Using preceptors to improve nursing students' clinical learning outcomes: A Malawian students' perspective

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ABSTRACT

Objective: Clinical environment remains an important aspect in the development of student's competence, confidence and fulfillment of their expected learning outcomes. Preceptors and clinical teachers play a significant role in preparing students to achieve their professional goals through continuous support and resource provision. This study explored the students' perception of using clinical preceptors to improve their clinical learning outcomes.

Methods: The researchers used semi structured interviews to collect qualitative data. A total of 48 students were purposively and conveniently sampled from 8 hospitals to participate in the study. Content analysis was used to analyse the data.

Findings: Two themes emerged from the study findings namely: creating a positive clinical learning environment and facilitating academic clinical collaboration.

Conclusions: The findings of the study revealed that students gained more confidence and competence in clinical practice when supported by preceptors as well as achieved clinical learning outcomes. These findings suggest the need to train more clinical preceptors for improvement of students' clinical learning outcomes.

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1. Introduction and background

Nursing is a practice-based discipline with clinical practice being central to nursing education. Clinical practice provides opportunities for the development of confidence and competence, focusing on students' learning needs rather than services needed by the health facility [1]. The establishment of a good learning environment where theory and practice complement each other, is dependent on clinical staff and nurse educators [2] as well as their knowledge of the intended learning outcomes for the students' clinical learning period. During clinical practice, both clinical staff and nurse educators are expected to collaborate in facilitating the students' learning experience and acquisition of clinical skills. However, poor collaboration between academic and healthcare facilities has been reported in Malawi [3]. This has resulted in ineffective clinical teaching and supervision for both academic and clinical staff. For example, the demands on the nurse educators and clinical staff are extensive as regards to heavy workloads and inadequate resources to meet student's expectations which can compromise the quality and quantity of the clinical supervision of students. If students are to acquire adequate knowledge and skills in clinical practice, someone must be there to supervise and demonstrate how theoretical knowledge can be integrated into practice [2].

Clinical learning needs to be effectively facilitated in order to ensure adequate preparation of nursing students and achievement of clinical competence for entry level practice [4]. Preceptorship model has widely been supported in literature as an effective approach to facilitating students' learning and acquisition of skills in clinical practice [1,5–8]. Henderson et al. [6] describe a preceptor as a skilled clinician, a registered nurse (RN), who can provide students with the guidance and experience to facilitate their learning. Using this model, students work under the supervision of the registered nurse, who provides individualised support, to facilitate the achievement of clinical learning outcomes. The preceptorship model has been reported to play an important role in professional socialization for nursing students [10] through role

modeling, as well as enhancing the student's sense of responsibility by providing them with opportunities to demonstrate competence as a nurse. Furthermore, Kim et al. [6] report that the preceptorship model helps the student to build confidence and ease their transition from being a student to a nurse thereby assisting students to adapt to the realities of their practice.

In Malawi, clinical teaching and support for nursing students has traditionally followed the "one teacher" approach [11]; where the nurse educator has dual responsibility for classroom and clinical teaching. Recently, there has been an increase in student enrolment in training colleges leading to increased workload for nurse educators as they strive to meet the increased classroom teaching, administrative tasks and research activity. Nurse educators have insufficient time to provide adequate clinical support to students [12]. As such, the clinical teaching role has in most cases been left out as the responsibility of the clinical staff with the nurse educators performing a link role rather than that of patient care and direct clinical teaching. However, research shows that clinical staff often lack formal qualifications and/or receive little or no preparation for their clinical teaching role [9] leading to increased theory-practice gap. In view of this Mzuzu University, one of the public universities in Malawi introduced a 6-week preceptorship training programme in 2012 to train clinical staff in clinical teaching and preceptorship. The programme aimed at equipping clinical staff with knowledge, skills and attitudes in clinical teaching to enable them teach and mentor learners in the clinical area. It was believed that training clinical staff in clinical teaching would help to reduce the theory–practice gap as well as promote collective teaching approach to students [11]. The preceptors work in different clinical settings to support student's individualised learning. However, it was not known how the preceptors trained through this programme have improved their interaction with students to facilitate clinical teaching and learning outcome in Malawi. Therefore, this paper reports the nursing students' perspectives on the effectiveness of using clinical preceptors to improve students' clinical learning.

2. Methodology

A cross sectional explorative research design was used to understand the students' perception of using clinical preceptors to improve their learning outcomes in the clinical setting. Both qualitative and quantitative approaches were used in this study. However this paper focuses on the qualitative component of the study.

2.1. Study setting and sampling

The study was conducted in eight hospitals where clinical preceptors trained at Mzuzu University are working. The study engaged 48 s-, third- and fourth-year nursing students from different training institutions, who were placed in various hospitals for clinical learning experience. The researchers recruited nursing students who had worked with a trained preceptor for atleast a period of 4 weeks. All students from Mzuzu University were excluded from the study because they were not in the clinical setting during the time of the study. Second-, third- and fourth-year students from 13 nursing colleges were purposively and conveniently recruited into the study. Only students who had spent sufficient time (a minimum of 4 weeks) with the preceptors were included in the study because they were considered to have adequate experience to provide their perception on the performance of the preceptors [13].

2.2. Data collection

The researchers conducted semi-structured interviews to obtain narrative accounts from students regarding their perception of the clinical preceptors' performance and impact on clinical teaching. An interview guide was used to guide the researchers during data collection. The interview was guided by the following questions: What roles do preceptors play in clinical teaching? How can you differentiate the support you received from a trained preceptor and non-preceptors? Probing questions were asked to solicit specific information from the participants. The interview guide was piloted at one institution which did not form part of the main study setting. The researchers identified the participants with assistance from Registered Nurses in-charge of the clinical setting where the students were working, after meeting the inclusion criteria. One to one interviews were conducted in a separate room within the hospital settings to ensure participant's privacy. This setting was deemed convenient for the participants. The interviews took an average of 30–45 min per participant. Interviews were audio recorded and field notes were taken to complement the recorded information. Transcription of the recorded data was done within 24 h. Data saturation was reached when no new information was coming up from the participants.

2.3. Data analysis

Data collection and analysis were done concurrently with the aim of examining the information to identify new issues. Letters and numbers were used in coding the participants, for example, NS1 (nursing student 1). The data analysis followed Holloway and Wheeler [14] idea of data analysis procedures. The data were transcribed verbatim. Then the transcripts were read through repeatedly to identify similar strands, codes and themes. The researchers used thematic content analysis where systematic coding and categorization to organise the data was done [15]. Thematic content analysis is a research method which brings a basic understanding of the research methodology when it comes to analyzing the interview data. The analysis was assisted by the use of computer software, *Atlas ti* version 7.1 for qualitative data analysis. Similar codes that emerged were used to create families and similar families grouped together as themes [16].

2.4. Trustworthiness

The trustworthiness for this study was achieved through the use of multiple informants and member checking. The researchers involved 6 participants to verify and check the authenticity of the results. In addition, peer checking was used to verify the credibility of the results. The first author identified the codes and themes from the data and then involved colleagues, the second and third authors, to independently identify the codes. These were later compared with the first author's developed codes and themes. Differences were discussed and harmonization done through consensus. Furthermore, the researchers used intuition and audit trails. Reflective journals and field notes were kept to record and reflect upon the observations made during the interviews.

2.5. Ethics considerations

Ethics approval was granted by the National Health Sciences Research Committee for Malawi. Thereafter, permission was sought from and was granted by the respective hospitals. Each participant gave a written consent prior to participation. Participants' integrity, privacy and confidentiality were maintained throughout the study using a series of measures including the signing of the

confidentiality binding agreement by the participants during the process of data collection and reporting.

3. Findings

3.1. Participants' demographic characteristics

A total of 48 students, 12 males and 36 females, participated in the study. There were 16, 12, 11 students from second, third and fourth year respectively. Participants' age ranged between 21 and 31 years.

3.2. Emerging themes

The study findings show that students perceived the clinical preceptors as helpful and important to facilitate their clinical learning experience and achievement of learning outcomes. Two themes emerged from the data and include; creating positive clinical learning environment and facilitating academic clinical collaboration. These themes portrayed the major perceptions of students towards clinical preceptor's performance and effectiveness in clinical teaching.

3.2.1. Creating a positive clinical learning environment

The study findings showed that the trained preceptors created a positive learning environment for the students. Two sub-themes were prevalent namely; being friendly and receptive as well as providing student support and guidance.

3.2.1.1. Being friendly and receptive.
Participants of the study reported that preceptors were friendly and receptive. As such the students were free to approach the preceptors when they needed assistance in the clinical settings. One participant reported: "*The preceptor in this ward is friendly and interacts with students politely*" (NS5).

Another participant described the preceptors as welcoming, when she explained how the preceptors received them and oriented them to the ward environment:

"*When we arrived in the ward, the preceptors welcomed us … oriented us to the ward and activities that take place in this ward …*" (NS20).

Participants reported that the preceptors created learning opportunities and involved the students when such opportunities were identified.

"*The preceptor I have worked with helps us … Whenever she has identified a new condition, she will call students to see the patient, she teaches us. Sometimes she gives you assignments to report back to her*" (NS33)

Another participant explained how the preceptor involved students' in patient care compared to other nurses in the clinical setting.

"*At least this nurse (preceptor) involves students when there is something, other nurses just do it, even if you are there. When you ask them a question, they will say, 'go and read', but the preceptor will explain to you, and asks you questions to find out if you have understood*" (NS15)

Findings of the study show that students preferred working with the preceptors to enhance their clinical learning experience and achieve the learning outcomes. The participants perceived the clinical preceptors as having a positive attitude towards the students compared to other nurses in the clinical setting. This was revealed in the following statements from a participant:

"*The preceptors have a positive attitude towards us students. You see the way they approach you, talking to you, at least they respect us students*" (NS10).

Findings of the study show that there are notable improvements on trained preceptors' attitudes towards students. Participants reported that there was positive attitude from preceptors than before they were trained. One participant highlighted:

"*There is this nurse, she is now a preceptor. Previously she was not interested to teach students, but when she came back from training (meaning preceptorship training) she works with students, teaching us. Even the way she approaches a student … she seems to have improved her attitude at least. We used to shun away from her … but now she even calls us when there is something*" (NS41).

Another participant observed that:

"*In my last allocation, I worked with the nurse before she went for the training. She used to tell us to consult our teachers … like 'it's not my role to teach' … but now, she is very eager and teaches us when we ask her …. she has changed*" (NS7)

Most of participants indicated that the positive attitude the preceptors have developed towards students helps to positively socialize the students too. Findings show that students develop positive attitudes toward nursing as a profession, and patients, when they learn in a positive, respectful environment. One participant said: "*… it is motivating to be a respectful student when you are also treated with respect by qualified nurses*" (NS30).

3.2.1.2. Providing student support and guidance.
Findings of the study showed that students received adequate support and guidance from the trained preceptors in the clinical setting compared to other nurses who were working in the same clinical settings. This was revealed in the following statements from some participants:

"*That nurse is supportive … she is always there when you ask for help*" (NS2)

"*When you want to do a procedure, she assists you, sometimes she demonstrates the procedure to you, and observes you doing it*" (NS35)

"*There are other nurses here, but this one is always eager to assist students, he guides you … tells you what to do in a procedure*" (NS19)

"*There is this nurse who came to tell us she is a preceptor, she sometimes comes to check on us, she shows us how we can care for patients, like when doing a procedure, she will be there to see what you are doing, and corrects you when you make a mistake*" (NS27).

As such the students became confortable working with the preceptors and were free to seek further guidance when they were not certain what to do in the clinical area.

Furthermore the participants reported that the clinical preceptors were very supportive in helping the students to identify own learning needs. This was revealed in the following statements as some participants reported how the preceptors requested for individual clinical learning objectives on daily basis.

"When we come to the wards, first thing in the morning, the preceptor wants to see our objectives. If you do not bring objectives, she will ask you to write" (NS14).

"… we are given objectives from college … but when we come here, this nurse always asks for our objectives, individual objectives. Then she will teach you based on your objectives. By the end of the day she wants you to evaluate what you have achieved" (NS24).

This made the students to come to the clinical setting eager and prepared to learn, because they felt accepted as part of the clinical staff. As such, this facilitated the development of confidence and competence among the students, as some participants indicated:

"When the preceptor is helping you with the procedure, demonstrating and then asking you to do it as she observes, the next time you do it alone you are confident; because you know what you are doing"(NS4).

"I am now competent in some skills, because the preceptor is always there helping you with procedures, demonstrating, sometimes correcting you when you make a mistake" (NS36).

3.2.2. Facilitating academic clinical collaboration

The study findings showed that students perceived preceptors as key in facilitating collaboration between the clinical placement areas and training institutions. The participants reported that the preceptors were acting as a link between the students and clinical areas or the training institutions. This was presented in the following statements:

"When there is something that we want from college, or any communication from college, it passes through the preceptor … because at the hospital here, we are in the hands of the preceptors" (NS42).

"The preceptors work as a link between college and the clinical area … even here when we want something, we tell the preceptor to help us" (NS37).

The majority of participants also reported that the preceptors worked as mediators between students and clinical settings without necessarily waiting for the nurse educators. This was reported in the following statement: *"When we have problems here, she sorts them out first before reporting to our teachers" (NS17).*

As such, the students respected the preceptors same way as they respected their link lecturers from college.

4. Discussion

Findings of the study showed that clinical preceptors facilitate attainment of students' clinical learning outcomes. Preceptors created a positive clinical learning environment for the students which facilitated learning. Findings show that preceptors were friendly and receptive. Students were free to seek support and assistance for their learning.

Atakro and Gross [17] reported similar results that preceptorship model of clinical teaching provides a positive clinical learning environment for students. Students require a learning environment that is supportive, respectful and encourages learning by practice [10,1] which is critical for the development of clinical skills and achievement of learning outcomes [18] as well as professional development and preparation for practice [19]. Student nurses who feel safe and accepted in the clinical environment dare to ask questions, and have the courage to assist in demanding situations [20] thereby improving their clinical skills. Findings of this study showed that preceptors enhanced the achievement of learning outcomes by welcoming and orienting students to the clinical environment, involving students in patient care as well as having a positive attitude towards them. Hilli et al. [20] concurs that the preceptor's welcoming attitude, manner of conduct and interest in the student as a unique person make the student feel cared for as part of the team. Similarly other researchers have reported that point out that a successful clinical learning environment is created through an inspirational learning atmosphere, student orientation to the work environment and a positive interpersonal relationship between students and mentors [21]. This lead to student's satisfaction with the clinical learning environment as the preceptors help the students to gain a sense of professional identity, while at the same time, meeting their individual learning needs [21,22]. Students' satisfaction with the clinical learning environment and acceptance within the healthcare team contribute to the achievement of clinical skills and professional development [19,23].

The findings also reveal that students perceived the preceptors as being supportive for their learning. The students reported that the preceptors were a valued resource as they facilitated their learning through guidance and direct support during practical procedures. Furthermore, the preceptors assisted the student to identify individual learning needs and identified learning opportunities for them. This finding concurs with other researchers' reports that the presence of clinical preceptors is important for students' learning as the preceptors provide continuous support [17,24] close guidance and assistance [25] as well as a one-on-one learning opportunity [1]. Similarly, the key determinants for student satisfaction of their clinical learning experience have been reported as quality clinical facilitator support and the availability of a range of clinical learning opportunities [26]. Preceptors who offer more individualised student learning opportunities than team supervision approach of student learning contribute to increased student satisfaction [21] as the student is given time to identify his/her own learning needs.

The students reported being confortable to work with the preceptors, and were motivated and eager to seek further assistance when they did not know what to do in some practical skills. This was particularly common because of the preceptors' positive attitude and interest to teach students in the clinical setting. Motivation, approachability and having a positive attitude are important attributes needed by preceptors for effective students' support [27]. Furthermore the quality of the relationship between a preceptor and a student is an important factor for effective clinical learning [28]. Students reported that when the preceptors treat students as individuals and have positive attitudes towards them, students' professionalism is strengthened. Furthermore, the one-on-one relationship which takes place between the student and the preceptor contributes to the improvement in clinical skills as the student learns from registered nurses who are familiar with the routines and culture of the nursing practice setting [29]; thereby contributing to increased role socialization, promotion of clinical competence, self-confidence, and enhancement of critical thinking. Working with the preceptors in the clinical setting made students to be confident. Furthermore, the continuous support and guidance received from the preceptors helped the students to improve their clinical competence. This concurs with other researchers' observation that preceptorship contributes to the development and improvement in psychomotor skills among students [17,28], provides students the opportunity to develop self-confidence [10] and increases their competence [17,28] as they socialize into the nursing profession. Through preceptorship, the students improve hands-on practice and develop an understanding of relevant care

processes in nursing practice, thereby bridging the theory-practice gap.

Findings of the study also revealed that the preceptors were valued by the students for their role in facilitating collaboration between clinical settings and training institutions. Literature shows that collaboration between training institutions and clinical settings improves nursing education thereby ensuring achievement of learning outcomes [30]. Furthermore, the preceptors play an important role in facilitating collaboration for student learning by planning and organising for student orientation and meetings, preparing clinical placement areas and learning opportunities as well as planning for link lecturer-student-preceptor meetings [28]. This implies that preceptors work collaboratively with the healthcare facilities and training institutions to ensure effective student teaching and learning [31]. In this study, the preceptors acted as a link between the students and their training institutions for communication, as well as between the students and clinical settings. This finding was significant considering that the preceptors were the gatekeepers to the clinical settings because they were familiar with the clinical environment compared to the nurse educators and students. Dias et al. [24] considers communication as the backbone of the preceptorship model. According to them communication channels should be kept open with training institutions, preceptors and students to ensure effective clinical teaching and learning. Effective communication with students in the clinical area promotes mutual trust and cooperation, thereby contributing to a positive clinical learning environment.

Despite highlighting the effectiveness of using the preceptors to improve clinical learning, the students faced a number of challenges in working with the preceptors. However, this is beyond the scope of this discussion. As such, these will be discussed in a different paper.

5. Conclusion

Attainment of learning outcomes by students during clinical learning is dependent on the nature of support students receive from qualified staff. Students acquire expected skills, confidence and competences when learning in a clinical setting with trained preceptors. Preceptorship program facilitates a supportive positive clinical learning environment.

6. Recommendations

A competent nursing and midwifery workforce is vital for an effective healthcare system. Preceptorship has proved to be an effective clinical learning approach for nursing and midwifery students. Malawi needs more trained preceptors to foster a positive clinical learning environment for students. Nurse educators should give adequate support for preceptors in order to maximize the support preceptors give students during learning.

Conflict of interest

The authors have no conflict of interest.

Acknowledgement

Appendix A. Supplementary data

Supplementary data related to this article can be found at http://

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