

A STUDY OF THE RELATIONSHIP BETWEEN CLINICAL COMPETENCY WITH HAPPINESS AMONG NURSES IN TEACHING HOSPITALS IN KERMAN UNIVERSITY OF MEDICAL SCIENCES IN 2016

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ABSTRACT

Background and objective: clinical competency and happiness are two variables that influence the quality of nursing care. various factors, such as rapid change in health monitoring systems, the need for safe and affordable services, raising the community's awareness about health-related issues and increased expectation of receiving quality services, are associated with these two concepts. Therefore, the present study aimed to determine the relationship between clinical competency and happiness of nurses in educational hospitals affiliated to the Kerman University of Medical Sciences in 2016.

Methods: the present research is a cross-sectional, descriptive-correlational study which was conducted with the aim of examining the relationship between clinical competency and happiness. A sample of 291 nurses completed the demographic information questionnaire, a questionnaire on nurses' clinical competence and Oxford happiness questionnaire. After filling the questionnaires and collecting data, the data were analyzed using SPSS V.18 software. Descriptive statistics (frequency, percentage, average and standard deviation) and inferential test of Spearman's correlation coefficient were used for data analysis.

Results: total average of nurses' clinical competency was 2.99 ± 0.5 . About 50.2%, 47.4% and 2.4% of nurses had high, moderate and low clinical competency, respectively. Moreover, happiness of about 66.7% of nurses was at average level. The results of Spearman's test showed that there is positive significant relationship between clinical competency and happiness ($p < 0.5$).

Conclusion: according to the results of the present study, there is a positive significant relationship between happiness and clinical competency and higher the nurses' happiness level is, the higher, their clinical competency level is. Therefore, it is suggested that nursing custodians do some interventions to improve the nurses' happiness level and thus, increase their clinical competency.

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Introduction

Nursing is an important part of qualitative care and nurses play a critical role in the health care system of a country and one of the most fundamental missions of nursing managers is to evaluate the nurses' clinical competency continuously. In addition to evaluation, maintaining and improving the quality of patient care and raising nurses' competencies and capabilities has been at top of the nursing managers' programs (1). competency is considered as essential components of nursing. With the increased

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complexity of cares, professional nurses' competencies have been increasingly paid attention and the importance of evaluating it has been widely noted in the texts (2). Clinical competency is defined as "a combination of skills, knowledge, attitude, values and abilities that form effective of high performance in occupational of professional positions" (1, 2). Qasemi et al. (2014), quoted from Epstein and Hundert, have defined competency in the field of medicine as the correct judgment and habit of using knowledge, technical skills, clinical arguments, communication, values and rethinking daily activities with the objective of providing services to the society and individuals (2). Nurses need highly specialized clinical competencies to accurately determine patients' conditions and to predict and deal with problems that may occur during treatment (3).

Due to various factors such as rapid change in health monitoring systems, the need for safe and affordable services, raising the community's awareness about health-related issues and increased expectation of receiving quality services, along with the tendency of health services providers to use the skilled labor forces, the clinical competence of health professionals has been paid attention more than ever (4-8). Examining clinical competency is a critical prerequisite for ensuring high quality nursing care and determining the necessary parts for the development of nurse's performance. Competency is an essential factor for ensuring the quality, safety and affordability of the health care (9). In a study conducted in 2012 by Ghodrati et al., nursing students in Sabzevar have evaluated their clinical competency at slightly above average level (10). Negarandeh et al. (2013), in their study on the patients referring to the emergency department of Imam Khomeini Hospital in Khomein, showed that using the qualified nurses' services increases the safety and satisfaction of patients with nursing services (6).

Given that nurses work in environments where death and life and health of patients are of major issues, their happiness can help the health of them and patients (11). Since job positions are related to happiness, employed people are happier than the unemployed ones and people working in specialized and professional occupations are happier than those working in non-specialized jobs (12). Happiness is of the most essential innate and psychological needs of human. Due to the major influence of it on the health and wellness of society, it has been always paid attention by human. This issue is the most fundamental human issue for all generations and the most central motive for human goals that, on the one hand, prepares an individual for better life and greater efficiency and on the other hand, increases an individual's dependency on the environment due to its contagious characteristics. Hence, people try more to serve the community as long as they feel happy (13). Happiness includes several critical components; emotional component (an individual is happy in terms of mood), social component (a happy individual enjoys good social relations with others and can receive social support from them) and cognitive component (that make happy individual to process and interpret the information in a particular way which finally results in his happiness and optimism) (14).

According to a study conducted in Kermnshah by Maleki et al. (2012), happiness is one of the important and inferential variables in human life and in some way, it is the meaning of life or of something make the life meaningful. One of the important results of their study was that there is significant relationship between job and happiness and women are happier than men (15). The results of a study on the students of the Baghiyat Allah University of Medical Sciences, carried out by Saffari et al. (2012), show that married persons compared to single ones, people older than 25 years old compared to younger ones, graduate students compared to the professional doctorate students, nursing students compared to those studying other disciplines, other than medicine and students having an average score of 16 and higher compared to those having an average score less than 16, have reported higher level of happiness (16). In Arab et al.'s study carried out in 2016, the results showed that among the students of the Kerman University of Medical Sciences, the highest and lowest happiness scores were related to nursing students and medical students, respectively. However, the difference between the two groups was not statistically significant (17). Based on our searches in Iran, the relationship between clinical competency and happiness has been not examined in any study. Therefore, according to the results of different studies and the importance of happiness and clinical competency in nurses and the impact of various factors (education, environment, gender, working experience, education level, income) on these two variables and researcher's interest in this issue, the present study was conducted on the relationship between clinical competency and happiness of nurses in educational hospitals affiliated to the Kerman University of Medical sciences in 2016.

Method

The present research is a cross-sectional, descriptive-correlational study which was conducted with the aim of examining the relationship between clinical competency and happiness. Its population included all nurses working in the hospitals affiliated to the Kerman University of Medical Sciences and the number of them was 1112 (Bahonar Hospital: 367 nurses, Afzalipour Hospital: 323 nurses, Shafa Hospital: 310 nurses and ShahidBeheshti Hospital: 112 nurses) and the samples were selected according to the number of nurses of each hospital using quota sampling method. Sample size was estimated 286 according to Morgan's table and previous studies (18). However, considering the possibility of drop-out, sample size was considered 310 that according to the number of nurses of each hospital, 100 nurses from Bahonar Hospital, 90 nurses from Afzalipour Hospital, 90 nurses from Shafa Hospital and 30 nurses from ShahidBeheshti Hospital were selected as samples. Inclusion criteria were: having one year of working experience (11), having a bachelor's degree or higher in nursing and exclusion criteria were: having physical and psychological disorders according to the nurses' statements.

Researcher started sampling after getting the code of ethics No. IR.Kmu.REC.1395.161 and coordinating with the research environment and the questionnaires were given to the nurses after obtaining informed consent from those who were eligible to enter the study. It was tried to refer to the mentioned environments in morning, evening and night shifts so that nurses could

participate in the study and then, they were asked to fill the questionnaires carefully. In the present study, in order to achieve the research objectives, a questionnaire including 3 parts: demographic information, Oxford happiness questionnaire and nurses' clinical competence questionnaire, was used. 1) Demographic information questionnaire includes the questions on age, gender, marital status, working experience, work place, type of job shift, education and name of hospital. 2) Oxford happiness questionnaire: it includes 29 items with 4-option and the participant must be asked, in each item, to draw the line around the sentence that is the best description of their conditions during the last week. Validity and reliability of the Persian version of the Happiness Questionnaire have been confirmed by previous studies (17). The final score of this questionnaire is between 0 and 87 (18). The scores from 0 to 25, 25-50, 51-75 and higher than 76 represent poor, moderate, good and high happiness, respectively. 3) Standard nurses' clinical competence questionnaire: this questionnaire was prepared according to Benner's "from the beginner to professional" Theory by Meretoja et al. (1). This questionnaire includes 55 questions in 7 dimensions: clinical care (10 items), leadership (9 items), interpersonal relations (8 items), legal/ethical practice (8 items), professional development (6 items), teaching-coaching (6 items) critical thinking and research attitude (8 items). This questionnaire was designed based on 4-option Likert scale (score 0: no competent, score 1: slightly competent, score 2: somewhat competent, score 3: competent enough, score 4: highly competent). Total score can be calculated both by averaging or summing Likert scale. If average score is used, total score will be 0 to 4 and if sum of them is used, total score will be to 220. In each area, high average score shows high competency in that area. The average scores 3 (total score 165-220), 2-3 (total score 110-165) and less than 2 (total score 0-110) are considered as high, medium and low competency. In the present study, average score was used. Validity and reliability of the Persian version of the Nurses' Clinical Competence Questionnaire have been confirmed at the Nursing Care Research Center of Iran University of Medical Sciences in 2014 by Qasemi et al. and they were accepted and this questionnaire can be used as a valid tool in the areas of human resource management and nursing education (2). In the present study, statistical software of SPSS V.18 was used to analyze the data. In order to examine the demographic characteristics of the participants, levels of clinical competency and happiness, descriptive statistics of mean, standard deviation, percentage and frequency (Tables 1 to 4) were used. The result of Kolmogorov-Smirnov test showed that the average score of happiness was consistent with the normal distribution, but the average score of clinical competency has no normal distribution. Therefore, Spearman's correlation test was used to determine the correlation between these two variables. Therefore, since averages of different dimensions of clinical competency and happiness didn't follow normal distribution, Spearman's correlation test was used to determine the relationships between them.

Results

Out of 310 distributed questionnaires, 293 questionnaires were received. So the response rate was 94%. Two questionnaires were removed from the study due to incomplete information. The average age of nurses participating in the present study was 31.87 ± 6.78 years and their average working experience was 8.41 ± 6.5 years. About 88.7% of nurses were female. Nearly 52.3% of the participants were younger than 30 years old and about 72.2% of them were married. More than 90% of them had undergraduate degree. Nearly 40.9% of the nurses studied had a working experience of less than 5 years and about 45% of them were working in the internal surgical wards. The majority of participants (71.1%) worked with rotational shiftwork (Table 1).

Table1. Demographic characteristics of nurses

Variable	Frequency	Percent
Gender		
Female	285	88.7
male	33	11.3
Age (year)		
Younger than 30	152	52.3
31-40	104	35.7
Older than 40	35	12
Marital status		
Married	210	72.2
Single	80	27.5
Divorced	1	0.3
Academic degree		
Undergraduate	272	93.5
Master	19	6.5

According to Table 2, the highest averages were related to the dimension of legal/ethical practice (3.12±0.53) and clinical care (3.06±0.44), respectively and the lowest average was related to interpersonal relationship (2.91±0.5). Moreover, according to the cut points of the questionnaire, about 50.2% (n=146), 47.4% (n=138) and 2.4% (n=7) of nurses had high, moderate and low clinical competency, respectively.

Table 2. Averages and standard deviations of dimensions of nurses' clinical competency and total average and standard deviation

Dimensions of clinical competency	Average	Standard deviation
Clinical care	3.06	0.44
Leadership	2.96	0.48
Interpersonal relationship	2.91	0.5
Legal / ethical practice	3.12	0.53
Professional development	2.94	0.5
Teaching/coaching	2.99	0.57
critical thinking and research attitude	2.93	0.5
Total score	2.99	0.44

Average score of happiness was 40.06±13.56. The highest and lowest averages were related to the areas of health (1.5±0.55) and satisfaction (1.32±0.55), respectively (Table3). Moreover, happiness of about 13.1% (n=38), 66.7% (n=194), 18.5% (n=54), 1.7% (n=5) of nurses were low, moderate, good and high, respectively.

Table3. Averages and standard deviations of dimensions of nurses' happiness questionnaire

Dimensions of happiness	Average	Standard deviation
Satisfaction	1.32	0.55
Positive mood	1.36	0.52
Efficacy	1.33	0.54
Health	1.5	0.55
Self-esteem	1.46	0.54

The results of Spearman's correlation test showed that there is positive and significant relationship between happiness and clinical competency ($\rho=0.22$, $P=0.000$). Nearly, there are positive and significant relationships between the most dimensions of clinical competency and happiness ($P<0.05$) (Table4).

Table4. The relationships between the dimensions of happiness and dimensions of clinical competency

Dimensions		Happiness				
		Satisfaction	Positive mood	Efficiency	Health	Self-esteem
Clinical competency	Clinical care	$\rho=0.14$ $P=0.02$	$\rho=0.2$ $P=0.001$	$\rho=0.13$ $P=0.02$	$\rho=0.2$ $P=0.001$	$\rho=0.08$ $P=0.2$
	Leadership	$\rho=0.09$ $P=0.14$	$\rho=0.16$ $P=0.005$	$\rho=0.19$ $P=0.001$	$\rho=0.02$ $P=0.000$	$\rho=0.07$ $P=0.23$
	Interpersonal relationship	$\rho=0.15$ $P=0.01$	$\rho=0.2$ $P=0.000$	$\rho=0.2$ $P=0.000$	$\rho=0.24$ $P=0.000$	$\rho=0.12$ $P=0.03$
	Legal ethical practice	$\rho=0.14$ $P=0.02$	$\rho=0.18$ $P=0.003$	$\rho=0.18$ $P=0.002$	$\rho=0.24$ $P=0.000$	$\rho=0.13$ $P=0.03$
	Professional development	$\rho=0.14$ $P=0.02$	$\rho=0.18$ $P=0.002$	$\rho=0.21$ $P=0.000$	$\rho=0.27$ $P=0.000$	$\rho=0.1$ $P=0.008$
	teaching-coaching	$\rho=0.14$ $P=0.01$	$\rho=0.19$ $P=0.001$	$\rho=0.2$ $P=0.000$	$\rho=0.25$ $P=0.000$	$\rho=0.1$ $P=0.07$
	critical thinking and research attitude	$\rho=0.18$ $P=0.003$	$\rho=0.22$ $P=0.000$	$\rho=0.2$ $P=0.000$	$\rho=0.24$ $P=0.000$	$\rho=0.14$ $P=0.02$

Discussion

The results of the present study showed that the total average score of clinical competency was 2.99 ± 0.5 and this represents the moderate level of nurses' clinical competency. In Choi and Ha's study, total average score of clinical competency was 2.65 (1) and it is consistent with the result of the present study. Also, the results of the present study are consistent with the results of the study by Soroush et al. (2015). In their study, total average of clinical competency was reported 2.9 ± 0.43 (3). This result is inconsistent with the result of a study by Farshi et al. (2015). They reported average score of nurses' clinical competency at the higher than moderate level (4). In the present study, about 50.2%, 47.4% and 2.4% of nurses had high, moderate and low clinical competency, respectively. This result is consistent with the result of the study by KarimeMoneghi et al. (2011). According to their study, 53.3% of nurses had high clinical competency according to the results of self-assessment (2). Clinical competency is one of the main indicators in determining nursing performance and given the need for providing high quality care to patients and the complexity of therapeutic environment consistent with the emergence of new diseases, this concept has become one of the main issues in nursing education centers and researchers believe that recognizing the ways for the development and enhancement of clinical competency is necessary to maintain nursing care standards (5). It should be noted that nursing is a critical and sensitive occupation and related to human health, presence of about 50% moderate and low clinical competency is significant and this requires planning for training almost half of nurses and enhancing their clinical competency. In the present study, among different dimensions of clinical competency, the highest averages were related to the areas legal ethical practice and clinical care, respectively and the lowest average was related to interpersonal relationship. In dimensions of legal ethical practice, this result is consistent with the result of a study by Vagheii et al. (2011) but in terms of interpersonal relationship, they are inconsistent (2). Since one of the main tasks of nurses is to cooperate with each other in the care of patient which is characterized by the team care of the patients, providing constructive and applied feedback to each other during care and also, the ability to recognize their needs and support of each other (6), this result indicate that nurses are aware of their rights and do their tasks according to the rules. In the care of patient, they pay required attention. This can be due to the development of supportive organizations of nurses, the development of nursing occupation, and the development of health education and advancement and increased knowledge of patients. Moreover, since nurses deal with human lives, they should pay attention and observe the rules and regulations in surviving the patients and consider care of patient as important dimension of clinical competency. All dimensions of clinical competency should be taken into account in training programs. The low average of the dimension "interpersonal relationship" can influence other dimensions of nurses' clinical competency. This can be due to high work load of nurses, high frequency of patients, high number of high-risk patients and patients' needs for complicated cares which make the nurse to spend greater part of his/her opportunities on care issues and documentation. Therefore, it is required that nursing managers pay particular attention to nurses' interpersonal relations.

Average score of happiness was 40.06 ± 13.56 which indicates that nurses' happiness is at moderate level. According to the results related to the components of happiness, the highest and lowest averages were related to the areas of health and satisfaction, respectively. This result is inconsistent with the result of a study by Shokravi et al. (2014). According to their study, the highest and lowest averages were related to the areas of satisfaction and subjective well-being, respectively (7). Moreover, according to a study on the relationship between mental health and happiness among nursing students, conducted by Hussaini et al. (2016), among the components of happiness, the highest average was related to the area of satisfaction and it is inconsistent with the result of the present study (8). Since happiness is a mood influenced by various factors, its dimensions may follow this trend and this can be a reason for inconsistency between the results of the present study and the mentioned studies and the predictive role of various ground and working variables in the incidence of happiness and its dimensions can be investigated by conducting research.

Moreover, the average score of nurses' happiness (40.06 ± 13.56) obtained in the present study is lower than those of obtained in a study on nursing students of Islamic Azad University (45.56 ± 15.67) and the University of Medical Sciences (50.23 ± 15.39), conducted by Ebadi et al. (2016). Arab et al. (2016), in the study on the students of the University of Medical Sciences, have reported the nursing students' happiness average score 4.26 ± 0.61 which is higher than the average score obtained in the present study (11). The lower level of nurses' happiness in comparison with nursing students can be due to intensive shifts, job burnout, job stress, facing critical situations, job dissatisfaction and low wages. The difference between the Iranian nurses and nurses of other countries in terms of happiness can be due to cultural differences, the conditions governing the working environment, the role of supportive organizations. Therefore, it is required that nursing managers provide some programs to improve nurses' happiness and also, pay attention to different dimensions of happiness. The happiness of the majority of nurses participating in the present study was moderate (66.7%). Only, 1.7% of nurses had high level of happiness. This result is inconsistent with the result of a study by Boonyarak (2011), in which the happiness of the majority of nurses was reported at high level (9). The result of the present study is consistent with the result of a study by Siamian, who reported the happiness of the majority of participants at moderate level (10). In examining the relationship between clinical competency and happiness, it was found that there is a positive significant relationship between happiness and clinical competence. The higher the happiness is, the higher the nurses' clinical competency will be. Although, no study on the relationship between happiness and clinical competency in Iran was found, KarimiMoneghi et al (2011) have conducted a study on the relationship between clinical competency and spiritual intelligence and the results showed the significant relationship between them (2). Komeili Sani et al. (2013) have carried out a study on the relationship between clinical competency and job stress and the results indicated significant and

negative relationship between them (12). Therefore, nurses' happiness can impact their clinical competency positively and increase their clinical competency and efficiency. Nearly, there were significant and positive relationships between the most aspects of clinical competency and happiness. According to Komeili Sani's study, which indicates the significant relationship between clinical competency and spiritual intelligence (12), and significant and positive relationship between happiness and job satisfaction of nurses (14), it can be said that higher happiness in nurses will be accompanied by greater clinical competency and better job performance.

Conclusion

According to the results of the present study, there is a positive and significant relationship between happiness and clinical competency and nurses with greater clinical competency reported higher levels of happiness. Therefore, along with in-service training programs and enhancement of nurses' clinical competency, psychological aspects of nurses should be paid attention specially. Also, the results of the present study show that clinical competency of nearly 50% of nurses was high and the rest nurses have moderate and low clinical competency which need special attention. In terms of happiness, 66.7% of nurses have moderate happiness. Therefore, nursing managers should take required measures to improve the happiness level of nurses because there is positive and significant relationship between it and clinical competency. Educational centers should plan the training of nurses in such a way where different dimensions of their clinical competency are enhanced coordinately, resulting in improvement of quality of nursing services and desired satisfaction of patients. It is suggested that nurses continuously participate in different workshops to increase their happiness.

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