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Original Article

# Comparing the Relationship of Emotional Intelligence and General Health in Nurses of Intensive Care Units With General Units in Qazvin

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# Abstract

**Background and aims:** To know that how emotional intelligence and general health are related, can play a crucial role in the quality of nurses' performance. The present study was conducted to compare the relationship of emotional intelligence and general health in nurses of intensive care units with other units in Qazvin city, Iran.

**Methods:** This cross-sectional study was conducted among nurses working in hospitals of Qazvin in 2018. To this end, 250 nurses were selected by random sampling. Data collection tool was Goldberg General Health Standard Questionnaire (GHQ) and Shearing's Emotional Intelligence Questionnaire (EIQ). Data were analyzed by SPSS statistical software version 18.0 using the statistical tests of Pearson correlation, *t* test, ANOVA, chi-square, and liner regression. A *P* value less than 0.05 was also considered statistically significant.

**Results:** The mean score of general health was  $21.33 \pm 10$  and the mean score of emotional intelligence was  $122.8 \pm 11.5$ . The findings showed that there was a statistically significant relationship between emotional intelligence and general health and all general health components (*P* < 0.05). Level of depression in Intensive Care Unit was higher than that in other units (*P* < 0.05). Moreover, according to linear regression coefficient, there was a statistically significant association between general health and emotional intelligence (*P* < 0.05), to such a degree that increasing emotional intelligence caused an increase in general health. This model identified 5.6% of health variance, emotional intelligence, and body mass index (BMI) variables as predictive variables.

**Conclusion:** Considering the fact that nursing is a stressful profession, attention to emotional intelligence is very effective and valuable in improving mental health and as a result, in reducing job stress, increasing the quality of nursing care, reducing burnout, and ultimately increasing patient satisfaction from nursing care.

Keywords: General health, Emotional intelligence, Nurse

#### Introduction

Emotional intelligence is defined as the ability to recognize and manage excitement in oneself and others, and includes self-awareness, self-management, social awareness, and communication management.<sup>1</sup> In addition, it is an important factor that contributes to the success in life, mental relaxation, and improvement of interpersonal relationships at workplace.<sup>2</sup> Meyer considers emotional intelligence as a set of distinct intellectual and emotional abilities.<sup>3</sup> In general, emotional intelligence is one of the different intelligences that a person may have and it is related to the social, spiritual, and emotional aspects of an individual's life.<sup>4</sup> Emotional intelligence includes four areas: self-awareness, self-care, social awareness, and communication management. A small percentage of people's success depends on their cognitive intelligence and other factors such as emotional intelligence are critical to success in life.<sup>5</sup>

Emotional intelligence facilitates the management of emotions in the in-person and interpersonal dynamics and facilitates the ability to think and work constructively and reasonably.<sup>6,7</sup> Nurses are allowed to express their feelings and humanity to patients.<sup>4</sup> The study of Saeed et al<sup>2</sup> showed that there was a statistically significant relationship

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between the emotional intelligence of nurses in the general and intensive care units (P = 0.02) (2). Farshi et al demonstrated that the highest frequency for emotional intelligence was obtained in the area of self-awareness and the lowest in the social skills area.<sup>5</sup>

Sharing the excitement in human relationships, understanding your own states and others', self-control, empathy with others, and the positive effect of emotions on the thought and cognition are the subjects of emotional intelligence which enormously affect the way nurses interact. The effect of emotional intelligence seems to be very striking and undeniable, given the definitions of its various characteristics in occupations, professions, and responsibilities, including nursing, due to the importance of interaction and opposition to different individuals with different personalities and emotional characteristics. Regarding the relationship between emotional intelligence and general health, many previous studies have shown that people with high emotional intelligence have significantly higher physical and mental health.<sup>8,9</sup> General health refers effectively to the proper functioning of people in terms of thinking, mood, and behavior as well as useful activities in society, establishing positive relationships with others, and being able to face the challenges of life.<sup>10</sup> General health is a required item for nurses because achieving a sense of balance in general health leads to a sense of coherence in nursing jobs<sup>11</sup> and it is one of the important dimensions of health that depends on how nurses interact with patients.<sup>12</sup> Niazi et al found a statistically significant relationship between emotional intelligence and general health in nurses.13

Nursing as a complex profession requires continuous interaction with different people in a high stress environment<sup>4</sup> and is considered as one of the tense careers, because work-related tension in nurses affects many people and patients in the sector.<sup>5</sup> On the other hand, nurses are the largest group in providing health care services, so they can potentially affect the quality of health care.<sup>13</sup> To the best of our knowledge, no study has assessed the relationship between these two variables in Iranian nurses, which could be very effective in community health. Therefore, the results of this study along with that of other similar researches may be used to identify the level of emotional intelligence of nurses in different units and to predict their general health status, as well as any significant increase in the quality of nursing care in Iran. Hence, the present study was designed to compare and evaluate the relationship of emotional intelligence and general health in nurses of intensive care units with other units.

## **Materials and Methods**

This descriptive cross-sectional study was conducted in selected medical centers of Qazvin in 2018. The statistical population included nurses working in selected educational-medical centers affiliated to Qazvin University of Medical Sciences. Stratified random sampling was used as the method of sampling, according to which the units of each hospital were considered as a class and from each class, which included intensive care units and general units, according to the ratio of the nurses in those units to the total population, a total number of 250 nurses were randomly selected. The inclusion criteria were: lack of any chronic disease, lack of any serious family dispute (according to their own statement), holding a Bachelor's degree or higher, and being employed. Exclusion criteria included: the completion of the years of service before the end of the research and refusal to participate in the study. The researcher completed the questionnaires after obtaining written permission from the Deputy for Research, Qazvin University of Medical Sciences, and presenting it to the authorities of the educational-medical hospitals, and obtaining informed consent from the nurses who wished to participate in this research.

According to a study by Mafi and Asefzadeh,<sup>14</sup> the mean score of emotional intelligence in nurses was estimated to be 12.63  $\pm$  111.63 (14). Therefore, considering the first type error  $\alpha = 0.05$  and d = 1.64, sample size was estimated using the following formula. As a result, the sample size for the study was calculated to be 228, including 10% dropouts. Finally, the sample size was determined 250.

$$n = \frac{z_{1-\frac{\alpha}{2}}^{2} \times \sigma^{2}}{d^{2}} = \frac{(1.96)^{2} \times (12.63)^{2}}{2.66896} = 228$$

The data collecting instrument was a 3-part questionnaire. The first part included 8 questions regarding the demographic characteristics of the nurses.

The second part, the Shearing's Emotional Intelligence Questionnaire (EIQ), included 33 questions (5-point Likert scale questions) (A: always, B: often, C: sometimes, D: rarely, E: never) and had five dimensions: selfmotivation (7 questions), self-awareness (8 questions), self-control or self-management (7 questions), empathy or social or communication awareness (6 questions), and social skills (5 questions). The lowest obtained score is 73 and the highest is 125 (14). Reliability and validity of Shearing's EIQ was determined in the study of Mansouri and Cronbach's alpha was obtained 0.86.<sup>15</sup>

The third part, the Goldberg General Health Questionnaire (GHQ), included 28 questions. This questionnaire consists of 4 subtests, each including 7 questions. Questions 1 to 7 relate to subtests of physical symptoms, questions 8-14 relate to the anxiety and insomnia subtests, questions 15-21 relate to the subtests of social function disorder, and questions 22-28 relate to depression subtests that totally show the person's psychophysical status in the last month. All questions include 4 options. A Likert-type scoring method (0-1-2-3) is used for this questionnaire, so that a higher score indicates a high level of general health. Therefore, the individual score

will range from 0 to 84.

In each subtest, score 6 and less was considered as a healthy person and score 7 and higher was considered as a person suspected of having a disorder. Moreover, on a general scale, score 23 and less was considered as a healthy person and score 24 and higher was considered as a person suspected of having a disorder. The general health questionnaire in the study of Noorbala and Mohammad has also been confirmed <sup>16</sup> The reliability coefficient of the general health questionnaire was determined 91% by a retest method in the study of Noorbala and Mohammad. Data were analyzed using SPSS software version 18.0. Pearson correlation coefficient was used to investigate the relationship between emotional intelligence and general health and its dimensions, and t-test was used to assess the relationship of emotional intelligence and general health with different units. Furthermore, ANOVA was applied to study the relationship of emotional intelligence and general health with shifts of nurses. Additionally, chi-square was used to evaluate the communication of emotional intelligence and general health with gender and marriage. Finally, linear regression was used to determine the predictors of general health and emotional intelligence of nurses. A P value less than 0.05 was considered statistically significant.

## Results

In this study, majority of the subjects (84.4%) were female, 62.7% were married, and 90% had rotating shifts. The

 $\ensuremath{\textbf{Table 1.}}$  The Mean Score of Emotional Intelligence Versus General Health of Nurses

	Unit			
Variable	Intensive Care Units Mean±SD	General Units Mean±SD	P Value	
Emotional intelligence	123.4±12.2	122.2±10.8	0.30	
General health	20.9±11.4	21.7±10.1	0.50	

subjects were in the age range of 22 to 52 years old. Work experience varied from 1 to 29 years, with an average work experience of 8.66±7.23 years. According to the general health measure, 61.2% (153 persons) were healthy nurses and 38.8% (97 persons) were ill.

The mean score of general health was  $21.33 \pm 10.77$  and the mean score of emotional intelligence in nurses was  $122.8 \pm 11.5$  (Table 1).

According to the chi-square test results, there was a statistically significant relationship between marriage and general health. In other words, married nurses enjoyed more general health than their single counterparts. Moreover, regarding the dimensions of public health, there was a statistically significant relationship between social dysfunction and depression, and marital status (P < 0.05).

Considering the dimensions of general health in the area of physical complaints, results showed that 97.2% of nurses were healthy. Regarding anxiety, disorder in social functioning, and depression, 96.4%, 97.2%, and 98.8% were healthy, respectively. Most patients were in the surgical units, surgery room, and CCU. All of the nurses had physical health except for those in surgical and emergency units. Moreover, the highest anxiety was seen in nurses working in surgical, emergency, and internal units. Social functioning was also the major disorder for nurses in surgical units. Nurses in CCU and ICU were more depressed than those in other units. Level of depression in ICU was more than that in other units (Table 2).

Emotional intelligence and general health scores were higher in the nurses with fixed morning shifts compared to those with other types of shiftwork, as the fixed night shift nurses had the least general health. However, there was no statistically significant relationship between the type of shift and the health score and emotional intelligence as determined the ANOVA statistical test. Furthermore, there was a statistically significant difference between emotional intelligence in different units; the highest and the least emotional intelligence were recorded for ICU

Table 2. The Comparison of Mean Scores of Emotional Intelligence and General Health of Nurses

	Intelligence-General Health-Health Dimensions											
Units	Total Score of General Health		Physical Complaints		Anxiety		Social Functioning		Depression		General Health	Emotional Intelligence
	Healthy	III	Healthy	III	Healthy	111	Healthy	III	Healthy	III	Mean±SD	Mean±SD
Emergency	63.8	36.3	95	5	95	5	97.5	2.5	98.8	1.3	123±12.7	21±12.1
CCU	50	50	100	0	100	0	100	0	93.8	6.3	114±10.8	25.3±8.9
ICU	77.3	22.7	100	0	100	0	100	0	95.5	4.5	126.1±11.4	19.6±8.3
Surgery	48	52	94	6	94	6	92	8	100	0	123±10	19.5±8.7
Internal	63.6	36.4	100	0	93.9	6.1	97	3	100	0	121±11	21.6±10.3
Surgery room	35.7	64.3	100	0	100	0	100	0	100	0	126.3±11	19.2±9.8
Heart	76	24	100	0	100	0	100	0	100	0	124±14	17.9±10.2
Infectious	80	20	100	0	100	0	100	0	100	0	120±8	23.8±11.5
Total	61.2	38.8	97.2	2.8	96.4	3.6	97.2	2.8	98.8	1.2	122±11.5	21.3±10.7
t test											P = 0.3	P = 0.03

and operating room, respectively. General health in the operating room and surgical units was lower than that in other units. ANOVA test showed no statistically significant difference in terms of general health (Table 2).

According to Pearson correlation coefficient, there was a statistically significant relationship between emotional intelligence and general health and all components of general health, so that nurses with a high level of emotional intelligence enjoyed a better general health (P < 0.05, Table 3).

Emotional intelligence score of the internal units was more than that of the surgical units. According to the independent statistical test, there was a statistically significant relationship between emotional intelligence in the internal and that in the surgical units (P < 0.01). Furthermore, general health score of the internal units was more than that of the surgical units, however there was no statistically significant relationship between them. Anxiety in the surgical units was higher than that in the internal units, and there was a statistically significant relationship between the mean scores of anxiety in the internal and surgical units (P < 0.03, Table 4).

Furthermore, a significant reverse correlation was observed between body mass index (BMI) and general

Table 3. Correlation of Emotional Intelligence with General Health in Nurses

	Emotional intelligence			
General Health Dimensions	r	P value		
	0.31	0.0001		
Physical complaints	0.19	0.002		
Anxiety	0.29	0.0001		
Social functioning	0.23	0.0001		
Depression	0.28	0.0001		

 
 Table 4. The Comparison of Mean Scores of Emotional Intelligence and General Health and 4 Dimensions of Nurses' Health

	Ur		
Intelligence and General Health	Internal	Surgery	P Value
	Mean± SD	Mean± SD	
Emotional intelligence	126±11.4	120±8.6	0.01
General health	19.6±8.3	23.8±11.5	0.07
Physical symptoms	5.2±3.1	6.1±3.8	0.2
Anxiety	5.2±3.3	7±4	0.03
Social functioning disorder	7.3±2.3	8.2±3.1	0.1
Depression	1.8±2.4	2.4±2.8	0.3

 Table 5. Multivariable Regression Analysis of Inter-style for Prediction of General Health

health (P<0.04), as by increasing BMI, general health decreased. Likewise, there was a statistically significant reverse relationship between anxiety and BMI (P<0.04), in that by increasing anxiety, BMI decreased.

According to the results from linear regression, there was seen a statistically significant relationship between general health and emotional intelligence, in such a way that by increasing emotional intelligence, general health increased. The R2 value indicated that this model predicted 6.5% of the health variance, intelligence metrics, and BMI as predictor variables (P < 0.05, Table 5).

## Discussion

In this study, a statistically significant correlation was found between emotional intelligence and general health and all components of general health including physical complaints, anxiety, social functioning, and depression. There was also a positive linear relationship between emotional intelligence and general health. These findings suggest that nurses with high emotional intelligence have higher general health. This finding is consistent with the findings of previous research.<sup>17,18</sup>

The reason for this relationship can be explained as that emotional intelligence components such as emotion management, evaluating your own and others' emotions, empathy, and emotional flexibility are characteristics that are more common in healthy people than other people. Control over emotions actually leads to more mental relaxation in the individual and reduces tension. In addition, emotional flexibility allows an individual to act appropriately in different situations of life, which can reduce anxiety and ensure mental and physical health of the individual.

In this study, by increasing emotional intelligence, general health increased. The results of studies by Augusto Landa et al and Lu showed a significant direct relationship between emotional intelligence and job satisfaction.<sup>21,22</sup> Increasing the emotional intelligence leads to a good health status and increasing general health leads to a sense of responsibility, good social interaction, and subsequently an increase in skills and, ultimately, a good nursing performance. Research shows that increasing the emotional intelligence reduces stress in the workplace.<sup>23</sup> Admittedly, stress reduction plays a leading role in the

Variable	В	SE	Beta	т	P value
Constant	50.45	9.62		5.24	0.000
Intelligence	-0.132	0.056	-0.152	-2.346	0.020
BMI	-0.548	0.236	-0.166	-2.321	0.021
Unit	0.134	1.430	0.006	0.094	0.925
Age	-0.024	0.1442	-0.015	-0.208	0.836
Gender	0.206	1.966	0.007	0.105	0.917

ADJ.R<sup>2</sup>=0.035, R<sup>2</sup>=0.056, R=0.237

quality of nurses' performance.

The results of research by Rogers et al<sup>19</sup> and Slaki and Cartwright<sup>20</sup> showed that people with good health had a powerful and positive emotional intelligence in dealing with life, community, and workplace problems. The study results of Augusto Landa et al<sup>21</sup> in 2008 and Lu in 2007,<sup>22</sup> which examined the stress of nurses in internal units as well as emotional intelligence, revealed a significant inverse relationship between emotional intelligence, job stress, and emotional depression; in other words, increasing the emotional intelligence leads to a reduction in job stress and burnout.

This relationship can be attributed to the fact that emotional intelligence components such as emotion management, assessment of your own emotions and others', empathy, and emotional flexibility are characteristics that are more common in healthy people than other people. This finding corroborates the previous results.<sup>17,18</sup>

Furthermore, a positive relationship was observed between emotional intelligence and job satisfaction in nurses. Therefore, devising strategies for improving the emotional intelligence of nurses can play a crucial role in increasing job satisfaction of nurses and satisfaction of patients who are in direct contact with nurses. Increasing emotional intelligence leads to more skill in controlling and organizing emotions and excitement, while reducing depression and frustration. Therefore, nurses with high emotional intelligence can better appear in managerial roles. High emotional intelligence helps people to interact and communicate effectively with others.

Accordingly, nurses with high emotional intelligence can better communicate with patients. Since communication with the patient in intensive care unit is more important than that in other units, it is better to have nurses with high emotional intelligence in these units. The results of a study by Benson et al<sup>27</sup> on surgeons and surgery trainees indicated that there was a reverse relationship between emotional intelligence and burnout and occupational stress. The study of Saeed et al<sup>2</sup> showed that the highest level of emotional intelligence was observed in nurses working in intensive care units at the required level of care, and the difference between the general units and intensive care units was statistically significant regarding the emotional intelligence. Nooryan et al<sup>28</sup> reported that emotional intelligence of nurses in intensive care units was high and Delpasand et al<sup>29</sup> reported an average level of emotional intelligence. While the surgery room nurses had the lowest overall health scores. More physical complaints were reported in the nurses of the surgery room and surgical units compared to nurses in other units; this seems to be due to the work-related stress in the surgery room and surgical units.

## Conclusion

The results of this study indicated that emotional

intelligence was positively correlated with general health of nurses. Moreover, level of depression in intensive care unit was more than that in other units. It is apparent that nurses with high level of emotional intelligence in their workplace can positively affect their patients and may provide better mental health care for them. Accordingly, the nurses may be able to resist difficulties of their work. On the other hand, considering that nursing is a stressful profession, attention to emotional intelligence is very effective and valuable in improving mental health and as a result, in reducing job stress, increasing the quality of nursing care, reducing burnout, and ultimately increasing patient satisfaction from nursing care provided.

Therefore, it is necessary to identify the level of emotional intelligence of nurses as people who are in constant contact with different patients and their families.

Finally, it is recommended that medical centers, especially public hospitals, should adopt functional strategies to improve emotional intelligence and general health of nurses, by conducting training courses, as healthy nurses can provide the best nursing care.

# Limitations

It is plausible that some limitations may have affected the results obtained. The small sample size restrains generalization of the results to the whole population, hence conducting similar studies on larger sample size in public and private hospitals are recommended. Furthermore, self-reported mental status via questionnaire was another limitation which could not be controlled.

# **Conflict of Interest Disclosures**

None.

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#### References

- Beauvais AM, Brady N, O'Shea ER, Griffin MT. Emotional intelligence and nursing performance among nursing students. Nurse Educ Today. 2011;31(4):396-401. doi: 10.1016/j. nedt.2010.07.013.
- Saeed Y, Javadi M, Sirati Nir M, Mokhtari Nouri J. Assessment and comparison of emotional intelligence of nurses in general and intensive care units. Iran J Crit Care Nurs. 2013;5(4):214-21. [Persian].
- Mayer JD, Roberts RD, Barsade SG. Human abilities: emotional intelligence. Annu Rev Psychol. 2008;59:507-36. doi: 10.1146/annurev.psych.59.103006.093646.
- Zarina MS, Najib AM. Emotional intelligence among nurses. Advances in Natural and Applied Sciences. 2013;7(4):413.
- Rahkar Farshi M, Vahidi M, Jabraeili M. Relationship between emotional intelligence and clinical competencies of nursing students in Tabriz Nursing and Midwifery School. Research and Development in Medical Education. 2015;4(1):91-5. doi:

10.15171/rdme.2015.015. [Persian].

- Kaur D, Sambasivan M, Kumar N. Effect of spiritual intelligence, emotional intelligence, psychological ownership and burnout on caring behaviour of nurses: a cross-sectional study. J Clin Nurs. 2013;22(21-22):3192-202. doi: 10.1111/ jocn.12386.
- Rego A, Godinho L, McQueen A, Cunha MP. Emotional intelligence and caring behaviour in nursing. Service Industries Journal. 2010;30(9):1419-37. doi: 10.1080/02642060802621486.
- Ashkanasy NM, Dasborough MT. Emotional awareness and emotional intelligence in leadership teaching. Journal of Education for Business. 2003;79(1):18-22. doi: 10.1080/08832320309599082.
- Palmer B. The relationship between emotional intelligence, personality and effective leadership. Aust J Psychol. 2003;55:140.
- Amirian ME, Fazilat-Pour M. Simple and multivariate relationships between spiritual intelligence with general health and happiness. J Relig Health. 2016;55(4):1275-88. doi: 10.1007/s10943-015-0004-y.
- 11. Azimian J, Piran P, Jahanihashemi H, Dehghankar L. Investigation of marital satisfaction and its relationship with job stress and general health of nurses in Qazvin, Iran. Electron Physician. 2017;9(4):4231-7. doi: 10.19082/4231.
- 12. Chan M. Mental health and development: targeting people with mental health conditions as a vulnerable group. World Health Organization. 2010;3(1):111-21.
- Niazi M, Menati R, Delpisheh A, Menati S, Kassani A. The Association between General Health and Emotional Intelligence in the Nurses of Ilam Province. Sadra Medical Sciences Journal. 2015;3(3):179-90. [Persian].
- 14. Mafi L, Asefzadeh S. Association of Emotional Intelligence and communication skills with patients in nurses. The Journal of Qazvin University of Medical Sciences. 2014;18(3):34-40. [Persian].
- 15. Mansouri B. Standardization of a questionnaire on emotional intelligence Sybrya Shrink senior Tehran University students [dissertation]. Tehran: Allame Tabatabaei University; 2001.
- 16. Noorbala A, Mohammad K. The validation of general health questionnaire-28 as a psychiatric screening tool. Hakim Research Journal. 2009;11(4):47-53. [Persian].
- Ashkananasy NM, Dasboroug MT. Emotional intelligence awareness and emotional intelligence in leadership teaching. J Educ Bus. 2003;79(1):18-23.
- 18. Cavallo K, Brienza D. Emotional competence and leadership excellence at Johnson and Johnson: The emotional intelligence

and leadership study. J Clin Psychol. 2004;8(1):5.

- 19. Rogers P, Qualter P, Phelps G, Gardner K. Belief in the paranormal, coping and emotional intelligence. Pers Individ Dif. 2006;41(6):1089-105. doi: 10.1016/j.paid.2006.04.014.
- Slaski M, Cartwright S. Emotional intelligence training and its implications for stress, health and performance. Stress Health. 2003;19(4):233-9. doi: 10.1002/smi.979.
- 21. Augusto Landa JM, Lopez-Zafra E, Berrios Martos MP, Aguilar-Luzon Mdel C. The relationship between emotional intelligence, occupational stress and health in nurses: a questionnaire survey. Int J Nurs Stud. 2008;45(6):888-901. doi: 10.1016/j.ijnurstu.2007.03.005.
- 22. Lu KY, Chang LC, Wu HL. Relationships between professional commitment, job satisfaction, and work stress in public health nurses in Taiwan. J Prof Nurs. 2007;23(2):110-6. doi: 10.1016/j.profnurs.2006.06.005.
- 23. Naghizadeh H, Tavakkoli M, Miri M, Akbarzadeh H. Relationship between emotional intelligence and job stress among managers and employees of teaching hospitals affiliated to Tabriz University of Medical Sciences and Health Care. Journal of Birjand University of Medical Sciences. 2009;16(4):57-64. [Persian].
- 24. Banihashmiyan K, Bahrami Ehsan H, Moazen M. Relation between head masters' general health and emotional intelligence and job satisfaction of teachers. Journal of Behavioral Sciences. 2010;4(1):45-50. [Persian].
- 25. Antonakis J, Ashkanasy NM, Dasborough MT. Does leadership need emotional intelligence? Leadersh Q. 2009;20(2):247-61. doi: 10.1016/j.leaqua.2009.01.006.
- Lin YH, Chen CY, Lu SY. Physical discomfort and psychosocial job stress among male and female operators at telecommunication call centers in Taiwan. Appl Ergon. 2009;40(4):561-8. doi: 10.1016/j.apergo.2008.02.024.
- Benson G, Ploeg J, Brown B. A cross-sectional study of emotional intelligence in baccalaureate nursing students. Nurse Educ Today. 2010;30(1):49-53. doi: 10.1016/j. nedt.2009.06.006.
- Nooryan K, Gasparyan K, Sharif F, Zoladi M. The Effect of Teaching Emotional Intelligence (EI) Items on Job Related Stress in Physicians and Nurses Working in ICU Wards in Hospitals, Yerevan, Armenia. Int J Collab Res Intern Med Public Health. 2011;3(10):704-13.
- 29. Delpasand M, Nasiripour AA, Raeissi P, Shahabi M. The relationship between emotional intelligence and occupational burnout among nurses in critical care units. Iran J Crit Care Nurs. 2011;4(2):79-86. [Persian].

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