

Original Article

Intensive Care Unit Experience of Nursing Students during their Clinical Placements: A Qualitative Study

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Abstract

Background: It has been strengthened that nursing students benefit from ICU placements by practicing their patient care skills, widen their knowledge by observing complex treatments and care activities. Besides these positive outcomes it is also being emphasized that ICU environment is a complex environment for students which may trigger their stress during clinical placements. There are very few studies related to nursing students' perceptions about ICU placements.

Objective and aims: The aim of this qualitative study is to determine the effects of Intensive Care Unit (ICU) experience on nursing students' learning.

Methodology: This study was conducted with 18 students from February to May 2011 in ICU units of a University Hospital. Data were collected by using a semi structured interview form. Each interview took about 40-50 minutes and answers given by students were recorded by researchers.

Results: Data were interpreted by researchers independently and 4 themes emerged and were named as "Perceptions about ICU environment and patients", "Thoughts about being an ICU nurse", "Comprehension of communication and empathy with ICU patient" and "Contribution of patient caring activities in learning".

Conclusion: Personal experiences and perceptions of the nursing students play an important role in forming their thoughts related to ICU. ICU environment is a place where nursing students experience different procedures and caring activities and get involved in analyzing complex health conditions. For the students who are at their beginning of their nursing education ICU's are quite stressful places to practice nursing skills. Considering nursing students' limited autonomy at ICU's comparing to clinical wards we recommend the use of the intensive care unit as a part of clinical education for nursing students who are close to their graduation such as intern students.

Key words: ICU experience, nursing student, clinical education

Introduction

The purpose of nursing education is to equip nursing students with the necessary knowledge, attitude and skills in order to provide effective patient care. Clinical practice plays an important role in nursing students' education by promoting different clinical experiences in various locations of the health care settings (Esmacili et al., 2013). Taking responsibility in patient care helps nursing students feel confident and transform

their theoretical knowledge to clinical practice (Karaoz, 1997). While nursing students practice nursing care activities during their clinical rotations they also get an opportunity to develop effective communication skills and empathic understanding. It has been reported that students' empathic caring and caring towards patients (Michalec et al., 2013), active involvement and collaboration with clinical staff improves their clinical practices. Homeworks, case report

studies, nursing care plans help nursing students to gain confidence and learn about clinical cases (Baraz et al., 2014). Being confident during clinical practice is an important fact in nursing education. Although competence level of nursing students during their clinical practice varies, there are numerous studies indicate that they experience some amount of stress in hospital environment (Cilingir et al.,2011; Yamashita et al.,2012; Willimas & Palmer, 2013; Blomberg et al., 2014; Zhao et al.,2014). It has been known that stress is a negative effect on learning activities of a person. Although some amount of stress may trigger learning positively as the amount of stress increases learning gets troubled. It is important to provide positive learning environments for nursing students in order get successful in nursing education (Hacialioglu, 2013). Not only classroom environment but also clinical environments should be satisfying for students and should be meeting the goals of nursing education. Studies done on nursing students' ICU experiences reflects that ICU placement provides various benefits for them (Swinnny& Brady, 2010; Douchette et al., 2011; Cooneely & Hunter, 2012). However it has been also a question if clinical experience in ICU is useful for nursing students' education particularly the ones attending beginning courses classes because of its complicated nature and excess of stimulus (Swinnny, 2010). At a glance being in different units, participating in patient care activities, seeing different patient profiles can be evaluated as positive outcomes in nursing education. ICU is a different and sometimes traumatic experience for patients treated in these units (Haigh, 2006) because of their complexity. Feeling safe in this chaotic environment is important for hospitalized ICU patients (Hupcey, 2000) and nursing students as well. Insufficient knowledge and technical skills are determined as major sources of stress among students (Sharif & Masoumi, 2005). According to some research findings most of the nursing students grade their clinical competence as sufficient (Lakanmaa et al. 2013). There are very few studies that explored nursing students' experience and their perceptions related to intensive care units during clinical rotations. Intensive care units (ICU) are known to increase stress further (Wellard, Woolf& Gleeson, 2007) in nursing students. One study represents that even being familiar with psychomotor skills is not effective in decreasing

anxiety in critical care environments (Erler& Rudman, 2012). While being in ICU is a stressful experience for nursing students, it also has some positive outcomes such as triggering their interest, promoting learning the care of patients with complex needs, observing and developing some technical skills, enhancing their communication (Cochrane et al.,1993; Doucette, 2011). Because of the environment of the ICU's, needs of patients and their relatives, complex treatments and procedures, extensive work load sometimes hinder the health care professionals time spent with students and this negatively affects the learning experience (Hansen et al.,2011). Preparing nursing students for clinical experience and giving reliable information to help them develop confidence are important efforts to guide nursing students in integrating theoretical and clinical knowledge (Karabulut & Ulusoy, 2008; Mould et al., 2011). Creating a favorable ICU experience both for nursing students and ICU nurses requires organization of activities, deciding on how to supervise students, strengthen the system (Ihlenfeld, 2007; Hansen et al.,2011) and developing collaboration between nursing schools and hospital management (Karaoz, 1997).

Methods

The study employed a descriptive exploratory design, suitable for investigating little-understood phenomena (Marshall & Rossman, 1999). The aim of this study is to determine nursing students' ICU experiences and expose how these experiences influence them. A qualitative design was used for this study.

Participants

This study was done with nursing students who were registered to Surgical Nursing Course from February to May 2011. Nursing students (n=18) who were assigned to surgical ICU's during their weekly rotations were included in this study.

Data collection

Data were collected by using a semi structured interview form especially designed for this study. Each interview took about 40-50 minutes and answers given to questions were recorded for each participant. Interview questions used in this research were consisted nursing students' ICU experience, perceptions related to ICU and contribution of this clinical placement on their learning as a student.

Data analysis

A qualitative content analysis was done for interpretation of the data collected from student interviews. The recorded interviews were transcribed in verbatim and were read several times in order to get the most appropriate impression. The data was interpreted, divided in to units according to their meanings then condensed and coded. To organize the meanings of units properly interview transcripts were read by researchers several times. After coding was completed the codes were organised into subcategories, categories and emerging themes given in table 1 (Erdogan et al.,2014). Themes were discussed by the researchers and last corrections were done on the emerging themes.

Ethical considerations

Written permission was taken from directorate of the School of Health Research Committee to do this qualitative study. The aim of the study was introduced to nursing students and only the ones who are volunteered to participate were included. Data collection method also was explained to each student verbally and also written consent was filled out and signed by participants.

Results

Theme1. Perceptions about ICU environment and patients

The first theme (Table 1) focuses on nursing students' perceptions related to ICU environment and patients in ICU, how patients and environment influenced them during this period. Even though ICU environment was considered as a confusing and complex area for students, this place was effective in teaching some concepts related to care of ICU patient.

"There are too many things that needs attention, IV fluids, monitors, patients....." (C, Heart Surgery ICU)

"In my opinion, ICU is a place where terminally ill patients receive care. That's why I was anxious about ICU." (T- General Surgery ICU)

"This is the first time that I worked in a place like this. It was really confusing, first of all it was very stuffy and was really confusing; I thought that I need to be strong psychologically." (F- Brain Surgery ICU)

"I have always been anxious about ICU. To be honest I was a little scared, I remember seeing ICU scene on TV. I was wondering if it was the same. When I went in to ICU I was in shock. Almost all the patients were entubated and their eyes were closed. They were plenty of machines around them; alarms were ringing all the time...." (P- Reanimation Unit)

"All of the patients in ICU need care and they are unconscious. It is very good to take care of these patients, doing their treatments. I was really in a strange mood during my ICU rotation for two days." (E, Brain Surgery ICU)

"I felt really sorry for the little boy who had head trauma due to a traffic accident. Seeing him suffer really touched me...." (L, Brain Surgery ICU)

Even though they have not seen ICU before, questioning the accuracy of some practices, comparing the clinical practices with their theoretical knowledge improved nursing students' analytical thinking. Different practices they observed in ICU were a challenge for nursing students.

"Radio was turned on in ICU. I remember hearing that classical music is relaxing but I thought that music is not appropriate for patients." (G, Brain Surgery ICU)

"Physically restraining patients and leaving the restraints whole day long on patients was really bad. I think it should not be this way..." (D, BrainSurgery ICU)

"Seeing restrained patients from their arms and seeing them undressed was remarkable for me..." (P- Reanimation Unit)

Theme 2. Thoughts about being an ICU nurse

The second theme focuses on nursing students' points of view regarding ICU nursing and perceptions related to nursing profession (Table 1). Nursing students' ICU experience helped them understand the difficulties of nursing profession even though there are very few patients per nurse to take care of. Most of the

patients were dependent and nurses' workload was quite heavy.

Some students realized that they should take nursing profession seriously and need to learn many things in order to practice nursing.

"Although numbers of patients are few, workload is quite heavy..."(C, Heart Surgery ICU)

"I was reluctant to go to ICU at first, because of disoriented patients and patients with poor prognosis. However, this experience helped me to see the stressful site of this job."(M, Brain Surgery ICU)

"I never thought that working in ICU could be this hard. The patients are seriously ill, there are many things to do. It may be hard for me at this point. Thinking quickly, being able to make right decisions, being able to stay calm with patient are very important facts. I would consider working as a nurse in a place like this..."(L, Brain Surgery ICU)

"I realized what nursing is during my ICU rotation. Seeing patients looking at me with attachment made me happy. I think that we should do everything that needs to be done for patients."(U, General Surgery ICU)

Seeing one patient dying was really disappointing experience for one student. Also having relative hospitalized in ICU previously made her prejudiced about ICU and being an ICU nurse.

"I saw a patient dying, this really influenced me. I could not recover for a while. That is why I could not attend my ICU rotation for two days; I could not keep up with it."(G, Brain Surgery ICU)

Some of the students were questioning their theoretical knowledge; they realized the importance of learning and research.

"I know that I am going to come across different things while practicing nursing. I really need some time to get used to it and learn things."(E, Brain Surgery ICU)

"I did not think that what I know will not be enough to take care of patients before

I go to my clinical rotations. I really figured out that I need to learn plenty of things both theoretically and practically. I followed all of the procedures carefully. Working in ICU is a really big responsibility."(K, Brain Surgery ICU)

"Working here helped me to understand what nurses actually do here in terms of nursing practice. There are plenty of treatments and procedures. Practicing nursing is really different in ICU. Patients are at the edge of life and death, we have plenty of responsibilities."(H, Brain Surgery ICU)

Theme 3. Comprehension of communication and empathy with ICU patient

The third theme focuses on nursing students' comprehension of communication and empathy with ICU patients (Table 1). Students were able to observe how communication was handled with intubated, disoriented patients in ICU. They had an opportunity to closely see nurse-patient interactions in ICU environment. Some of them thought that communication with patients was not handled appropriately.

Nursing students considered that positive and open communication held by nurses is a paramount issue in nursing care. They believe good communication skills are really important in addition to giving treatment or nursing care to patient. The words chosen to address the patients are part of good and effective communication.

Two of the students focused on nurses' communication techniques used with patients.

"Nurses really respect the patients. They act faithfully during patient care activities and make patients smile. They also respect their privacy."(A, General Surgery ICU).

".....They call patients by their names, this is very good. They take care of them individually."(B, Brain Surgery ICU)

"I could say that this experience was the turning point of my life. Life is too short, anyone can be here one day, and this is really weird. I am very happy for the things I could do for the patients. I realized the importance of psychological support for the patients..."(N, Brain Surgery ICU).

Some of the students made comments about inappropriate communication techniques used by nurses. Besides positive examples, seeing different communication techniques made them compare the health professionals' attitudes towards patients. They compared different role models they saw and tried to figure out the best ones.

“It is not appropriate to talk loudly in front of the patients. Too many dialogs take place which are not even related to patients. We should not forget that the last sense the patients lost is hearing” (F, Brain Surgery ICU)

Table 1. Themes emerged according to qualitative data

Subcategory	Category	Themes
Frightening Complicated Alarm sounds Music Sound Too many monitors Naked patients Concerns of being a patient in ICU one day Severity of patients' illness	Complexity of ICU Seriousness of patients'	Theme 1 Perceptions related to ICU environment and ICU patients
Tiring workplace Lack of knowledge Importance of thinking fast and giving right decisions	Perception of seriousness of nursing profession	Theme 2 Thoughts about being an ICU nurse
Nurses communication with patients Importance psychological support Loneliness of patients The importance of patients' confidence Insufficient communication with patient's family Insufficient communication with patients	Patient- nurse communication Feelings	Theme 3 Comprehension of communication and empathy with ICU patient
Realizing that there is something can be done for patients Giving care to patients and doing some treatments with ICU nurses Helping patients with their self care Planning the patient care Intensity of practices in ICU Being shy in different environment Not letting students practice by themselves Observing caring and treatment activities Feedbacks nurses in contribution of learning	Determining patient needs and planning care Not having plenty of opportunities to practice Observing care and treatments	Theme 4 Contribution of patient caring activities in learning

“I saw that nurses are not communicating with unconscious patients. Although it is not enough, professionals try to communicate with conscious patients only.” (G, Brain Surgery ICU)

“I felt like the nurse-patient interactions are not effective even with conscious

patients, asking some questions cannot be considered as communication.” (H, Brain Surgery ICU)

“Communication with patient is not suitable. A little devotion will not take anything from us.....” (N, Reanimation Unit)

Theme 4. Contribution of patient caring activities in learning

Nursing students were able to observe some activities related to patient care, taking vital signs, medical treatments, and infection control procedures, assessment of pain, evaluation of patient needs and assessment of patients' psychological needs. While they had an opportunity to assist nurses during direct patient care activities they were able to observe only some of the procedures. Although most of the procedures were limited to only observing them their perspective related to patient care got extended. The fourth theme focuses on nursing students' contribution of patient caring activities in their (Table 1).

"In ICU all of the patient needs are met by nurses. Nursing care is done according to care plan. I met the patients' hygienic needs." (A, General Surgery ICU)

"I gave an oral care to one patient, helped the nurse while feeding patients." (N, Brain Surgery ICU)

"At first when nurses told me not to do anything I was frustrated. Later I figured out that I could do something for patients, giving patient care was a pleasing experience for me." (S, Reanimation Unit)

"They do not let us do every procedure in ICU. I felt like doing nothing here. I tied one patient's hair, fixed his compression stockings." (G, Brain Surgery ICU)

"I had an opportunity to observe some medical treatments. The nurse explained me the purpose of some medication. This is very useful for me." (O, General Surgery ICU)

One student focused one terminal patient's situation and importance of giving care. Another student emphasized a patient's privacy.

"When I think of ICU, the only thing I could think of is patients with poor prognosis. At first we never should forget the patient in ICU is also a human-being. Even a dying plant can refresh in a well-lightened room with proper watering. Nurses should care for their

patients in the same way. Even terminally ill patients deserve good patient care." (G, Brain Surgery ICU)

"They really respect the patients' privacy." (A, Brain Surgery ICU)

Discussion

Nursing students' feelings, perceptions related to ICU environment and ICU nursing

Even though ICU environment is extremely important in the healing process of critically patients (Price, 2004), because of their complicated nature (Swiny, 2010), it is stressful both for patients and health care professionals (Elpern et al., 2005; Nooryan et al., 2014). Especially taking care of patients with poor prognosis is the source of moral distress among ICU nurses (Elpern et al., 2005). Heavy workload and extended responsibilities are nursing students' points of focus during their ICU rotation. Being extremely careful and being able to think critically are important factors in ICU nursing according to students. Complicated nature of ICU environment, intense procedures, ringing alarms, and variety of monitors, patients' poor prognosis and struggling, intubated patients make ICU environment even more stressful. ICU environment is described as a frightening place where patients are in pain and these entire negative facts require well-equipped nurses. Nursing students' perceptions related to ICU's physical environment are consistent with previous research findings. Cochran & Ganong's (1989) study demonstrates that ICU nurses and ICU patients have different perceptions related to ICU stressors. In our study nursing students mainly focused on patients' general appearance, their struggle, type of music playing on the radio, alarm sounds etc. in ICU. All of these feedbacks received from students' show that they are really sensitive to patients' needs and feelings. According to research findings especially unplanned ICU experiences raises stress levels of patients (Yava et al., 2010). Although ICU rotations organized by nursing faculty is considered as a planned activity, it should be taken into account that ICU environment is a stressful experience for nursing students. In a study done with nursing students using an ICU stimulator shows that students are more self-confident before they go to clinic wards than after being familiar to ICU environment (Mould et al., 2011). Critical nurses' skills are dependent

on their knowledge and experience. One of the important functions of the ICU nurse is to provide continuous observation which involves interpretation and evaluation of information (Galley & O’Riordan, 2003). According to this study, nursing students’ experience in ICU helped them understand the seriousness of nursing profession, the qualifications needed to become an ICU nurse, necessity of having good qualities. Besides being able to observe different clinical settings, seeing different role models are considered as positive outcomes in order to shape their expectancies. According to the study of Ihlenfeld (2007), opportunities given to senior students can influence their decision on becoming an ICU nurse.

Patient-nurse interactions in ICU

An effective teamwork and holistic patient care are important facts in healing process of patient (Douchette et al.,2011). Communication techniques and interactions with patient are centerpiece of nursing education. Consequently learning effective patient-nurse interactions, being able to practice them are significant. According to this study nursing students mainly focused on communications of nurses with patients, tried to interpret patients’ face expressions, observed communications techniques used especially with unconscious patients. The way of nurses dealing with patients, positive approaches used during care, using writing as a method of communication with some of the patients, making an eye contact considered as positive communication techniques by nursing students. On other hand high pitched sounds in ICU, not using effective communications with unconscious patients, dialogs that are not mainly related to patients are found to be disturbing and inappropriate. Their efforts in trying to observe teamwork in ICU show that they care about professional role of nursing. Also being in ICU guided them in developing critical thinking skills. Karaoz (1997) reports that transferring their theoretical knowledge to practice, being able to look at things at different perspectives, recognizing wrong or deficient practices are also important. Findings of this study are considered valuable in developing some skills in nursing students especially in order to practice effective communication methods.

Nursing students’ participation on patient care practices and their influence on learning

Clinical practices occupy an extremely important role in improving practical abilities of the nursing students and especially ICUs are considered as proper places for learning experience (Nabolsi et al., 2012; Williams & Palmer, 2013). In this study, complexity of the practices done in ICU’s and variety of the tools used are among the stress-creating factors for nursing students. Another study reports that one of the most worrying factors during the practices of nursing students is the lack of self-confidence for giving care to the patients (Panduragan et al., 2011). In this study, the students had a feeling that they will be able to accomplish something during their clinical practice. Having some students observe the procedures at a distant point caused negative feelings on them. Therefore, it is necessary to remember the fact that the communication atmosphere in the clinical environment has an extremely important effect on the motivation of students (Hanifi et al.,2012). Particularly non friendly environments, busy wards tend to negatively affect nursing students’ learning experiences. Understanding the anxiety of the students in the clinical practice environments and expressing that they will not be left alone during the practices are extremely important attitudes (Ihlenfeld, 2007), also effective educational and clinical experiences provided by instructors during clinical placements are significant in nursing education (Esmacili et al.,2013). It has been reported by Nabolsi et al. (2012) that supportive clinical environments creates positive learning outcomes for student nurses; especially if faculty and nursing staff have good relationships with each other. In order to achieve the desired learning outcomes, it is very important that the educators have cooperation with clinical nurses, develop a teaching strategy especially in specific areas such as ICUs, clearly express their expectations from the students and provide correct feedbacks and maintain the motivation level.

Limitations of the study

There is several limitation of this study. First, all of the nursing students involved in this study were second year nursing students who were assigned to ICU unit for 14 hours/week during their Surgical Nursing Course.

Thus nursing students who are at the beginning of their nursing education may have not able to recognize all of the details during their ICU placement. Secondly, we completed this study with 18 students because of the conditions of ICU (physical environment, infection, patient safety etc) and findings of this study can not be generalized to all of the nursing students.

Conclusions

Although ICU's seem to be an ideal environment for clinical practice, this experience for the students who are in the first year of their education can be intimidating and stressful. In this study nursing students' expressions related to ICU usually focus on their negative experiences although they reported that the ICU environment was useful for their learning at some points. Since lack of professional knowledge in caring critically ill patients can cause negative feelings in beginning level nursing students the accuracy of assigning nursing students in highly stressed and complex areas such as ICU's should be discussed carefully both by nursing faculty and clinical staff.

Although ICU environment considered as an effective place to promote nursing students' clinical learning it also can be stressful experience for most of the students. Plenty of students questioned their clinical practice because they were not allowed to do any patient caring activities but only observing. Therefore, the effectiveness of intensive care in the early stages of nursing education should be reconsidered. Providing opportunities to receive feedbacks both from ICU nurses and nursing students regarding their experiences, collaboration with nurses in order to construct the expectations from nursing students are important aspects of clinical education in nursing.

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