Original article

Nursing students' clinical performance and professional self-concept

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Abstract

Objective: Nursing professional self-concept is nurses' internalized values and beliefs and the manner they affect their thoughts and behavior. The questions of how nursing students see themselves and what qualities interest them are of great importance. The present study aims to determine the correlation between clinical performance and nursing students' professional self-concept. **Materials and Method:** The present cross- sectional -analytical study was conducted on 86 nursing students at Jahrom universities of medical sciences. The study data were collected using a questionnaire which consisted of 6-Dimension Scale of Nurse Performance (6-DSNP) and Nurse Self-Concept Questionnaire (NSCQ). The data analyzed using descriptive and inferential statistics. **Results:** The nursing students' clinical performance and professional self-concept scores were 2.94±1.45 and 5.46±1.11. Pearson correlation coefficient revealed a significant correlation between the students' clinical performance and professional self-concept. Total 6-DSNP score were significantly related to two of the dimensions of NSCQ: Nursing care and communication (p<0.05). There was a relationship between academic year and professional self-concept total score (p=0.01, r= 0.26). **Conclusion:** The results of the study show that clinical performance and professional self-concept are related. These findings can be helpful to teachers, authorities at nursing colleges, and nursing managers. Applying techniques that will enhance students' professional self-concept are essential to improving their clinical performance.

Keywords: professional self-concept; clinical performance; nursing students

Introduction

The importance of nursing students' clinical performance must not be overlooked (1): monitoring students' clinical performance and understanding their perception of their skills and abilities and the expectations of them are essential to identifying their educational needs and ways to help them develop professionally (2), as well as being a major issue in their transition from college (3).

Despite the great need for nursing graduates, there are concerns over nursing students' qualification for clinical performance (4). Various studies have concluded that the current educational programs fail to prepare nursing students for real practical performance, and after graduation, most nurses begin like total beginners (2). Though these new nurses are acquainted with the theoretical framework, they are not competent enough for performance in clinical environments (5).

Some university professors believe that if students appreciate the value of the services they perform and feel responsible, their sense of professionalism will develop. This viewpoint is consistent with the philosophy of the educational curriculum which aims to give students a chance to fulfill their potential (6). Professional self-concept has been a major concern over the past hundred years in various professional fields (7). In professions related to health care, the enhancement of professional self-concept is universally recognized as a major goal (8).

Nursing professional self-concept consists of the information and beliefs that nurses have regarding their roles, values, and behavior (9). In other words, it is nurses' internalized values and beliefs and the manner they affect their thoughts and behavior. Nursing professional self-concept is greatly influenced by the society's impression of nursing: nurses are worried about their image as nurses. Despite the scientific advances made in the profession of nursing and its treatment as an independent field, nurses' skills remain unknown to most people. The media present women as people who are directed by doctors and continuously perform routine tasks (10). These factors cause nurses to internalize the negative attitude, which accounts for the severe shortage of nurses and nurses' tendency

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to leave their jobs worldwide (11). Various studies have shown that Iran is faced with the same issue. In a study of nursing students' attitude to the profession of nursing, more than half of the respondents were for leaving the profession and planned to quit or change their majors (12). The results of a similar study showed that there was a significant relationship between nursing students' professional self-concept and willingness to stay in nursing (13). Thus, the questions of how nursing students see themselves and what qualities interest them are of great importance (14).

Nursing students need to develop a wide range of qualities, views, and behaviors which are necessary to an eternal commitment to one's profession: they must feel responsible for their profession, patients, supervisors, and society. The present study aims to determine the correlation between clinical performance and nursing students' professional self-concept among nursing students at Jahrom University of Medical Sciences, Iran.

Materials and Methods

This study was a cross-sectional analytical work. The entire senior and junior nursing students at the nursing college of Jahrom University of Medical Sciences in 2013 made up the study population. Since the study population was small, census method used. Census is a study of every student, in a population. It is known as a complete enumeration, which means a complete count. The total population of all senior and junior nursing students (100 students) was assessed. 86 questionnaires were completed. The response rate was (86%). The first- and second-year students were excluded because they had not passed the training courses in hospitals or were not familiar with certain procedures. Inclusion criteria were: willingness to participate, being senior and junior student, not being affected by major or chronic physical problems, and not being affected by major or chronic mental problems, as stated by the participant.

Once the research project was accepted and approved by the ethics committee at Jahrom University of Medical Sciences, the introduction papers were submitted to the head of the nursing college. With the permission of the students' professor, toward the end of one of their classes, the objectives of the study were explained to the students by the co-researcher who was not involved in the student's education. The students were told that the questionnaires were nameless; the information would be treated as confidential. Before the students completed the questionnaires, each had to give his/her consent in writing, and those who were not willing to participate were excluded. Next, the questionnaires were distributed and the students were asked to complete them.

Data collection was based on self-evaluation, and the questionnaire consisted of three parts: the respondents' personal characteristics, the nurses' self-concept questionnaire (NSCQ), and the 6-dimension scale of nurse performance (6-DSNP).

NSCQ is a 36-item questionnaire designed by Cowin (15); it addresses the six dimensions of: nurses' self-esteem (6 questions), knowledge (6 questions), caring (6 questions), leadership (6 questions), staff relations (6 questions), and communication (6 questions). The questions were all in the affirmative, and, based on the Liker scale, scored from 1 to 8, with higher scores indicating better professional self-concept. The reliability and validity of the questionnaire have been verified by several studies conducted abroad (16). The reliability and validity of the Persian questionnaire have been verified with the Spearman-Brown correlation coefficient of 0.84 and Cronbach's alpha of 0.97(17).

Designed by Schwirian, 6-DSNP (18) is a 52-item questionnaire which addresses the 6 following aspects: Teaching and collaboration (11 questions), planning and evaluation (7 questions), critical care (7 questions), interpersonal relations and communication (12 questions), leadership (5 questions), and professional development (10 questions). In part one (questions 1-42), the possible choices for each student to describe his/her readiness are "not at all," " Not very well," "satisfactory," and "very well;" in part two (questions 43-52), the students could choose from the following to describe how often they performed the activities in question: "seldom or never," "occasionally," "Frequently," and " Consistently." Based on the Likert scale, each item was scored from 1 to 4, with higher scores showing better perception of one's clinical performance. The reliability and validity of the questionnaire have been verified by several studies: in the study of Klein et al. in 2009, its reliability was reported to be 0.78-0.80(19). Since the questionnaire had never been used in Iran, in order to verify its content validity, the questions were translated into Persian by an expert, and then translated back into English by another expert. The face and content validities of the questionnaire were examined and verified by 10 faculty members at Jahrom University of Medical Sciences. To confirm its reliability, 30 students were tested and the Chronbach's alpha was verified ($\alpha=0.97$).

Data were entered into SPSS version 16.0. To analyze the distribution of the data, descriptive statistics—e.g. mean and standard deviation—were used, and to explore the relationships among the variables of the study, Pearson's correlation coefficient was employed.

Results

48 of the participants (55.8%) were junior and 38 (44.2%) were senior nursing students. The majority of the students were female (65.1%) and single (79.1%). The average age of the students was 21.38±2.46, and their average grade was 16.50 out of 20. The Iranian grading system at secondary schools and universities is similar to that of France; the grades range from 0 to 20. The passing grade is 10. Graduate programs require 12 and 14 as passing grades for Master's and Ph.D. programs, respectively. Iranian grades are not directly convertible to the 4.0 GPA scale. Usually, grades 17 or more are considered excellent, grades 14 to 16.99 are considered good and grades 10 to 13.99 are considered acceptable. Students having 9.99 or less fail. (Table 1).

Table1. Distribution of demographic characteristics of nursing students

		N(%)
Academic year	Junior	48(55.8%)
	Senior	38(44.2%)
Sex	Female	56(65.1%)
	Male	30(34.9%)
Marital status	Single	68(79.1%)
	Married	18(20.9%)
Age	20-22	51(59.3%)
	22-24	35(40.7%)
Average grade	>17	10(11.6)
	14-16.99	72(83.7%)
	<13.99	4(4.7%)

The mean and standard deviation of professional self-concept total mean score was 5.46±1.11 out of 8 (Table 2).

Table2. The mean and standard deviation of the NSCQ

NSCQ	Mean ± SD
professional self-concept mean total score	**5.46±1.11**
Nurse self-esteem	4.92±1.82
Nursing care	5.51±1.28
Nursing knowledge	5.58±1.65
Staff relations	5.47±1.24
Communication	6.13±1.22
Leadership	5.13±1.44

The mean and standard deviation of nursing performance total mean score was 2.94±1.45 out of 4 (Table 3).

The relationship between the students' clinical performance and professional self-concept was slight, but statistically significant (r=0.24, p=0.02). Total 6-DSNP score were significantly related to two

of the dimensions of NSCQ: Nursing care and communication (Table4).

Table3. The mean and standard deviation of the 6-DSNP

6-DSNP	Mean ± SD
Nursing performance total mean score	**2.94±0.45**
Teaching and collaboration	2.80±0.48
Planning and evaluation	2.74±0.55
Interpersonal relations and communication	3.06±0.49
Critical care	2.99±0.53
Leadership	2.95±0.65
Professional development	3.03±0.56

Table 4. The Relationship between the 6-DSNP Total Score and NSCQ Total Score and Its Subscales.

Variables	Nursing performance total score (6-DSNP)
professional self-concept total score (NSCQ)	**0.24**
Nurse self-esteem	0.03
Nursing care	0.29*
Nursing knowledge	0.20
Staff relations	0.20
Communication	0.25*
Leadership	0.17

*p-value<0.05

The relationship between demographic variables and NSCQ and 6-DSNP total scores were examined using Pearson and Spearman Correlation coefficients. No relationships were found between, academic year, sex, marital status, age and average with NSCQ and 6-DSNP total scores (p>0.05) except academic year and NSCQ total score (Table5).

Table 5. Relationships between demographic characteristics with professional self-concept(NSCQ) and clinical performance(6-DSNP) in nursing Students.

	6-DSNP		NSCQ	
	r	P-value	r	P-value
Academic year	0.18	0.09	-0.26	0.01*
Sex	0.14	0.17	0.20	0.054
Age	0.17	0.10	0.06	0.54
Marital status	0.09	0.39	0.06	0.58
Average grade	0.12	0.24	0.03	0.77

*P-value is significant

Discussion

The results of the review study showed that few studies had explored the factors affecting nursing students' clinical performance; universities today need to develop and apply strategies that, by

addressing special factors, will help various types of students (20). In the present study, there was a relationship between professional self-concept and clinical performance; it can be concluded that nurses with a strong professional self-concept will perform better in health care. The researcher believes that professional self-concept, as a motivational factor, can influence individuals' clinical performance and result in greater insight, feelings of responsibility, and professional advancement.

Similarly, self-concept affects educational performance, and successful learners owe their educational success to their positive self-image; in other words, how a learner sees him/herself influences his/her educational performance (21). Result of other study showed there was a statistically significant relationship between the nursing students' scores on the mental health and their academic achievement (22). Since nursing students are faced with psychological issues more than before and their education can decrease as a result, it is essential that issues related to their mental health be identified and considered.

Relationship between emotional intelligence and clinical performance was reported, which confirms the results of the present study (23). There is a relationship between nursing students' educational satisfaction and academic success that agree with the results of the present study (24). In another study, the results showed a significant relationship between students' self-esteem and academic achievement (25). However, the results of other study showed no significant relationship between students' self-concept and self-esteem with their educational success (26). One reason for this discrepancy can be the tools used; they used Roger's self-concept questionnaire which addresses an individual's personal traits, while in this study, the researcher used nurses' professional self-concept questionnaire which evaluates nursing professional self-concept.

The other hand, there wasn't a relationship between nurses' knowledge and clinical performance (27). This finding shows that, though knowledge and performance are essential to nursing, there are also other factors that need to be considered to improve nurses' clinical performance. It should be noted that in a complicated profession like nursing, cognitive understanding and practical skills are necessary, but not enough (23).

Also the findings of the study showed that nursing students' professional self-concept as determined by NSCQ was comparable to that of students studying abroad. In this study, the students had lower professional self-concept and achieved a lower average professional self-concept mean score. Other study in Shiraz reached similar results and reported the students' professional self-concept to be low compared to other studies (28). There are several possible reasons for the studied students' professional self-concept scores' being lower than students studying abroad: in a study of the challenges Iranian nursing students face during their education, most of the students referred to the society's indifference to their major and treating it as worthless (29). Also nursing students realize that hospitals are strictly doctor-centered, and tasks are divided routines; that realization will directly and indirectly restrict nurses and make them feel that their potentials will be ignored (30).

Nursing students begin their education with average self-esteem, at the end of their education, their self-esteem is below average (31). Similarly, in other study the nursing students had their minimum self-esteem at the end of their education (32). Since the subjects in the present study were senior and junior nursing students, their low levels of professional self-concept were predictable.

In this study, academic year was associated with professional self-concept. No relationships were found between, demographic variables with NSCQ and 6-DSNP total scores. This is in line with the study performed by badiyepeyma indicating that no significant relationship was found between professional self-concept and age and average. But those results were on the contrary to that revealed significant relationship between sex and professional self-concept (13).

It is recommended that a longitudinal study would usefully contribute to the body of research investigating nurse self-concept and clinical performance and its importance to nursing. In depth exploration using qualitative interview methods would be useful to determine how students with different professional self-concept, evaluate their clinical performance.

Conclusion

The results of the study show that clinical performance and professional self-concept are related. Accordingly, attempts should be made to enhance students' professional self-concept during their education that will enhance students' clinical performance. These findings can be helpful to teachers, authorities at nursing colleges, and nursing managers. Moreover, to enable nursing students, teachers need to help develop the professional self-concept of their students, dedicate time for private conversation with their students, listen to their worries, appreciate students' real attitude toward nursing and correct it as best as they can, and most importantly, introduce the realities of nursing and nurses' capacities to the society.

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