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Nurses' Work-Related Quality of Life and Its Influencing Demographic Factors at a Public Hospital in Western Iran: A Cross-Sectional Study

Javad Yoosefi Lebni[1], Razie Toghroli[2], Jaffar Abbas[3], Neda Kianipour[4], Nazila NeJhaddadgar[5], Mohammad Reza Salahshoor[6], Fakhreddin Chaboksavar[1], Farideh Moradi[7], and Arash Ziapour[1]

Abstract

Background: The quality of life as a concept beyond physical health stands one of the protuberant indexes, and various health-based studies required distinct measurements, which deemed necessary for their significant implications. The nurses fight at the front and play a leading role in providing services to patients at healthcare centers. They deserve a higher quality of life in catering to physical health services. This present study focuses on examining nurses' work-life quality standards and how demographic variables contribute to the hospital of Imam Reza in Kermanshah of Western Iran.

Methods: This descriptive-analytical study recruited a sample of 271 nurses affiliated with Imam Reza Hospital and Kermanshah University of Medical Sciences by incorporating the stratified random sampling in 2019. This study used a two-part questionnaire to collect data from the targeted respondents. The first part presented the participants' demographic profiles, and the second part showed the nurses' work-related quality of life (WRQoL) on the scale developed by Van Laar et al. The study screened the data and performed analyses through the SPSS version-23. The research study conducted a descriptive analysis to measure mean and standard deviation with inferential statistics, including independent samples t-test and one-way ANOVA ($P < 0.05$).

Results: The study findings specified that nurses' average quality of the work-life was at a moderate level 3.11 ± 0.47. Besides, results indicated that 57.50% of the nurses reported high standards of quality of work-life, 36.50% showed a modest and 5.20% revealed a lower level of work-life quality. The findings indicated that the quality of work-life significantly correlated with respondent" age, marital status, education, work experience, position, department, shifts, and employment status ($p < 0.05$).

Conclusion: The findings of this research demonstrated that the nurses' quality of work-life was higher than the average standard. The results provide useful insight for nurses and hospital managers. The policymakers and health managers need to pay more attention to providing a better quality of work-life to the nurses.

Keywords

quality of work-life, nursing, demographic variables, Kermanshah, hospital

In hospitals, the quality of work quality is one of the critical focus on the factors for numerous healthcare organizations. Besides, improving the quality of work for nurses is vital in ensuring the sustainability of the health care system to provide high-quality services to the patients.[1] Quality of work-

[1]Health Education and Health Promotion, Health Institute, Kermanshah University of Medical Sciences, Kermanshah, Iran
[2]Social Determinants in Health Promotion Research Center, Hormozgan Health Institute, Hormozgan University of Medical Sciences, Bandar Abbas, Iran
[3]Antai College of Economics and Management, School of Media and Communication, Shanghai Jiao Tong University, Shanghai, China
[4]Students Research Committee, Kermanshah University of Medical Sciences, Kermanshah, Iran
[5]Department of Health Promotion and Education, Ardabil University of Medical Sciences, Ardabil, Iran
[6]Department of Anatomical Sciences, Medical School, Kermanshah University of Medical Sciences, Kermanshah, Iran
[7]Clinical Research Development Center, Imam Reza Hospital, Kermanshah University of Medical Sciences, Kermanshah, Iran

Corresponding Author:
Arash Ziapour, Health Education and Health Promotion, Health Institute, Kermanshah University of Medical Sciences, Kermanshah, Iran.
Email: arashziapoor@gmail.com

life at various healthcare institutions is one of the critical variables, and numerous researchers have investigated its effect on quality service provided to the patients worldwide.[2] Healthcare centers management considers the quality of work one of the vital elements, and managers always seek to improve the quality of service through their human resource staff.[3] Therefore, it is also critical to employing and retaining staff and improving the quality of any organization.[4] In recent times, the concept of quality of life at work has become a major social issue around the world and one of the most important goals of today's organizations; however, previously, organizations mainly focused on the life quality of their employees.[5,6] According to the World Health Organization (WHO) in 1993, the definition of quality of life is "an individual's perception of his or her place in life and its objectives in the cultural and value system in which he or she lives." They focus on achieving their goals of life.[7,8] Nursing stands in one of the principal occupations of the healthcare systems worldwide.[9] Nurses constitute the most substantial proportion of the workforce of the medial personnel in the healthcare industry.[10] Nurses play an indispensable key role in providing high-quality services to patients at hospitals and healthcare centers around the world.[11]

At present, intensive nursing work and the shortage of nursing staff have become an international issue of great concern, closely related to the stability of the nursing industry, the quality of nursing service, and the satisfaction of both nursing staff and patients.[1,12] Exposure to work stressors and lack of adequate coping resources may affect the mental or physical health of health professionals. It leads to a decline in the quality of life associated with nurses' work, which in turn leads to a decrease in the quality of patient care.[13] Based on the available literature, some researchers have examined and classified the components that are not useful and disadvantageous according to the recommendations of the health professionals.[14] The past indicates that such factors might have adverse consequences on the perception of health professionals and their HRQoL.[15,16] These factors include the characteristics of nurses working environment (shifts of duties, the status of the employment and, background), work-related mental stress, and sociodemographic elements, which affect them, such as age, marital status, years of work experience, and, in particular, gender.[17] Women's and their emotional well-being might be more affected than men's because of domestic duties and household chores complicated works.[18] In this sense, the most vulnerable are nursing professionals, whose HRQoL is at high risk of being affected by their work characteristics. Their working environment and experience with patients can hurt the nurse's HRQoL.[19,20]

More to the point, improving the quality of work-life of nursing staff has been introduced as one of the critical factors in ensuring the sustainability of the health system[21] and high quality of work-life is necessary for employing and retaining employees.[22] Not to mention, the nurses' quality of work-life is the degree to which nurses can satisfy their essential and personal needs through work in health centers and ultimately achieve organizational goals.[23] In health care organizations, including the quality of work-life has been described as a reference to strengths and weaknesses in the workplace.[10] On the other hand, increasing the quality of work-life of employees, especially in the case of occupations such as nursing, which are in direct contact with humans, is of prominent significance and affects different dimensions of their work.[1]

The results of conducted studies in this field are indicative of the fact that in health care systems, not only does the proper quality of work-life make employees satisfied. However, it is also seen as one of the essential factors that ensure the sustainability of the health care system.[7] In contrast, the lower the quality of work-life in nurses, the higher the probability of quitting jobs.[21] Research has it that nurses have inherent capabilities in providing services to patients, which can affect the quality of nursing care at all levels.[3]

Although nurses represent the most massive workgroup in hospitals and facilitators of hospital care, few studies have addressed the nature of nursing work and their quality of work-life.[24] Besides, given the importance of quality of work-life and the critical role of nurses working in health care, paying attention to the different aspects of their lives and its improvement towards honing the quality of care is a necessity. It is worth mentioning that some Iranian studies have addressed the nurses' quality of work-life in Tehran,[25] Jordan,[1] Brazilian[7] and Uromia,[26] to name a few. However, there is little information about the nurses' quality of work-life. Similarly, Dehghannyieri et al. showed that nearly half of the participants rated the quality of their work-life average, and less than one-tenth of them rated their quality of life as desirable.[27] In a study conducted by Yazdi Moghadam et al., the results indicated that the quality of life of nurses working in hospitals affiliated with Sabzevar University of Medical Sciences was moderate.[28] Furthermore, Arab et al. showed that not only did one's quality of work-life correlate with his/her working conditions and job satisfaction, but it was also affected by his/her personal life.[29] The results of a study done by Gillet et al. revealed that managerial behaviors could influence nurses' quality of work-life. It was found out that the nursing managers' leadership style positively and significantly correlated with the quality of work-life of nurses.[30] Besides, Brooks and Anderson reported that high work stress in nurses led to a decrease in their quality of work-life, so that nurses had little energy after the completion of their work, thereby failing to keep a balance between work and family life.[31] Studies have shown that in hospitals where the staff have a low quality of work-life, the rates of absenteeism, desertion, burnout, and work pressure are high in nurses. On the other hand, their quality of care and performance are decreased.[26] Therefore, the organization's attention to its employees' quality of work-life has been identified as an important indicator of employment, maintenance, and proper functioning.[32]

Nurses, as the largest group of health providers in all countries, are among the key pillars of treatment who are responsible for essential tasks such as mental, physical, and mental health care. Failure to observe the principles of their safety, relaxation, and welfare at work plays a significant role in the occurrence of physical and mental disorders among them.[33] Given that under different conditions and times, nurses have reported various factors as the determinants of their work-life and productivity[21] By considering the nurses' different work environment and its crucial role in caring for and improving the quality of their working life, the present study aimed to investigate the quality of work-life of nurses and the impact of demographic variables at Imam Reza Hospital, Kermanshah, Western Iran.

Methods

Study Design

The researchers executed this present study from March to September 2017. The population of this study was the sample of the 271 selected nurses out of 926 staff working in different wards of Imam Reza Hospital affiliated to Kermanshah University of Medical Sciences. This study used Cochran's formula to draw the required sample by using a simple random sampling method. This research followed the ethical standards to conduct the survey. We led this survey after the university's ethical committee's approval. We used the translated version of the scale to record the respondents' feedback. The selection criteria for the nurses taking part in the research required a minimum bachelor's degree and their willingness to participate in the survey and at least one year of full-time clinical practice experience. We excluded some participants who showed no interest in the study or returned incomplete questionnaire forms. We obtained the approval plan and introductory letter from the head of the research and vice-chancellor of Kermanshah University of Medical Sciences.

The research team explained the research environment and provided an introductory brochure to the study participants. The research team demonstrated the study objectives to the officials, and the hospital director gains permission to conduct the survey. The investigators selected eligible respondents from the provided lists of the nurses from a targeted sample from the research population. They explained study purpose and obtained participants' written consent before surveying various wards and health units during different shifts of the nurses' duties. The researchers distributed questionnaire forms among nurses and educated them on how to fill the forms and received backfilled forms in the same or the next shift. The researchers described study objectives and assured participants that their information is strictly confidential, and data would refer to the analysis of this research. This study used a two-part questionnaire to collect data from the targeted respondents. The first part presented the participants' demographic profiles, and the second part showed the nurses' work-related quality of life (WRQoL) on the scale developed by Van Laar et al. The study screened the data and performed analyses through the SPSS version-23.[34]

The research study conducted a descriptive analysis to measure mean and standard deviation with inferential statistics, including independent samples t-test and one-way ANOVA ($P < 0.05$). Demographic Questionnaire: It consisted of nine items: gender, age, marital status, education, work experience, position, department, shifts, and employment status. Work-related Quality of Life (WRQoL) Scale: The WRQOL is widely used to measure the QWL of healthcare professionals around the world. This evidence-based measure has been translated into more than eight languages.[34] Based on Maslow's,[35] need satisfaction theory, and Herzberg's two-factor approach, the WRQoL incorporates a broad range of concepts, including work and non-work factors.[36] Besides, the original 23-item WRQoL measures employees' QWL, and the overall scale uses a five-point Likert scale. In this way, 1 point is for "strongly disagree" 2 denotes "disagree"; 3 represents "neutral", and four is for "agree." furthermore, the responses were rated on a 5-point Likert scale, with higher scores indicating higher levels of QWL. This scale has six dimensions: (a) job and career satisfaction (JCS) with six questions, (b) general well-being (GWB) with six items, (c) stress at work (SAW) with two questions, (d) control at work (CAW) with three questions, (e) working conditions (WCS) with three questions, and (f) home-work interface (HWI) with three questions. The WRQoL is psychometrically robust, with an overall Cronbach's alpha of 0.91 and excellent goodness of fit (comparative fit index: 0.94, goodness-of-fit index: 0.93, normed fit index: 0.92, and root-mean-square error of approximation 0.05.[34] Besides, this scale has been validated for nurses, healthcare workers,[34] and higher education employees,[37] which is easy to apply and allows for interdisciplinary and international comparisons. The original WRQoL scale is a valid and reliable instrument, making it an appropriate scale for translation into Chinese to be used in Iran. The reported reliability of the questionnaire in Iran has been 92%.[38] In the present study, the Cronbach's alpha value for the quality of work-life survey was 90%, an indication of the acceptable internal consistency of the questionnaire.

Statistical Analysis

To analyze data, the SPSS Statistical Software Version 23.0 was applied. Besides, the descriptive (mean and standard deviation) and inferential statistics (independent samples t-test and one-way ANOVA) statistics were utilized, too ($P < 0.05$).

Results

Of the total of 271 subjects in the present study, 121 nurses (44.6%) were male, and 150 (55.4%) were female. In terms of

marital status, 202 of the participants (74.5%) were married. Besides, the average age of the subjects was 32 ± 8.3, and the majority of items were aged between 20 and 30 years old (52.4%). Furthermore, the majority of nurses held bachelor's degrees (218 subjects or 80.4%). In terms of work experience, half of the participants (102 subjects, or 37.6%) had less than ten years of work experience. As can be seen in Table 1, out of the whole participants, 204 were registered nurses (75.3%), 32 were staff nurses (11.8%), and 35 subjects were head nurses (12.9%). As for department, the majority of nurses worked in an emergency (98 subjects, or 36.2%), and 35.4% (96 subjects) worked rotating shifts. In terms of employment status, 144 subjects (53.1%) had fixed-term employment ($p < 0.05$) (Table 1).

The findings showed that the mean score of the overall quality of the work-life of nurses measured 3.11 ± 0.47, an indication that the quality of the work-life of nurses was moderate. The results also revealed that the highest average score was for job commitment (3.19 ± 0.78), and the lowest mean score was stress at work (2.97 ± 0.62) (Table 1).

Table 1. Descriptive Indicators of the Quality of Work-life and Its Components in the Sample Under Study (n = 271).

			The overall quality of work-life		
Variable	N	%	Mean± SD	Statistical test	p-value
Gender					
Male	121	44.6	3.09 ± 0.36	independent t-test	0.544
Female	150	55.4	3.12 ± 0.54		
Age Group (in years)					
20-30	142	52.4	3.13 ± 0.41	One-way ANOWA	0.000
30-40	88	32.5	3.23 ± 0.38		
40-50	21	7.7	3.14 ± 0.34		
>50	20	7.4	2.42 ± 0.71		
Marital Status					
Single	202	74.5	2.81 ± 0.70	One-way ANOWA	0.000
Married	47	17.3	3.16 ± 0.38		
Divorce/separated	6	2.2	3.59 ± 0.23		
divorced	16	5.9	3.11 ± 0.33		
Education					
Bachelor degree	218	80.4	3.05 ± 0.48	independent t-test	0.000
Master degree	53	19.6	3.34 ± 0.35		
Work Experience (in years)					
10≥	102	37.6	2.93 ± 0.56	One-way ANOWA	0.000
10–15	96	35.4	3.17 ± 0.42		
>15	73	26.9	3.27 ± 0.27		
Position					
Registered Nurse	204	75.3	3.12 ± 0.50	One-way ANOWA	0.41
Staff Nurse	32	11.8	3.22 ± 0.32		
Head Nurse	35	12.9	2.95 ± 0.32		
Department					
Internal	52	19.2	3.27 ± 0.31	One-way ANOWA	0.000
Surgery	55	20.3	3.13 ± 0.36		
Pediatric	12	4.4	2.77 ± 0.37		
Emergency	98	36.2	2.96 ± 0.54		
ICU	21	7.7	3.41 ± 0.32		
Obstetrics	33	12.2	3.16 ± 0.52		
Shifts					
Morning and Evening	75	27.7	2.85 ± 0.59	One-way ANOWA	0.000
Night	52	19.2	2.99 ± 0.37		
Evening and Night	48	17.7	3.31 ± 0.19		
Rotating Shifts	96	35.4	3.27 ± 0.40		
Employment Status					
Fixed-Term	144	53.1	3.14 ± 0.52	One-way ANOWA	0.004
Temporary	39	14.4	2.93 ± 0.41		
Contract Employee	29	10.7	2.95 ± 0.53		
Apprentice	59	21.8	3.23 ± 0.23		

Likewise, one-way ANOVA and *t-test* were used to examine the statistical scores between the nurses' quality of work-life and demographic variables. A significant relationship was found between the mean score of the total quality of work-life of nurses and each of age, marital status, education, work experience, position, department, shift, and employment status, except for gender ($p < 0.05$) (Table 1). The study results showed Mean (M) and standard deviation scores for participants' quality of work-life 3.11 ± 0.47, accordingly. Table 2 indicates the highest and lowest levels related to the quality of work-life associated with employee engagement 3.19 ± 0.78 and stress at work 2.97 ± 0.62, respectively. Table 3 shows the quality of nurses' work-life 153 (57.5%), 99 (36.5%), and 14 (5.2%), as high, average, and low levels, consequently.

Discussion

The present study aimed to investigate the quality of work-life of nurses and the role of demographic variables at Imam Reza Hospital, Kermanshah, Western Iran. One of the essential findings of the present study was that more than half of nurses (57.5%) reported higher levels of quality of work-life than average. In contrast, Navidian et al. in hospitals based in Kerman,[39] and Shafipour et al. in hospitals affiliated with Mazandaran University of Medical Sciences.[40] Saberipour et al. reported that the quality of work-life of nurses at Alhadi hospital, based in Shoushtar, Iran, was average.[41] Likewise, the results of a study performed by Hesam et al. demonstrated that the quality of work-life of the majority of nurses in hospitals affiliated with Gorgan University of Medical Sciences was higher than average and at the desired level.[42] In contrast, Almalki et al. in Saudi Arabia showed that the majority of nurses had low quality of work-life.[43] Moradi et al. reported that the quality of work-life was high among the nurses working in Kashan hospitals.[44] Further, Awosusi observed that the quality of work-life among the nurses working in Nigerian hospitals was average.[45] Similarly, Lee et al. reported that the quality of work-life of nurses in Taiwanese hospitals was average.[9] Brooks and Anderson in Chicago said that the quality of work-life of nurses working in ICUs was low.[31] Similarly, Dargahi et al. found out that the majority of nurses (74%) working in hospitals affiliated with Tehran University of Medical Sciences had poor quality of work-life.[25] It should be mentioned that one of the possible causes of this contradiction might be related to the different conditions in the work environment in different hospitals.[25] Moreover, in each of these studies, the statistical population, the applied tools and the scoring methods were different. In the present study, 57.5% of nurses reported that the quality of their work-life was at a desirable level, see Figure 1 for the Tertile Classification of Quality of Work-life among Nurses Working.

In a study performed by Moradi et al., 60% of nurses had a moderate quality of work-life, 37.1% had low levels of quality of work-life, and only in two percent of them, the quality of work-life was desirable.[44] Moreover, Nagammal et al. reported that 63% of nurses working in Qatar hospitals

Table 3. Quality of Work-Life in Terms of the Demographic Variables.

Quality of working life	N	(%)
High QWL	153	57.5
Average QWL	99	36.5
Low QWL	14	5.2

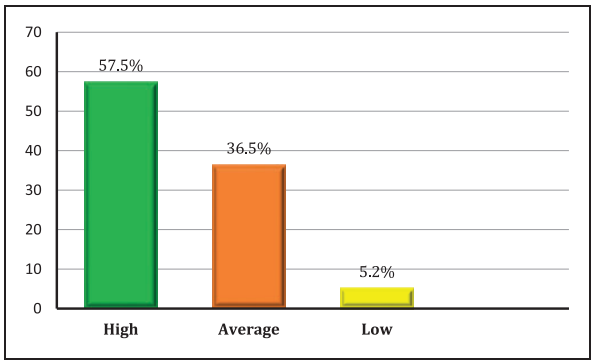

Figure 1. The Tertile Classification of Quality of Work-life among Nurses Working.

Table 2. The Score for Every Scales of Quality of Nursing Work-Life.

Domain	Number of Items	Possible score	Mean± SD	Min	Max
General well-being (GWB)	8	8–40	3.13 ± 0.64	1.50	4.25
Homework interface (HWI)	7	7–35	3.04 ± 0.64	1	4
Employee engagement	5	5–25	3.19 ± 0.78	1	4
Job and career satisfaction (CJS)	4	4–20	3.08 ± 0.56	1.75	4.50
Control at work (CAW)	3	3–15	3.06 ± 0.62	1.67	4
Working conditions (WCS)	3	3–15	3.02 ± 0.83	1.33	4.33
Stress at work (SAW)	4	4–20	2.97 ± 0.62	1.75	4.50
Overall QoWL	34	34–170	3.11 ± 0.47	1.45	3.99

Values are presented as numbers, ranges, or mean ± standard deviations.

had high levels of quality of life.[46] In contrast, Dehghan Nayeri and Salehi concluded that 50% of nurses were dissatisfied with the quality of their work-life, and only 10% were satisfied.[47] Ramesh et al. reported that 84.3% of nurses at Bangalore-based hospitals were confident with the quality of their work-life, whereas only 15.1% of them were dissatisfied.[48] This finding was consistent with the results of the present study. Increasing the quality of work-life of employees in any organization, especially in jobs, in direct contact with people, such as nursing, is essential and affects different levels of work. Additionally, the quality of work-life affects the performance of personnel and is achieved through increasing the quality of work-life, thus meeting the organizational goals and needs.

The results of the present study indicated that there was a meaningful relationship between gender and quality of work-life of nurses so that women enjoyed a more favorable status than men. This finding was concurrent with the results of studies conducted by Shafipour et al.[32] Mogharab et al.[49] Dargahi et al.[25] Khaghanizadeh et al.[50] and Fallahee et al.[51] However, this finding was inconsistent with the results of studies conducted by Farsi and Rajai,[52] Wagenaar et al.[53] and Natarajan et al.[54]

In the present study, there was a significant relationship between the age of nurses and their quality of work-life, which was consistent with the results of studies done by Shafipour et al.[32] and Mogharab et al.[49] in which a positive correlation was reported between the two said variables. However, this finding was in concurrent with the results of a study conducted by Dehghan Nayeri and Salehi,[47] in which the age of nurses and their quality of work-life were negatively related. Additionally, Yazdi Moghadam et al.[28] reported that the quality of work-life decreased with age. Similarly, Goshtasbi et al.[55] found out that the quality of life decreased with age. It seems that with age, the skill of individuals increases, thereby improving the quality of work-life.

In the present study, a significant relationship was found between the nurses' marital status and quality of work-life, which was consistent with the results of studies by Falahee et al.[51] Khaghanizadeh et al.[50] and Farsi and Rajai,[52] but inconsistent with the results of a study performed by Mogharab et al.[49] Besides, it was found in the present study that the nurses' quality of work-life significantly correlated with their education. In other words, the higher one's education, and consequently, the higher one's occupational position, the higher his/her quality of work-life will be. Moradi et al.[44] Shafipour et al.[32] and Kalpaklioglu and Baccloplu[56] found a significant correlation between the subject's education and quality of work-life.

Further, the results of the present study showed that there was a significant relationship between work experience and quality of work-life of nurses, and it was observed that the nurses with 15 years of work experience and above had a better mean of quality of work-life. This finding was consistent with the results of studies conducted by Moradi et al.[44] Shafipour et al.[32] and Mogharab et al.[49] and Yazdi Moghadam et al.[28] In a study done by Dargahi et al.[25] a significant relationship was found between the quality of work-life and work experience so that people with higher work experience were more satisfied with the quality of their work-life. However, this finding was inconsistent with the results of studies done by Khaghanizadeh et al.[50] and Choobineh et al.[57]

In the present study, a significant relationship was observed between the nurses' quality of work-life and their positions. This finding was consistent with the results of a study by Habibzadeh et al.[58] About the nurses at Uromieh University of Medical Sciences. Also, the results of the present study revealed that there was a significant relationship between the department and the quality of work-life, which was concurrent with the results of a study conducted by Kelbiso et al.[21] In which it was found out that the nurses working in the outpatient departments of hospitals located in Hawsa, Southern Ethiopia, reported a better quality of life. However, this finding was inconsistent with the results of a study done by Shafipour et al.[32] Choobineh et al.[57] and Habibzadeh et al.[58]

According to the results of the present study, there was a meaningful relationship between work shift and quality of work-life, so that the mean score of nurses' quality of work-life was higher when they were working rotating shifts. The results of a study conducted in Bangladesh showed that the nurses working morning shifts had a better quality of work-life than the ones working evening and night shifts.[59] Hesam et al. found out that no statistically significant relationship was between the nurses' quality of work-life and work shifts.[42] Besides, Hadley and Roques showed that the nurses working morning and evening shifts had a higher quality of work-life than those who worked night shifts.[60] Bagheri et al. found out that the night shift nurses had the lowest quality of work-life.[61] Besides, Muecke et al. express that " rotating shifts cause nurses harmful psychological and physiological effects, especially at the age of 40, and high levels of quality of work-life are perceived by nurses when their work shifts have the least negative effects on their personal lives.[62]

Likewise, Bagheri et al. found out that the quality of work-life was low in nurses working night shifts. It seems that in this study, the matching of nurses with work shift was related to the fair division of labor time based on work experience and considering nurses' desire by the head nurse and their proper relationship with the design of the staffing schedule.[61] Accordingly, nurses typically perceive the higher quality of work-life when their work shifts have the least negative impact on their work-life.[62]

In the present study, the results demonstrated that there was a significant relationship between the nurses' quality of work-life and employment status.[63–71] Besides, the nursing apprentices had the highest mean score of quality of work-life. In a study conducted by Mohammadi et al., a significant

relationship was found between the quality of work-life of nurses in Ardebil hospitals and their employment status.[72] This finding was inconsistent with the results of a study by Habibzadeh about the nurses of Uromia University of Medical Sciences.[58]

Limitation

This study has some limitations. First, the data is collected through self-reporting methods, which may affect the accuracy of the results. Second, because the sample consists of nurses working in Imam Reza Hospital, it is not possible to generalize the results to other organizations. Finally, it is recommended to conduct further research in this area to make comparisons to reach a consensus on this issue.

Conclusion

The results of the present study demonstrated that the nurses' quality of work-life was higher than average. Moreover, there was a significant difference between the nurses' quality of work-life and each of age, marital status, education, work experience, position, department, shift, and employment status, except for gender. Hence, it is suggested that nurses and hospital managers pay more attention to improving the quality of work-life of nurses and their determinants. The measures, such as improving the management practices in the nursing system, establishing effective incentive schemes, and changing the management of nurses' work hours in health, medical units can prove useful in this regard. It can provide care to clients satisfactorily, along with keeping different aspects of their own lives at optimal levels.

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Ethical Approval

The Ethical Review Committee of the University approved the study with reference number: I.R.KUMS.REC.1397.1060-No 97949.

ORCID iD

Arash Ziapour https://orcid.org/0000-0001-8687-7484

References

1. Suleiman K, Hijazi Z, Al Kalaldeh M, et al. Quality of nursing work life and related factors among emergency nurses in Jordan. *J Occup Health* 2019; 61: 398–406.
2. Ziapour A and Kianipour N. Health-related quality of life among university students: the role of demographic variables. *J Clin Diagn Res* 2018; 12: JC01–JC04.
3. Hemanathan R, Sreelekha PP and Golda M. Quality of work life among nurses in a tertiary care hospital. *Health Car* 2017; 5: 1–8.
4. Raeissi P, Rajabi MR, Ahmadizadeh E, et al. Quality of work life and factors associated with it among nurses in public hospitals, Iran. *J Egypt Public Health Assoc* 2019; 94: 1–8.
5. Phiri LP, Draper CE, Lambert EV, et al. Nurses' lifestyle behaviours, health priorities and barriers to living a healthy lifestyle: a qualitative descriptive study. *BMC Nurs* 2014; 13: 38–11.
6. Nazari B, Bakhshi S, Kaboudi M, et al. A comparison of quality of life, anxiety and depression in children with cancer and healthy children, Kermanshah-Iran. *Int J Pediatr* 2017; 5: 5305–5314.
7. Ramos FRS, Barth PO, Brito MJM, et al. Sociodemographic and work-related aspects of moral distress in Brazilian nurses. *Acta Paulista De Enferm* 2019; 32: 406–415.
8. Lebni YJ, Azar EF, Sharma M, et al. Factors affecting occupational hazards among operating room personnel at hospitals affiliated in in Western Iran: a cross-sectional study. *J Public Health* 2020; 1–8. https://link.springer.com/article/10.1007/s10389-020-01331-x#article-info
9. Lee YW, Dai YT and McCreary LL. Quality of work life as a predictor of nurses' intention to leave units, organisations and the profession. *J Nurs Manag* 2015; 23: 521–531.
10. Akter N, Akkadechanunt T, Chontawan R, et al. Factors predicting quality of work life among nurses in tertiary-level hospitals, Bangladesh. *Int Nurs Rev* 2018; 65: 182–189.
11. Horrigan JM, Lightfoot NE, Larivière MA, et al. Evaluating and improving nurses' health and quality of work life: a cross-sectional study of Korean blue collar workers employed by small businesses. *Workplace Health Saf* 2013; 61: 173–181.
12. Tomietto M, Paro E, Sartori R, et al.; PN Nursing Group. Work engagement and perceived work ability: an evidence-based model to enhance nurses' well-being. *J Adv Nurs* 2019; 75: 1933–1942.
13. Wu S, Li H, Tian J, et al. Health-related quality of life and its main related factors among nurses in China. *Ind Health* 2010; 49(2): 158–165.
14. Alghamdi MG. Nursing workload: a concept analysis. *J Nurs Manag* 2016; 24: 449–457.
15. Sansó N, Galiana L, Oliver A, et al. Palliative care professionals' inner life: exploring the relationships among awareness, self-care, and compassion satisfaction and fatigue, burnout, and coping with death. *J Pain Sympt Manage* 2015; 50: 200–207.
16. Zangeneh A, Lebni JY, Azar FEF, et al. A study of the communication skills in health care and the role of demographic variables (a case study of the nurses at the educational, therapeutic and research center of Imam Reza Hospital, Kermanshah, Iran in 2018). *J Public Health* 2019; 1–7. https://link.springer.com/article/10.1007/s10389-019-01126-9#article-info

17. Chuang C-H, Tseng P-C, Lin C-Y, et al. Burnout in the intensive care unit professionals: a systematic review. *Medicine (Baltimore)* 2016; 95: e5629–e5629.
18. Kim J-S. Emotional labor strategies, stress, and burnout among hospital nurses: a path analysis. *J Nurs Scholarsh* 2020; 52: 105–112.
19. Choi S-H and Lee H. Workplace violence against nurses in Korea and its impact on professional quality of life and turnover intention. *J Nurs Manag* 2017; 25: 508–518.
20. Kwak Y, Han Y, Song J-s, et al. Impact of emotional labour and workplace violence on professional quality of life among clinical nurses. *Int J Nurs Pract* 2020; 26: e12792.
21. Kelbiso L, Belay A and Woldie M. Determinants of quality of work life among nurses working in Hawassa town public health facilities, South Ethiopia: a cross-sectional study. *Nurs Res Pract* 2017; 2017: 1–26.
22. Shin JH and Bae SH. Nurse staffing, quality of care, and quality of life in US nursing homes, 1996–2011: an integrative review. *J Gerontol Nurs* 2012; 38: 46–53.
23. Lin P-Y, MacLennan S, Hunt N, et al. The influences of nursing transformational leadership style on the quality of nurses' working lives in Taiwan: a cross-sectional quantitative study. *BMC Nurs* 2015; 14: 1–9.
24. Joslin L, Davis C, Dolan P, et al. Quality of life and neck pain in nurses. *Int J Occup Med Environ Health* 2014; 27: 236–242.
25. Dargahi H, Gharib M and Goodarzi M. Quality of work life in nursing employees of Tehran University of Medical Sciences Hospitals. *J Hayat* 2007; 13: 13–21.
26. Habibzadeh H, Ghorbanzadeh K, Khalkhali H, et al. Investigation of the relationship between quality of work life and clinical competence in nurses. *Uromia Nurs Mid Faculty J* 2012; 10: 332–339.
27. Dehghannyieri N, Salehi T and Asadinoghabi A. Assessing the quality of work life, productivity of nurses and their relationship. *Iran J Nurs Res* 2008; 3: 27–37.
28. Yazdi Moghadam H, Stagi Z and Heidari A. Assessment of life quality of nursing in Sabzevar hospitals. *J Sabzevar Univ Med Sci* 2008; 16: 50–56.
29. Arab M, Shabaninejad H, Rashidian A, et al. A survey on working life quality of specialists working in affiliated hospitals of TUMS. *J Hosp* 2013; 11: 19–24.
30. Gillet N, Fouquereau E, Bonnaud-Antignac A, et al. The mediating role of organizational justice in the relationship between transformational leadership and nurses' quality of work life: a cross-sectional questionnaire survey. *Int J Nurs Stud* 2013; 50: 1359–1367.
31. Brooks BA and Anderson MA. Defining quality of nursing work life. *Nurs Econom* 2005; 23: 319–326.
32. Sarafis P, Rousaki E, Tsounis A, et al. The impact of occupational stress on nurses' caring behaviors and their health related quality of life. *BMC Nurs* 2016; 15: 1–9.
33. Venkataraman S, Anbazhagan S and Anbazhagan S. Quality of nursing work life among staff nurses in a tertiary care hospital in Puducherry. *Int J Community Med Public Health* 2018; 5: 3853–3859.
34. Van Laar D, Edwards JA and Easton S. The work-related quality of life scale for healthcare workers. *J Adv Nurs* 2007; 60: 325–333.
35. Maslow AH, Frager R, Fadiman J, et al. *Motivation and personality* (Vol. 2). New York: Harper & Row New York, 1970.
36. Herzberg FI. *Work and the nature of man*. Cleveland: World Pub. Co, 1966.
37. Edwards JA, Van Laar D, Easton S, et al. The work-related quality of life scale for higher education employees. *Q High Educ* 2009; 15: 207–219.
38. Karimi H and Rezvanfar A. The effect of quality of work life on organizational commitment among agricultural promotion professionals in Kerman. *Iran J Agric Econ Dev* 2014; 45: 125–141.
39. Navidian A, Saber S, Rezvani Amin M, et al. Correlation of quality of work life and job satisfaction in nurses of Kerman university of medical sciences. *J Health Prom Manag* 2014; 3: 7–15.
40. Shafipour V, Momeni B, Yazdani Charati J, et al. Quality of working life and its related factors in critical care unit nurses. *J Mazandaran Univf Med Sci* 2016; 26: 117–126.
41. Saberipour B, Mohammadzadeh H, Hemtipour A, et al. Quality of life and its related factors in nurses of Al Hadi hospital of Shushtar city in 2015. *Nurs Developm Health* 2015; 6: 49–58.
42. Hesam M, Asayesh H, Roohi G, et al. Assessing the relationship between nurses' quality of work life and their intention to leave the nursing profession. *Q J Nurs Manag* 2012; 1: 28–36.
43. Almalki MJ, FitzGerald G and Clark M. The relationship between quality of work life and turnover intention of primary health care nurses in Saudi Arabia. *BMC Health Serv Res* 2012; 12: 314–319.
44. Moradi T, Maghaminejad F and Azizi-Fini I. Quality of working life of nurses and its related factors. *Nurs Mid Stud* 2014; 3: e19450.
45. Awosusi O. Assessment of quality of working-life of nurses in two tertiary hospitals in Ekiti state, Nigeria. *African Res Rev* 2010; 4: 111–124.
46. Nagammal S, Nashwan AJ, Nair SL, et al. Quality of working life of nurses in a tertiary cancer center in Qatar. *Nurs* 2017; 6: 1–9.
47. Dehghan Nayeri N, Salehi T and Asadinoghaby A. Quality of work life and productivity of clinical nurses and their relationship with each other. *Nurse Res* 2009; 8: 27–37.
48. Ramesh N, Nisha C, Josephine AM, et al. A study on quality of work life among nurses in a medical college hospital in Bangalore. *Natl J Community Med* 2013; 4: 471–474.
49. Mogharab M, Riyasi H, Hedayati H, et al. Work life quality of nurses working in educational hospitals affiliated to Birjand University of Medical Sciences, 2012. *Modern Care J* 2013; 10: 84–90.
50. Khaghanizadeh M, Ebadi A and Rahmani M. The study of relationship between job stress and quality of work life of nurses in military hospitals. *J Mil Med* 2008; 10: 175–184.
51. Fallahee Khoshknab M, Karimloo M, Rahgoy A and Fattah Moghaddam L. Quality of life and factors related to it among psychiatric nurses in the university teaching hospitals in Tehran. *Hakim Res J* 2007; 9: 24–30.
52. Farsi Z and Rajai N. Investigation of the relationship between individual characteristics with quality of work life of nurses in hospitals of Aja in Tehran. *Q Ebnesina* 2015; 17: 12–19.
53. Wagenaar AF, Taris TW, Houtman IL, et al. Labour contracts in the European Union, 2000–2005: differences among demographic groups and implications for the quality of working life and work satisfaction. *Eur J Work Organ Psychol* 2012; 21: 169–194.
54. Natarajan C and Kiruthika V. Factors contributing quality of work life of employees in select magnesite companies: an empirical study. *Int J Manag* 2013; 4: 188–194.

55. Goshtasbi A, Montazeri A, Vahdaninia M, et al. Assessment the health status of people in Tehran based on gender, education and residential area: a population study. *Payesh* 2003; 2: 183–189.
56. Kalpaklioğlu A and Baççıoğlu A. Evaluation of quality of life: impact of allergic rhinitis on asthma. *J Investig Allergol Clin Immunol* 2008; 18: 168–173.
57. Choobineh A, Daneshmandi H, Parand M, et al. The survey of quality of work life and determination of its related factors in Shiraz University of Medical Sciences staff. *J Ergonom* 2013; 1: 56–62.
58. Habibzadeh H, Mohamadpor Y, Khalkhali H, et al. The relationship between nurses' quality of work life and their clinical competency. *J Urmia Nurs Mid Faculty* 2012; 10: 332–339.
59. Uddin M. A study on the quality of nurses of nurses government hospital in Bangladesh. *Proc Pak Acad Sci* 2006; 43: 121–129.
60. Hadley MB and Roques A. Nursing in Bangladesh: rhetoric and reality. *Soc Sci Med* 2007; 64: 1153–1165.
61. Bagheri H, Shahabi Z, Ebrahimi H, et al. The association between quality of sleep and health-related quality of life in nurses. *J Hayat* 2007; 12: 13–20.
62. Muecke S. Effects of rotating night shifts: literature review. *J Adv Nurs* 2005; 50: 433–439.
63. Abbas J, Aqeel M, Abbas J, et al. The moderating role of social support for marital adjustment, depression, anxiety, and stress: evidence from Pakistani working and nonworking women. *J Affect Disord* 2019; 244: 231–238.
64. Abbas J, Aqeel M, Wenhong Z, et al. The moderating role of gender inequality and age among emotional intelligence, homesickness and development of mood swings in university students. *Int J Hum Rights Healthc* 2018; 11: 356–367.
65. Abbas J, Aqeel M, Jaffar A, et al. Tinnitus perception mediates the relationship between physiological and psychological problems among patients. *J Exp Psychopathol* 2019; 10: 204380871985855.
66. Abbas J, Mahmood S, Ali H, et al. The effects of corporate social responsibility practices and environmental factors through a moderating role of social media marketing on sustainable performance of business firms. *Sustainability* 2019; 11: 3434.
67. Abbas J, Hussain I, Hussain S, et al. The impact of knowledge sharing and innovation on sustainable performance in Islamic banks: a mediation analysis through a SEM approach. *Sustainability* 2019; 11: 4049.
68. Aman J, Abbas J, Nurunnabi M, et al. The relationship of religiosity and marital satisfaction: the role of religious commitment and practices on marital satisfaction among Pakistani respondents. *Behav Sci* 2019; 9: 30.
69. Abbas J, Aman J, Nurunnabi M, et al. The impact of social media on learning behavior for sustainable education: Evidence of students from selected universities in Pakistan. *Sustainability* 2019; 11: 1683.
70. Azhar A, Abbas J, Wenhong Z, et al. Linking infidelity stress, anxiety and depression: evidence from Pakistan married couples and divorced individuals. *Int J Hum Rights Healthc* 2018; 11: 214–228.
71. Abbas J, Raza S, Nurunnabi M, et al. The impact of entrepreneurial business networks on firms' performance through a mediating role of dynamic capabilities. *Sustainability* 2019; 11: 3006.
72. Mohammadi M, Mozaffari N and Dadkhah B. Etebari asl F, etebari asl Z. Study of Work-Related quality of life of nurses in Ardabil province hospitals. *J Health Care* 2017; 19: 108–116.

Author Biographies

Javad Yoosefi Lebni, PhD student in health education and health promotion at Iran University of Medical Sciences and researcher at the Health Promotion Research Center of Iran University of Medical Sciences. Interested in research in the areas of social determinants of health, addiction, women's health, children's health, quality research and health promotion.

Razie Toghroli, veterinarian and PhD student of health education and health promotion at hormozgan university of medical science. her research interests are in One_health, health promotion, public health, zoonosis disease, health care, health literacy, life style and antimicrobial resistance.

Jaffar Abbas, is affiliated with Shanghai Jiao Tong University. His main research interests areas are Public Health, Business Administration, Tourism development, Corporate Social Responsibility, Entrepreneurship and Firm Performance.

Neda Kianipour, Students Research Committee, Kermanshah University of Medical Sciences, Kermanshah, Iran. Her research interests are in public health, health care and Environmental Health.

Nazila NeJhaddadgar, PhD, is a researcher in the field of Health Education, Adolescent health and healthy life style.

Mohammad Reza Salahshoor, associate professor PhD in Anatomical sciences from University of Isfahan, Iran. Department of Anatomy and Cell-biology, School of Medical Sciences, Kermanshah University of Medical Sciences, Kermanshah, Iran.

Fakhreddin Chaboksavar, PhD in Health Education and Health Promotion at Iran University of Medical Sciences. His research interests are in Educational interventions and Health Promotion.

Farideh Moradi, PhD in health policy from Iran university in medical sciences, advisor to the director of Imam Reza Hospital in Kermanshah, Iran.

Arash Ziapour, PhD Student of Health Education and Health Promotion at Iran University of Medical Sciences Iran and Researcher at Kermanshah University of Medical Sciences. His research interests are in Sociology, social determinants of health, Health Promotion, public health, health care, Health, Health Literacy, Diabetes, children's health, Social Health and Life Style.