

Comparison of emotional intelligence, general health, and physical health in nurses working in psychiatric wards and other wards of hospitals

DOI: 10.22098/JPC.2022.10784.1106

behzad malehmir¹, Zohreh Rafiee rad^{2*}, safura keyvanlo³, Fateme Javand⁴, Mohammad Narimani⁵

1. Master of Clinical Psychology, Mohaghegh Ardabili University, Ardabil, Iran.
2. MA Clinical Psychology, Mohaghegh Ardabili University, Iran Corresponding Author: rafieerad@yahoo.com
3. MA Clinical Psychology, Mohaghegh Ardabili University, Iran
4. Master of Clinical Psychology, Azad University, West Tehran Branch, Iran.
5. Professor of Psychology, University of Mohaghegh Ardabili, Ardabil, Iran

Abstract

Aim: Due to the great importance of health in the nursing profession, it can be potentially stressful for them. This study aimed to compare emotional intelligence, general health, and physical health in nurses working in psychiatric wards and other wards of hospitals. **Method:** The present study was descriptive and causal-comparative. The statistical population of the present study was all nurses in Ardabil in the first half of the year 1400 and 50 nurses working in psychiatric wards and 50 nurses were selected by simple random sampling. Bar-Ann's Emotional Intelligence Questionnaire (1980), Goldberg & Hiller's General Health Questionnaire (1972), and Scott and Clovi's Physical Health Questionnaire (2003) were used to collect data. Data were analyzed using descriptive statistics and multivariate analysis of variance (MANOVA). **Finding:** The results showed a statistically significant difference between the two groups of nurses in the psychiatric ward and other wards in the variables of emotional intelligence ($F = 9.85$ and $P < 0.01$), general health ($F = 24.22$ and $P < 0.01$), and physical health ($F = 14.77$ and $P < 0.01$). **result:** Therefore, according to the results of the present study, it is suggested that education on emotional intelligence, general health, and physical health components be included in the in-service training program of nursing students both as in-service training courses for employed nurses and as a course unit. Efficiency and effectiveness of the level of nursing services and empowerment of nursing students, increase the satisfaction of patients and their families from nursing services and also improve the level of community health.

Keywords: Emotional Intelligence, General Health, Physical Health, Nurs

Introduction

Today, with the increasing prevalence of mental disorders, the demand for high-quality psychiatric services is increasing (World Health Organization, 2018). Centuries ago, many countries around the world focused on health and infectious diseases and paid less attention to mental health. However, in recent years, due to social and economic changes and stress, mental health problems have increased and special needs for care and nursing have emerged in these departments (Sepehrmanesh et al., 2013). Nurses construct up a significant percentage of employees in the health care system and their activities have shift work and are considered as hard jobs. For example, nurses working in psychiatric wards are often exposed to violence, threats, and disrespect from patients and experience more stress than other nurses (Huang et al., 2020). In addition to stress from patients, psychiatric nurses are exposed to environmental stresses such as rigid and inflexible policy-making, inappropriate job assignments, inadequate rewards, angry psychiatrists, peer conflict, and sometimes fruitless efforts to heal patients, all of which ultimately lead to a decrease in job satisfaction and burn out (Yavari et al., 2014).

One of the elements that help a person's adaptive behavior and problem-solving is intelligence. In 1958, Gardner divided intelligence into different types, such as social intelligence, cultural intelligence, emotional intelligence, physical intelligence, musical intelligence, and language intelligence (Klishami, 2016). Emotional intelligence is recognizing, understanding, and managing emotions to communicate with others, solve personal problems, and cope properly with life challenges is a very practical concept for nurses (Masoudi and Alavi, 2020). Increasing emotional intelligence skills also helps nurses to be more effective in dealing with stressors that lead to burnout (Tago and Karshi, 2017). Research shows that emotional intelligence has an effective effect on increasing the communication between nurses and patients, and nurses with higher emotional intelligence can easily find ways to deal with problems, effective measures to solve problems, and effective solutions to problems, which increases the quality of care and Leads to patient recovery (Zhou et al., 2016). Studies have shown that high levels of emotional intelligence increase people's control over their inner feelings and provoke logical reactions to problems (Sheidaei, 2015). Today, it is believed that emotional intelligence plays an important role in success and career, and as an emotional information processor, it can provide appropriate emotional coordination in the workplace. In general, emotional intelligence has a positive effect on better decision-making and improving the performance of nurses as people with high job stress (Ebrahimi et al., 2020).

The World Health Organization (WHO) has defined health as a set of well-being, complete physical, mental and social well-being, none of which is superior to the other (Pourabrahimi et al., 2019). General health is a bio-psychological-social triangle that in the psychological part, is associated with some components of emotional intelligence such as emotional self-awareness, self-fulfillment, and self-worth. Also, in the social sector, responsibility and empathy are understood as the components of interpersonal relationships, and finally, the third side of this triangle is physical health, which affects and is affected by general health (Bakhshaish, 2013). A study conducted in university hospitals in Tehran showed that 38% of nurses have poor general health (Arsalani et al.,

2012). In Isfahan, 4 to 13% of nurses have problems in the field of social functioning and in general, 59% of nurses in Iran have physical and mental problems (Mardani et al., 2012). In jobs such as nursing where human communication is important, there is more stress and it endangers the health of the person. This stress is a multidimensional and destructive phenomenon that can increase absenteeism and reduce energy and work efficiency, which ultimately leads to a decline in the quality of patient care (Parhizkar, 2020). Today, fatigue and leaving jobs in nurses working in psychiatric wards have increased significantly compared to other wards. In this regard, the study by Pico et al. (2017) in Singapore showed that employees experience high levels of stress, which has reduced their efficiency, fatigue, and reduced quality of work life. The presence of this level of anxiety has also caused problems in the physical dimension.

Physical health means the body can function daily and conserve energy for emergencies and to stay away from illness and overall fitness. According to studies, 77% of nurses complain of insomnia, 66% of nurses often complain of headaches and gastrointestinal disorders, and 61% often complain of joint pain (Ozaslan et al., 2019). Nurses in psychiatric wards have more communication with patients in other words, have a long-term duty toward them, play a more supportive and caring role, and are ultimately exposed to a variety of health problems, including physical health, which is the most common. They can be referred to low back pain, sleep disorders, and disorders of biological rhythms (Maghsoudi et al., 2015). Because nurses are the largest professional group in the health care system and play an important role in providing quality care to patients, it is important to pay attention to issues related to general health, physical health, and emotional intelligence. In this regard, due to the existence of various physical, psychological, and social problems, the lack of support systems for nurses in psychiatric wards, and the lack of clear and complete information about their health status, the present study aimed to investigate emotional intelligence, general and physical health inwards Psychiatry and other wards of the hospital were performed.

Methods

The present study is descriptive and causal-comparative in terms of the basic purpose and terms of the data collection method. The study population in this study included 115 nurses working in psychiatric and normal wards in two hospitals in Ardabil (Ishar Psychiatric Hospital and Fatemi Hospital) in 1400, of which 57 nurses in psychiatric wards and 58 nurses in normal wards. To determine the sample, using the Morgan table, from a sample of 57 psychiatric ward nurses, a sample 50 people, and a total of 58 normal ward nurses, a sample of 50 people was selected by simple random sampling. To do this, first, the list of nurses in both hospitals was prepared and numbered and then from the numbers that were in the envelope, the desired number of samples was randomly selected. After coordinating with the security and management of the hospital, the researchers, by referring to the metrons and the head nurses of the wards, explained the general objectives of the research and selected the qualified ones with their consent. Separate briefing sessions were held in both hospitals with the presence of researchers and subjects, and after knowing the objectives of the research, if they wished and completed informed

consent, they were assured that the results of the questionnaire would remain confidential and if desired, the results would be provided to them. Will take. Data were collected over one month. Inclusion criteria included having a bachelor's degree or higher, one year or more of work experience, no serious medical or psychiatric disorders, and willingness to participate in research.

The following tools were used to collect data.

Measuring tool

1-Bar-On Emotional Intelligence Questionnaire: The present questionnaire was developed by Bar-On in 1980 and has 90 items. The questionnaire is scored on a 5-point Likert scale from 5 to 1 (strongly agree: 5 and strongly disagree: 1) and in some questions, it is scored in reverse. The reliability and validity of the emotional intelligence test among students of the University of Tehran were studied using Cronbach's alpha method equal to 0.92 for the total reliability of the questionnaire, which indicates the high reliability of the questionnaire (Ahmadi, Baradaran, Hosseini, and Mehrabian, 2014). In another study, the reliability of the load-in questionnaire using Cronbach's alpha was 0.62 (Dejkan, 2002). Petrides and Farnham (2001) estimated the internal consistency of the present questionnaire to be 0.86. In the research of Ahmadi Azgandi, Frost Memar, Taghavi, and Abolhassani (2006), the validity of this questionnaire was estimated from 0.76 to 0.88 using Cronbach's alpha method.

2-General Health Questionnaire (GHQ): The present questionnaire was developed by Goldberg and Hiller (1978) to measure a person's general health in a recent month and has 28 items. The scoring method in this questionnaire is in the form of a Likert from 0 to 3 for options A to D. The total score of the questionnaire can be a minimum of 0 and a maximum of 84. Goldberg and Williams (1988) estimated the reliability of the halving method for this questionnaire as 0.95. Chan (1985) estimated the internal consistency coefficient of this questionnaire to be 0.93. The present questionnaire is standard and has been standardized in different populations in Iran and different countries. Taghavi evaluated the reliability of the general health questionnaire based on three methods of retesting, halving, and Cronbach's alpha, which obtained reliability coefficients of 0.93, 0.70, and 0.90, respectively (Taghavi, 2001). The validity and reliability of the present questionnaire were examined by Ismailpour and Jalal in 2019 and its Cronbach's alpha coefficient was 0.90 to 0.95.

3-Physical Health Questionnaire (PHQ): Scott and Kelloway 2003 developed a 14-item scale study that included four components: headache, respiratory, digestive, and sleep disorders. This instrument was standardized in 2017 according to Iranian culture and society by Abbasi, Kimiaei, Saffarian, and Abedi. A person's score on this scale ranges from 14 to 98, with a lower score indicating physical health. The internal consistency of this scale was 0.86 in Scott and Kelloway's research. In Vater's study (2015), the reliability of this scale was 0.90. In the study of Balali and Eskandarzadeh (2018), the reliability of this scale was 0.83. Also in the study of Abbasi et al. (2017), the internal consistency of the whole questionnaire was 0.81. In the present study, the validity and reliability of this questionnaire were 0.89 and 0.83, respectively.

Results

A total of 50 nurses and 50 nurses from other wards of the hospital participated in this study. The mean and standard deviation of their age were (36/51±8/27) and (33/32±7/91), respectively. Other demographic variables were as follows: in the group of psychiatric nurses, 74 (74%) of the participants were female and 26 (26%) were female. Regarding marital status, studies showed that 38 (38%) were single and 62 (62%) were married. Also, the educational status of nurses showed that 45 people (45%) had a bachelor's degree, 53 people (53%) had a master's degree and 2 people (2%) had a doctorate. Table 1 shows the results of descriptive statistics of general health, physical health, and emotional intelligence variables related to nurses.

Table 1: Descriptive statistics of general health, physical health, and emotional intelligence variables

<u>Nurses of other wards</u> <u>n=50</u>				<u>Psychiatric nurses</u> <u>n=50</u>				Variable
kurtosis	skewness	SD	M	kurtosis	skewness	SD	M	
-0/37	0/50	7/60	19	0/41	0/23	5/56	24/22	General Health
-0/56	0/32	10/36	41/88	0/53	0/70	12/67	48/02	Physical health
0/49	0/81	14/40	109/42	0/20	0/38	16/17	136/68	Emotional intelligence

Table 1 shows the mean and standard deviation of changes in general health, and physical and emotional health in the two groups of nurses in the psychiatric ward and nurses in other wards of the hospital. The results indicate that compared to the group of nurses in the psychiatric ward in changes in general health, physical and emotional intelligence is lower than the group of nurses in other wards of the hospital. According to the obtained results, the amount of skewness observed in the research is in the range (2, -2), that is in terms of general health distortion, physical health and emotional intelligence are normal and their distribution is symmetrical. Also, the amount of their kurtosis is in the range (2, -2), this indicates the distribution of research variables due to software kurtosis. Multivariate analysis of variance was used to evaluate the significance of the differences. Before using the multivariate analysis of variance test, its assumptions were tested. To evaluate the normality of the data, skewness and tensile tests are used, which were according to the results of software research tests. Based on the box test ($P = 0.103$, $\text{BoxM} = 99.28$), the hypothesis of matrix-covariance homogeneity of the two groups of nurses is confirmed in the research. The results of the Levin test showed that the two

groups of nurses were in general health ($F = 0.704$ and $P = 0.504$), physical health ($F = 1.296$ and $P = 0.186$), and emotional intelligence of time ($P=0.390$, $F=2.814$) they were equal at the community level. The Bartlett test is used to examine the validity or significance of the relationship between general health, physical health, and alertness. The results of the Bartlett test ($P = 0.000$, $df=2$, $X^2=75.23$) showed that the relationship between these variables is significant. Therefore, the correlation between general health, physical health, and emotional intelligence is sufficient. Also, Pillayi trace test with a value of 0.704, Wilkes lambda value with a value of 0.296, hoteling effect with a value of 2.814, and the largest zinc root with a value of 2.814 and an amount of F equal to 9.25 and a significant level obtained with a value of 0.000 are statistically significant. The level of significance of Pillayi test indicates that there is a significant difference between the two groups of nurses in terms of scores between general health, physical health, and emotional intelligence.

Table 2: Levin test results to evaluate the equality of error variances after the test of general health, physical health, and emotional intelligence variables

P	df _w	df _b	F	Variables
0/504	98	1	0/704	General Health
0/186	98	1	1/296	Physical health
0/390	98	1	2/814	Emotional intelligence

Table 2 shows the result of the Levin test to measure the equality of variances, which shows the same variance, given that the Levin index is not statistically significant ($P>0.05$). Since the assumptions of multivariate analysis of variance are valid, the analysis of variance was performed. The results are shown in Table 3.

Table 3: Results of multivariate analysis of variance between the two groups participating in the variables of general health, physical health, and emotional intelligence

Eta	P	F	amount	
0/704	0/001	9/25	0/704	Pillayi trace
0/704	0/001	9/25	0/296	wilks' lambda criterion

0/704	0/001	9/25	2/814	hotelling's trace
0/704	0/001	9/25	2/814	Roy's Largest Root

Table 3 shows the results of a multivariate analysis of variance on the variables of general health, physical health, and emotional intelligence. As the results of this table show, the Pillai trace test with a value of 0.704, the Wilkes lambda test with a value of 0.296, the hoteling trace with a value of 2.044, and the Roe's largest root value with a value of 2.814, and an F value equal to 9.25 and the level The obtained significance equal to 0.001 is statistically significant. Significance levels of tests indicate that there is a significant difference between the two groups of nurses in terms of scores for general health, physical health, and emotional intelligence.

Table 4: Results of multivariate analysis of variance to determine the difference between the two groups of nurses in the variables of general health, physical health, and emotional intelligence

Eta	P	F	MS	Df	SS	Variable	Source
0/34	0/001	24/22	5683/31	1	5683/31	General Health	group
0/29	0/001	14/77	655/77	1	655/77	Physical health	
0/18	0/002	9/85	1320/71	1	1320/71	Emotional health	

Based on Table 4, the results of the multivariate analysis of variance show a statistically significant difference between the two groups of nurses in the psychiatric ward and other wards in the variables of general health ($F = 24.22$ and $P < 0.01$), physical health ($F = 14.77$ and $P < 0.01$) and emotional intelligence ($F = 9.85$ and $P < 0.01$). In this way, the score of general health, physical health, and emotional intelligence in nurses in psychiatric wards is higher than in other wards.

Discussion

This study aimed to compare emotional intelligence, general health, and physical health in nurses working in psychiatric wards and other wards of hospitals. The results of the present study showed that there is a significant difference between emotional intelligence among nurses in psychiatric wards and other wards. It shows that nurses in psychiatric

wards have less emotional intelligence than other wards (Seung and Eun Hong, 2016, Basogel et al., 2019). To explain this finding, it can be argued that a higher level of emotional intelligence improves individual performance, and also reducing this component in nurses causes that in the face of stressors, not have effective methods to deal with problems and measures, and thus the quality of care (Yavari et al., 2014). Nurses in psychiatric wards experience more stress, violence, anger, and negative emotions than in other wards, and we see a decrease in life satisfaction and burnout. A decrease or lack of emotional intelligence skills is one of the factors that are effective in burnout and reduction of job and personal satisfaction.

Another result of this study was that there is a significant difference between general health among nurses in psychiatric wards and other wards and nurses in psychiatric wards experience less general health than other wards (Rajabi, Aghajani, 2019 and Hatami, 2018). Explaining this finding, it can be argued that psychiatric nurses are psychologically confronted with daily patients who often do not have insight into everyday issues and who suffer a lot from physical illnesses that may one day improve. Physically and socially, nurses put pressure on this department. These detrimental stresses reduce the ability of psychiatric nurses to provide quality care and support to patients and lead to a reduction in complete psychological, physical and social well-being. The results of Rajabi, Aghajani, and Hatami's research in 2018 showed that there is a significant difference between job stress, job performance, and general health of psychiatric and emergency department nurses in Milad, Erfanian, and Iran hospitals.

Finally, the results of the study showed that there is a significant difference between physical health among nurses in psychiatric wards and other wards, and nurses in psychiatric wards experience less physical health than other wards Borhanzahi Et al., 2013 and Pekorinen et al., 2017 are in line. The results of Parvin and Rafiei's research, 2014 indicate that nurses in psychiatric wards are exposed to all kinds of physical and verbal violence and their physical health is at risk. The results of another study showed that among the nurses who were attacked by patients, 65% had superficial injuries and 26% had serious injuries (Moylan et al., 2011). In general, the skills of emotional intelligence, general health, and physical health of nurses working in psychiatric wards are lower than in other wards, so more attention is needed to increase the quality of care and recovery of patients.

Conclusion

The results of the present study show that higher levels of emotional intelligence improve individual performance and also reduce this component in nurses, causing that in the face of stressors, there are no effective methods to deal with problems and thus reduce the quality of patient care. Nurses in the psychiatric ward also suffer psychologically, physically, and socially from nurses psychologically, physically, and socially because of the daily encounters with patients who often have no insight into everyday issues and endure much suffering from physical illnesses that may one day improve. These

detrimental stresses reduce the ability of psychiatric nurses to provide quality care and support to patients and lead to a reduction in complete psychological, physical and social well-being. This study, like other studies, was faced with limitations such as a lack of knowledge about the health status of nurses before the study, personality traits of nurses, and lack of control over environmental variables in hospitals. It is suggested that in future research, subjects such as physical illnesses, family problems, and issues related to the social environment be considered in the subjects.

References

- Arsalani, N., Fallahi-Khoshknab, M., Josephson, M., & Lagerstrom, M. (2012). Iranian nursing staff's self-reported general and mental health related to working conditions and family situation. *International nursing review*, 59(3), 416-423.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical consideration. *Journal of Personality and Social Psychology* and resilience as predictors of leadership in school administrators. *Journal of Leadership Studies*, 5(4), 20-29.
- Başoğul, C., Arabacı, L. B., Büyükbayram, A., Aktaş, Y., & Uzunoğlu, G. (2019). Emotional intelligence and personality characteristics of psychiatric nurses and their situations of exposure to violence. *Perspectives in psychiatric care*, 55(2), 255-261.
- Eun-jung, O., Myung Ha, L., Sung Hee, K. (2016). Influence of Emotional Intelligence and Empathy on the Facilitative Communication Ability of Psychiatric Nurses. *Journal of Korean Academy of Psychiatric and Mental Health Nursing*, 25(4): 283-293.
- Huang, X., Wang, L., Dong, X., Wan, Q. (2020). Effects of nursing work environment on work-related outcomes among psychiatric nurses: A mediating model. *Journal of psychiatric and Mental Health Nursing*, 28(2): 186-196.
- Hye-Seung, K., Yoon-Young. (2019). Influence of the Emotional Intelligence, Communication Competence, and Stress coping on Turnover Intention in Psychiatric Nurses. *Journal of the Korea Academia-Industrial Cooperation Society*, 17(1): 141-151.
- Kelishami FG, Farahani MA, Orak RJ, Ameri ZA, Hashemi SB, Seyedfatemi N. (2016). Emotional intelligence in Nursing, models, and methods of measurement. *Advances in Nursing & Midwifery*. 26(93):21-9.
- Lartey, J, K, S., Amponsah-Tawiah, K., Osafo, J. (2021). Emotional intelligence and perceived organizational support as predictors of emotional exhaustion among nurses and midwives *International Journal of Workplace Health Management*, 14(3): 203-220.
- Looff, P., Nijman, H., Didden, R., Embregts, P. (2018). Burnout symptoms in forensic psychiatric nurses and their associations with personality, emotional intelligence and client aggression: A cross-sectional study. *Journal of psychiatric and Mental Health Nursing*, 25(8): 506-516.

- Moylan, L. B., & Cullinan, M. (2011). Frequency of assault and severity of the injury of psychiatric nurses concerning the nurses' decision to restrain. *Journal of psychiatric and mental health nursing*, 18(6), 526-534.
- Özaslan, Z., Bilgin, H., Uysal Yalçın. S., Haddad, M. (2019). Initial psychometric evaluation of the physical health attitude scale and a survey of mental health nurses. *Psychiatric and Mental Health Nursing*, 27(1): 62-76.
- Pekurinen, V., Willman, L., Virtanen, Kivimäki. M., Vahtera, Välimäki, M. (2017). Patient Aggression and the Wellbeing of Nurses: A Cross-Sectional Survey Study in Psychiatric and Non-Psychiatric Settings. *Int. J. Environ. Res*, 14(10): 1245.
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation concerning established trait taxonomies. *European Journal of Personality*, 15, 425-448.
- Qalawa SA, Hassan HE. (2017). Implications of nurses' moral distress experience in clinical practice and their health status in obstetrics and critical care settings. *Clin Pract*. 6(2):15-25.
- Sarafino, E. P (2010). *Health Psychology: Biopsychosocial Interactions*. 7th Ed. New York; John Wiley & Sons.
- Schat, A. C., Kelloway, E. K. (2003). Reducing the adverse consequences of workplace aggression and violence: the buffering effects of organizational support. *Journal of occupational health psychology*, 8(2), 110.
- Sims, T. (2017). Exploring an Emotional Intelligence Model with Psychiatric Mental Health Nurses. *Journal of the American Psychiatric Nurses Association*, 23(2): 164-170.
- Tagoe, T., & Quarshie, E. N. B. (2017). The relationship between emotional intelligence and job satisfaction among nurses in Accra. *Nursing open*, 4(2), 84-89.
- Vaters, C. A. (2015). Motivation and well-being: A test of self-determination theory using a person-centered approach.
- World Health Organization. (2018). Mental disorders. Retrieved from Accepted Article
This article is protected by copyright. All rights reserved.
- Zhu, B., Chen, CR., Shi, ZY, Liang, HX, Liu, B. (2016). Mediating effect of self-efficacy in the relationship between emotional intelligence and clinical communication competency of nurses *International Journal of Nursing Sciences*. 3(2): 162-168.
- Ebrahimi, N., Sadegh Moghadam, L., Hosseinzadeh, F; Bahrain. (2020). Relationship between emotional intelligence and personal and occupational characteristics of nurses. *Occupational health and safety*. 10 (3): 290-300.
- Ahmadi Azgandi, A., Taghavi, S., Frost Memar, F., Abolhassani, A. (2006). Validity and validity of Petrides and Farnham Emotional Intelligence Trait Questionnaire. *Transformational Psychology: Iranian Psychologists*, 3 (10), 157-168.
- Ismailpour, L., Jafar Jalal, A. (2019). Relationship between quality of work life and general health of nurses working in psychiatric wards, *Iranian Journal of Nursing*, 32 (117), 69-79.

- Forgiveness, A. (2013). Relationship between personality types and general health with job satisfaction of Yazd Health Center staff. *Tehran University of Medical Sciences*, 7 (1): 42-55.
- Brothers of Civilization, R., Ahmadi, S., Hosseini, M., Mehrabian, F. (2014). Evaluation of emotional intelligence of medical and dental students of the International Branch of Guilan University of Medical Sciences, *Journal of Research in Medical Education*, 6 (2), 1-10.
- Balali, A., Eskandarzadeh, F. (2018). Investigating the factors affecting the physical health of Turkish and Kurdish ethnic groups with emphasis on the behavioral dimension of lifestyle (Case study: Tabriz and Mahabad). *Iranian Journal of Sociology*, 19 (4), 113-138.
- Borhan Zehi, Kh., Ebrahimi Rigi, Z., Yazdanparast, A., Dadpisheh, S., Ebrahimi Rigi, H. (2021). Prevalence of musculoskeletal disorders and its relationship with negative emotion in nurses: A descriptive-analytical study. *Journal of Occupational Medicine*, 13 (1): 42-52.
- Parhizkar, A. (2020). Comparative study of general health level of nurses working in teaching hospitals of Kurdistan University of Medical Sciences and Social Security in 1997. *Scientific Journal of Kurdistan University of Medical Sciences*, 25: 87-98.
- Rafiei Vardanjani, L. (2014). Problems of nurses working in psychiatric wards of Sina and Hajar hospitals in Shahrekord in dealing with aggressive patients. *Journal of Research Development in Nursing and Midwifery*, 11 (1): 24-31.
- Poorabrahimi, M., Architecture, AS ;Hosseini Zarvijani, SA; Fattah Moghaddam, L. (2019). Investigating the relationship between quality of work life and general health of nursing staff of Razi Psychiatric Center in Tehran. *Journal of Rehabilitation Research in Nursing*,5(4): 44-49.
- Dezhkam, n. (2002). Investigating the relationship between self-esteem and emotional intelligence in students of Islamic Azad University. Master Thesis in Educational Psychology, Islamic Azad University.
- Rajabi, B., Aghajani, H., Hatami, M. (2018). A comparative study of job performance, job stress and general health in psychiatric and emergency nurses. *Yearbook of Medical and Health Sciences Research*, 2141-9248.
- Sepehrmanesh, Z., Ahmadvand, A., Moroji, A., Mirzadeh, M. (2013). Evaluation of mental health of nurses in psychiatric and dialysis wards of Akhavan Hospital of Kashan University of Medical Sciences in 2010: (a short report). *Journal of Rafsanjan University of Medical Sciences*, 12: 325-330.
- Mania, M., Adib Sarshaki, N., Rumi, Gh. (2015). The effectiveness of emotional intelligence training on communication skills of students with intellectual disabilities. *Iranian Rehabilitation Magazine*. 13 (3): 8-13.
- Abedini, R., Choobineh, A., Hassanzadeh, J. (2013). Evaluation of musculoskeletal load in hospital nurses with patient transfer activity. *International Journal of Occupational Health*, 5 (2): 39-45.

- Abbasi, F., Kimiaei, A., Saffarian, M. and Abedi M. (2017). Evaluation of psychometric properties of the Persian version of the Physical Health Questionnaire. *Research in Medicine*, 41 (4): 275-281.
- Mardani Hamoleh, M., Shahraki Vahed, A., Ebrahimi, A. (2012). Mental health status of nursing staff. *Iranian Journal of Nursing*, 24 (74): 28-35.
- Masoudi, K., and Alavi, A. (2020). The relationship between nurses' emotional intelligence and clinical decision making. *Journal of Ibn Sina Nursing and Midwifery Care (Scientific Journal of Hamadan Nursing and Midwifery School)*, 29 (1): 14-22.
- Maghsoudi, S., Hesabi, M., Monfared, A. (2015). General health and its related factors in nurses working in medical-educational centers in Rasht. *Journal of Holistic Nursing and Midwifery*, 25 (1): 63-72.
- Mousavi, S., G., Azimi, S., Design, M., J., Shirzadi, M. (2019). Investigating the situation of nursing staff being assaulted in psychiatric wards and related factors in Isfahan in 2016. *Behavioral Sciences Research*, 17 (3): 379-387.
- Yavari, M., Shamsai, F., Yazdanbakhsh, K. (2014). Comparison of burnout and mental health of nurses working in psychiatric and special wards (ICU). *Nursing Management Quarterly*, 3 (3): 55-65.