

Relationship between quality of work life and efficiency in Iranian operating room personnel

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Abstract

Context: In Iran, based on the available databases, there were no studies about the quality of work life (QWL) of operating room personnel, and more research that in abroad has been done is focused on the salaries and other benefits and work satisfaction or dissatisfaction.

Aims: This study aimed to determine the relationship between QWL and efficiency of operating room personnel of Educational Hospitals of Mazandaran University of Medical Sciences in 2016.

Settings and Design: This descriptive-analytical study was done in 2016.

Materials and Methods: The society in this study was all anesthetic and operating room technician personnel working in the operating room of training hospitals of Mazandaran University of Medical Sciences (Sari, Iran). The questionnaire for data gathering was included demographic variables, efficiency, and QWL.

Statistical Analysis Used: The data were tabulated and analyzed by means of SPSS 18.0 for Windows (SPSS Inc., Chicago, IL, USA), which was used to calculate descriptive indices, K_2 -test, and Fisher's exact test.

Results: The mean age of the participants was 38.67 (standard deviation = 2.98) years. To evaluate the association between QWL and efficiency, Pearson correlation coefficient was used and found a significant relationship between efficiency and QWL of individuals participating in the study ($r = 0.48$; $P < 0.001$).

Conclusion: It is recommended that managers pay more attention to the QWL for nurses and by adopting suitable strategies of QWL and important component improving the quality of nursing work life.

Keywords: Comparison, Efficiency, Operating room, Quality of work life

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INTRODUCTION

Quality of work life (QWL) is considered by many managers who are seeking to improve the quality of their human resources.^[1,2] QWL is a complex, multidimensional, and general concept and an aggregate analysis of how people experience the work and organization. It seems that the QWL is the staff

attitudes and feelings about the job.^[3] QWL of nurses is influenced by social, administrative, managerial factors, and specific cultural situations.^[4,5] Improving the QWL of personnel has been introduced an important factor to ensure the sustainability of the health system. In every organization, high QWL is essential to attract and retain employees.^[6]

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Efficiency is the sense of effectiveness, proficiency, efficiency, and individual ability in the organization. In other words, efficiency is efficient use of workforce, power, talent, and skills of human resources.^[7] Today, increased efficiency and optimal use of limited resources and accurate assessment of the quality of services provided to provide, maintain, and improve the health of patients in hospitals that are one of the most important missions of health-care centers.^[8,9] In Iran, the efficiency of nursing (as the largest part of health system) is one of the concerns of the health system managers in the recent years, and in this regard, they have turned to measures like privatization.^[8] Studies suggest that reducing productivity, income, and issues such as inflation and unemployment bring decline in the level and quality of life in the community and reduce social security.^[10] In contrast, the rules of the law in organization, an appropriate reward system, and participation in decision-making including the factors that increase the efficiency of the organization and should be considered by managers.^[11] Furthermore, studies show that the QWL include important factors to influencing nurses efficiency.^[12]

The researchers due to the importance of efficiency and QWL in health-care providers and their role in the continuity of care and health promotion have done this study. In addition, in Iran, based on the available databases, there were no studies about the QWL of operating room personnel, and more research that in abroad has been done is focused on the salaries and other benefits and work satisfaction or dissatisfaction. Hence, this study aimed to determine the relationship between QWL and efficiency of operating room personnel of Educational Hospitals of Mazandaran University of Medical Sciences in 2016.

MATERIALS AND METHODS

This descriptive-analytical study was done in 2016 to determine the relationship between QWL and efficiency of Iranian operating room personnel. The society in this study was all anesthetic and operating room technician personnel working in the operating room of training hospitals of Mazandaran University of Medical Sciences (Sari, Iran). Using random stratified sampling, 130 operating room personnel (according to Krejcie and Morgan table^[13]) in Imam Khomeini, Bu-Ali, Fatima Zahra, Razi, and Shahid Zare hospitals were selected.

Eligible criteria's and procedures

Eligible participants for the study were those: (i) full agreement with performing the study, (ii) having full participation, and (iii) having no physical or mental illnesses that interference with the study. Data were collected in a single session using a survey administered in paper-and-pencil format. Participants provided informed consent and dropped

completed questionnaires through a slit into an enclosed box. Debriefing forms were given to participants as they exited the ward. The institutional review board approved the research before implementation of the study.

Instrument

In this study, the researcher after extensive review of the literature and results of previous studies including the results of quantitative and qualitative studies in terms of efficiency builds the questionnaire. The questionnaire was included demographic variables, efficiency, and QWL. The QWL questionnaire form of 45 questions with Likert scale (from very high to very low) and the efficiency questionnaire form of 25 questions with Likert scale (from strongly agree to strongly disagree). QWL questionnaire was included of important items related to motivation and interest in the work, fair wages, and labor benefits; the possibility of growth, organizational climate based on trust and security; managers management styles; and the possibility of creativity and innovation, decision-making and control over work, and family and social responsibilities on the job. The efficiency questionnaire was included of the items related to the effectiveness, efficiency, and commitment. Then, the questionnaire was given to ten experts and professors within and outside the university, and revised recommendations were implemented in the tool. After being valid, the tools were tested on a sample consisting of 20 personnel. Reliability coefficient was calculated using Cronbach's alpha. That the QWL was 0.94, and efficiency alpha coefficient was 0.88.

Ethical considerations

Ethical approval was obtained from the research ethics committee of the research deputy of associated university of medical sciences (IR.MAZUMS.REC.95.S.95). All the participants received oral and written information about the aims of the study. It was made clear to them that their participation was voluntary and that all data would remain confidential. Research participants could not be personally identified, and they were assured that participation would in no way affect their academic results.

Data analysis

The data were tabulated and analyzed by means of SPSS 18.0 for Windows (SPSS Inc., Chicago, IL, USA), which was used to calculate descriptive indices, K_2 -test, and Fisher's exact test. $P < 0.05$ was considered statistically significant.

RESULTS

The mean age of the participants was 38.67 (standard deviation = 2.98) years. About 48% had <30 h overtime work, and only 5% had more than 100 h overtime

work. Participants had between 130 and 193 h duty shift per month. Demographic profile of participants is presented in Table 1.

According to results, about 37% of participants in this study have relatively good quality of working life, and 26% of them also have a desirable quality of working life that is showing satisfactory state of units. Furthermore, 13% of the participant's efficiency is at a high level and 42% at relatively high, 33% on average, and 13% reported low level. Figure 1 shows the efficiency frequency distribution of the samples according to QWL.

To evaluate the association between QWL and efficiency, Pearson correlation coefficient was used and found a significant relationship between efficiency and QWL of individuals participating in the study [Table 2].

DISCUSSION

Employee satisfaction and their opinion about work are employer's long-standing issues.^[14] Furthermore, improvement of QWL of personnel is an important factor to ensure the sustainability of health systems. In any organization, high QWL is essential to attract and retain of employees.^[15] The QWL has important contribution in

satisfaction of other aspects of life such as family, leisure, and health.^[16] According to findings of this study, participant's QWL was appropriate level. Work life is based on how you feel about what is or is not acceptable in the workplace and related to the current experience in the personal and business fields of life.^[17] Nurses have described quality of their work life, and working environment is constantly being destroyed by these variables.^[18] Occupational sources such as poor rewards and lack of participation in decision-making are the greatest predictors of freedom from restriction of work and jobs demand and business resources have indirect impact on the QWL of nurses through experienced burnout.^[19] These issues can all affecting on the perception of nurses about the quality of their work life.^[20] Belgen did a meta-analysis that was included from 48 studies with 15,000 nurses. Results revealed that satisfaction and thus QWL significantly related to reduction of work stress, organizational commitment, communication with supervisors, independence, knowledge, justice, history, and experience.^[19] The results also revealed that the majority of samples had relatively high efficiency. However, in this study, a significant correlation was found between QWL and efficiency of nurses. Evidence showing that satisfied employees are more productive, conscientious, and functional.^[21] Many organizations that have introduced techniques for improving quality have been considered those methods and techniques effective for increasing efficiency.^[22]

The results of the correlation between demographic factors and quality of life scores showed a significant correlation with sex, apart from nursing jobs, planning in accordance with the desire, and the number of children. Hence, the planning in accordance with the desire was related to higher QWL. The results of the relationship between demographic variables and efficiency also showed a significant relationship between efficiency and marital status, apart from nursing jobs, planning in accordance with the desire, and the number of children. In general, job positions effect on life satisfaction.^[23]

Table 1: Demographic profile of participants (n=130)

Characteristic	N (%)
Gender, n (%)	
Male	37 (28)
Female	93 (72)
Economic situation, n (%)	
Weak	20 (15)
Average	76 (58)
Good	28 (22)
Excellent	6 (5)
Education, n (%)	
BS	110 (84)
MCs and above	20 (16)
Marriage, n (%)	
Married	77 (59)
Single	53 (41)
Work ward, n (%)	
Anesthesiology department	95 (73)
Operating room	35 (27)
Work experiences (years), n (%)	
<10	39 (30)
Between 10 and 20	70 (53)
Over 20	21 (17)
Age, mean (SD)	38.67 (2.98)

SD: Standard deviation

Table 2: Association between quality of work life and efficiency

Correlation coefficient	R ²	F	P
0.48	0.2304	36.36	0.001

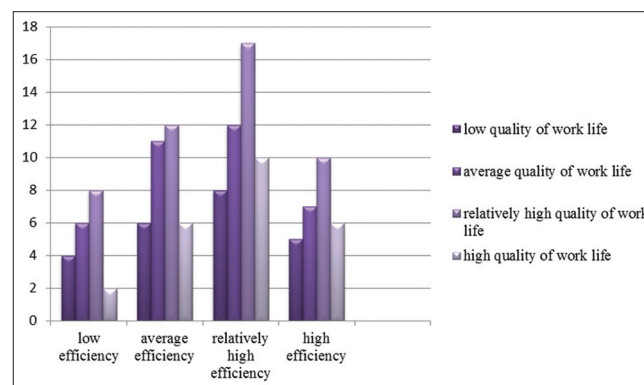


Figure 1: Efficiency frequency distribution of the samples according to quality of work life

Limitations of the study

The present study had also some limitations including (1) inability to control the emotions and cultural differences of participants, (2) possible careless of participants during completing of questionnaire, and (3) low sample size that these limitations may can limited generality of the results. Hence, recommended that more research should be done to assess wider contents of this issue.

CONCLUSION

This study was examined the relationship between efficiency and QWL and will apply in different parts of training and services management. Since the relative balance of cultural justification in a particular cultural have major impact on the members of the organization point of view about QWL. Researches have shown that culture effects on members motivation, performance, satisfaction, and stress and transform level. This study also showed an association between QWL and efficiency. Therefore, it is incumbent on managers to think solutions in terms of organizational culture that not only is responsive to employee's perceptions of their working lives but also increases their efficiency. Despite the relationship between QWL and efficiency that were considered in the recent studies, the positive results of the QWL were supported by some previous studies, including absence reduction, lower turnover, job satisfaction improvement, so requires managers. It is recommended that managers pay more attention to the QWL for nurses and by adopting suitable strategies of QWL and important component improving the quality of nursing work life and provide the necessary conditions to improve service quality and efficiency to nurses.

Conflicts of interest

There are no conflicts of interest.

Author contribution

All authors contributed to this research.

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