productivity, which ultimately promotes quality of health services. Since this was a cross-sectional study, it was not possible to determine a cause and effect relationship between the variables. Our study was conducted on the hospitals in the city of Qom, Iran; therefore, the results cannot be generalized to hospitals in other parts of the country.

Conclusion

The results show that the quality of work-life is low among the nurses in the hospitals of Qom, Iran. There is a significant positive correlation between quality of work-life and nursing productivity. Hospital managers ought to change the quality of work-life in nurses to create a sense of ownership, individualism, responsibility and self-esteem. This will improve organizational effectiveness and efficiency and ultimately productivity.

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