The Challenges of Effective Participation of Clinical Nurses in the Acquisition Process of Clinical Competence in Nursing Students: a Qualitative Study

Abdolmotalleb Hasani 1, Khadijeh Yazdi 1*, Zahra Sabzi 1

1Faculty of Nursing and Midwifery, Golestan University of Medical Sciences, Gorgan, Iran.

Abstract

The cooperation of nurses helps students to turn their theoretical knowledge into psychomotor skills. The aim of this study was to address the challenges of effective participation of clinical nurses in the acquisition process of clinical competence in nursing students. The present study was qualitative research performed in 2020. The main participants were nursing students and nurses working in the hospital. The participants of this study were selected purposefully. The obtained data were then analyzed using MAXQDA-10 software. Semi-structured interviews and observations were used for data collection. Qualitative content analysis method was used. Data analysis resulted in the emergence of two main categories as follows: "unpreparedness to play the role of educating students" and "non-educational clinical field". Moreover, unpreparedness to play the role of educating students includes the subcategories: "Nurses' scientific incompetence", "Fear of delegating authority to the students", and "limited nurse-student interaction"; and non-educational clinical field included the following subcategories: "implementation of non-standard care processes by nurses", "Lack of a written program for nurses' participation in student’s education", and "Insufficient opportunity to educate students due to the high workloads of nurses". The findings of this study showed that since nurses are considered an important part of clinical education for students, it seems that solving the existing challenges through involving nurses in the clinical education of students can be helpful.

Keywords: Clinical nurses, Clinical competence, Nursing students, Qualitative Study

INTRODUCTION

Nursing is a discipline related to clinical education [1, 2]. A clinical environment is a key place for nursing students to learn the related education [3]. Clinical competence is defined as the nurse's ability to put his/her effective and safe professional responsibilities into practice [4]. In recent years, factors such as rapid changes in health monitoring systems, the need to provide safe and cost-effective services, and increasing the expectation of receiving high quality services have led to more and more attention being paid to clinical competence [5]. The clinical environment has a great effect on the development of clinical competence in nursing students [6]. Notably, clinical competence is acquired through the link between theory and practice [7]. Preparing nursing students to enter the field of practice is a priority of health care organizations, due to staff shortage and the increased complexity of health care setting [8]. The purpose of the internship course is to acquire skills in performing tasks related to nursing [9]. Accordingly, this issue plays an essential role in creating appropriate opportunities for increasing skills to apply knowledge and form the basic skills of nursing students [10]. Nurses working in a clinical setting also play an important role in educating nursing students. The cooperation of nurses helps students to turn their theoretical knowledge into psychomotor skills [6]. The cooperation between experienced and knowledgeable nurses reduces the stress level of students in the clinical environment [11]. Educating nursing students can be difficult and stressful because of the nursing staff shortage for training [12]. In general, it was shown that the environment in which employees are satisfied would have a positive effect on educating the students [13]. In a review study conducted by Rebeiro et al., it was shown that a high workload is a major cause of improper nurse-student cooperation [14]. In a qualitative study, Mamaghani et al. showed that educational, communicational, and psychological factors are important for
nurse-students’ relationships [15]. Although the nurses play an important role in educating students, some of them do not take this in consideration as a part of their duties [16]. The collaboration of nurses in clinical education is necessary for student’s adaptation to the clinical setting [6]. Also, clinical education is essential for the acquisition of clinical skills by nursing students. While students are dealing with many difficulties in acquiring clinical competence [17]. Authorities could perform several feasible programs by recognizing the factors affecting the participation of nurses in the acquisition of clinical competence by the students, which leads to the acquisition of clinical competence by nursing students as well. The purpose of the present study was to investigate the participation of clinical nurses in the process of taking students’ competencies into practice.

**Materials and Methods**

**Research design and setting**

The present study was conducted in 2020 using a conventional content analysis approach in Golestan University of Medical Sciences.

**Participants**

The main participants were purposefully selected from nursing students and nurses working in the educational centers. A semi-structured interview was used for data collection. After explaining the purpose of the study, participants’ rights such as confidentiality of identity, and obtaining permission to record interviews, the interviews were conducted separately by a prior appointment and in a convenient place so that the participants could express their experiences. The first participant was purposefully selected and the rest of them were then selected by considering the maximum variation in terms of the semester, age, gender, and job position. From the professors’ point of view, the first participant was a student with good ability in express his/her internship experiences in training who had willingness to participate in the study. Consent was obtained from all participants. The study was approved by the Research Deputy and Research Ethics Committee of Golestan University of Medical Sciences.

**Data collection**

The interviews lasted for 30-40 minutes and varied according to the participant’s tolerance level. Initially, general questions were used as interview guides. Thereafter, they were asked to “talk about clinical competence and share their experience with the researcher” and also to “describe their experiences of clinical nurses participating in acquiring clinical competence in practice”. Exploratory questions such as “can you explain more?” and “take an example, please” were then asked for enriching the data. After 20 interviews, data saturation was achieved.

**Data analysis**

MAXQDA-10 software was used for data management. Graneheim & Lundman's approach was used for data analysis [18]. Firstly, the interviews were listened to several times to gain a proper understanding of the interview and then transcribed verbatim. Correspondingly, Graneheim & Lundman's approach includes involving the data, generating the initial codes, emerging the themes from the prior step, checking the data to ensure their acceptability, labeling themes, and preparing for the final report [19]. Moreover, to evaluate the acceptability of the study, Lincoln and Guba's criteria were used [20]. The researchers tried to fulfill the credibility by involving themselves in the process of data collection from the participants for a long period of time, and by checking the transcripts with the participants. Data validation was achieved by conducting the study in a step-wise order as well as auditing reviews that were done by two experts. Confirmation was improved by the comments and approval of the study supervisors. To ensure the transferability of this study, the researchers tried to provide an accurate report of the participants’ statements to be used in other contexts.

**Results and Discussion**

A total of 20 participants (14 nursing students and 6 nurses) were interviewed. Eight of them were men and the rest were women. After analyzing the obtained data, 400 initial codes were extracted. By merging similar codes, 232 codes remained at last. Similar codes were then placed in subcategories. A total of 24 subcategories were formed, and those with similar meaning were allocated into six main subcategories, and finally, the six main categories emerged from the data analysis process.

Data analysis resulted in emerging the following two main categories: "unpreparedness to play the role of educating students" and "non-educational clinical field":

**A. Unpreparedness to play the role of educating students**

This theme is composed of three categories including nurses’ scientific incompetence, fear of delegating authority to the students, and the limited cooperation of nurses with students based on the similarity of meaning, indicating the lack of necessary educational facilities in the clinical setting.

**A.1. Nurses’ scientific incompetence**

A number of the included participants addressed the insufficient skills and lack of up-to-date scientific and knowledge of nurses working in the clinical setting as the factors leading to superficial and scientific learning of the student and the limited nurse-student interaction.

“When I ask a nurse that what this disease is? What kind of medications were used for that?, And what are these medications’ side effects? His/her explanations do not convince me.” (Participant No. 6)
"Some nurses are weak in theory, are not up-to-date, and do not study. Perhaps their knowledge is insufficient because in most cases, they teach clinical procedures to the student based on knowledge and experience. In fact, they somehow transfer their old experiences to the student." (Participant No. 4)

**A.2. Fear of delegating authority to the students**

Almost all students stated that nurses afraid of teaching clinical procedures to them. It may be due to some concerns on the legal consequences of error in students’ performance.

"Nurses working in some wards do not entrust students due to fear from committing error to assign tasks on the student. It was the ninth time in this course that I was allowed to administer the medication into the patient's microset. " (Participant No. 14)

"whenever a patient has a complicated dressing and we want to take action, they were opposed even if we knew how to manage it. Once, I wanted to change the patient's dressing and the nurse told me that patient has an infected wound and I’m afraid that you do something wrong, because I am responsible for the patient." (Participant No. 17)

**A.3. Limited cooperation of nurses with students**

The participants stated that the most important factors possibly affecting the process of obtaining clinical competence are the interaction and supervision of the clinical nurse.

" We are only working for clinical nurses and do what they said, no matter what. There is no direct supervision on the students’ modalities even if they commit an error." (Participant No. 3).

"Nurses have an inappropriate attitude. For example, in the evening shift, one of the nurses beside the patient's bed said to the patient that he does not want to do anything, and I do not allow the students to do patients’ care. It means my performance is useless." (Participant No. 11)

**B. Non-educational clinical setting**

This theme consists of "Students’ attention to the implementation of non-standard care processes by nurses", "Lack of a written program for nurses' participation in student education", and "Insufficient opportunity to educate students due to the high workloads" subcategories based on semantic similarity. Accordingly, it indicates a lack of non-educational clinical environments and routine orientation.

**B.1. Students’ attention to the implementation of non-standard care processes**

Many participants complained of the non-standard performance of nursing procedures. They mentioned some factors such as a shortage in hospital facilities, the large number of students in the ward, and assigning routine procedures to them.

"There are shortages in the hospital facility. For example, in the surgery ward, the dressing set was not enough and we had to use one set for more than one patient, so we could not consider sterility in the dressing...." (Participant No. 16)

“When I entered the nursing discipline, I was supposed to deal with the diagnosing process or writing a care plan. But when I came to the practice, I observed that we just implement a set of routine procedures, not a plan. You have no critical thinking” (Participant No. 18)

**B.2. Lack of a written program for nurses’ participation in student’s education**

Some participants acknowledged the unclear list of activities expected from the clinical nurse and insufficient support for the students during their training.

"As a nurse, we really do not know what to teach to the student exactly, and nobody clearly explained for us that which tasks or responsibilities we should delegate to the students.” (Participant No. 8)

"When there is no benefit in training the students, I have gradually lost my motivation as a nurse to participate in a student's training.” (Participant No. 13)

**B.3. Insufficient opportunity to educate students due to the high workloads of nurses**

Some participants addressed the high workload and mentioned that as a factor affecting the students’ training.

"We do not have enough time to educate students because we have to admit patients and attend patient visits with the physician, and do some routine jobs, we are so busy." (Participant No. 5)

Students have the highest level of interaction with nurses; therefore, to gain positive experiences in training, nurses play an important role and they are considered as role models for students [21]. One of the issues that prevent the students from gaining clinical competence is the lack of scientific competence of nurses. Most of the included participants in this study stated that the nurses have no enough knowledge and skills and do not follow the scientific principles, so the students are in a dilemma, because they cannot make a connection between nursing theory and practice and due to the reason that they were trained differently from theories. In this regard, it seems necessary to hold an in-service training program for nurses, to get students acquainted with the principles and foundations of education. In some studies, the previous positive cooperation of the nurse in training the student has been reported and the nurses benefiting from sufficient knowledge and skills can help in the effective training of the student in practice [22, 23]. Another issue cited
by the participants as a barrier against nursing clinical competence was the fear of delegating authority to the students. Concerns about medical errors have also been reported as one of the main causes of weak nurse-student cooperation [15]. Most of the participants stated that nurses are afraid to hand over the procedure to the student, while delegating authority is one of the elements of nursing. Since nurses are directly responsible for the patient and any negligence and error by the student can be problematic for them, this issue can be resulted from the subsequent legal consequences. Another issue raised by the participants was the limited interactions between nurses and students. The reasons discussed herein were lack of supervision and proper treatment of nurses with students. Moreover, improper nurse-student interaction is one of the important obstacles in acquiring clinical competence. Supervision in clinical education is an interpersonal process, during which the nurse helps the less skilled and experienced students to acquire the necessary ability to play their roles [24]. Most of the students stated that nurses have inadequate supervision in their performance and nurses think to assign their tasks to the student, who had no direct or indirect supervision on the correctness of the procedure, which can consequently lead to a decline in the quality of care and an increase in the medical errors. In this regard, Khalifezadeh [25] and Nasiriani [26] declared the lack of supervision in clinical education in Iran. The mentioned reasons were nursing staff shortage, participation of non-specialist instructor in clinical education, and lack of time for nurses, which are consistent with the findings of the present study. Supervision-based training is supposed to be helpful in clinical education and to create a supportive clinical environment. Therefore, education authorities can have valuable effects, by supporting nurses to participate in the students’ training [27, 28]. Another subject mentioned by the students was the way the nurses behavior them. They stated that nurses have no proper behavior with students, which results in the reduced self-confidence. In a study conducted by Ghodbsbin et al., students reported that there is no proper relationship between the students and staff [29]. Additionally, Fathi showed that the arrogant response of the staff to the students and the nurses’ irritability and anger were the most inhibitory factors for nurse-student interaction, which is consistent with the present study [30]. The nursing team and students' feelings of disrespect have been reported as two clinical educational barriers for nurse-student interaction, which are also consistent with the findings of the present study [31]. In the study by Mamaghani et al nurses’ improper attitudes towards students and lack of student support were some of the reasons for the students’ reduced motivation in learning from nurses [15]. Constructive interaction and appropriate nurses’ feedback play important roles in promoting a student’s self-confidence and his/her quality of learning [32]. Lack of educational facilities and the large number of students in training settings are also among the educational issues mentioned by the students, so it is necessary to improve the educational environment and allocate the students into some small groups [22]. In a study conducted by Hadizadeh et al., the included students stated that hospital facilities are insufficient for clinical training, which is consistent with that of the present study [33]. Students put an emphasis on taking responsibility over, finding opportunities to perform various tasks, and receiving feedback, all as facilitators from nursing staffs [34]. The students reported implementing routine jobs during training, which is consistent with Hemmati et al.’s study [35]. Performing routine tasks leads to the limited learning and takes the opportunity from performing novel and more complex tasks. So, nurses should be trained to delegate more complex tasks to students based on each student’s ability. Other issues disclosed by nurses were the lacks of support and benefit for students training for clinical nurses, which lead to the reduced motivation for training students. In a study carried out by Arkan et al., students reported that inviting nurses to participate in clinical learning increases nurses’ motivation to participate in student’s education [36].

Another challenge raised by the nurses was the insufficient opportunity to participate in students’ training due to their high workloads. Arkan’s study showed that nurses have no enough time to train students due to their high workloads [36]. In Chuan’s study, students reported that learning opportunities are lost when nurses are busy because nurses prefer spending their time doing their own tasks [13]. In addition, in a study conducted by Jesmi et al., the high workload was among the reasons for the reduced nursing satisfaction, which affects the quality of care [37]. For this reason, the authorities should consider compensating for the staff shortage; as a result, nurses can have enough time to share their experiences with students. Another discussed issue was the lack of clarity in the list of the expected roles of the clinical nurse. In fact, the nurses expressed unfamiliarity with the amount of tasks that can be delegated to the students. There is unclear information on the student’s duties. In other words, the nurse’s responsibility for the students is not clearly stated for them and some nurses consider training the students as an additional burden [38]. The colleagues and managers support nurses to accept the educational role. An adequate number of nurses, clarification of the duties of nurses in students training, sufficient environment in educational centers commensurate with the number of students, and identifying the responsible person for the performance and medical errors of student are among the things helping students in achieving clinical competence [22].

**Conclusion**

The findings of the present study showed that nursing students are dealing with many challenges to acquire clinical competency. Nurses’ scientific incompetence, fear of delegating authority to students, the limited interactions between nurses with students, implementation of non-standard processes by clinical nurses, lack of a written program for nurses’ participation in student education, and insufficient opportunity due to high workloads lead to the disruption of the student-nurse collaboration. Since nursing
staff is known as one of the main pillars of the nursing students’ clinical training, it seems that removing barriers against the cooperation of nurses in students’ clinical education can be helpful in acquiring clinical competence.

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REFERENCES