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Clinical Learning Triad in Nursing Education: Qualitative Analysis of Perceptions of Undergraduate Nursing Students

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Article Info	Abstract
Article History Received: 22 October 2020 Accepted: 15 May 2021	This study explores the student nurses' perception of the clinical learning triad, its benefits and challenges with regards to their clinical learning. A qualitative descriptive methodology guided this study. Using semi-structured interview focus group discussions were conducted to elicit data from 30 participants. Data was analyzed manually to identify the key themes. Five themes identified are <i>Bridging the gap between theory and practice, Skill Acquisition, Interpersonal Skills and Communication, Clinical Instructor-the Centre for Clinical Learning Triad, Benefits and Challenges of Clinical Learning Triad</i> . Students verbalized that the availability of nurses enhanced the learning experience. However, expressed that at times the busy ward routines hindered them from approaching the staff nurses for their learning needs. A specialized clinical instructor is mandatory to channelize objective based clinical learning in nursing education. They also verbalized support from the clinical environment alleviated anxiety and progressed their practical learning. Clinical Instructors coordinate the clinical learning from the beginning of a shift but staff nurses play a major role in helping students to complete student learning through skill training while the instructor is busy handling other students. The study concludes that the practical knowledge of staff nurses combined with the efforts of clinical instructors to bridge the gaps between the theory and practice supported by the positive clinical environment equips the nursing students with required skills and knowledge thus establishing the effectiveness of the Clinical Learning Triad.
Keywords Nursing education Clinical nursing Clinical learning triad Nurse educator Nursing staff Student Nursing	

Introduction

Nursing students learn most effectively by their active involvement, and they build a sense of belonging as a clinical nurse in all areas of the clinical setting (Hirst, 2016). Multiple factors within the clinical learning environment affect the learning opportunities for students, including a lack of equipment, busy clinical supervisors, poor teaching attitudes of staff nurses, and a lack of commitment from the student nurses (Lovrić et al., 2015). Further, higher teacher-student ratios in clinical supervision lower the amount of quality time spent with the individual student. Consequently, all these factors negatively affect a student's clinical learning (Rajeswaran, 2017). A descriptive survey conducted among Pre service Diploma nursing students in North Tanzania reported that faculty overloaded with students in clinical areas and staff nurses with hectic schedules

and patient loads have less time to significantly contribute in teaching nursing students are two of the main factors affecting clinical practice (Gemuhay et al., 2019).

While theory learning in the classroom is critical for student success, for many, the abstract concepts learned in the classroom do not begin to make sense until they are applied in the practice environment. By gaining access to the clinical setting and engaging in practice, students can develop a shared understanding of nursing skills and practice, begin to identify with the profession, and ultimately develop an identity as a clinical nurse (Hirst, 2016; Plack, 2008). The quality of clinical teaching and learning always depends on the diversity of clinical experiences students receive, faculty-student interaction, continuity of supervision, and ongoing feedback and support from the nurse educators (Didion et al., 2013).

The researcher's experience in clinical training has also revealed that, due to the unpredictable nature of the clinical training environment, nursing students may not be able to professionally develop themselves and this may affect their performance later on in their career. A failure to identify and rectify these challenges may prevent students from effective learning and growth (Jamshidi et al., 2016). Clinical supervision is the cornerstone of the teaching and learning taking place within hospital settings. A qualitative study conducted among nursing students in Botswana verbalized how the heavy workload of nurses in a unit and their attitudes towards students impacted their learning. Staff nurses should be a role model with an interest to refine the practical skills of nursing students as well (Rajeswaran, 2016).

A study with nursing students noted that mentorship or support from clinical nurses dramatically enhanced student adaptation to the clinical environment and eventually improved learning (Plack, 2008). Student interactions with many different individuals in the clinical setting may result in a complex learning triad consisting of the student, the clinical instructor (CI), the clinical nurse, patients, families, other therapists, doctors, other healthcare workers, other students, etc. (Plack, 2015). In this article, the clinical learning triad refers to the undergraduate nursing students' learning environment consisting of a student nurse, CI, and staff nurses who facilitate the student's clinical nursing education (Plack, 2008). The triad mentoring model is effective in creating academic–clinical partnerships that promote evidence-based practice and quality improvement for both the clinical setting and the student learner (Dolan & Willson, 2019).

Significance of the Problem

In nursing education, students are typically assigned to a CI who is expected to ensure student learning objectives are met. As CIs have more than one student to supervise, they entrust a clinical nurse to take care of the student and encourage students to interact and learn from the clinical nurse. Thus, this relationship between the student and CI constitutes a short-term formal mentorship (Murray, 2001; Plack, 2015).

The current clinical supervision policy practiced in the Middle East region includes six to eight students per instructor. But sometimes, the same instructor may supervise two adjacent clinical areas or the number of students per instructor may go up to 12–16 due to faculty shortage. In situations like these, it becomes difficult

for a single instructor to dedicate sufficient time to all students and they must use additional learning resources, such as staff nurses, other healthcare providers, or the patient and their family. Although the impact of the clinical learning environment has been studied sufficiently, further research is required to conceptually clarify student satisfaction on incorporating staff nurses to enhance clinical learning when their CI is busy with other students (Kalyani et al., 2019).

Method

Design

A descriptive qualitative design study using semi-structured interviews and nine selected focus group discussions led by the team of researchers was conducted from December 2019 to March 2020. Students who had completed at least one clinical course or were currently enrolled in any clinical course were included in data collection using non-probability convenient sampling techniques. Adequacy of the sample was decided based on data saturation to describe the phenomenon sufficiently, all research questions answered, and when no newer information was elicited.

Data Collection Process

After obtaining informed consent, a semi-structured interview was conducted in a conversational style to make the students feel comfortable to share their views. With permission, their interviews were recorded with the promise that the collected data would remain confidential. The interview guide addressed the main areas the researchers sought to explore, such as how students described their clinical experience (in a particular clinical course) and how they felt when they had to approach the clinical nurse for their clinical learning when the CI was busy with another student. Two main questions with seven sub points were used to guide the interview. The interviews lasted for 20–40 minutes with an average of 30 minutes. Based on the feedback and opinions of the participants, a range of supplementary questions was used to find and complete information.

Researchers recorded and transcribed the data from the beginning of the interaction. Field notes and observations were recorded wherever necessary during the interview and focus group discussions. The data were coded after initial transcription and similar codes were grouped under similar axes. For a more precise and concise explanation of the phenomena, key themes were derived and described. In addition, observation was used to obtain data from students in their clinical environment. Specifically, observers registered student interactions and conversations for further synthesis of knowledge.

Data Analysis

Demographic data were analyzed using descriptive statistics. Thematic analysis of the interview records and focus group discussion was done by following the step-by-step guide to data analysis. Familiarization with the data was achieved through repeated listening of the recordings and rereading the field notes. The sections of the data linked to each other in terms of content and meaning were balanced and coded. Themes were created by

merging one or more similar codes. Subsequently, the themes were checked against the data to verify the consistency of the themes and their relevance to the information collected. Content analysis was used in this study to describe the key advantages and risks of the clinical triad in clinical learning as viewed by nursing students.

Trustworthiness of Data

The credibility and consistency of the data were maintained using a systematic framework for data analysis. The initial data collection and coding process were performed by two researchers who are experts in their specialty. The whole process was conducted again by a co-researcher who has a master's degree in nursing. Another co-researcher who has a master's degree and is part of the nursing faculty with more than 18 years of experience and was not involved in data collection and initial transcription peer-reviewed the data recorded. The researchers obtained generalizability of the data by presenting the results to a group of students who had a similar clinical experience but were not part of the sample.

Ethical Clearance

Ethical approval to conduct this study was obtained from the institutional research ethics committee on December 8, 2019, before beginning the study. Informed consent was obtained from all participants before the interview and focus group discussion and also for the audio recording.

Results

Participants' Demographic Characteristics

A total of 30 students, 8 (27%) males and 22 (73%) females, participated in the data collection. Nine groups were selected to participate in the focus group discussion based on the sampling criteria. Participants were students posted in the clinical areas of maternity and mental health nursing, belonging to second- and third-level courses of a baccalaureate of science in nursing program at the largest public university in Oman.

Emerging Themes

The themes that emerged from the data included a) Theory Practice Integration, b) Skill Acquisition, c) Interpersonal Skills and Communication, d) CI as the Center of the Clinical Triad, and e) Benefits and Challenges of the Clinical Learning Triad.

Bridging the Gap between Theory and Practice

When students worked alongside their preceptor daily in a continuous partnership, adequate feedback and more reliable, in-depth acquisition of knowledge were achieved. As one student described:

Interaction with staff nurses gave us more knowledge on how it is practiced in the clinical area. It helped

us to learn in detail about the clinical conditions and direct patient care. Nurses, some patients gave us real-life experiences to help us learn more about delivery and newborn care.

Participants also believed that bridging the gap between nursing theory and nursing practice is only possible by familiarizing and empowering all nurses and improving the interaction between nurses and CIs. As one participant explained, "Nurses are very knowledgeable and they are able to teach us very well." When asked about the importance of clinical nurse-CI collaboration, other participants added, "What we observed in the clinical area was discussed by the teacher and reconfirmed with the teacher," "It is satisfactory to be with the staff nurse because of their long experience with the patient," and "I get many benefits from post-conference discussion with my clinical teacher because we discuss all objectives and what we met. Also, she helps us correct mistakes that we make while performing skills."

Skill Acquisition

The clinical environment is a suitable context for learning skills needed for patient care. Students had more confidence in performing clinical skills in the presence of a clinical nurse when the instructor was away with another student in the clinical area. As some students mentioned, "I was more confident in providing patient care when I was with nurses at the patient's bedside," "Nurses were more flexible with me in procedure supervision when the instructor was not present," and "Nurses made the environment more calm by not supervising me directly."

Clinical nurses are role models for students who are in the early stages of learning and preparing to be professionals. A positive attitude and confident skill demonstration by nurses were highly valued by students. One student mentioned:

When I accompanied the nurse to perform postoperative care for a cesarean patient, I found that she did the whole procedure so neatly and with ease, without harming the patient and comforting the patient throughout. I was amazed to observe the confidence of the nurse.

Moreover, the majority of the participants mentioned that these interactions with nurses were helpful to them and were useful in terms of professional growth. According to one student:

Well utilized. We were always busy. We saw many new cases and interacted with many patients. We did not have any free time in the clinical area, and joining nurses for daily nursing care helped us gain nursing skills.

Interpersonal Skills and Communication

A more casual and friendly approach by nurses reduced the anxiety level among students and they perceived improved performance. As one student stated, "Interaction with staff nurses gave us more knowledge on how it is practiced in the clinical area." This was supported by another student who explained, "Nurses gave us real-life experiences to help us learn more about delivery and newborn care." Students emphasized that nurses helped them transfer their knowledge from the skills lab to direct patient care.

Working with nurses helped the students to actively collaborate and interact with other health team members as nurses were well known. Students described feeling more confident when nurses were around them and supporting them in patient care. For example, when asked about their opinion of their involvement with staff nurses during patient assignment, students stated, “We could talk to doctors and other members when nurses were with us,” and “Working with nurses helped me to get involved in the care of more patients allotted to me by my instructor. I could easily interact with more patients.”

Students reflected that they had more opportunities to interact with patients, as they were more welcoming and open to students approaching them with the clinical nurses. As one student stated, “Nurses helped us to talk to patients and very supportive at all times.” Male students explained it was easier to interact with female patients in the presence of nurses and felt that nurses were the reason that patients accepted them as healthcare providers. When asked how the male students perceived clinical nurses' role in their education, they replied, “When I went with nurses, the female patients were more easily talking to me” and “When I approached patients initially for data collection, they did not accept me, but when nurses told them about me, I was more welcomed.”

The Clinical Instructor as the Center of the Clinical Triad

Students viewed instructors as experts who helped them to organize their clinical learning experiences. For example, one student described the benefit of being able to reflect on their training, “Things got more clear for us when the teachers discussed with us whatever we learned with staff nurses once again during the post-conference.” The clinical competencies learned by students with clinical nurses in the absence of CIs were re-emphasized and instilled with appropriate theory and evidence-based practice, “We could gain in-depth knowledge when we discussed what we learned with clinical nurses along with our instructors in the post-conference.”

Staying current with clinical knowledge and skills and managing the time commitment to all students equally is a challenge for any CI. Students perceived the role of CI as vital in bridging the gap between theory and practice. Students expressed, “We were scared to stay alone with nurses initially,” “Having the teacher with us ensured that my clinical objective was attained well at the end of the day,” and “I was happy when the teacher introduced me to the nurse and informed them to help me perform patient care.”

Clinical nurses are generally overloaded in the clinical setting either due to excessive patient load or inadequate staffing. Such instances were not noted by the students who mentioned that the presence of CIs would ensure effective utilization of their clinical learning time, “The staff nurse is busy, so sometimes we are simply standing. Teachers will do some discussion when we have no patients” and “Sometimes clinical time was very boring when no one was free to teach us.”

Benefits and Challenges to the Clinical Learning Triad

Notably, student nurses had more positive experiences while using the clinical learning triad during their clinical

teaching and learning process. However, they also expressed that work overload and time shortage of staff nurses hindered them from fulfilling student-related responsibilities at times. For instance, one student expressed, "The staff nurses are very approachable, and they are very skillful to demonstrate any particular skills in the unit, and the way they deal with the patient is really very good." Another student added, "They are also like our teachers, but the only problem is they get busy and can't discuss anything on that day and that may be the last day of our clinical rotation."

New student nurses were hesitant to approach staff nurses, as they were unsure of the staff nurses' contribution to their clinical learning. Later, they acknowledged staff nurses as the best catalyst in learning clinical skills when their CI was busy with other students:

Initially, we were not comfortable approaching nurses, as they are not our teachers and we are new to the unit. But when we approached, they are very friendly, knowledgeable, and skillful and actually practiced all of what we learned in theory classes.

Discussion

Many researchers have found a gap exists between theory and practice, which is related to CI factors as well as clinical environmental factors (Akram, 2018). The findings of this study showed that students' clinical learning outcomes are facilitated by CIs with the help of staff nurses. Students found being a part of this triad useful and acknowledged the importance of each of the members of this triad as a vital part in continuing clinical nursing education. A similar perspective was that to achieve learning objectives and clinical competencies, students need a supportive and respectful learning environment (Ngaiyaye et al., 2017; Papastavrou, 2016). In a survey of physical therapy students, the students stated that gaining access to and practicing with professionals during their clinical practice enabled them to develop a shared understanding of their roles as practitioners (Plack, 2008). Supporting this a qualitative study focusing on the challenges in the clinical learning environment highlighted that persistence of low culture of clinical teaching as a non-supportive vibe along with lack of interprofessional work atmosphere where there is still a grey area of how much a staff nurse needs to adorn the role of teacher to complement the CI during her clinical teaching (O'Maara et al., 2014).

The current study revealed that motivation, approachability, and a positive attitude are important attributes needed by a clinical nurse for effective student support in a mutually bound clinical learning environment. This concurs with other researchers' observations that preceptorship by nurses in hospitals contributes to the development and improvement in psychomotor skills among students, provides students the opportunity to develop self-confidence, and increases students' competence as they socialize into the nursing profession (Croxon et al., 2009; Haugan, 2012; Ngaiyaye et al., 2017). A focus group interview with 11 student nurses at the end of their bachelor nursing program revealed that student learning was enhanced when there was active participation and good interpersonal relationship among students and nurse clinicians (Vallant & Neville, 2006). Nursing students from Canada in a similar study also quoted the importance of the relationship with the clinical teacher and the unit nurses as an important source of learning and a disruption in this as a challenge. (O'Maara, 2014)

An important finding of our study was the need for mutual and coordinated training of clinical nurses and faculty instructors for making the student learning experience a memorable and most fruitful one. It is reasonable to assume that student satisfaction is partially a result of a positive learning experience and more satisfied students will be more likely to find further opportunities for a positive learning experience (Dunn et al., 1997; Haugan, 2012). Results from another survey revealed that staff nurses' and students' attitudes toward student learning influenced their learning outcomes, and factors such as students being considered as workers, overload of students, and busy ward routines hindered their learning (Barnett & Chuan, 2012).

Another significant finding was that with increasing differences in the policies and protocols of hospitals and nursing educational units, a widening gap is occurring between nursing theory and practice. This has been widely accepted and reported by many authors who have stressed a need to bridge this gap. Students believe they need the expertise of staff nurses and theoretical and evidence-based support from their CI for efficient clinical practice (Ibrahim et al., 2019; Papastavrou, 2016; Sercekus et al., 2016).

It is evident from student responses that CIs play equally important and irreplaceable roles in clinical education. Training units of certain hospitals have also revealed the significant role of instructors in providing clinical experiences and effective learning to the students (Aktas et al., 2016). With an emphasis on increasing the involvement of nurses and CIs, it is evident that the clinical learning environment requires strong association and collaboration in a triad of which clinical nurses, students, and CIs are interdependent and interrelated. By strengthening the triad of the supervisor, student, and teacher, the clinical environment outcomes could be improved (Didion et al., 2013; Esmaeili et al., 2014; Gideon, 2016).

Many researchers have found that harmonizing theoretical and clinical nursing approaches and giving opportunities for the students to work in a more positive clinical environment can build a strong base for their professional nursing education. CIs play a major role in the students' learning process by creating a positive learning environment for the students and participating as role models (Abu Salah Akram et al., 2018). If students, educators, and registered nurses work together to unravel the nuances of nursing practice, exchange diverse viewpoints, and synthesize the standards of the institution and the experiences of clinical practice, students can grow positively as future health professionals (Berry et al., 2005; Dalton, 2005; Kim et al., 2017).

Conclusion

The achievement of learning outcomes for students during clinical learning depends on the quality of the support given to students by trained nursing staff. Students develop expected abilities, trust, and competencies while studying in a clinical environment with clinical nurses. It could be stated that the nursing educators from colleges of nursing must harmonize the theoretical and clinical practice approaches through continuous involvement and coordination with clinical nurses. Further, more opportunities should be created for both CIs and students to work within a more creative clinical environment that will promote and add to the professional knowledge base of nurse education.

Recommendations

Results from this study suggest that nursing students should be encouraged to interact with clinical nurses to enhance their learning experience. Under the current scenario of economic and social distress, there is a need to re-emphasize the potential roles of each person involved in nursing students' clinical learning so that adequate support can be provided to meet educational objectives. Also, current findings support the need to encourage both clinical nurses and CIs so their theoretical knowledge can be effectively transferred into clinical practice, thus minimizing the gap between the theory and the reality of the clinical world.

A competent nursing and midwifery workforce is vital for an effective healthcare system. Preceptorship has proven to be an effective clinical learning approach for nursing and midwifery students. With the surge in student enrolment in nursing courses, clinical education must be improved with an amalgamation of the expertise of the CI as well as the clinical expertise of the clinical nurse. A clinical learning triad helps improve students' acceptance within the nursing team and enhances the delivery of individualized nursing care to their assigned patients, which in turn enhances patient satisfaction.

With the findings of the present study, we highlighted the need for more nurses from each clinical area to be trained as preceptors. This would ensure a safe and more coordinated learning environment for all undergraduate nursing students right from the second-level nursing course. Creating a task force of nurse preceptors will help meet the upcoming challenge of limited nurse educators for supervision of the growing number of nursing students. As experienced staff, nurses are generally interested in sharing their expertise with nursing students despite their busy schedules, as official involvement in the teaching/learning of nursing students may create a positive working atmosphere for them as well.

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