

## ORIGINAL RESEARCH



# The roles and experiences of preceptors in clinical teaching of undergraduate nursing and midwifery students in Malawi

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## Abstract

### Introduction

Clinical teaching is essential for undergraduate nursing and midwifery students. Registered nurses/midwives trained as preceptors (*an experienced nursing/midwifery professional who teaches, supervises and serves as a role model for a student*), guide the students during clinical practices. Literature is scanty on the roles and experiences of the preceptors in Malawi. This study explored the roles and experiences of preceptors during clinical teaching of the students.

### Methods

A cross-sectional study utilising quantitative research design was conducted at four tertiary level hospitals; a mental hospital; one mission hospital and five district hospitals. A total of 87 preceptors completed a Clinical Preceptor Experience Evaluation Tool. Data were analysed using SPSS version 20 and descriptive statistics were computed. Analysis of variance (ANOVA) and post hoc analysis were used to determine and test significant differences.

### Results

The study revealed that respondents were confident in performing their preceptor role; with good level of experience and education qualification of BSc in Nursing. ANOVA and post hoc comparisons using the Tukey HSD test indicated that the role domain mean scores for the respondents with 4-5 years of post-registration experience ( $M = 6.61$ ,  $SD = 0.36$ ) was significantly different ( $p=0.02$ ) with those with  $>9$  years ( $M = 6.13$ ,  $SD = 0.60$ ). The results showed that respondents with 4-5 years experience were more confident in their preceptorship role than those with  $>9$  years.

### Conclusion

This study indicates the roles of preceptors in Malawi to involve facilitating students' clinical teaching and learning. It suggests that registered nurses/midwives with a BSc in Nursing are suitable preceptors to facilitate students' clinical teaching and learning. There is revelation that preceptors with more years of post-registration experience are less confident in their preceptorship role performance.

**Keywords:** preceptorship, Roles, preceptor, clinical teaching, registered nurse/midwife, clinical instructor.

## Introduction

Clinical teaching is an essential component in the education of undergraduate nursing/midwifery students as it helps in the transferring and actualization of theoretical knowledge into practice.<sup>1</sup> In order to achieve effective clinical teaching and learning experiences, training institutions rely on registered nurses working on the ground to guide and assist students during their clinical experiences.<sup>1</sup> However, it has been argued that while on-field nurses/midwives are a better option for providing real practical support to nursing students as they are expert clinicians, not all of them are actually educators hence the need to provide them with educational support that would help them effectively supervise the student nurses and midwives.<sup>2,3,4</sup> To this end, the registered nurses/midwives earmarked for the provision of clinical instructor roles have been trained as preceptors in order for them to function effectively.<sup>1</sup>

A preceptor refers to a nurse employed within a health care agency who mentors, monitors, teaches, provides feedback and assesses undergraduate nursing/midwifery students in their workplace.<sup>5</sup> Preceptorship involves contact with an experienced and competent role model

and a means of building supportive one-to-one teaching and learning relationship.<sup>6</sup> This relationship is short term aimed at assisting a newly qualified practitioner or nursing/midwifery student to adjust to the nursing/midwifery role.<sup>6</sup> Preceptors have been utilised in orientation of new nurses/midwives, re-orientation for seasoned nurses/midwives and clinical assistance for undergraduate nursing and midwifery students in Australia, Canada, Sweden and the U.S.A.<sup>7,8</sup> In Africa, preceptors have mainly been utilised in supervising and clinical teaching in Ghana, Ethiopia, Uganda, Zambia, South Africa prior to Malawi.<sup>9,10</sup> Malawi commenced the utilisation of preceptors in clinical education in order to assist undergraduate nursing/midwifery students during clinical experiences. Thus, experienced registered nurses/midwives, working in the hospitals, were trained as preceptors and expected to teach and guide undergraduate nursing/midwifery students allocated to the departments where they worked in addition to their daily patient care duties. These additional tasks were given to these nurses/midwives against the backdrop that the country has the highest nurse-patient ratios<sup>11</sup> as well as high disease burden which could potentially increase the challenges already faced by them.

Across the globe, literature<sup>12, 4</sup> has commended preceptors for putting great deal of efforts into creating meaningful and positive learning experiences for students. Literature has however, also demonstrated that preceptors experience several challenges when executing their preceptorship roles<sup>1, 13</sup>. There have been cases of role confusion amongst some practicing nurses hired for preceptorship roles<sup>12, 14</sup> so that they feel that their role of providing nursing care to patients is usually overtaken by preceptorship role. Furthermore, lack of support from nursing faculty members from the hosting nurse training institutions made it difficult for the preceptorship goals to be met.<sup>4</sup> It is documented that the preceptor's role is somehow complicated because faculty members rarely visit students in the clinical sites, and if at all they do that, they briefly stay in the ward just to meet with the students.<sup>15</sup> Preceptor's overall lack of support from the nursing faculty members and increased-workload negatively affected the role of the preceptors.<sup>1</sup>

Clinical teaching and guidance are additional tasks to the preceptor's day to day activities. Preceptors who are demotivated or fatigued may not effectively teach students. It is usually difficult for preceptors to combine and balance clinical teaching with patient care especially when the ward has many students and terminally ill patients who require attention of the preceptor.<sup>11</sup> Nurses have often left other fellow clinical staff members to do the core ward activities while they spend their time teaching and supervising students, and this has often led to conflicts and disagreements.<sup>16</sup> Nevertheless, there is scanty data on preceptorship roles and experiences in Malawi, a low resourced country. Many studies<sup>1, 12, 13</sup> that explored preceptor experiences of teaching and guiding nursing students were conducted in well-resourced contexts. Therefore, this study aimed at exploring the roles and experiences of preceptors when teaching undergraduate nursing and midwifery students in Malawi.

## Methods

### *Study design and setting*

A cross-sectional study utilising quantitative research design was utilised in this study. It was conducted at Malawi's four tertiary level hospitals which are commonly referred to as Central hospitals namely: Kamuzu, Mzuzu, Queen Elizabeth and Zomba; five district hospitals namely: Chitipa, Karonga, Machinga, Rumphu, Thyolo; one mental hospital: Zomba mental and one mission hospital, Ekwendeni in 2018. These institutions are patronized by nursing and midwifery training institutions as clinical sites for students' clinical placements. The settings were appropriate for the study because apart from being utilised as clinical sites for students, they have preceptors among the nursing/midwifery members of staff.

### *Sample size and sampling methods*

The target population for the study was all preceptors at the study sites (N = 112). Using a cross sectional sample size calculation formula,<sup>17</sup> ( $n=N/[(1+N(e)^2)]$ ), a sample of 87 participants was calculated as sufficient. The inclusion criteria to participate in the study, included being a registered nurse/midwife, working as a preceptor for a minimum of two-year post preceptorship training, willingness to participate in the study and working at the selected study settings during data collection period. The exclusion criteria included those that were not registered nurses/midwives, had not worked as a preceptor for a minimum of two-year post preceptorship training and a preceptor who was not working in any of the

selected study sites. The assumption was that such preceptors had worked for adequate time that introduced and afforded them enough experiences regarding the role, contributions and challenges of this programme.

### *Ethical review and approval*

The study was reviewed and approved by the College of Medicine Research Ethics Committee, (certificate number (P.11/16/2015)). Permission to conduct the study at the indicated study sites was granted by the Directors of Kamuzu, Mzuzu, Queen Elizabeth and Zomba Central Hospitals, Zomba Mental Hospital as well as Ekwendeni Mission Hospital and the District Health Officers for Chitipa, Karonga, Machinga, Rumphu and Thyolo District hospitals. To ensure privacy and confidentiality, codes were used on the questionnaire instead of respondents' names.

### *Data collection*

Data for the survey were collected in 2018 utilizing a Clinical Preceptor Experience Evaluation Tool (CPEET) adopted with permission from Anthony O'Brien.<sup>18</sup> The tool had previously been used in a number of evaluative studies<sup>18</sup> and had established cross cultural validity and reliability in Australia, Ireland and Canada. This signified that the tool could ably be utilized in studies to do with exploration and evaluation of preceptors and preceptorship anywhere including Malawi since the principles of preceptorship training and utilization of preceptors are similar. Content validity was ensured by experts on preceptorship and clinical teaching. Face validity was achieved by pretesting the tool at Mzuzu Urban Health centre on six preceptors to ascertain the simplicity and clarity of questions in the questionnaire and the time it would take to be completed by the respondents. There were no amendments or modifications made to the tool after the pretest. The CPEET had four domain subscales of role, experience and education, challenges and satisfaction. The role domain entails the relationship between the preceptor and the student; experience and education, links the student to clinical practice opportunities; challenges, focuses on the challenges faced when precepting and satisfaction, entails finding time and being motivated to teach students. The tool measures opinion in relation to the preceptor on a seven-point Likert scale (1, strongly disagree to 7, strongly agree) that enabled the respondents to rate their level of agreement with 39 items. Respondents rated their level of agreement within the seven points on the scale. During data analysis, responses between 1 and 3 were considered to be leaning towards strongly disagree and responses from 5 to 7 were considered to be leaning towards strongly agree. Responses at 4 were considered to be neutral. The CPEET is a reliable instrument with good internal consistency in all four subscales: Role domain (Cronbach's alpha =.96), Experience and education domain (Cronbach's alpha=.79), Challenges domain (Cronbach's alpha =.82), and satisfaction domain (Cronbach's alpha =.93) (O'Brien, 2014). In this study, the calculated Cronbach's alpha showed that CPEET was a reliable tool with good internal consistency for all the two subscales: Roles domain: {Cronbach's alpha = .87} and Experience and Education domain (Cronbach's alpha = .6). The tool had been administered in Malawi and the region for the first time and proved to be reliable by the Cronbach's alpha. The CPEET was administered in English since the participants were preceptors trained by tertiary institutions whose language of instruction (lingua franca) was English. The CPEET was distributed to the respondents by the

principal investigator. The respondents gave a written consent before completing the questionnaire in their respective offices or rooms specifically arranged for data collection. The researcher collected the completed questionnaires from

**Table 1: Demographic characteristics of respondents**

Characteristics	Frequency	Percentage (%)
Sex		
Male	24	27.6
Female	63	72.4
Registered nurse/midwife qualification		
Bachelor's degree	79	90.8
Diploma	8	9.2
Post registration experience		
2 – 3 years	7	8.0
4 – 5 years	41	47.2
6 – 8 years	31	35.6
>9 years	8	9.2
Preceptorship training institution		
KCN	20	23.0
MZUNI	60	71.3
Other	7	5.7
Post preceptorship training experience		
0 – 1 year	2	2.3
2 – 3 years	28	32.2
4 – 5 years	50	57.5
>6 years	7	8.0

respondents at an agreed collection time.

### Data analysis

Data were analyzed using Statistical Package for Social Sciences (SPSS) software version 20 to calculate means (M), standard deviation (SD), frequencies and percentages. Mean and standard deviation were calculated from the scores of the subscales to determine the respondent's level of agreement based on items on the CPEET and were ranked based on the highest mean score. Frequency tabulations and percentages were followed when analyzing the demographic data of the respondents. On each subscale, the scores ranged from 7 (the highest possible average) to 0 (the lowest possible average). Analysis of variance (ANOVA) was used to determine if differences between preceptor scores on the Role domain and Experience and education domain sub scales were due to sex, educational qualification, years of post-registration experience, preceptorship training institution and post preceptorship training experience. Post-hoc analyses were conducted using Tukey's HSD to test the differences in scores.

### Results

Demographics characteristics of the study participants  
This study involved a total of 87 participants. Table 1 above shows the demographic characteristics of the participants:

**Table 2: Preceptors mean scores on the Clinical Preceptor Experience Evaluation Tool**

Item	Score	
	Mean	SD
<b>Role domain subscale</b>		
Clinical preceptors promote students' active participation in patient care.	6.68	0.62
Clinical preceptors provide clinical practice supervision for the students.	6.56	0.68
Clinical preceptors facilitate active learning experience for the student.	6.52	0.86
Clinical preceptors are a positive role model.	6.48	0.82
Clinical preceptors are a support person for students during their clinical placement.	6.44	0.90
Clinical preceptors facilitate students to make the links between theory and clinical practice.	6.39	0.88
Clinical preceptors encourage students to apply theory to the clinical situation.	6.32	1.06
Clinical preceptors treat students with respect.	6.29	0.98
Clinical preceptors facilitate students' learning by using case studies and care plans.	6.29	1.06
Clinical preceptors facilitate students to critically reflect upon clinical problems.	6.25	1.22
Clinical preceptors facilitate students to analyze clinical problems.	6.24	1.18
Clinical preceptors provide constructive feedback to the student.	6.24	0.98
Clinical preceptors support students by being available to answer questions.	6.21	1.01
Clinical preceptors' model multidisciplinary teamwork for the students.	6.17	0.96
Clinical preceptors are a professional confidante to students.	5.98	1.29
Clinical preceptors treat students fairly.	5.93	1.34
Clinical preceptors are a professional friend to students.	5.93	1.38
<b>Overall role domain subscale score</b>	<b>6.29</b>	<b>1.01</b>
<b>Experience and education domain subscale</b>		
Being a preceptor helps to expand my nursing knowledge.	6.78	0.49
Being a preceptor, I need to know what the expected level of skill competence should be for a student's scope of practice.	6.55	0.73
Being a preceptor facilitates professional reflection on my own roles as a nurse.	6.32	1.13
Being a preceptor challenges my work attitudes.	5.69	1.73
Clinical preceptors clarify the role of preceptor with colleagues on a regular basis to ensure the needs of the students are met.	5.39	1.54
I read updated texts and journals regularly.	5.38	1.45
<b>Overall experience and education domain subscale score</b>	<b>6.02</b>	<b>1.18</b>



**Table 3: Relationship between respondents' characteristics and mean scores on the Clinical Preceptor Experience Evaluation Tool**

Respondents' characteristics	Role domain subscale			Experience and education domain subscale		
	F	Df	P	F	Df	P
Sex	0.39	1,85	0.54	0.76	1,85	0.39
Post registration experience	3.7	2,84	0.03*	2.96	2,84	0.06
Education qualification	1.78	1,85	0.19	0.39	1,85	0.53
Preceptorship training institution	0.33	2,84	0.72	2.18	2,84	0.12
Post preceptorship training experience	0.79	3,83	0.50	0.89	3,83	0.45

significance level set at  $\leq 0.05$

### ***Preceptors' mean scores and standard deviation on the Clinical Preceptor Experience Evaluation Tool***

Table 2 shows the mean scores and standard deviations of the role domain subscale and the experience and education domain subscale.

### **Discussion**

The study aimed to determine roles and experiences of preceptors in clinical teaching of undergraduate nursing/midwifery students in Malawi. The results suggest that participants were able to execute their roles as preceptors with confidence and had good levels of education (table 2). According to the findings in this study, the BSc in Nursing degree registered nurse/midwife (RN/M) qualification was significant as it assisted the preceptors to be confident and competent in their execution of the preceptorship role (table 3). This is in agreement with the nurses' roles where RN/Ms have the role of being an educator as one of their job descriptions. It is also in agreement with what Atakro and Gross<sup>2</sup> found that in the absence of faculty members, educational institutions rely on RNs to take on the role of clinical nursing/midwifery instructors. Walker and Dwyer<sup>19</sup> also supported the utilization of nurses with RN qualifications as preceptors. This is also in agreement with a recommendation by the Nurses and Midwives Council of Malawi where the scope of practice for professional nurses (with RN qualifications) stipulates the role to teach students when they are placed in the clinical setting for clinical practice (NMCM Act 16 of 1995). Preceptors work together with the students for a specified duration of time to assist them to perform the tasks, gain a basic level of knowledge and skills and socially adapt to the practice and profession.<sup>20</sup> It is evident that preceptors should be confident and competent in their role for them to teach and support students effectively.<sup>15</sup>

This study found that preceptors were generally confident and competent in performing their preceptor role ( $M=6.29$ ,  $SD=1.01$ ); with good level of experience and education qualification ( $M=6.02$ ,  $SD=1.18$ ) (table 2). This result can be partly attributed to the fact that nearly all (90.8%,  $n=79$ ) preceptors in this study had a Bachelor degree in Nursing. In addition, all preceptors (100%,  $n=87$ ) (table 1) had the required minimum post registration experience of 2 years (NMCM Act 16 of 1995). Literature suggests that students can learn effectively under the guidance of a competent senior person who interacts with them and is available to teach them<sup>18, 21, 16</sup>. As the preceptors interact with students, they may have a personal reflection on their knowledge and skills and review or re-learn what they teach the students.

Preceptors with adequate clinical work experience are a

critical component of clinical education in that they are able to afford students with enculturation to their future role as nurses/midwives. Teferra & Mengistu<sup>22</sup> asserted that holding an advanced degree and longer clinical work experience are relevant factors in preceptorship. In this study, nearly all of the respondents (92%,  $n=80$ ) had >3 years of post-registration clinical work experience (table 1). However, there were significant differences in the respondents' mean scores on the role domain subscale ( $F(2, 84) = 3.7$ ,  $p=0.03$ ) (table 3) based on post registration experience. This finding suggested that preceptors' levels of confidence in their role differed based on post registration experience. Consistent with this finding, literature indicates that some preceptors believed that it took some years for them to feel comfortable in their role.<sup>23</sup> Nonetheless, the relationship between post registration clinical experience and clinical teaching performance of preceptors was found to be conflicting.

Post hoc comparisons using the Tukey HSD test revealed that the role domain mean scores for preceptors with 4-5 years of post-registration clinical work experience ( $M = 6.61$ ,  $SD = 0.36$ ) was significantly different ( $p=0.02$ ) (table 3) than those with >9 years ( $M = 6.13$ ,  $SD = 0.60$ ). This finding suggested that preceptors with vast experience > 9 years were less confident in their role in comparison to those with 4-5 years' experience. Conversely, it is documented that novice preceptors may not facilitate student clinical learning better as experienced preceptors will do.<sup>23</sup> The reduced ability to perform clinical teaching by preceptors with vast work experience (>9 years) may partly be attributed to them being promoted to managerial positions which impedes them from direct provision of patient care as years go by. On the other hand, those with less work experience are the ones who provide direct patient care which helps them to sharpen their skills and be in constant contact with students. Consequently, the inconsistent findings regarding abilities of preceptors with regard to their post registration work experience may provide challenges to training institutions when recruiting potential preceptors. However, literature recommends that clinical experience, willingness to be a preceptor, and confidence should be the main qualifications for becoming a preceptor.<sup>23</sup>

The above study results may have been affected by participants recall bias as participants were asked things or issues that happened sometime back, and this should be taken as a study limitation, when considering these results.

### **Conclusion**

This study indicates the roles of preceptors in Malawi to involve facilitating students' clinical teaching and learning. It suggests that registered nurses/midwives with a BSc in Nursing are suitable preceptors to facilitate students' clinical

teaching and learning. There is revelation that preceptors with more years of post-registration experience are less confident in their role performance and therefore require involvement in continuing professional development (CPD) to assist them in maintaining and sharpening their knowledge, skills and attitudes necessary for direct provision of care and execution of preceptorship role.

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