The relationship between quality of life and social support among nurses: A cross-sectional study

**Objective:** This research was conducted with the aim of evaluating the quality of life (QoL) and its relationship with social support of nurses. **Materials and Methods:** This cross-sectional study was performed on 241 nurses working at Zanjan University of Medical Sciences. The instruments used in this study were the Persian SF-36 tool, McCain Marquin Social Interaction Questionnaire, and information on individual and job characteristics. The sampling method was cluster sampling with probability proportional to population size. The information was analyzed using SPSS version 18 and with proportional statistics. **Results:** Only 31.6% (67) of the nurses had high levels of social support. The average social support was 47/65 ± 93/6. The highest mean score of QoL 67.75 ± 25.023 was related to physical activity and the lowest score mean were related to dimensions of bodily pain (54.59 ± 22.727) and role limitations because of physical health problems (59.60 ± 40.261). In the linear regression model with the Enter method, the adjustment of the effects of the variables of the three dimensions of general health, mental health and happiness, and QoL was associated with social support. **Conclusion:** The majority of nurses have moderate social support and poor QoL for nurses. Therefore, considering the effects of nurse support, it is recommended to perform supportive interventions and plan for more well-being of nurses.

**Keywords:** General health, happiness and vitality, mental health, nurses, quality of life, social support

Nurses are considered the largest group who provide patient care services and perform important duties such as mental, physical, and psychological care for patients. Performing such activities can have a significant role in nurses’ physical and mental disorders without observing the principles of safety, comfort, and well-being. Nurses can play an effective role in improving the quality of life (QoL) of patients. Hence, nurses’ QoL as a human being on the one hand and as a primary caregiver of the patients is so important. QoL is a multidimensional concept that is influenced by a bulk of important factors such as physical, mental, personal beliefs, and social relationships. The World Health Organization (WHO) views QoL as a multidimensional concept and defines it as each person's...
understanding of life, values, goals, standards, and individual interests. WHO defines Quality of Life as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment. What is understood of this definition is that working life comprises an important and conceptual part of one's life. For example, occupational stress is a very important factor affecting the QoL. Cimete et al. found that job satisfaction and QoL for nurses were closely correlated. Investigating the factors related to the quality of work-life of nurses indicates their potential in service to community members and can affect the quality of nursing care at all levels. Today, attention is focused on capacities that play an important role in the QoL. One of the factors that influence QoL is social support. Social support is defined as the support that one receives from family, friends, organizations, and other people. Nurses are always regarded as the most persuasive and oppressed occupational group in the hospital. It cannot be concealed that this group is susceptible to a lack of support due to occupational stresses, hard work, and overwork pressure. With respect to the definition, social support encompasses three categories of emotional, instrumental, and informational support. Emotional support means having someone available to rely on and trust when needed. Instrumental support means the material, objective, and actual support received by one person from others, and informational support means the acquisition of essential information through social interaction with others. Social support is a protective factor against workplace stress and acts as a safety valve against occupational stress. Studies show that in the nursing profession, emotional and material support from colleagues and caregivers is more important than support from friends and relatives. Furthermore, the results of social support lead to an increase in individual competence. It is worth noting that social support and cooperation are the reasons that nurses choose to stay in the workplace despite lack of other factors. Occupational stress, the high number of work shifts, lack of a fixed schedule in life, lack of a recreational program and even adequate rest and sleep, lack of holidays and lack of participation in social and family programs are all factors that highlight the broader need of nurses for social support. This is while the above-mentioned issues undoubtedly have an undeniable impact on the performance of the work and thus on the quality of care provided.

Given the literature review, the researchers hope that by conducting research on the relationship between QoL and social support among nurses, they will be able to provide information and feedback to nursing authorities and managers and to identify the nature of social support network and to establish and identify support systems and its relationship with the QoL of nurses which play an effective part in improving their QoL and careers so that we can improve the quality of care provided by this influential group of health-care providers and take a step toward achieving the lofty goal, as the ultimate goal of nursing is to promote well-being and QoL.

**MATERIALS AND METHODS**

This cross-sectional study was conducted on 241 nurses in five centers affiliated to Zanjan University of Medical Science from January 10, 2019, to July 30, 2019. The sampling method was stratified. First, by determining clinical and outpatient wards in each of the eight university hospitals in all five districts of Zanjan province, 30 types of work wards were obtained that were merged into 12 sections with regard to similar functions and scopes of their activities. The total number of nurses working in university hospitals in Zanjan province was 873 individuals holding associate and bachelor degrees in anesthesia and operating room as well as associate, bachelor, and master degrees in nursing. In the next step, the number of nurses in each hospital and ward was determined and a code number from 1 to 873 was allocated to them. The following formula was used to select 248 subjects. First, the sample size of each ward was determined based on the proportion of people employed in that section, and then, using a random digit table, according to the numerical range of codes for each section, the sample members of each section were selected. Inclusion criteria were satisfaction with and willingness to cooperation, lack of experience of mourning, divorce, or severe illness within the past 6 months. The questionnaire was delivered to the nurses and returned after completion. The questionnaires consisted of three parts: demographic-occupational section, McCain Marklin Social Integration Questionnaire, and SF-36 questionnaire. McCain Marklin Social Integration Questionnaire contains 14 items, eight of which measure the level of social support employees receive from their colleagues and six items about support from supervisors and head nurses. Answers to the items of this tool were scored as not at all (1 point), not in this way (2 points), I have no idea (3 points), it is so (4 points), and I totally agree (5 points). The total points (14–70) and how they were scored were as follows: 14–32 low support, 33–51 average support, and 52–70 high support. The reliability and validity of the Iranian version of this tool have been previously confirmed. SF-36 questionnaire contains 36 items that measure eight dimensions of QoL. These dimensions include physical functioning, limitations on role playing due to physical problems, physical pain, general health, vitality, mental
health, social functioning, and limitations on role-playing due to mental problems. Each of these dimensions scores from 0 to 100. Higher scores indicate better health status. The reliability and validity of the Persian version of this tool have been previously approved by Montazeri et al. Ethical considerations were obtained from the authorities of Zanjan University of Medical Sciences and coordinated with the authorities of the hospitals affiliated to Zanjan University of Medical Sciences, and the participants signed the informed consent form. It was emphasized that the information collected was anonymous and would be kept confidential, and the results would be interpreted in general, again if the individuals did not want to answer the questions, they would put the questionnaires in the envelope and handed them over to the relevant interviewer. Finally, ethical considerations and integrity were respected throughout the process. The plan was approved by the Ethics Committee of Zanjan University of Medical Sciences under code No. 8906569 and the data were analyzed using SPSS software version 16 IBM SPSS Statistics Version 16. It was noted that if some nurses refused to answer some of the questions, the data were considered missing by recording the number 9 in the corresponding file. Spearman, ANOVA, and inter-regression tests were run for the data analysis.

**RESULTS**

Data analysis was performed on 241 nurses. A small number of nurses were unwilling to respond (10%). The mean age of the nurses was 22–50 years, with a mean age of 6.7 ± 32.41. Majority of nurses under the study were female (85.5%). About 77.9% were married and the remaining ones were single. Seventeen percentage (48 persons) had 1–2 children, 33% (8 persons) had 3 or more children, and 22% (153 persons) had no children. The study showed that only 5.8% (n = 14) had physical disabilities. About 44.4% (107 people) expressed interest in their profession, 19.5% (47 people) were very interested, 6.2% (15 people) were somewhat interested, and 6.2% had little interest in nursing, with only 2.5% (n = 6) suggesting no interest in their job. The educational degrees of the samples were as follows: 80.1% had a bachelor's degree, 15.4% had an associate degree, and 2.9% had a master's degree. Furthermore, 34% of the nurses had work experience between 0 and 60 months, 27.4% between 61 and 120 months, 20.3% of them had 121–180 months, and 18.3% had more than 180 months. Overall, 7.1% held associate or bachelor's degree in anesthetics, 85.3% were technicians in the operating room, 1.7% held a master's degree in nursing, and 73.8% held a bachelor's degree in nursing. About 64.8% (149 people) of the samples were forced to work overtime, and only 37.7% (90 people) stated that doing overtime work was at their own request.

Table 1: Findings related to determining the relationship between quality of life domains and social support of nurses working in hospitals of Zanjan University of Medical Sciences

| QoL Test results | Social support | Spearman correlation test | One-way ANOVA, P |
|------------------|----------------|--------------------------|-----------------|
|                   | r              | P                        |                 |
| Physical functioning | 0.106          | 0.121                    | 0.67            |
| Limitations on role playing due to physical problems | 0.184 | 0.005 | 0.029 |
| Bodily pain | 0.056          | 0.390                    | 0.803            |
| General health | 0.119          | 0.072                    | 0.002            |
| Vitality | 0.329          | 0.0001                   | 0.0001           |
| Social role functioning | 0.472 | 0.008 | 0.069 |
| Limitations on role playing due to mental problems | 0.203 | 0.002 | 0.062 |
| Mental health | 0.333          | 0.0001                   | 0.0001           |

QoL – Quality of life
at lower levels of support [Table 2]. Based on the results of Table 3, it was found that social support had a significant effect on nurses’ mental health so that the average mean mental health score of those with higher levels of social support (provided that the effect of other variables was constant) was 7.44 unit more than the least supported ones. A linear regression model with the Enter method by adjusting the effect of the above confounding variables on the mean score of happiness and vitality of those with higher levels of social support (provided that the effects of other variables were constant) were 7.28 units higher than that of those with lower levels of support [Table 4]. In this study, other domains of QoL did not show a significant relationship with controlling for confounding factors entering the regression model.

**DISCUSSION**

Findings showed that most of the nurses enjoyed moderate social support. None of the nurses had the maximum level of support. This result was in line with the findings of the research by Rezae et al. In the study conducted by Othman and Nasurdin, the mean social support received by the colleagues was moderate (mean = 4.81, SD = 0.91). In contrast, social support received by nursing managers was relatively high (mean = 5.02, SD: 1.07) and social support by nursing managers was directly related to nurses’ job aspirations. Researchers postulate that enhancing job independence and social support is effective on nurses’ job aspirations, and nursing managers need to have more support for nurses to express their concerns and needs and provide assistance and information and constructive feedback.

Nursing managers need to keep in mind that health systems in several developed countries face major challenges due to lack of nursing, supervisor support, marital status, number of friends at work, number of children at home, gender, commitment at one time, peer support, and family support accounted for 60% of the factors contributing to job retention, so social sustainability can be promoted by social enhancement.

In our country, the lack of supportive culture, especially for employed women, and lack of attention to the issue in the public opinion, as well as the lack of professional ethics and behavior and the lack of independence needed in this profession as a job and a hierarchy and multiple officials in this occupation may be contributing factors to their less social support.

Based on the results of the study, after eliminating demographic and occupational variables, positive relationship between social support and happiness and vitality and mental health and general health of QoL was identified, and in fact, social support was a predictive factor for nurses’ QoL.

Many researchers emphasize the role of social bonds in maintaining mental health and well-being and volatility. Hefner and Eisenberg concluded in their research on nursing students that students with low social support were more likely to experience mental health problems and reported that they were six times more at risk for depression. The results are also in line with the findings of studies conducted by Yildirim et al. In their study, social support was inversely related to psychological symptoms, stating that social support had a significant effect on psychological status. It has been found that perceived

### Table 2: The impact of social support on general health by adjusting for the effects of confounding variables in the nurses studied

| Variables                  | P     | SD (coefficient) |
|----------------------------|-------|------------------|
| Social support             | 0.005 | 8.07 (2.81)      |
| Concern about job future   | 0.242 | −1.30 (1.13)     |
| Residence in the province  | 0.080 | 9.92 (3.37)      |
| Interest                   | 0.155 | −2.20 (1.54)     |
| Viewpoints of those around nursing | 0.046 | −3.83 (1.91)     |

SD – Standard deviation

### Table 3: The effect of social support on mental health by adjusting for the effects of confounding variables (occupational future, residence in the province, positive attitudes of caregivers) in the studied nurses

| Variable                          | SD (coefficient) | P     |
|-----------------------------------|------------------|-------|
| Social support                    | 7.44 (2.38)      | 0.002 |
| Concern about job future          | 2.62 (1.97)      | 0.007 |
| Residence in the province         | 4.77 (2.92)      | 0.105 |
| Interest                          | −2.22 (1.32)     | 0.094 |
| Viewpoints of those around nursing| −3.30 (1.67)     | 0.065 |

Linear regression model with enter method. SD – Standard deviation

### Table 4: Influence of social support on happiness and vitality by adjusting for the effects of confounding variables (occupational future, living in the province, interest and positive outlook) in the nurses studied by linear regression model

| Variable                  | P     | SD (coefficient) |
|---------------------------|-------|------------------|
| Social support            | 0.002 | 7.28 (2.35)      |
| Concern about job future  | 0.062 | 1.77 (0.94)      |
| Residence in the province | 0.089 | 4.90 (2.86)      |
| Interest                  | 0.000 | −4.57 (1.31)     |
| Viewpoints of those around nursing | 0.017 | −3.97 (1.64)     |

SD – Standard deviation
social support with mental distress and burnout were predictors of mental health in nurses.[26] Yoshizawa et al. also found that social support reduces the impact of stress on depression in psychiatric nurses.[27] In their research, Malinauskienė et al. also highlighted the importance of social support in reducing nurses’ mental distress and argued that the role of social support should not be neglected in nurses’ mental health and that workplace approaches should be developed to increase the sense of integrity among nurses.[28] The results of this study confirmed that along with an increase in social support, the general health dimension of QoL was also improved, which is in line with the results of the study by Harpham who stated that support has a favorable effect on people’s health.[29] There was also a significant negative relationship between mental health and workplace stress, workload, confrontation with physicians, nurses, and lack of support.[30] In their study, Rashid et al. also found the meaningful impact of social support on life satisfaction outcomes such as well-being, family, and work.[31] The study performed by Chavoshian et al. based on the results of regression analysis showed that among the social support components, emotional, instrumental, and informational support structures had a significant role in predicting QoL.[32] Another finding of this study was the association between social support and the happiness and vitality of QoL, which is consistent with numerous studies.[33,34] In his research, Jun also found that nursing students supported by parents, husbands, or friends enjoyed higher levels of happiness, suggesting that social support may increase happiness and vitality by allowing individuals to share their thoughts, feelings, desires, and occupational stresses.[35]

Furthermore, in their research on the elderly, Moeini et al. showed that the quality and quantity of social support in the elderly can be one of the predictors of happiness in them and that the elderly with higher social support had better performance, positive outlook, and life satisfaction.[36]

The results of the research by Li et al. also showed that the amount of emotional, instrumental, and informational support received from supervisors and managers in critical care nurses was negatively and significantly related to the level of emotional exhaustion.[37]

Limitations

One of the limitations of the present study was the use of questionnaire. Distortions in recalling past events are among the disadvantages of self-report questionnaires. Since the present study was a correlational one, it is quintessential to be cautious in the understanding of cause and effect relationships. Further research is recommended in this regard.

CONCLUSION

Given the results of the present study, it can be stated that increasing the support by upstream managers to nurses, reducing job pressures including overtime, developing programs to increase happiness and vitality and creating a positive mentality for the profession in the community, and understanding the problems of this highly laborious research in physical, mental, and vitality and happiness areas can improve their QoL.

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Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Joslin LE, Davis CR, Dolan P, Clark EM. Quality of life and neck pain in nurses. Int J Occup Med Environ Health 2014;27:236-42.
2. Alaf Javadi M, Parandeh A, Ebadi A, Haji Amini Z. Comparison of life quality between special care units and internal-surgical nurses. Iran J Crit Care Nurs 2010;3:113-7.
3. Estrella-Castillo DF, Gómez-de-Regil L. Quality of life in Mexican patients with primary neurological or musculoskeletal disabilities. Disabil Health J 2016;9:127-33.
4. Group WQ. Measuring Quality of Life: the development of the World Health Organization Quality of Life Instrument (WHOQoL). Geneva; World Health Organization. 2007;35:401-11.
5. Hsu MY, Kernohan G. Dimensions of hospital nurses’ quality of working life. J Adv Nurs 2006;54:120-31.
6. Brooks BA, Anderson MA. Nursing work life in acute care. J Nurs Care Qual 2004;19:269-75.
7. Cimete G, Gencaød NS, Keskin G. Quality of life and job satisfaction of nurses. J Nurs Care Qual 2003;18:151-8.
8. Reyasi H. Work life quality of nurses working in educational hospitals affiliated to Birjand University of Medical Sciences, 2012. Modern Care J 2013;10:84-90.
9. Caltabiano ML, Sarafino EP. Health Psychology: Biopsychosocial Interactions. An Australian Perspective. London: John Wiley and Sons; 2002.
10. Gülacı F. The effect of perceived social support on subjective well-being. Procedia Soc Behav Sci 2010;2:3844-9.
11. Klersy C, Callegari A, Martinelli V, Vizzardi V, Navino C, Malberti F, et al. Burnout in health care providers of dialysis service in Northern Italy-A multicentre study. Nephrol Dialysis Transplant 2007;22:2283-90.
12. Dehle C, Landers JE. You can’t always get what you want, but can you get what you need? Personality traits and social support in marriage. J Soc Clin Psychol 2005;24:1051-76.
13. Lawrence SA, Gardner J, Callan VJ. The support appraisal for work stressors inventory: Construction and initial validation. J Vocat Behav 2007;70:172-204.
14. Maruyama S, Morimoto K. Effects of long workhours on life-style, stress and quality of life among intermediate Japanese managers. Scand J Work Environ Health 1996;22:353-9.
15. Hayhurst A, Saylor C, Stuenkel D. Work environmental factors and retention of nurses. J Nurs Care Qual 2005;20:283-8.
16. AbuAlRub RF. Job stress, job performance, and social support among hospital nurses. J Nurs Scholarsh 2004;36:73-8.
17. Rezaee N, Behbahany N, Yarandy A, Hosseine F. Correlation between occupational stress and social support among nurses. Iran J Nurs 2006;19:71-8.
18. Montazeri A, Goshtasebi A, Vahdaninia M, Gandek B. The Short Form Health Survey (SF-36): Translation and validation study of the Iranian version. Qual Life Res 2005;14:875-82.
19. Jafari S, Batebi A, Sadegi R, Shojaei F, Hosseini M, Ebrahimpoor M, et al. Health related quality of life in nurses. Health Monitor J Iran Instit Health Sci Res 2013;12:671-8.
20. Othman N, Nasuridin AM. Social support and work engagement: A study of Malaysian nurses. J Nurs Manag 2013;21:1083-90.
21. Vera M, Martinez IM, Lorente L, Chambel MJ. The role of co-worker and supervisor support in the relationship between job autonomy and work engagement among Portuguese nurses: A multilevel study. Soc Indicators Res 2016;126:1143-56.
22. Blakeley JA, Ribeiro VE. Early retirement among registered nurses: Contributing factors. J Nurs Manag 2008;16:29-37.
23. AbuAlRub RF. Work and non-work social support and intent to stay at work among Jordanian hospital nurses. Int Nurs Rev 2010;57:195-201.
24. Hefner J, Eisenberg D. Social support and mental health among college students. Am J Orthopsychiatry 2009;79:491-9.
25. Yildirim N, Karaca A, Cangur S, Ackgogz F, Akkus D. The relationship between educational stress, stress coping, self-esteem, social support, and health status among nursing students in Turkey: A structural equation modeling approach. Nurse Educ Today 2017;48:33-9.
26. Babaeiamiri N. Predicting nurses’ mental health based on their job burnout, perceived social support, and psychological hardiness. Modern Care J 2016;13:e8856.
27. Yoshizawa K, Sugawara N, Yasui-Furukori N, Danjo K, Furukori H, Sato Y, et al. Relationship between occupational stress and depression among psychiatric nurses in Japan. Arch Environ Occup Health 2016;71:10-5.
28. Malinauskienë V, Leisytë P, Malinauskas R. Psychosocial job characteristics, social support, and sense of coherence as determinants of mental health among nurses. Medicina (Kaunas) 2009;45:910-7.
29. Harpham T. Urbanization and mental health in developing countries: A research role for social scientists, public health professionals and social psychiatrists. Soc Sci Med 1994;39:233-45.
30. Lambert VA, Lambert CE, Ito M. Workplace stressors, ways of coping and demographic characteristics as predictors of physical and mental health of Japanese hospital nurses. Int J Nurs Stud 2004;41:85-97.
31. Rashid WE, Nordin MS, Omar A, Ismail I. Social support, work-family enrichment and life satisfaction among married nurses in health service. Int J Soc Sci Humanity 2011;1:150.
32. Chavoshian SA, Moeini B, Bashirian S, Feradmal J. The role of spiritual health and social support in predicting nurses’ quality of life. J Educ Community Health 2015;2:19-28.
33. Kim JH, Jeon HO. Factors influencing subjective happiness in nursing students: Focused on psycho-social factors. J Korean Acad Psychiatr Ment Health Nurs 2016;25:123-32.
34. Kim GH, Kim KH. Factors related to happiness in first year women nursing students. J Korean Acad Psychiatr Ment Health Nurs 2012;21:149-57.
35. Jun WH, Jo MJ. Factor affecting happiness among nursing students in South Korea. J Psychiatr Ment Health Nurs 2016;23:419-26.
36. Moeini B, Barati M, Farhadian M, Ara MH. The association between social support and happiness among elderly in Iran. Korean J Fam Med 2018;39:260-5.
37. Li L, Ruan H, Yuan WJ. The relationship between social support and burnout among ICU nurses in Shanghai: A cross-sectional study. Chin Nurs Res 2015;245-50.