

Relationship between Nurse's Emotional Intelligence and Clinical Competency

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Abstract

Introduction: Nowadays, various reasons such as providing desirable services to patients and increasing their expectations have made nurses' clinical competence more attention. Since emotion control can be effective in achieving clinical competency, this study aimed to investigate the relationship between emotional intelligence and clinical competency of nurses. **Methods:** This is a descriptive correlational study. Data were collected from 120 nurses working in clinical wards of Arak teaching hospital (Valiasr, Amir Kabir, Amir al-Momin, and Ayatollah Khansari) using Nursing Clinical Competency Assessment Questionnaire and Bradbury Graves Emotional Intelligence Questionnaire. Pearson correlation coefficient, Chi-square, and SPSS 16 were used for data analysis. **Results:** The results showed that there is a significant and direct relationship between emotional intelligence and clinical competency of nurses. **Conclusion:** Considering the relationship between emotional intelligence and clinical competency, nursing managers must consider emotional intelligence promotion in nursing planning.

Keywords: Emotional intelligence, Clinical competency, Nurse

INTRODUCTION

Clinical competence is composed of a combination of skills, knowledge, attitudes, values, and abilities that form the cornerstone of effective performance in an occupation [1]. Nowadays, because of the fast changes in health monitoring systems, the need to provide safe and cost-effective services, increase public awareness about health issues and increase their expectations of health services and the willingness of organizations to employ skilled and qualified staff has made the clinical competence of the staff to be more important than ever [2]. Preserving and enhancing nurses' level of clinical competence has always been an important challenge in nursing management [3]. Nurses possess the most significant and primary role in providing health services [4]. Competent nurses can well carry out their roles and responsibilities [5], provide higher quality nursing services, and increase patient satisfaction with nursing services [6]. Access to approaches to enhancing nursing service-quality has always been of interest to nursing managers [7]. At the moment, nurses' lack of clinical competence is of the most significant issues, leading to problems in the services provided by nurses, which can jeopardize the health of society. Thus, applying the criteria for measuring clinical competence, besides determining the level of competence of nurses, can identify their deficiencies and skills and cognitive impairments [8]. Based on the studies conducted, different factors like experience, environment, opportunities, motivation, and theoretical knowledge affect the clinical

competence characteristics of the nurses [9]. Besides the points stated, other factors like emotional intelligence (EI) have a significant effect on the effective performance of nurses [10]. The concept of EI in the early 1990s has been defined in Mayer and Salovey's scientific texts as a subset of social intelligence [11] and includes a set of social skills and abilities different from rational intelligence, and the study of emotions and feelings by distinguishing between them and their use is to guide reasoning and action [12]. Evidence shows that EI brings about better performance and teamwork, increased problem-solving ability [13], improved communication skills, effective clinical performance, reduced stress, and burnout [14]. Those with EI can control their own and others' emotions and distinguish between positive and negative emotions and use emotional

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How to cite this article: Azizi M, Kazemi Majd R, Salehi A, Momeni H, Nasiri A., Kerami A. Relationship between Nurse's Emotional Intelligence and Clinical Competency. Arch Pharma Pract 2020;11(S1):91-4.

information to think and act personally [4]. Prati et al. concluded that EI is associated with job behaviors [15]. Thus, it seems that EI is considered as one of the effective factors in the clinical competence of the nurses, and as limited studies have been published concerning the relationship between EI and clinical competence in Iran, the scholars decided to specify the EI and clinical competence of nurses and the relationship between them.

MATERIALS AND METHODS:

The study was descriptive-correlational and the population was 122 nurses working in the educational hospitals of Arak (Valiasr, Amir Al-Momenin, Amir Kabir, and Ayatollah Khansari). The sample size needed for the study, considering the correlation coefficient between EI and clinical competence equal to $r = 0.25$, the study power $1 - \beta = 0.80$, and the 95% confidence interval, the minimum sample size required was determined to be 122 that was selected randomly from among all the staff.

$$r = 0.25$$

$$N = \left(\frac{1.64 + 0.84}{C(r)} \right)^2 + 3 = 122$$

$$C(r) = \frac{1}{2} \log_e \frac{1 + 0.25}{1 - 0.25}$$

The inclusion criteria were at least 6 months of work experience as a nurse, no supervisor or matron positions history, and willingness to participate in the study and the exclusion criteria were incomplete completion of the questionnaire.

Data collection tools were the demographic information questionnaire (age, gender, level of experience, level of education, organizational unit, and so on), Competence Inventory for Registered Nurse (CIRN), and a Bradberry and Greaves' Emotional Intelligence questionnaire. Bradberry and Greaves' 28-item EI questionnaire has four sub-scales of self-awareness (questions 6-1), self-management (13-7), social awareness (14-20), and relationship management (28-21). The scoring method is rated based on a 6-point Likert scale from never (1 point) to always (6 points) with a maximum score of 160 and a minimum of 28 (average score 94). Higher scores show higher EI. The validity and reliability of this questionnaire in Iran were evaluated by Ganji in 2006. CIRN has 55 questions, evaluating the nurses' clinical competence in seven various areas including clinical care, leadership, interpersonal communication, legal and ethical performance, professional development, guidance, critical thinking, and inclination to research. The scoring of the tool is such that each person can get a score between zero and 220. According to the cut-off point of the tool, obtaining a score of 165-220 shows high clinical competence, 110-165 moderate clinical competence, and less than 110 means low

clinical competence. The validity and reliability of this questionnaire were evaluated by the author et al. in 2013.

After obtaining a license to conduct the study from Khomeini University of Medical Sciences with the code IR.KHOMEIN.REC.1397.001 and obtaining the consent and cooperation of officials and nurses working in the relevant hospitals, information from official, contractor, treaty, and project-based nurses working in the wards of these hospitals who were willing to complete the questionnaire with at least 6 months of work experience as a nurse, it was collected. The nurses' participation in the study was completely voluntary, and the volunteers were given the required explanations on the purpose of the study, extracting and providing information, the confidentiality of personal information, lack of need to include first and last names in the questionnaire and other ethical points.

After collecting and inserting the data into SPSS 16, they were analyzed using descriptive and inferential statistics (multiple linear regression, independent t-test, and Chi-square test). The significance level (Alpha Error) in all tests was considered to be 0.05.

RESULTS:

Out of the 122 questionnaires, 120 were completed and returned to the researcher. Moreover, 22.5% of the participants were males and 77.5% were females with their mean age as 29.77 years, and an average of 6.23 years of service history. The distribution of other demographic variables of the participants in the study is presented in Table 1.

The mean score of the nurses in the clinical competence questionnaire was 148.24, with the lowest score as 43 and the highest 204, which is average considering the cut-off point of the questionnaire. The average score of nurses on the EI questionnaire was 121.79. Concerning the dimensions of EI, the highest score was related to relationship management (34.94) and the lowest to self-awareness (27.76), with a significant correlation between its dimensions.

Moreover, the results indicated a significant relationship between nurses' EI and clinical competence ($p < 0.001$) in terms of dimensions of EI between clinical competence with self-awareness, self-management, and relationship management, but there were no significant relationships between clinical competence and social awareness ($p > 0.05$).

Table 1: Demographic information of the participants (n=120)

Variable	Mean	SD	Min.	Max.
Age (year)	29.77	5.43	23.0	50.0
Experience (year)	6.23	5.77	0.3	27.5

Variable		Frequency (n)	Percent age (%)
Gender	Male	27	22.5
	Female	93	77.5
	Project	67	56.1
Employment status	Treaty	12	10.3
	Contract	7	5.5
	Official	34	28.6
Marital status	Single	64	53.3
	Married	56	46.7
	Internal	25	20.8
Ward	Emergency	15	12.5
	Surgery	42	35.0
	Internal	25	20.8
	children	13	10.8

Table 2: Mean, standard deviation, minimum and maximum values observed for the scores of clinical competence evaluation and EI questionnaires of the nurses

Variable	Mean	SD	Min.	Max.
Clinical competence	148.24	30.37	43	204
Emotional Intelligence	121.79	16.27	87	154
Self-awareness	27.76	4.47	9	36
Self-management	29.98	5.38	13	40
Social Awareness	29.11	4.62	21	41
relationship management	34.94	5.85	18	47
1, 2, 3, 4: Emotional intelligence questionnaire constructs				

Table 3. The correlation between the values of the clinical competence questionnaire with the values of the emotional intelligence questionnaire and its constructs using the Pearson correlation coefficient

	(1)	(2)	(3)	(4)	(5)	(6)
Clinical competence	1					
Emotional Intelligence	0.523**	1				
Self-awareness	0.515**	0.719**	1			
Self-management	0.495**	0.860**	0.499**	1		
Social Awareness	0.170	0.376**	0.403**	0.489**	1	
relationship management	0.471**	0.859**	0.456**	0.702**	0.497**	1
1, 2, 3, 4: Emotional intelligence questionnaire constructs **: p < 0.001 in H0 test: r = 0.						

DISCUSSION:

The study was conducted to examine the relationship between EI and the clinical competence of nurses. The results of studies conducted in this regard show that EI is of the most significant skills of health care providers. Nurses use various aspects of EI in different areas like management, education, and research [16]. EI is a key factor for success in life, psychological well-being, and improving interpersonal relationships [17]. Mehrabian et al. indicated a significant relationship between EI and employee empowerment so that the increase in EI will lead to enhancement in the empowerment of employees in the organization. EI increases motivation for more effort, satisfaction, and effectiveness, and finally empowerment and productivity improvement. Those with higher EI can better cope with the challenges of life and the workplace and manage their emotions in a way that is more efficient [18]. The results of Ghaderi et al. (2013) indicated a significant relationship between EI and nurses' job involvement so that nurses with higher EI experienced less job involvement [19]. Jorado (2019) et al. found that the increase in EI leads to a reduction in nurses' job stress [20]. Moreover, Huang et al. concluded that EI leads to a reduction in chronic fatigue among Chinese nurses [21].

According to the results of this study, the nurses' clinical competence was moderate. Consistent with these results, Mirlashari et al. and Qalajeh et al. reported the clinical competence score of most of the nurses studied was average [7, 22]. In a study aimed at determining the clinical competence of nurses by self-evaluation method, Bahraini et al. reported the level of clinical competence of nurses was good, which was inconsistent with the results of this study [5].

Moreover, according to the purpose of the study, there was a significant and direct relationship between EI and the clinical competence of nurses. According to Rahkar Farshi et al., there was a significant and direct relationship between EI and clinical competence of nursing students [13]. Additionally, Imeni et al. found a significant and direct relationship between EI and clinical competence of operating room and anesthesia students [23], which is in line with the results obtained in this study. In today's world, besides practical and theoretical skills, nurses require problem-solving, decision-making, and judgment skills in various situations, and the ability to communicate effectively with others. EI is the center of the clinical and professional performance of nurses, and nurses can overcome their emotions in clinical settings and better manage the relationship between themselves and patients through this skill [23]. Furthermore, the results of the study of the author et al. showed that using the services of nurses with higher clinical competence improves patients' satisfaction with nursing services [24]. Ranjbar Ezatabadi et al. concluded that EI of the nurses has a direct effect on the quality of their services, which is in line with our results [25].

CONCLUSION:

According to the results, there was a significant and direct relationship between EI and clinical competence of nurses, so that the nurses with higher EI were more clinically qualified. In other words, one can state that nurses have to learn to control their emotions in clinical settings to enhance clinical competence. Hence, training EI skills, stress management, and conflict resolution in the workplace should be considered by nursing managers, so that the nurses have more clinical competence and professional skills to care for their patients.

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