Relationship between Emotional Intelligence and Clinical Competencies of Nursing Students in Tabriz Nursing and Midwifery School

Mahni Rahkar Farshi[1], Maryam Vahidi[2], Mahnaz Jabraeili[3]*

[1]*Department of Pediatrics, Faculty of Nursing and Midwifery, Tabriz University of Medical Sciences, Tabriz, Iran*

[2]*Department of Psychiatric, Faculty of Nursing and Midwifery, Tabriz University of Medical Sciences, Tabriz, Iran*

[3] *Medical Education Research Center, Tabriz University of Medical Sciences, Tabriz, Iran*

Abstract

Introduction: Preparing students to take over job responsibilities is one of the most challenging duties of nursing schools. The focus of nursing education should be on helping students to achieve high levels of competence in nursing care and identify factors for reinforcing it. Since desirable results have not been reported on clinical competencies of nursing students, achieving skills to control their emotions could be effective. Thus, this study aimed to investigate the relationship between emotional intelligence (EI) and clinical competencies.

Methods: In this correlational study, all nursing students in semesters 6, 7 and 8 were studied after determining the sample size in Tabriz University of Medical Sciences. The data were collected using three questionnaires of demographic data, the Emotional Intelligence Sharing – Sybrya and a short clinical competence. The data analysis was done through descriptive and inferential statistics using SPSS 18.

Results: The results of the present study showed that the total EI score and clinical competence of students was more than moderate. The relationship between total EI and clinical competence was significant. Among the subscales of EI, there was a significant relationship between social skills and clinical competence.

Conclusion: The relationship between the total emotional intelligence score and clinical competence of students in this study indicated the necessity and importance of emotions in decision-making to act properly within a clinical setting. Therefore, taking part in courses designed for learning skills of emotion perception and stress management in the workplace seem to be essential.

Introduction

Currently, nursing managers consider the importance of quality improvement of services and improvement of nurses' competencies as an essential part of any program[1], and preparing students to take over job responsibilities and to do care duties safely and effectively is one of the most challenging duties of nursing schools.[2] The focus of nursing education should be on making students achieve high levels of competence.[3] The term competence is used to describe the skills and abilities needed for safe and effective practice without direct supervision. Clinical competency is nursing care based on professional standards of performance.[4] Available evidence suggests that the clinical education of nursing students and subsequently their clinical competence are not as excellent as they might be.[5] For example, Vahidi et al.'s study showed that nursing students did not have the academic skills needed in clinical

environments and were faced with problems in doing their job duties.[6] Also, Salimi et al.'s study showed that students' clinical skills in the intensive cardiac care were not optimal.[7] Many factors affect the acquisition of clinical competency. In one study, nurses found both individual, or internal factors, and external ones, including knowledge and skills, ethics, work conscience, accountability and responsibility, effective in acquisition of clinical competency.[3] Recently, nursing schools and authors of academic nursing knowledge have emphasized the importance of emotional intelligence in enhancing nursing students' performance.[2] Today, Emotional intelligence is a concept that is considered by many researchers.[2] Emotional intelligence is a set of abilities that affect the total capabilities of a person in meeting environmental demands.[8] They are classified

***Corresponding authors:** Mahnaz Jabraeili, Email: jabraeilim@tbzmed.ac.ir

in four categories: self-awareness, self-management, social awareness and relationship management.[9] In fact, compatibility with the environment in which one lives does not only depend on cognitive factors. A small percentage of people's success depends on their cognitive intelligence and other factors, such as emotional intelligence, are essential for success in life.[10] Existing evidence suggests that emotional intelligence leads to better performance, better team work, problem-solving ability and reduction of stress.[11] Nursing is considered one of the most stressful occupations because it imposes stress on many job holders and the nurses encounter different stressful situations due to the nature of the profession.[12] Preparing students to take over their job responsibilities and to do care duties safely and effectively is one of the most challenging duties of nursing schools. Recently, nursing schools and authors of nursing knowledge have emphasized the importance of emotional intelligence in enhancing nursing students' performance.[2]

Beauvais et al. studied the relationship between emotional intelligence and nursing students'performance in the six dimensions of leadership, critical care, education and collaboration, planning, interpersonal relations and professional development, all of which had a significant positive correlation with emotional intelligence.[2] In another study, Talarico et al. examined emotional intelligence and its relationship with the residents' performance. The results of the study showed no correlation between emotional intelligence and residents' performance.[13]

Although findings of studies conducted in other countries found a direct relationship between emotional intelligence and better performance, team work, problem-solving and stress reduction[11,14] some studies have found no connection between these variables.[13] Due to conflicting results about the relationship between emotional intelligence and clinical competency, and considering that the clinical competence of each country[3], is affected by its health care facilities and nursing staff characteristics, and taking into consideration that the results of studies in Iran show a low level of clinical competence of nursing students[5,6,7], identifying the factors associated with clinical competence of nursing education is necessary to improve it. For this purpose, the present study aimed to investigate the relationship between emotional intelligence and clinical competence of nursing students in Tabriz.

Materials and Methods

The population of this correlational study was all nursing students in semesters 6, 7 and 8 who were studying in Tabriz nursing faculty during the research was being carried out. A sample size of 125 was determined using the formula of the sample size, considering the Alpha 0.05 and power 0.8. 132 students were enrolled using census. Absence of a known mental disease was one of the inclusion criteria; also, if a student reported that she/he experienced acute stress during the study, she/he was excluded.

After permission from the Ethics Committee of Vice-Chancellor for Research of Tabriz University of Medical

Sciences (5.4.831), the researchers referred to the clinical environment. After contacting nursing students and explaining the research goals, a three-part questionnaire was given to them. The first part of the questionnaire was related to personal-social characteristics of the students, including: age, sex, education semester, birth order, residence, number of siblings, marital status, loss of education, employment, family history of any psychiatric disorder and level of interest in their field of study. The second part was meant to measure emotional intelligence, and the third part measured clinical competencies of the students. Emotional Intelligence Questionnaire Sharing – Sybrya, contains 33 questions in five subscales:self motivation (questions 1, 9, 15, 20, 21, 26, 31), self-awareness (6, 10, 12, 14, 24, 27, 32, 33), self-control (2, 5, 11, 16-18, 23, 30), social consciousness(3, 4, 17, 22, 25, 29) and social skills (7, 8, 13, 19, 28). Questionnaire scores ranged from 33 to 165. The questionnaire was used by Hassan Taghizadeh et al. in Tabriz University of Medical Sciences. Its validity and reliability (Cronbach's alpha (0.82) has been confirmed.[15] A short questionnaire for nursing competence (SNCQ) is an18-item self-reporting tool which measures nursing competence items using a four-point Likert scale using the terms "never", "rarely", "often", and "always" with a minimum score of 1 and a maximum score of 4. The score range related to nursing competence was from 18 to 72.[16] In this study, back translation was used for validity of clinical competence questionnaire.Its content validity was assessed by collaboration of ten faculty members in nursing and midwifery faculty. Its reliability was determined by test-retest and the correlation coefficient was determined 0.77 at two different times for participants. Collected data were analyzed using SPSS 13. To analyze the data, we used descriptive (frequency and percentage, mean and standard deviation)and inferential (Pearson test, t-test and ANOVA) statistics.

Ethical consideration

This study was approved at the 130th meeting of the Vice Chancellor for Research Ethics Committee of Tabriz University of Medical Sciences (5.4.831). Before, the aims of the study were explained to the students and the consent was obtained.

Results

In this study, 64.4 percent (85 students) of the total participants were female, and 35.6 percent (47 students) were male. Students' ages ranged between 20 and 27 years with a mean age of 22.14 ± 1.15 years. 43 students(32.6 %) were in semester 6, 41 (31.1 %) in semester 7and 48 (36.4 %) were in semester 8.

78 % of participants reported good financial condition and 74 % of students were staying in the dorm. 43.2 % of the students reported their interest to nursing as moderate, 39.4 % higher than moderate and 17.4 % low. 61.4 % of the students were optimistic about the future of their profession, and 13.6 % were pessimistic.

The results showed that the mean and standard deviation scores of students' emotional intelligence was 109.09 $\pm$

17.39. The mean score of students' clinical competence was 53.89 ± 5.81, which is greater than average (Table 1). Emotional intelligence subscales were shown in Table 2. The relationship between total emotional intelligence and clinical competence was weak but significant (r =0.22, P= 0.02). The results also indicated that among subscales of emotional intelligence, there was a significant relationship between social skills and clinical competence which was shown in Table 3. The results showed that there was no significant relationship between clinical competence and the variables of sex, age, semester of study and a total score of emotional intelligence as well (P>0.05).

Table 1. Frequency of nursing students' clinical competence and emotional intelligence

Variable	Score range	Average of range	Lowest	Highest	Mean	Standard deviation
Clinical competence	18-72	45	38	72	53.89	5.81
Emotional intelligence	33-165	99	75	148	109.09	17.39

Table 2. Frequency of emotional intelligence subscales

Variable	Score range	Average of range	Lowest score	Highest score	Mean	Standard deviation
Self-motivation	7-35	21	15	29	22.38	3.56
Self-awareness	8-40	24	21	40	29.11	4.52
Self-control	7-35	21	9	30	21.10	4.57
Social- awareness	6-30	18	10	28	19.11	4.26
Social skills	5-25	15	10	24	16.35	3.27

Table 3. Relationship between total scores of clinical competence and emotional intelligence subscales.

Variable	total scores of clinical competence N= 132
Self-motivation	0.83
Self-awareness	0.16
Self-control	0.10
Social- awareness	0.15
Social skills	0.25*

* Statistically significant p<0.01 (two tail)

Discussion

The results showed that the mean score of students' emotional intelligence was higher than moderate. In the study of Namdar et al. the emotional intelligence score was reported as good, measured by different instruments.[11] Comparing the results with Por's's study, although the EI score in both studies was above moderate, the total score of the students' emotional intelligence in Por's study was higher.[12] The studies of Beauvais and Benson reported the scores of nursing students' emotional intelligence as moderate.[2,17] Some differences may be due to cultural and educational differences in various communities.

Based on the findings, the score of the students' clinical competence was above moderate. Vahidi et al. who studied the students' professional competencies in the field of multiple skills during training from the viewpoint of the instructors, and students found it moderate.[6] In their study, Khodayariyan et al. found that based on the nurses' own reports and their supervisors, 80 percent of CCU nurses had moderate clinical competence.[4] The difference in findings may be due to the type of instruments and methods of data collection. The relationship between total EI score and clinical competence of students in this study demonstrated the necessity and importance of emotions in decision-making for proper functioning.[2] The results of Por's study are consistent with our findings.[12] In the studies of Beauvais et al. and Codier et al., although the clinical competence of nurses was also assessed and different measuring tools were used to measure emotional intelligence and clinical competence, the results showed a positive relationship between emotional intelligence and clinical performance.[18]

The results of this study also showed that, of the five sub-scales of emotional intelligence (self-motivation, self-awareness, self-control, social awareness and social skills), there was a significant relationship between social skills and clinical competence. Social skills are a set of acceptable learned behaviors enabling an individual to have effective relationships with others and avoid irrational social reactions. Social skills are a complex set of skills including communication skills, problem-solving and decision-making, assertiveness, interacting with others and group and self-management, which can be acquired and taught.[19]

Nursing is a stressful job, and due to requirements of the field of study, nursing students work as professional caregivers in clinical settings from early in their education, so that skills are required in order to help students control their emotions. Inability to control emotions can lead to increase anxiety and stress.[12] In the study of Beauvais, of the four emotional intelligence subscales, (receiving emotions, utilizing emotions, understanding emotions, and managing emotions) the only significant correlation found was between perception of emotion and clinical competence.[2] Communication skills are important factors in acquiring clinical competency; needing to understand the emotions of another person is a subset of social skills. The results showed that there was no significant correlation between sex and the total scores of emotional intelligence and clinical competence. The studies of Zahiredin et al. in Shahid Beheshti University and Namdar et al. showed no significant relationship in the emotional intelligence scores of male and female students.[11,20] However, in a study conducted in Golestan University of Medical Sciences, a significant difference was found in the emotional intelligence of male and female students in terms of self-awareness, self-control and social consciousness, where the score was higher for female students.[21]

There was no statistically significant correlation between the semester of study variable and the total emotional intelligence and clinical competence score as well. Benson's study reported a statistically significant difference in EI scores between first and fourth year nursing students.[17]

Considering the findings of the current study and other studies, we can say that emotional intelligence has a fundamental role in effective job performance. Due to the aforementioned professional characteristics, nursing students should increase their emotional intelligence skills to gain further success.[3,22] Emotional intelligence is adventitious that can be learned and developed[14], so, the inclusion of emotional Intelligence training courses in the undergraduate curriculum is necessary. Emotional intelligence can be taught to nursing students without major changes in the curriculum and included as a basic component of the psychiatric and mental health nursing course. In clinical education, we can improve nursing student clinical competence by integration of critical thinking and emotional intelligence.[2]

The self-reporting tool used in the study, particularly the clinical competence questionnaire, was one of the limitations of the study in which practical skills of the students were not measured visually. Therefore, a similar study using visual scales to measure clinical competence in students and nurses is recommended. The interventional studies to enhance emotional intelligence and effectiveness of interventions on the clinical competence of students are also recommended.

Conclusion

The relationship between emotional intelligence and clinical competency of nursing shows the importance of emotional issues in nursing education. Nursing students need to learn to control emotions in clinical situations and their professional performance due to their characteristics of the discipline. So paying attention to learn how to control emotions, stress management and conflict in work environment, is one of the key issues in nursing education.

Competing Interests

The authors declare no conflict of interest in this study.

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