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COLLEGE OF HEALTH SCIENCES

FACULTY OF NURSING AND MIDWIFERY

UTILIZATION OF EFFECTIVE CLINICAL TEACHING  
PRACTICES AND ASSOCIATED FACTORS AMONG  
MIDWIVES AND NURSES EDUCATORS IN PUBLIC  
UNIVERSITIES OF TIGRAY, ETHIOPIA, 2025

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Advisor's Approval sheet

This is to certify that the thesis entitled “Utilization of effective clinical teaching practices and associated factors among midwives and nurses educators in public universities of Tigray, Ethiopia 2025 is submitted in partial fulfillment of the requirements for the degree of MSc with specialization in “Midwifery education” to the Graduate Program of the College of Health Sciences of Mekelle University and has been carried out by Kibra Mahari ID No: CHS/MWE/003/13 under our supervision. Therefore, we recommend that the student has fulfilled the requirements and hence hereby can submit the thesis to the Faculty of Nursing and of Midwifery

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**Declaration**

I hereby declare that this MSc thesis is my original work and has not been presented for a degree in any other university and all sources of material used for this thesis have been duly acknowledged.

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This MSc thesis had been submitted for examination with my approval as thesis advisor.

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## **LIST OF ABBREVIATION**

AOR = Adjusting Odds Ratio

CTP=Clinical Teaching Practice

CI =Confidence Interval

CLOs=Clear Learning Objectives

ECTP=Effective Clinical Teaching Practice

FB=Feed Back

ICM= International Confederation Of Midwife

HDP=Higher Diploma Program

PBA=Performance Based Assessment

UNFPA=United Nations Population Fund Agency

WHO=World Health Organization

## ABSTRACT

**Background:** Effective clinical teaching is important for preparing competent midwives and nurses to provide high-quality of health care services. However, studies in Ethiopia have shown that many midwives and nurses educators do not apply effective clinical teaching practices, resulting in a low level of student's clinical competence. Although effective clinical teaching practices is important in Tigray, Ethiopia, there is limited data regarding utilization of effective clinical teaching practices.

**Objective:** To assess the utilization of effective clinical teaching practices and associated factors among midwives and nurses educators in public universities of Tigray.

**Methods:** A cross-sectional study was conducted from September 25 to November 10, 2025. The sample size was initially calculated using a single population proportion yielding a sample size of 421. However, since the total number of midwives and nurses educators was 292, a census sampling technique was employed, and all eligible midwives and nurse educators in public universities of Tigray, were included. Data were collected using pretested self-administered structured questionnaire.

Variables with a P-value less than 0.2 in bivariate analysis were entered into final model and adjusted odds ratio with corresponding 95% confidence interval was estimated to identify associated factors with effective clinical teaching practices using multivariable logistic regression. Statistical significance was declared at  $P$ -value  $<0.05$ .

**Results:** This study found that 70% of midwives and nurse educators were utilized effective clinical teaching practices. Factors significantly associated with effective clinical teaching practices included: higher diploma training(AOR =4.70:95%CI[2.15, 10.25]), 5–8students-per-clinical-unit(AOR=3.30;95%CI[1.30,8.32]),providing clear clinical learning objectives (AOR=3.56:95%CI[1.69, 7.47]), using performance-based assessment tools (AOR = 5.37: 95%CI[2.44, 11.81]), always providing timely feedback (AOR =3.04: 95%CI[1.49,6.23]) and good interest in clinical teaching (AOR=3.24: 95%CI[1.48,7.11]).

**Conclusion and recommendations:** The majority of midwives and nurses educators of Tigray universities utilized effective clinical teaching practices. Higher diploma training, students per clinical unit, providing clear clinical learning objectives, use performance-based assessment, providing timely feedback and good interest in clinical teaching were significant factors to utilized effective clinical teaching practice. Therefore, Tigray universities should strengthening these areas through encouraging training opportunities, limit student per clinical unit, reinforcing use of performance based assessment method and timely feedback to improve clinical learning outcomes in midwifery and nursing programs.

**Keywords:** Effective clinical teaching practice, midwife educators, nurses' educator

# 1. INTRODUCTION

## 1.1 Background

World Health Organization (WHO) defined; effective clinical teaching practice (ECTP) is the planned and learner-centered facilitation of clinical learning experiences through supervision, assessment, coaching, and timely feedback that enables students to achieve competency-based learning outcomes and deliver safe, quality care (1). Similarly, international confederation of midwives (ICM) according to it is systematic guidance of students in clinical settings by qualified midwifery educators who integrate theory into practice, ensure supportive supervision, and provide timely feedback, and model professional and ethical midwifery care (2).

Additionally, ECTP needs critical thinking, problem-solving abilities, specialized psychomotor and technological skills, and a solid professional value system, which are essential for producing competent healthcare professionals (1, 3, 4, 5).

Globally, effective clinical teaching depends on skilled, trained, and motivated midwifery and nurse educators. These educators should provide clear learning objectives, use performance-based assessments, facilitate hands-on practice opportunities, and offer constructive feedback. Similarly, institutions must ensure adequate infrastructure, simulation labs, teaching materials, and limit student-to-instructor ratios to improve clinical instruction (6-11).

International guidelines, such as those from the World Health Organization, emphasize competency-based clinical education and continuous professional development for clinical educators to ensure high-quality health care (1, 5).

Studies from countries such as Oman, South Africa, Cambodia, Malaysia and Iran indicate that effective clinical teaching practices significantly improves student competency and learning outcomes, while a lack of educator training and support, and lack of clinical practice equipment diminishes the quality of clinical education (12-17).

In Ethiopia, clinical teaching is integrated into pre-service training program in nursing and midwifery programs (16). However, evidence suggests that only 47.3% of midwifery educators demonstrate effective clinical teaching practices (6). Many midwives and nurses educators had lack formal training preparation, have limited opportunities to attend workshops or higher diploma programs (HDP), face high workloads in overcrowded clinical sites (16, 18). In line with this, high student-to-clinical-unit ratios, shortages of simulation tools, and inadequate feedback mechanisms affect the development of essential clinical competencies among students (7, 18-20). Consequently, many midwives and nurse students graduated without achieving necessary competencies, which negatively affecting the quality of healthcare services (16, 21, 22).

Factors' influencing the effectiveness of clinical teaching includes; educator-related factors such as, clinical experience, interest in teaching and participation in professional development programs, qualifications, institutional and system-level factors, including availability of simulation labs, teaching resources, and clear clinical teaching objectives, also factors used to ensuring effective clinical teaching practice (1, 5-7, 23, 24).

Despite the recognized importance of effective clinical teaching, no previous study has assessed the utilization of effective clinical teaching practices among midwives and nurse educators in the public universities of Tigray. Therefore, this study aims to fill that gap.

## 1.2 Statement of the problem

There is global demand for skilled midwives and nurses, alongside an urgent need for systems that prepare qualified educators (4). Shortages of competent midwifery and nursing faculty remain a significant challenge worldwide, particularly at bachelor's degree level and higher (25, 26). A survey conducted by the IMC in 2019–2020 revealed that fewer than half (46%) of responding countries had fully qualified midwifery educators (27).

Effective clinical teaching depends on skilled, trained, and motivated midwives and nurse educators in clinical settings. These educators can facilitate student learning, provide supportive supervision, set clear learning objectives, use performance-based assessments, offer constructive feedback, and foster a student-centered learning environment. Institutions should also ensure adequate infrastructure, simulation labs, teaching materials, and limit student-to-clinical-unit ratios to improve clinical practice (1–10).

Studies conducted in Oman and South Africa reported that only 48.8% and 56%, respectively, applied effective clinical teaching practices (13-14). In low- and middle-income countries, only a small proportion of midwifery educators have formal educational preparation (25). A study from Ethiopia indicates that 47.3% of midwifery educators demonstrate effective clinical teaching practices (6).

In Ethiopia, although there has been training initiatives aimed at promoting student-centered teaching and assessment methods but, still shortages of adequately trained educators and limited use of active learning and teaching strategies, inconsistently use performance assessments and feedback was common challenges (19-20). In addition, nurses educators have limited opportunities to attend clinical teaching trainings, no prior clinical experience, inadequate simulation training and lack of orientation for newly instructors on clinical teaching also, contributes inconsistency in teaching practices (19).

Furthermore, midwifery students often experience in overcrowded clinical sites with different departments, limited use of simulation tools, larger student per clinical unit, and inadequate feedback mechanisms restrict the students' opportunities to develop essential clinical competencies, which may negatively affect the implementation of ECTPs (7, 18-19). As a result, midwives and nurse student's graduate enter work place without achieving necessary clinical competencies or with low competency among midwives and nurses students decrease overall quality of education (16, 21-22).

Addressing these challenges requires strengthening formal training and continuous professional development for midwifery and nursing educators, including participation in HDP programs, and clinical teaching workshops, should be provided (27). Furthermore applied student-centered teaching approaches, including clear defined clinical objectives, performance-based assessments, structured FB, increased opportunities hands-on practice, reducing student-per clinical unit would enable to effective clinical teaching practices (6, 10, 24, 28-31).

Despite midwives and nurses being the backbone of health care system, they continue to face challenges. Moreover; there is limited empirical evidence on effective clinical teaching practices among midwives and nurse educators in this Ethiopia especially on Tigray. Most previous studies in Ethiopia have focused on students' perceptions of clinical practice and assessing nursing and midwifery departments separately. Therefore, this study aims to assess the utilization of effective clinical teaching practices and associated factors among midwives and nurse educators in Tigray, Ethiopia.

### **1.3 Significance of the Study**

The findings of this study will add new knowledge on utilization of effective clinical teaching practices of midwives and nurses educators by identifying gaps and best practices. In addition, it will help for midwives and nurses to maximize the competency of graduate students that can satisfy the country's demand for competent midwifery and nursing professionals.

Finally, this study will serve as a baseline for future research and policy-making in midwifery and nursing education in public universities of Tigray. It will support educational planners and institutions in implementing targeted interventions to strengthen teaching practices, and promote student-centered learning.

## **2. LITERATURE REVIEW**

### **2.1 Utilization of effective Clinical teaching practice of Midwives and Nurse Educators'**

Effective clinical teaching practice (ECTP) is a critical component of health professions education, influencing students' clinical competence and professional development. The extent to which educators utilize ECTP varies across contexts, with studies revealing both high and low levels of countries.

A study done in Palestine, among nursing students' perceptions towards effective clinical instructors teaching ability was stated that the most important higher score with (mean = 89.79), followed by nursing competence, evaluation skills, and interpersonal relationships, while personality traits were considered lowest score (29). Likewise, finding from Canada suggest that effective clinical teachers had confident, clinical skilled, well-prepared, approachable, and serve as role models in clinical teaching practices (32).

A cross-sectional study done in Cambodia revealed that effective clinical teaching practices among preceptors was moderate (mean = 3.63 out of 5), with nursing expertise 3.72, teaching competence 3.51, and interpersonal skills 3.65 (12). Another study in 2020 found a similar mean instructor performance score of 3.65 (8). Similarly, in Tigray public universities and Gondar revealed that clinical competence, evaluation skills, and interpersonal relationships, were characteristics of effective clinical teacher (33, 34). In line with factors affecting instructor's clinical teaching such as clinical competence, teaching skills (35).

However, when measured as a binary outcome (effective vs. ineffective), the proportions vary. A study conducted in Oman found that 48.8% of nurse educators demonstrated effective clinical teaching practices ECTP (13), while a survey in public nursing colleges of South Africa found that 56% of educators applied effective clinical teaching practices(14). In Ethiopia, institution-based cross-sectional study suggests that only 47.3% of midwife educators practiced clinical teaching effectively (6). The wide range of these findings suggests that ECTP is influenced by contextual factors such as educator training, institutional support, and clinical environment.

## **2.2 Factors affecting the effective Clinical teaching practice of Midwives and Nurse Educators**

Understanding the factors associated ECTP is essential for designing interventions to improve clinical teaching. The literature identifies multiple categories of factors, which are listed below.

### **2.2.1 Socio demographic characteristics**

A web based descriptive study done in Oman, revealed that age of educators were significant determinant factors of ECTP (13), and similar findings were reported in Kenya (36). Gender differences were identified in studies from Iran, and Oman where female educators sometimes demonstrated higher effectiveness of clinical teaching (13, 15).

Teaching experience is consistently associated with better clinical instruction. Studies in Ethiopia, midwifery educators whose clinical experience 1–3 years and 4–6 years were 3.31 and 4.72 higher than to applied effective clinical teaching practices compared to those with  $\leq 1$  year of experience respectively (6). In line, educators whose experience less than 5 was 21% less than practice effectively than greater than 10 years teaching experience's (7).

Studies done in Kenya and Malaysia, Egypt said that educational qualification of educators was significantly associated factors with effective clinical teaching (36-39). In line in Oman, South Africa, Ethiopia educators with master's qualifications was higher practice those with bachelor's degrees (7, 13-14).

### **2.2.2 Training status of educators**

A quasi-experimental study examined that training were significant improvement in nurse educators' knowledge and performance on clinical teaching competencies and had good clinical evaluation achievement (10). Studies in, Iran, Saudi Arabia, Oman, Cambodia, and South Africa similarly reported that trained educators demonstrated higher improvement on teaching ability, nursing competence, interpersonal skills, and overall effective clinical teaching practices (11-15).

A review in South Africa revealed that simulation-based teaching training for nurse educators was positively associated factor for ECTP (9). Also another study done on South Africa said that training on clinical teaching skills was significant associated with effective clinical teaching practice among nurse educators (14). In Ethiopia, participation in Higher Diploma Programs (HDP), and attaining clinical teaching workshop, was positively associated with effective clinical teaching practices among midwifery educators (6).

### **2.2.3 Clinical Practice Environment**

A study done in Alborz revealed that adequate necessary facilities and using different modern teaching methods were important factors for ECTP (8). Study in Kenya, students reported that a supportive clinical environment with adequate resources, small student groups, and innovative teaching methods improved clinical teaching (39).

In contrast, studies in Ethiopia identified barriers such as limited clinical facilities, insufficient simulation lab materials, and low use of active learning methods, which negatively affected clinical practice (18, 30-31). Specifically, midwives and nurse educators reported skill gaps in using active learning methods (e.g., case studies, role-play) and providing constructive feedback. Only 50% of educators created conducive learning environment, and 43% applied active learning methods (20).

Student per clinical unit is a critical environmental factor. A study among midwifery students in Tigray reported that 57.6% experienced an average of 5–8 students per clinical unit (30). In Ethiopia, midwifery educators supervising 5–8 or 9–12 students were more effective than those supervising  $\geq 13$  students (6).

### **2.2.4 Educators –related characteristics**

A situational analysis in Iran found that intrinsic motivation was characteristics of effective clinical instructors (15). In Ethiopia, providing clear clinical learning objectives and having a strong interest in clinical teaching were significantly associated with ECTP (6). In Tigray, 42.4% of instructors rated their interest as good, 27.3% as very good, and 15.2% as not good (6, 30).

### **2.2.5 Clinical Evaluation/assessment related characteristics**

Assessment practices are integral to effective clinical teaching. A finding done in Ethiopia shown that, use performance based assessment tool was significantly associated with ECTP (6). Nursing students, who were assessed using structured/measurable assessment were more likely clinical competent (19, 23). Conversely, lack of clear evaluation methods and limited clinical supervision were identified as barriers in Tigray (18). Moreover, in Ethiopia assessment found that 49% of midwifery and nurse educators used a variety of student assessment methods, indicating a skill gap (20).

A review in South Africa, identified feedback as a significant element effective clinical teaching practices (9). Ethiopian studies confirmed that timely feedback improved ECTP and student learning outcomes (20, 31, 33).

Despite the growing body of literature on effective clinical teaching practices in nursing and midwifery education, several gaps remain, particularly in the Ethiopian context. Most existing studies have focused either on nursing educators or midwifery educators separately, with limited combined analysis (6, 20, 34, 33). Furthermore, the majorities of studies were conducted in single institutions or selected regions, and findings may not be generalizable across all public universities in Tigray (30, 33,). None of the previous studies have employed a census approach to capture the entire population of midwives and nurse educators in Tigray, which is essential for obtaining a complete picture in a post-conflict setting where resource constraints and recovery efforts may influence teaching practices.

Additionally, while factors such as HDP training, student-to-educator ratios, and assessment methods have been identified in prior research, most studies have relied on smaller sample sizes or have not controlled for a wide range of potential confounders using multivariable analysis (18, 30).

This study therefore addresses these gaps by: (1) including both midwifery and nursing educators from all public universities in Tigray; (2) using a census sampling method to ensure complete representation; (3) applying multivariable logistic regression to identify factors associated with ECTP while controlling for confounders; and (4) providing baseline evidence that can inform targeted interventions and future research.

### 2. 3. Conceptual frame work

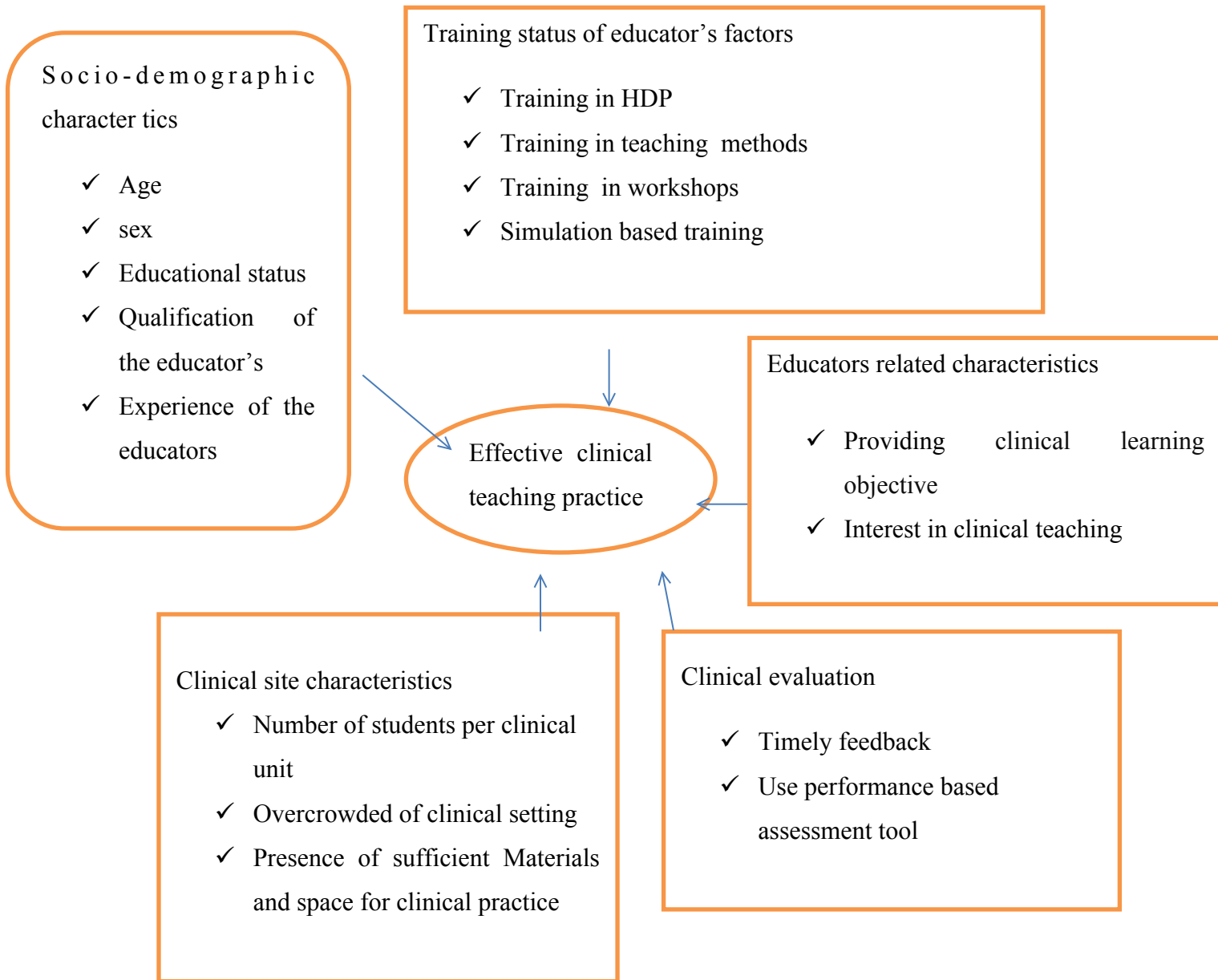


Figure: 1 Conceptual framework for the utilization of effective clinical teaching practice and associated factors among midwives and nurses educators in public universities of Tigray, Ethiopia 2025 adapted from previous studies (6, 9, 12-14, 16, 18, 30,32, 36-39). And categorizes the factors into five: Socio-demographic characteristics, training status of educators, clinical teaching site characteristics, educator-related characteristics, and clinical evaluation/assessment-related characteristics. These factors are postulated to influence whether midwives and nurse educators utilize effective clinical teaching practices. The dependent variable is the utilization of effective clinical teaching practices. This framework guided the selection of variables and the analysis of associated factors

### **3. OBJECTIVES**

#### **3.1 General objective**

1. To assess utilization of effective clinical teaching practice and associated factors among midwives and nurse educators in public universities of Tigray, Ethiopia 2025

#### **3.2 Specific objective**

1. To determine the utilization of effective clinical teaching practice among midwives and nurse educators
2. To identify factors affecting effective clinical teaching practice among midwives and nurse educators

## **4. METHODOLOGY**

### **4.1 Study Area and period**

Tigray is one of the national regions in Ethiopia, located 780 kilometers north of Addis Ababa, the capital city. Tigray has four public universities: Mekelle, Axum, Adigrat, and Raya, established in chronological order from earliest to most recent. According to the department head office report, the total number of nurses and midwives educators in these universities was as follows: Mekelle University: 70 nurses, 26 midwives, Axum University: 75 nurses, 34 midwives, Raya University: 9 nurses, 8 midwives and Adigrat University: 42 nurses, 28 midwives.

Study period: The study was conducted from September 25 to November 10, 2025.

### **4.2 Study design**

An institution based cross-sectional study design was used. This design was chosen because it is cost-effective, feasible for a census of all educators, and appropriate for assessing effective clinical teaching practices and its associated factors at a single point in time.

### **4.3 Population**

#### 4.3.1 Target population /Source population

All midwives and nurse educators from public university in Tigray

#### 4.3.2 Study population

All midwives and nurse educators who are actively involved in clinical teaching at public universities in Tigray

#### 4.3.3 Study unit

Individual clinical educators working in midwifery and nursing departments of public universities of Tigray

## 4.4 Inclusion and exclusion criteria

### 4.4.1 Inclusion Criteria

All regularly recruited as academic staffs of midwives and nurse educators who were actively involved in clinical teaching on 2017 E.C academic year in Tigray public universities.

### 4.4.2 Exclusion criteria

Midwives and nurses educators who were on study leave and not actively engaged in clinical teaching.

## 4.5 Sample Size Determination

The sample size was calculated using a single population proportion formula, taking the highest prevalence from the previous study done in Ethiopia. The prevalence of effective clinical teaching practices on midwifery educators in Ethiopian universities was used to determine the sample size, with a prevalence of 47.3% (6), taking 5% margin of error, 95% confidence interval with a non-response rate of 10% which gives a total of 383 sample participants. The minimum sample size required for this study was determined by using a single population proportion formula, considering the following assumptions:

$$n = [(z\alpha/2)^2 p (1-p)] / d^2$$

Where, n= minimum sample size required for the study

z= standard normal distribution with a confidence interval of 95% and  $\alpha=0.05$ (z=1.96)

p= the prevalence of effective clinical teaching practices on midwifery educators in Ethiopian universities from the previous study was 47.3%

d= desired precision or tolerable margin of error =5%=0.05

$n = [(z\alpha/2)^2 p (1-p)] / d^2 = (1.96)^2 \times 0.473(1-0.473) / (0.05)^2 = 383$ ; Then, by adding 10% non-response rate, the final calculated sample size was 421.

For the second specific objective, the sample size was calculated based on the associated factors. Considering the following variables:

**Table 1:** sample size determination for the study on utilization of effective clinical teaching practices and associated factors among midwives and nurse educators in public universities of Tigray.

<b>Variables</b>	<b>Proportion among exposed</b>	<b>Proportion among non-exposed</b>	<b>Adjusting odds ratio</b>	<b>Sample size</b>	<b>Reference</b>
<b>Trained on HDP</b>	0.86	0.69	2.78	208	(6)
<b>Attend clinical work shop</b>	0.77	0.62	4.00	112	(6)
<b>Provide clinical learning objective</b>	0.886	0.66	4.74	96	(6)
<b>Interest in clinical teaching</b>	0.547	0.916	8.63	312	(6)

Finally, to ensure for maximum sample size sample size, single proportion formula was used, giving a calculated sample size of 421. But in this study, the calculated sample size for the target population was larger than the total number of available participants of midwives and nurse educators which was 292. Therefore, a census sampling approach was used, resulted that all members of the population all midwives and nurses educators 292 were included in this study.

#### **4.6 Sampling Technique and Procedures**

All midwives and nurse educators who met the inclusion criteria in the four public universities of Tigray were included. The distribution of participants was as follows: Mekelle University (26 midwives and 70 nurses), Axum University, were (34 midwives educators and 75 nurses) , Adigrat University (28 midwives and 42 nurses educators) and Raya University (8 midwives and 9 nurse educators).

Although the calculated sample size was 421, the total number of eligible midwives and nurse educators in Tigray public universities was 292, which is smaller than the calculated sample size; therefore, a census approach was employed. No sampling was applied; the entire population was targeted.

## 4.7 Data collection instruments and procedures

Primary data were collected using self-administered questionnaire prepared in English. The questionnaire was not translated into the local language because all respondents were university educators and understood English as it was medium of instruction at the university level.

The questionnaire to assess effective clinical teaching practice and influencing factors was developed using questions adapted from different literature (6, 9, 12, 13, 16, 20, 30, 32, 36-39), with modifications made to fit with the objective of this study. It consisted of six parts: socio-demographic characteristics, training status, clinical site characteristics, instructor related, clinical evaluation, and effective clinical teaching practice. ECTP was measured using 47 items that described qualities enabling clinical educators to teach effectively. A 5-point Likert scale was used, ranging from 1 (“strongly disagree”) to 5 (“strongly agree”).

Data were collected by four trained BSc midwife data collectors under the supervision of two MSc nurse and midwife supervisors. The purpose of the study was explained to participants, and written informed consent was obtained before distributing the questionnaires. Participants were assured of confidentiality and the voluntary nature of their participation. Completed questionnaires were checked for completeness on the site.

## 4.8 Operational Definitions

**Effective Clinical Teaching Practice (ECTP)** is process by which clinical educators facilitate the development of students' clinical knowledge, clinical skills, and professional attitudes through supportive clinical supervision, role modeling, offering constructive feedback, and integrating theory into real-world patient care.

Utilization refers to proportion of participant who applies ECTP in practice.

Measurement of ECTP: ECTP was measured using a 47-item questionnaire. A total score was calculated for each participant (possible range 47–235). Educators with a total score  $\geq 176$  (equivalent to 75% of the maximum score) were categorized as demonstrating effective clinical teaching practice; those scoring below 176 were categorized as having poor clinical teaching practice, based on a previously used cut-off (6).

## 4.9 Study Variables

### Dependent Variable:

- ✓ Effective Clinical Teaching Practice (ECTP) =effective/poor

### Independent Variables:

**Socio-demographic characteristics:** Age, sex, educational status, experience of educators and qualifications of educators

**Educators training status:** participation in HDP, teaching workshop, teaching basic clinical course, and simulation based training

#### **Clinical site characteristics**

- ✓ Number of students per clinical unit: the number of students per clinical unit was categorized based on previous Ethiopian study (6).
- ✓ Presence of sufficient materials for effective clinical practice: was measured using (yes/no) based on whether the clinical area had the necessary equipment, consumables, and teaching aids to support student clinical practices (35).
- ✓ Presence of sufficient space for clinical practice: was defined as a clinical teaching environment with sufficient physical space to accommodate instructors and students for hands-on practice. (Yes/No) (35).

**Educators related characteristics:** Interest in clinical teaching, and providing clear clinical learning objectives

**Assessment/Clinical evaluation:** Giving timely feedback, and use of performance-based assessment tools

#### 4.10 data Processing and Analysis

After data collection, completed questionnaires were checked for completeness and consistency. The data were cleaned, coded, and entered into EpiData version 3.2. Then, the cleaned data were exported to SPSS version 27 for analysis. Descriptive statistics were used for categorical and continuous variables represented by frequency or percentage (tables), text.

Bivariate and multivariable analyses were done using binary logistic regression model to determine the association between associated factors and the dependent variable (effective clinical teaching practice (ECTP)). The 47 Likert-scale items measuring ECTP were summed to obtain a total score for each participant. Based on the total score, percent score also calculated then, participants were classified into two groups based on total score/percent score: those educators with effective ECTP and those educators with poor ECTP, using the cut-off described in the operational definition. Then, this binary outcome was used as the dependent variable for analysis.

Although a census was conducted (i.e., all eligible educators were included), inferential statistics were used to allow generalization to a theoretical population of educators in public universities of Tigray and to provide measures of precision for the observed associations. Bivariate binary logistic regression was performed to identify factors associated with ECTP at a p-value  $< 0.2$ . Variables meeting this criterion were entered into a multivariable binary logistic regression model to control for potential confounders. Adjusted odds ratios (AOR) with 95% confidence intervals (CI) were reported, and statistical significance was declared at  $p < 0.05$ .

Before inclusion predictors in the final logistic regression model, multicollinearity was checked using the variance inflation factor (VIF)  $< 10$  and there was no collinearity. The goodness of fit of the final logistic model was tested using the Hosmer-Lemeshow test (0.373) with a p-value  $> 0.05$ . Finally, the result was presented using texts and tables.

#### **4.11 Data Quality assurance**

The questionnaire was prepared in English and was not translated into the local language because respondents were university educators and understood English as it was medium of instruction at the university level. Before conducting the actual data collection reliability of questionnaire was checked using cronbach's alpha coefficient 0.89 which shows good internal consistency and modification was made concerning the structure of the questionnaire accordingly. The data collectors and supervisors were trained on aims of study's, subject identification and contents of the questionnaire for one day prior to data collection period by the principal investigator.

Supervisors closely monitored data collection to ensure completeness and consistency of the questionnaire. The investigator oversaw the overall data collection process.

#### **4.12. Ethical Considerations**

Ethical approval was obtained from the Institutional Ethical Review Board (IERB) of Mekelle University College of Health Sciences (MU-IRB 2572/2025). A copy of the ethical letter and the permission letters obtained from department of midwifery were distributed to each of the four universities. Before data collection, Participants were informed about the study's purpose, objectives, procedures, potential risks, and benefits. Their participation was voluntary, and assured that they can stop or withdraw from the interview at any time. Confidentiality and privacy were ensured, with no personal identifiers collected. Data were coded and stored securely, accessible only to the research team. No harm was done to educator only few minutes was taken from educators' time and no direct benefit for one who included in this study.

#### **4.13. Dissemination of Results**

After data collection, analysis, and interpretation, then findings, conclusions, and recommendations were made. The results will be submitted to Mekelle University College of Health Sciences, Department of Midwifery. Further dissemination will be made to Tigray universities, various academic institutions, the Ethiopian Midwife and Nurse Association, and the Ministry of Health. Efforts will be also made to publish the results in reputable international peer-reviewed.

## 5. RESULTS

A total of 273 midwives and nurse educators participated in this study, yielding a response rate of 93.4% (273 out of 292 eligible educators). Because a census was conducted, the descriptive statistics presented below represent the true parameters of the target population. Inferential statistics (p-values, confidence intervals) are included to allow generalization to a theoretical population of midwives and nurse educators in public universities and future educators, and to provide measures of precision for the observed association.

### 5.1 Socio-demographic characteristics of respondents

188 (68.9%), of the respondents were male. The median age of the participants was 34 years, with an interquartile range (IQR) (the first and third quartiles) of 32 to 35 years.

Detailed socio-demographic characteristics are presented in Table 2.

**Table 2:** Socio-demographic characteristics of midwives and nurse educators in Public Universities of Tigray, 2025 (n=273)

Variables	Category	Frequency	Percent
Age in years	<=30	46	16.8
	30-35	156	57.1
	>=35	71	26.0
Sex	Male	188	68.9
	Female	85	31.1
Professional qualification	BSC	15	5.5
	MSC	258	94.5
Marital status	Single	52	19
	Married	219	80.2
	Divorced	2	0.7
University name	Mekelle	87	31.9
	Adigrat	67	24.5
	Raya	16	5.9
	Axum	103	37.7
Department	Midwifery	90	33.0
	Nursing	183	67.0
Clinical experience before academic staff	None	56	20.5
	Less than 2 years	121	44.3
	Greater than 2 years	96	35.2
Clinical teaching experience	<1 years	34	12.5
	1-3 years	68	24.9
	4-6 years	82	30.0

## 5.2 Training status of respondents

168 (61.5%), 114(41.8), 135(49.5%), and 143(52.4%) of respondents were trained on higher diploma in teaching profession (HDP, clinical teaching workshop, simulation based teaching and had basic effective teaching skill respectively.

**Table3:** Training status of midwives and nurse educators in Public Universities of Tigray, 2025(n=273)

Variable	Category	Frequency	Percent
Training HDP	Yes	168	61.5
	No	105	38.5
Training simulation based Assessment	Yes	135	49.5
	No	138	50.5
Training on teaching clinical skill	Yes	143	52.4
	No	130	47.6
Attended clinical workshop	Yes	114	41.8
	No	159	58.2

### 5.3 Clinical teaching site characteristics

173 (42%) of educators said that their site for clinical teaching was general hospital, with 35(8.6%) of clinical site was health center.

177(64.8%) of midwives and nurse educators taught clinical courses to their students at same clinical teaching site alongside with different departments including (midwifery, nursing, public health, pharmacy, and medicines. In addition, 142 (52.0%) of midwives and nurse educators stated that their clinical teaching site had adequate space to conduct effective clinical teaching.

Furthermore, 163(59.7%) of midwives and nurses educators said that they had enough material to taught in clinical practice. And 41(15%, 81(29.7%) respondents taught clinical practice of their students with <5, and >13 student per clinical unit, respectively.

**Table 4:** Clinical teaching site characteristics of midwives and nurse educators in Public Universities of Tigray, 2025 (n=273)

Variable	Category	Frequency	Percent
Clinical teaching site	General hospital	173	42.6
	Primary hospital	63	15.5
	Referral hospital	135	33.3
	Health center	35	8.6
Number of students per clinical unit	<5	49	17.9
	5-8	98	35.9
	9-12	58	21.2
	>13	68	24.9
equipped teaching materials of your institutions	Yes	163	59.7
	No	99	36.3
	I don't know	11	4
Overlapping with different department students in clinical teaching site	Yes	177	64.8
	No	96	35.2

## 5.4 Instructor's related characteristics

185(67.8 %) of midwives and nurse educators provide clear clinical teaching objective for their students in written form. In addition, 149(54.6%) of the respondent have used different clinical teaching method always, while almost all (97.4%) of midwives and nurses educators were utilized teaching strategies.

Furthermore, 76.6% of educators use bed side, 73.2% case study, 35.2% role model teaching method and 57(20.9%) seminar presentation were utilized respectively.

Midwives and nurses educators towards clinical teaching was measured by single item using 5-point likert scale indicating 1-very poor, 2-poor, 3-fair, 4-good, and 5- very good. As a result, there was no response as very poor and poor. Then response with good and very good was used as good and the response with fair was as it was. So, 200(73.3%), respondents reported that they had good interest in clinical teaching.

**Table 5:** Instructor's related characteristics of midwives and nurse educators in Public Universities of Tigray, 2025(n=273)

Variable	Category	Frequenc y	Percent
Providing objective of clinical teaching in written form	Yes	185	67.8
	No	88	32.2
Orientation program for new instructors	Yes	170	62.3
	No	103	37.7
Strategies for select instructors	Yes	167	61.2
	No	106	38.8
Using teaching strategies	Yes	266	97.4
	No	7	2.6
Frequency of using different teaching methods	Always	149	54.6
	Sometimes	124	45.4
	Fair	73	26.7
Interest in clinical teaching	Good	200	73.3
	Fair	73	26.7
Selection bed side teaching method	Yes	209	76.6
	No	64	23.4
Selection case study teaching method	Yes	192	73.2
	No	81	29.7
Selection role model teaching method	Yes	96	35.2
	No	177	64.8

### 5.5 Assessment/evaluation related characteristics

207(75.8%) of respondent's utilized performance based assessment tool for assessing students' performance, and 159(58.2%) give timely feedback always after assessing students' performance.

**Table 6:** Assessment/evaluation related characteristics among midwives and nurse educators in Public Universities of Tigray, 2025( n=273)

Variable	Category	Frequency	Percent
Frequency of timely FB on assessment	Sometimes	114	41.8
	Always	159	58.2
Frequency of continuous assessment	Sometimes	134	49.1
	Always	139	50.9
Use PBA	yes	207	75.8
	No	66	24.2

### 5.6 Utilization of Effective clinical teaching practice

Utilization of effective clinical teaching practice among the midwives and nurses educators was assessed using 47 question items with 1-5 likert scale and summarized using total score and percent score then, classified in two classes effective and poor using the predefined scale cut points. Therefore, in this study the estimated utilization of effective clinical teaching practices among the midwives and nurse educators in public universities of Tigray was 70% with CI (65%, 75%).

### 5.7 Associated factors with utilization of effective clinical teaching practice

Variables that were found to have significant statistical associations in the bivariate analysis with a p-value of < 0.2 (training on (workshop, clinical teaching method, HDP), PBA, providing written learning objectives, student per clinical unit, interest in clinical teaching and timely feedback) with effective clinical teaching practices were entered into multivariable logistic regression analysis.

In multivariable logistic regression analysis, there were significantly associated factors with effective clinical teaching practices (ECTP) such as HDP training, use of performance-based assessment methods (PBA), providing written learning objectives, r student per clinical unit, interest in teaching and providing timely feedback were the significantly associated factors of effective clinical teaching practice. The model showed good fit (Hosmer-Lemeshow  $p = 0.373$ ), and no multicollinearity was detected ( $VIF < 1.3$ ).

In this study, the number midwives and nurses educators who had attend HDP training were 4.7 times AOR; 4.70[2.15, 10.25] higher to utilized effective clinical teaching practice than who had not attend HDP training.

In this study, midwives and nurses educators who had teaching 5-8 students per clinical unit were 3.30 times higher AOR=3.30 [1.30,8.32]to utilized effective clinical teaching practice than ( $>13$ ) student per clinical unit. Midwives and nurses Educators who had providing clear written learning objectives to their students were 3.56 times higher compared to educators those did not provide it for their students (AOR : 3.56[1.69, 7.47])

ECTP among midwives and nurse educators who had good interest in clinical teaching was 3.24 times higher compared to midwives and nurse educators who had fair interest in clinical teaching AOR:3.24[1.48,7.11].

Use of performance-based assessment (PBA): Educators using PBA tools were 5.37 times more likely to demonstrate effective clinical teaching practice [AOR = 5.37; 95% CI: 2.44–11.81].

Finally, midwives and nurse educators who had use timely feedback always was 3.04 times higher to utilized ECTP than whose use timely feedback sometimes AOR: 3.04[1.49,6.23].

**Table 7:** Bivariate and multivariable analysis of factors associated with utilization of effective clinical teaching practices among midwives and nurse educators of Tigray Public Universities, 2025,( n=273)

Variable	Category	Effective teaching clinical practices		COR [95% CI]	AOR [95%CI]	P-value
		Yes(E)	No(p)			
Training HDP	Yes	143	25	6.79[3.83,12.04]	4.70[2.15,10.25]	.000*
	No	48	57	1	1	
Clinical teaching skills training	Yes	117	26	3.40[1.96, 5.89]	1.09[0.52,2.29]	.810
	No	74	56	1	1	
Training workshops	Yes	88	27	1.74[1.01,2.99]	1.37[0.63,2.98]	.423
	No	103	55	1	1	
Student per clinical unit	<5	36	13	3.50[1.58, 7.76]	1.76[0.64,4.83]	.273
	5-8	77	21	4.64[2.35,9.16]	3.30 [1.30,8.32]	.011*
	9-12	48	10	6.08[2.64,14.85]	2.19 [0.73,6.54]	.158
	>=13	30	38	1	1	
Provision of CLOs to Students	Yes	151	34	1	1	
	No	40	48	5.32[3.04,9.33]	3.56[1.69, 7.47]	.000*
Using PBA tool	Yes	166	41	6.64[3.63,12.14]	5.37[2.44,11.81]	.000*
	No	25	41	1	1	
Interest in clinical Teaching	Fair	34	39	1	1	
	Good	157	43	4.18[2.36,7.40]	3.24[1.48,7.11]	.003*
Timely feedback	Sometimes	58	56	1	1	
	Always	133	26	4.93[2.82, 8.63]	3.04[1.49,6.23]	.002*

*n*= number of participant; COR=crude odds ratio, AOR= adjusting odds ratio, CI=confidence interval, HDP=higher diploma program, CLOs= clinical learning objectives, PBA=performance based assessment, I=reference category, P-value <0.05, \* statistical significant, goodness of fit (Hosmer and lemeshow) =  $p=0.373$ , no multicollinearity (*Tolerance* > 0.1 and *VIF* < 1.3)

## 6. DISCUSSION

This study aimed to assess utilization of Effective Clinical Teaching Practice and associated factors among midwives and nurse educators in public universities of Tigray. As a result HDP, PBA, providing written learning objectives, student per clinical unit, interest in clinical teaching and timely feedback with effective clinical teaching practices were significant associated factors.

### 6.1 Utilization of Effective Clinical Teaching Practices among midwives and nurse educators in public universities of Tigray

In this study the utilization of effective clinical teaching practices (ECTP) among midwives and nurse educators in public universities of Tigray was 70% CI (65%, 75%). This current study is higher than studies done in Ethiopia, which reported 47.3% (6), from Oman (13) and South Africa (14) found 48.8% and 56%, respectively. This higher utilization observed might be due to improvements in using teaching strategies., increased training opportunities for clinical educators such as HDP training, smaller student-per clinical unit, provision of clear clinical teaching objectives, and using of PBA, timely feedback, and good interest in teaching may have contributed to improved utilization of effective clinical teaching practices .

Another, difference may be attributed to variations in study period, scope, sampling method, measurement tools, and target population. Unlike earlier studies that focused primarily on midwifery educators or single institutions, the present study included both midwives and nurses educators from all public universities in Tigray.

This findings is align with the studies in Oman and Cairo, South Africa, revealed that effective planning, facilitation of clinical learning, feedback, role modeling, and work-based assessment, professional competence, interpersonal skills, and active engagement in teaching strategies, person-centered, and communicative educators motivation and training were used to improve effective clinical teaching practice resulted enhance student learning outcome (9,13,38).

Overall, this finding suggest that structured training program, clear clinical teaching objectives, and professional development opportunities are key for improving the utilization of effective clinical teaching practices. Strengthen these areas contributing to better student competence and healthcare outcomes.

## 6.2 Factors Associated with Utilization of Effective Clinical Teaching Practices

This study identified significantly associated factors with the utilization of effective clinical teaching practices among midwives and nurses educators in public universities of Tigray.

This study revealed that, midwives and nurse educators who had received HDP training were four times higher to utilize effective clinical teaching practice compared to those who had not. This result is consistent with studies in Ethiopia (6), South Africa (9, 14), Saudi Arabia (11), and Cambodia (12), which demonstrated that formal training in teaching methodologies significantly improves clinical instruction. This might be due to HDP enhance educator's pedagogical skills, such as student center teaching, better clinical supervision and constructive feedback, which are essential for effective clinical teaching practices.

In this study, Educators who teaching 5–8 students per clinical unit were three times more to demonstrate effective clinical teaching practice than the larger group ( $\geq 13$ ). This finding is in line with study done in Ethiopia among midwife educators those teach 5–8 students per clinical unit higher compared to those teach  $\geq 13$  students per clinical (6), and it is also consistent with finding conducted in Mekelle university suggested that 5–8 students per clinical unit to effectively provide clinical education(30). This might be due to that optimal student per clinical unit allowed educators to provide closer supervision, offering timely feedback, and individualized guidance, increase student engagement on hand on practice which effectively practice the clinical teaching.

In the current study, educators who provided clearly written learning objectives were three times increase to utilize effective clinical teaching practice than those who did not. This result is in line findings from Ethiopia (6) and other low- and middle-income countries (24, 25). This might be due to providing clear clinical learning objectives help educators guide teaching, align teaching with assessment activities, clarify expectations, and improves student engagement and competency development. When objectives are absent or vague, students may lack direction, and teaching can become unfocused, reducing the effectiveness of clinical instruction.

In this study, midwives and nurse educators with a good interest in clinical teaching were three times more likely to demonstrate effective clinical teaching practice compared to those with fair interest. This result is consistent with studies in Ethiopia (6), Canada (32), South Africa (9,14) and Oman (12). This might be due to interested educators were more engaged, approachable, and committed to providing high-quality clinical teaching in clinical practice provided better supervision, structured guidance, and contribute to improved student learning outcomes. Interest likely translate into greater effort in planning, supervision, and feedback, all of which contribute to ECTP.

In this study, midwives and nurse educators who always provided timely feedback were three times higher to utilized effective clinical teaching practice compared to those who provided feedback sometimes. This finding is consistent with studies from, South Africa and Oman, Gondar, Oromia, which highlighted that timely feedback, is improve for clinical competence of students, (13, 14, 31 33), and Tigray (19) delayed feedback negatively affect students' clinical learning. This might be due to timely feedback helps to identify students' performance gap, guides teaching students which areas needs to improvement and promotes competency development, enhancing effective clinical teaching practices.

At the end, midwives and nurse educators who used PBA tools of assessment were five times more likely to utilized effective clinical teaching practice than those who did not. This finding is consistent with study in Ethiopia (6). This finding is aligns with studies in South Africa (9, 14), Oman (13), and Cambodia (12). This might be due to PBA tools they guide educators in identifying student learning gaps, weakness and strength and in order to align with teaching needs which enhance effective clinical teaching practices and support competency development. The strong association suggests that implementing PBA may be one of the most effective strategies for improving clinical teaching quality.

## **7. STRENGTHS AND LIMITATIONS OF THE STUDY**

### **7.1 Strengths of the Study**

- ✓ This study used a census method, including all eligible midwives and nurse educators in public universities of Tigray, which improved representativeness and reduced sampling errors represent the true parameters of the target population.
- ✓ The high response rate (93.4%) minimizes the risk of non-response bias
- ✓ The inclusion of both midwives and nurses educators provides a comprehensive view of clinical teaching practices across disciplines
- ✓ This study also identified key factors associated with effective clinical teaching practices using multivariable analysis with appropriate model diagnostics (Hosmer-Lemeshow test, VIF) ensured identification of associated factors

### **7.2 limitations of the Study**

Although it offers useful baseline data, there are also some limitations encountered;

- ✓ Since the data was self-reported provided by educators it may over-reported their use of effective teaching practices and potential misinterpretation of questions.
- ✓ Observational study will be best if resource available.

## **8. CONCLUSION**

This study assessed the utilization of effective clinical teaching practices (ECTP) and associated factors among midwives and nurse educators in the public universities of Tigray, Ethiopia. The findings reveal that 70% of educators utilize effective clinical teaching practices, indicating relatively high level of utilization.

There were factors found to be significantly associated with effective clinical teaching practices including: receiving HDP training, use performance-based assessment methods, 5-8 students per clinical unit, good interest in clinical teaching, providing clear written learning objectives, and giving timely feedback to their students were factors to improved utilization effective clinical teaching practices.

This finding identified the significances of professional preparation and structured clinical teaching approaches in improving clinical teaching practices on midwives and nurse educators. Therefore, strengthening professional development programs, optimizing student-to-per clinical unit to 5-8, and institutionalizing structured teaching and assessment practices are essential for sustaining and improving effective clinical teaching practices. Such efforts will ultimately enhance student competency and contribute to better quality healthcare services in Tigray.

## 9 . RECOMMENDATIONS

Based on the findings of this study, the following recommendations are suggested:

### **To universities and department Heads**

- ✓ It is better to strengthen and expand HDP training for midwives and nurses educators to enhance educators' clinical teaching competencies, assessment skills, and feedback provision.
- ✓ Ensure the use of validated PBA tools (e.g., checklists, OSCEs, portfolios) for all clinical rotations.
- ✓ Establish a policy limiting the number of students per clinical unit to 5–8 students per clinical unit
- ✓ Strengthen in promoting recognition programs (e.g., teaching excellence awards) and provide opportunities for professional growth to sustain and enhance educators' interest in clinical teaching

### **To Clinical Coordinators**

- ✓ Encourage to limit 5-8 students per clinical unit ensure closer supervision timely feedback, and individualized teaching experience.
- ✓ Strengthen in Incorporate structured feedback sessions into clinical rotation schedules and periodically assess whether timely feedback is being provided.
- ✓ Ensure provision of written learning objectives

### **To Educators**

- ✓ Develop and provide clear clinical learning objectives and integrate performance-based assessment tools to align clinical teaching outcome.
- ✓ It is better to offering timely and constructive feedback consistently to enhance students' learning and skill acquisition

### **To Researchers**

Further, future studies are encouraged be conducted direct observation of clinical teaching practices to complement self-reported data and reduce social desirability bias. And interventional guidelines using the findings of this study as baseline data

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## 11. ANNEXS

English version questionnaire form

Annex1: Participant information sheet and voluntary Consent of participants

Hello! Dear respondent, my name is \_\_\_\_\_. I am working as a data collector for the study being conducted in \_\_\_\_\_ University by Kibra Mahari, who is studying his master's degree at College of Health Science, Mekelle University. I kindly request you to give me your attention to explain about the study as you are selected to participate in this study.

**Title of the Research Project:** utilization of effective clinical teaching practice and associated factors among midwifery and nursing educators in public universities of Tigray, Ethiopia 2024/25

**Name of the organization:** Mekelle University collage of Health science department of Midwifery

**Name of the sponsoring organization:** Adigrat University

**Introduction:** This information sheet and consent form is prepared to explain the study you will be asked to join. Please listen carefully and ask any question about the study before you agree to join.

**Purpose of Research Project;** the finding of this study help in shaping of the can satisfy the country's demand for competent effective clinical teaching practice midwifery and nurse professional. This result will be aid nurse/midwife educators in achieving best clinical teaching. Furthermore, the aim of this study is to write a thesis as a partial requirement for the fulfillment of a master's degree in midwifery education.

**Procedure:** To assess the utilization and associated factors of effective clinical teaching practice among Midwifery and Nursing educators. I will be giving you the questionnaires to provide me the pertinent data that is helpful for the study. You will fill them by seeing & understanding carefully and it will take about 15-20 minutes to complete them. You do not need to tell your name and all your responses and the results obtained will be kept confidentially by using coding system whereby no one will have access to your response.

**Risk/Discomfort:** By participating in this research project, you may waste only your time about 15-20 minutes. I hope you will participate in the study for the sake of the benefit of the research result. There is no risk in participating in this research project.

**Benefits:** Although participants not receive direct personal benefits from taking part in this study, their participation will contribute valuable information to improve the quality of clinical teaching in nursing and midwifery education. In long term may enhance the competence of future health care providers and improve patient care outcome.

**Compensation:** You will not be provided any incentives or payment to take part in this project.

**Confidentiality:** The information collected from this research project will be kept confidential and information about you will be stored in a file, without your name, but a code number assigned to it and it will not be revealed to anyone except the principal investigator.

**Right to refuse or withdraw:** participation in this study is entirely voluntary, and participants have full right to withdrawal at any stage. Participant may discontinue their involvement for any reason including discomfort with the question, lack of time, or personal circumstance.

**Person to Contact:** If you want more information and check about this project, and if you have any conflict of interest you can contact the following people.

**Principal Investigator's Name and Contact Address:**

**Name:** Kibra Mehari ; **e-mail:** [kibramehari960@gmail.com](mailto:kibramehari960@gmail.com); **Mob:** +251943711735

**Advisor's Name and Address:**

**Main Advisor:** Mr. Kahsay (Asst. professor) **e-mail:** [kahsay.zenebe@gmail.com](mailto:kahsay.zenebe@gmail.com)

**Co advisor; Mr. Tomas (BSC, MSC)** **e-mail:** [tomasacsh@gmail.com](mailto:tomasacsh@gmail.com)

## CONSENT STATEMENT

### **Introduction:**

This study will be conducted as partial fulfillment of MSc in Health science education. I am very grateful for your willingness and cooperation to participate on the study; will appreciate your giving genuine data. No need to write name, so that we will not be identified. Confidentiality will be guaranteed.

Thank you for agreeing to talk to me today. The research of study contains effective clinical teaching practice, training status, clinical site characteristics instructor related factors and assessment factors. Confidentiality and consent: "I'm going to ask you some personal questions related ECT. There is not necessarily any right or wrong answer. I would like to ask you share your views as freely and completely as possible. We will protect the confidentiality of your responses to the best of our ability. Your name will not be written on this form and will never be used in connection with any of the information you tell me.

This interview is voluntary. Your decision on whether or not to participate in the interview will not affect the health care you receive at this facility. You do not have to answer any questions that you do not want to answer, and you may end this interview at any time you want to.

However, your honest answers to these questions will help us improve our understanding of the problem/gap on the services. We would greatly appreciate your participation in this interview. It will take about 10-15 minutes.

Would you be willing to participate in this interview? If yes, continue with the interview otherwise stop here.

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(Signature of interviewer certifying that informed consent had been given verbally by respondent)

Self-administered questioner for the midwifery and nursing educators

**Part1. Effective clinical teaching practice factors assessment questioners**

No	Questions	Response	Skip
<b>Part 1. 1 Socio demographic data</b>			
1,	Age		
2	Sex	1 .Male 2. Female	
3.	Marital status	1. Married 2. Single 3. Divorced 4. windowed	
4.	University Name:	1. Mekele    3. Raya 2. Adigrat   4. Axum	
5.	Department	1. Midwifery 2. Nursing	
6.	Clinical experience before becoming academic staff	-----in months	
7	Years of teaching experience in nursing /midwifery education	-----in months	
8	Educational level	1. BSC        3. PHD 2. MSc       4.other (specify----- ----	
<b>1.2 Training status of the educators</b>			
9.	Have you been trained in Higher Diploma Program (HDP)?	1.Yes 2.No	
10.	Have you ever trained on clinical teaching skill	1.Yes 2. No	
11	Have you received simulation based teaching training?	1.Yes 2. No	
12	Have you ever attended a clinical teaching workshop?	1.yes 2. no	
<b>1.3 Clinical site characteristics</b>			

13	Where they send their students for clinical teaching site (you can more than once )	1. General hospital 2. primary hospital 3. referral hospitals 4. private hospital 5.health center	
14.	is the clinical site equipped with necessary materials for clinical teaching such as clinical skill and simulation lab( manikins , personal protective equipment) clinical sites (delivery and newborn kits BP/stethoscope, incudes and support tools (guideline ,checklist ,logs..	1. Yes 2. No 3. I don't know	
15	Average number of students you teach per clinical unit:	1. 1<5 2. 5-8 3. 9-12 4. >=13	
16	Does the clinical teaching site take place at the same time as from other department in your institutions for example nurse, midwifery, doctors and others	1. Yes 2. No	
17	Is there enough space in the clinical site to conduct effective teaching	Yes No	
<b>1.4 Instructor related Questionnaire</b>			
18	Do you provide written clinical learning objectives to your students	1. Yes 2. No	
19	Is there orientation program for new clinical instructors,	1.yes 2. No	
20	Is there consistent strategy for selecting clinical teachers for your institution	1. Yes 2. No	
21	What are the selecting strategies for clinical instructors	1. Academic qualification 2. Clinical experience 3. Teaching skill Others specify-----	Skip if no for Q20
22	Are you using different clinical teaching methods	1. Yes 2. No	
23	which method of clinical teaching do you use (you can select more than once )	1. Demonstration 2. Bedside teaching 3. Use of clinical simulation 4. Other (specify-----	If answer no for Q22 skip

24	How often do you use the above methods during clinical teaching	1. Never 2. sometimes 3. Always	
25	How would do you rate interest in clinical teaching?	1 Very poor, 2. poor, 3-fair, 4. good, 5 .very good.	
	<b>Assessment/evaluation related Questionnaire</b>		
26	How often did you give timely feedback to student after performance?	1=never 2=sometimes 3=always	
27	How often did you use continuous assessment methods regularly in clinical practice?	1=never 2=sometimes 3=always	
28	Does you use performance-based assessment tools to evaluate your students portfolios, log books, objective structured clinical/practical examinations (OSCEs/OSPEs) and digital learning solutions	1. Yes 2. No	

**Part 2. Effective Clinical Teaching Practice among nurse and midwifery educator's**

Instructions: Please indicate the extent to which you agree with the following statements about clinical educators using the scale below: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

	Character tics of effective clinical teacher	1	2	3	4	5
1	I demonstrate clinical competence and techniques to my students during clinical practice					
2	I am well prepared for clinical teaching sessions.					
3	I communicate clearly and effectively with my students					
4	I guide students during hands-on clinical activities					
5	I demonstrate enthusiastic during clinical teaching.					
6	I encourage critical thinking among students.					
7	I act as a good role model in clinical practice.					
8	I provide helpful and constructive feedback to students.					
9	I establish a safe and respectful learning environment.					
10	I evaluate students fairly and objectively.					
11	I facilitate the integration of theory into practice.					
12	I stimulate student interest in clinical practice.					
13	I promote active student involvement during clinical teaching.					
14	I encourage self-directing learning among students					
15	I respond to thoughtfully students questions.					
16	I demonstrate patience when teaching students.					
17	I recognize individual difference in students learning styles.					
18	I am approachable and supportive during clinical teaching					
19	I Sets clear learning objectives.					
20	I provide timely evaluations of student's clinical performance.					

21	I encourage to students to take responsibility for their learning.					
22	I provide students with sufficient opportunities to practice clinical skills.					
23	I am available for student consultation during clinical practice					
24	I encourage teamwork and collaboration.					
25	I promote reflective practice among students.					
26	I respect students' opinions.					
27	I provide up-to-date clinical knowledge during teaching.					
28	I use a variety of clinical teaching strategies.					
29	I demonstrate confidence in clinical settings.					
30	I Motivates students to achieve their best performance.					
31	I help students to link classroom knowledge to clinical practice.					
32	I recognize and address students' weaknesses.					
33	I demonstrate professional behavior during clinical teaching.					
34	I treat all students fairly during clinical practice.					
35	I encourage open communication with students.					
36	I set high expectations for students.					
37	I demonstrate cultural sensitivity during clinical practice.					
38	I provide adequate supervision during clinical practice.					
39	I encourage peer learning among students.					
40	I maintain student confidentiality.					
41	I demonstrate emotional intelligence in clinical teaching.					
42	I provide on-going feedback to my students about their clinical performance					
43	I facilitate problem-solving discussions during clinical teaching.					
44	I demonstrate adaptability in teaching.					
45	I show commitment to student's success in clinical learning.					
46	I balance guidance with student independence during practice.					
47	I engage in demonstrate continuous professional development related to clinical teaching.					

Thank you ;

