

ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES
SCHOOL OF ALLIED HEALTH SCIENCES
DEPARTMENT OF NURSING AND MIDWIFERY

Knowledge and Attitude towards Nursing Clinical Preceptorship among Nurse Educators Working in Teaching Institutions in Addis Ababa, Ethiopia.

By:

Andreas Admassu Teferra (BSc)

A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES,
DEPARTMENT OF NURSING AND MIDWIFERY IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS OF THE DEGREE MASTER OF
SCIENCE IN ADULT HEALTH NURSING

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Advisor: Daniel Mengistu (BSc, MSc, Assistant Professor)

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LIST OF ABBREVIATIONS AND ACRONYMS

AOR: Adjusted Odds Ratio

BSc: Bachelor's degree in Science

CI: Confidence Interval

EBP: Evidence Based Practice

HERQA: Higher Education Relevance and Quality Agency

IRB: Institutional Review Board

MSc: Master's degree in Science

NEPI: Nurse Education Partnership Initiative

NGO: Non-Governmental Organization

OR: Odds Ratio

RN: Registered Nurse

SPSS: Statistical Package for the Social Sciences

UK: United Kingdom

US: United States

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ABSTRACT

Background: Despite being a primary target of nursing education, clinical skills are still major areas of concern among students and novice graduates alike. Clinical preceptorship in nursing is a teaching and guidance program where students are paired with an experienced nurse in the clinical environment to equip them with clinical skills and nursing values. Since nurse educators are one of the primarily responsible bodies for its effective implementation and eventual success, this study assessed their knowledge and attitude towards clinical preceptorship.

Objectives: To assess the knowledge and attitude towards nursing clinical preceptorship among nurse educators working in teaching institutions in Addis Ababa, Ethiopia.

Methods: The study was conducted in Addis Ababa and used an institution-based descriptive cross-sectional study method mixed with qualitative approaches. 109 nurse educators participated in the quantitative data gathering while an in-depth interview with five participants involved in nursing education was used for qualitative data gathering.

Results: Among the educators, 43.1% were found to be knowledgeable about nursing clinical preceptorship and its concepts whereas 96.3% had favorable attitude towards clinical preceptorship. A statistically significant association was found between the knowledge of educators towards preceptorship and their educational qualifications together with their teaching experiences. In-depth interviews revealed the existence of a theory-practice gap while shortage of facilities for clinical practice were the main challenges for clinical teachings. Role of nurse educators in clinical practice was also reported to be minimal.

Conclusion and Recommendation: Less than half of the educators were found to have adequate knowledge towards nursing clinical preceptorship whereas the outlook towards it remains almost exclusively favorable. Additionally, clinical practical attachments of students is faced with a variety of challenges. Teaching institutions should focus on enhancing clinical skills of students and alleviate the problems it faces while hospitals and healthcare institutions should play their part in producing competent nursing workforce. Further studies related to clinical preceptorship and related matters is highly recommended.

Keywords: Clinical Preceptorship, Clinical practice, Nurse Educator, Preceptor, Knowledge, Attitude

CHAPTER 1: INTRODUCTION

1.1 BACKGROUND AND STATEMENT OF THE PROBLEM

Nursing is a practice-based profession that is built on theoretical knowledge, both of which is gained through a programme of nursing education. This profession in the 21st century faces a number of challenges including a growing population of hospitalized patients who are older and more acutely ill, increasing healthcare costs, and the need to stay current with rapid advances in medical knowledge and technology (1).

Clinical practice is where students gather real-life experiences in modern day healthcare provision, nurses who are competent and those who possess an ability to make swift clinical judgments and decisions are required. However, it has been reported that immediately upon graduation, baccalaureate-prepared nurse graduates lack the ability to make critical judgments in the clinical practice area (2).

Though there are different definitions that are found in different texts, typically, a preceptorship involves the pairing of an experienced teacher with a less experienced learner with the goal of achieving selected learning objectives (3). Nursing clinical preceptorship, which is a concept of interest in this study, and clinical preceptors are also subjected to many definitions. One definition of a clinical preceptor is “an experienced staff nurse who assumes the role of clinical teacher for a student. While, the experience between the clinical preceptor and the student is referred to as a preceptorship” (4). In a broader sense, Neutens (2006, cited by (5)) defines a preceptor as a teacher or an instructor playing a combination of roles as a mentor, supervisor and assessor in order to develop leadership skills in another level. Moreover, the relationship between those involved in the preceptorship process is given an essential value. There are three main players that are considered essential in a student learning experience – the preceptor, the student and the clinical

instructor. These three individuals need to work together and communicate well in order to achieve the best possible learning experience (6).

Along with the aim of providing quality nursing care and maintaining a high level of client satisfaction, retention of nurses is also a major issue in many nations. Starting from enhancing students' clinical skills massively and introducing them with the work environment that will await them, an effective preceptor is a major factor leading to the retention of new nurses. One strategy that has been applied to increase nurse retention and increase the quality of care is an effective preceptorship technique (7). Moreover, staff nurses who precept can connect with students in ways that others cannot, building trust and responsibility, while easing the transition into the “real world” of healthcare. (8)

Preceptorship is important to nursing education for a wide variety of reasons. It assists nursing students to incorporate theory into practice, integrates students into the practice setting within the organization, allows students to apply learning and internalize the role and values of the profession within a nurturing and supportive relationship, and assists in recruiting nursing students into the profession (9). It is also becoming an integral part of nursing education. Among sixteen studies conducted internationally, aiming to study measurable changes in students that underwent preceptorship programs, 56% supported using preceptorship in undergraduate nursing education (10). Other benefits of clinical preceptorship programs for educators in particular include continuity and consistency of education, increased satisfaction and retention of students as-well-as enhancement of developing a shared responsibility for education and training (11).

Though the role of nursing educators in teaching clinical skills to students still takes center stage in countries like Ethiopia where formal clinical preceptorship programs are at their initial stages, organized preceptor schemes are being applied in many countries. The Global Nurse Capacity

Building Program/Nurse Education Partnership Initiative (NEPI) run some of the pioneer projects in training preceptors and introducing mentorship programs in Ethiopia (12). Though most nurse educators and clinicians in Ethiopia are still largely unfamiliar to the concept and application of nursing clinical preceptorship. Conversely, some African countries like Botswana and Ghana are utilizing the program in full (5, 13). For instance, in most training institutions in Botswana, student nurses in their final year of training are accompanied by a preceptor during all duty shifts while the nurse educator, whose fundamental task lies in classroom teaching, will visit the students every second week as a resource person, mainly with the aim of enhancing clinical learning (5).

The need for implementing a nursing preceptorship program, especially in relation to nurse educators has been supported by many literatures. For instance, it was found that while nurse educators were expected to accompany student nurses, a shortage of staff limits them to lectures in the classroom, resulting in minimal student accompaniment (5, 14). According to Troskie, Guwa and Booyens (1988, cited by Cele (14)) a shortage of nurse educators also makes it difficult for one nurse educators to spend enough time with each student nurse. Additionally, clinical instructors which accompany students were also found to manage demonstration of procedures to each student once or twice a week only, instead of daily. Kemper (2007, cited by (5)) also found that the ratio of students to nurse educator were too high to allow for effective student supervision in clinical practice, hence the need to introduce preceptorship.

Within the national context, studies that aim to investigate the utilization and application of nursing preceptorship programs in nursing education have not been conducted or could not be found. Moreover, even in an international context, those that aim to specifically assess the standpoint of nurse educators towards clinical preceptorship and its overall implications are absent. At present, the quality of nursing practice in Ethiopia is under much needed revision and scrutiny, largely due

to the fact that most novice graduates are reported to be lacking the required clinical skills and decision making capacities. Thus, introducing preceptorship programs in teaching hospitals and healthcare institutions is one of the fundamental strategies to provide quality healthcare for the public and continue the growth of nursing as a profession.

In Ethiopia, nursing educators are often assigned as clinical instructors for undergraduate students usually beginning from the second year of the four year program. The clinical instructor is not usually accessible to the students at all times, and usually a single instructor is assigned to a large group of students, which results in minimal one-to-one practical learning and demonstration sessions. The apparent gap between theory and practice is one of the demanding issues in nursing, both locally and abroad. Group interviewees that involved nurse educators showed major areas of concern such as shortness of clinical placements and lack of collaboration between clinical areas and educational institutions while there was also a mutual agreement that a theory-practice gap exists and measures are needed to halt these issues (15).

Therefore, the purpose of this study was to examine the overall knowledge and attitude of nurse educators towards nursing clinical preceptorship. It also aimed to assess any other factors associated with nursing clinical preceptorship; the main rationale being that educators are pillars in the eventual design and implementation of nursing preceptorship and practice modules. Thus, assessing their overall outlook towards preceptorship programs is vital in formulating an effective learning and clinical practice environment, which will subsequently lead to the betterment of nurse graduates and their overall abilities.

1.2 SIGNIFICANCE OF THE STUDY

After a review of literatures and not succeeding in finding any pertaining to this particular research problem, I have realized the importance of conducting a study of this nature. To reiterate, clinical practice is an important aspect in nursing education; playing massive roles in the process of producing effective and efficient nurse practitioners. In turn, nursing clinical preceptorship is the ultimate practice program to teach students clinical skills and enhance their decision making capacities. Thus, this study is expected to provide information that is of importance to nursing education and practice as-well-as for policy making.

For nursing education and practice: this study provides an insight about the general state of nursing clinical preceptorship in Ethiopia particularly from the perspective of the educator. The information gathered will help in amending or improving the way clinical preceptorship is currently being implemented in teaching institutions. The involvement of nurse educators in reviewing clinical practice programs and further incorporating preceptorship in their respective institutions will have a much needed positive impact on nursing education and practice.

For policy makers: In order to design a uniform clinical practice module to be applied in teaching institutions, authorities involved in constructing educational policies and programs can utilize this research and use it as a base for further studies and policy reviews. Especially, since it is from the standpoint of people who are directly involved in nursing education, using both quantitative and qualitative results, it is expected to provide a unique and rich data. It might also play an important role in designing programs that will formally incorporate healthcare institutions and nursing staff in the provision of nursing education.

CHAPTER 2: LITERATURE REVIEW

Teaching is an integral part of nursing, so becoming a nurse educator is a natural step for many. Likewise, Preceptorship is the ideal method for teaching students in the healthcare environment (16). Thus, whether it is teaching in the classroom or in the practice setting, nurse educators prepare and mentor patient care providers and the future leaders of the profession and thus they play a pivotal role in strengthening the nursing workforce, serving as role models, and providing the leadership needed to implement evidence-based practice and improve patient outcomes (17).

The role of nurse educators is evolving. Studies indicate that there has been a paradigm shift among nursing educators to change the student-teacher relationship to one that is more commensurate in nature with the teacher serving as a facilitator of learning, rather than adopting an authoritarian position (18). Nurse educators are now more responsible for creating an environment in the classroom, laboratory, and clinical settings that facilitates student learning and the achievement of desired cognitive, affective, and psychomotor outcomes (19). There is also evidence suggesting that the attitudes and values that student nurses develop and take with them into the clinical area are fostered and nurtured by the nurse educators to whom they are exposed throughout their education (20).

It is known that nurse educators with adequate training facilitate development of students and will engage in various activities that will enhance the profession, rather than focusing on formative or summative student evaluation only. Johnson (2002, cited by Madhavanprabhakaran (21) found that a study in Norway among nurse educators indicated teaching and nursing competence as the most important domains for nursing education and are far more important than evaluation skills, personal factors and relationships with students. Nurse educators are also a link between the

clinical environment and the student for imparting quality clinical teaching thus, they need to work as a harmonious team for the implementation of effective clinical learning procedures and creation of a professional working relationship, which can be used to reduce the theory-practice gap and bridge the apparent differences between what is being taught in the classroom and what is actually practiced (22). This is one of the main reasons why it is crucial for educators and administrative staff to recognize the value and importance of the preceptor role (23). Apart for its undeniable and apparent benefit and essentiality in monitoring and mentoring student nurses towards enhancing their clinical skills (24), studies have shown that clinical advancement programs based on expertise and the use of expert nurses as clinical preceptors and educators may also augment the overall expertise within a hospital (Moore 2008, cited by McHugh (25)).

The roles of nurse educators in preceptorship or in clinical teaching is underlined in many studies. Nurse educators have a responsibility to arrange times with site administration and the head of the hospital or healthcare facility that is convenient for students' practice. In addition, if there are assigned clinical preceptors, they should coordinate with them to be sure that they will be available to work on the chosen day (26). Lack of support from educators during students stay in the clinical environment coupled with the lack of challenging opportunities and poor relationships with hospital staff are some of the negative experiences reported by students (27). The involvement of nurse educators and leaders in the practice environment will help in engaging in critical reflection of the current models of clinical practice education so that programs are able to graduate safe and competent registered nurses as-well-as integrate evidence based nursing education with preceptorship model in clinical nursing education (28).

One of the issues that is often congruently raised when talking about clinical preceptorship models and their implementations are those related to selection. Though Clinical Preceptors generally are

expected to have an ample experience in nursing practice, there is no clearly set educational qualification criteria. For instance, the University of South Florida, College of Nursing requires a preceptor to be a faculty/staff educator and have a minimum of a MSc, or a Master's degree in Nursing (19), while Lewallen (2002, cited by (29) found that some schools in the US do hire clinical instructors or preceptors if they are RN's and/or have the same degree as the one toward which their students are studying.

The task of designing and implementing clinical preceptorship programs as-well-as the design and evaluation of academic and continuing education programs is mainly bestowed upon nurse educators. Some role expectations towards nurse educators regarding clinical preceptorship are identifying and securing proper practice sites for students, providing preceptors with course objectives, supporting preceptors towards developing teaching skills, monitoring student progress, providing evaluation feedback for preceptors, solving student and/or preceptor problems with rotation and giving feedbacks to students (30). Conway and Elwin (2007, cited by (31) found that nurse educators in Australia are responsible for varied and complex tasks, including organizing preceptor programs, which can include formal academic programs that lead to a degree or certificate, or more informal continuing education programs designed to meet individual learning needs (32).

There is a general scarcity of research that investigates the values held by such nurse educators (20) while finding literature that specifically attempts to address nurse educators' viewpoint towards clinical preceptorship programs was unfruitful.

In a study with a similar theme, conducted in countries such as Iran, the US and Nigeria with an aim of assessing the knowledge and attitude of nurse educators towards Evidence Based Practice

(EBP), results indicate the presence of adequate knowledge and positive attitude towards applying EBP (33-36).

Similarly, the role of nurse educators in clinical practice is expressed in many studies conducted in various nations. In the UK, for example, lecturer practitioners were introduced for a better clinical teaching experience. Camsookai and Cave (2002; 1994 cited by Mitchell (37) found that the effectiveness of the lecturer practitioner role in the clinical setting was being regularly questioned while Williamson (2004, cited by Mitchell (37) added that the question over the lecturer practitioner role particularly loomed over their effectiveness in reducing the theory-practice gap, role conflict, occupational stress and burnout, and the need for support and appraisal. There is also suggestion that lecturer preceptors, who are responsible for students clinical learning together with clinical preceptors but who are also fundamental in the theory-practice linkage, be involved in clinical settings because their support to students in clinical settings is found to be crucial (38).

Nonetheless, the opposite scenario is also found to be true. As a solution for smoothing transition into a teaching role and preparing nurses for preceptorship, teaching institutions should design, embrace and fund a formal process. It is suggested that without formal and specific preparation, qualified nurse specialists will not be able to make a successful transition to the role of clinical instructor, nor will they be able to fulfill their role to the highest level possible (39). Clinical instructors and preceptors are also often hired based on their clinical expertise, and little support is provided to develop their teaching skills (40). Some studies argue that one-to-one sessions of students paired with a preceptor, are mainly for the purpose of demonstrating high values of nursing rather than to teach advanced theoretical knowledge (41). However, Hsu (2006, cited by (40) noted that preceptors often do not use a higher level of questioning that would stimulate students' critical thinking. A study conducted in the US supported this by reporting that nurses

who are experts in clinical skills are not necessarily capable of teaching clinical skills to others (39).

In another study that was carried out in the UK, with the aim of finding out whether newly qualified nurses are prepared for clinical practice or not, it was found that introducing a mandatory preceptorship programme would assist with a smoother transition of newly qualified nurses to the healthcare environment adding that nurse educators should also design effective programs to ease this transition and reduce frequently reported issues among novice nurses such as anxiety and improving the theory-practice gap (42).

In the African state of Malawi, most of the clinical teaching in higher institutions was carried out by nurse educators, whose main task is supposed to be theoretical teaching rather than clinical teaching and thus the need for clinical preceptors (43). However, the study also indicates that a preceptorship program might not be feasible in countries like Malawi, where there is a severe nursing shortage thus relying on nurse educators to facilitate clinical teaching is the only feasible option (43). Similarly in Nigeria, it was found that nurse educators' attitude towards curriculum development and mode of delivery of care must be reviewed to reflect the delivery of care that was present in the country (44). Issues pertaining with clinical staff shortage is also reported in countries like the US, where it was found that in many nursing programs reported, shortages in the clinical areas were three times greater than in the classroom (45). In Oman for instance, keeping in mind the shortage of clinical instructors and considering the prime importance of clinical teaching in nursing, a 6:1 ratio of student-teacher has been implemented except in the final semester with an advanced clinical nursing course where an individual preceptorship model was adopted (21).

According to the Ethiopian Higher Education Relevance and Quality Agency's (HERQA) quality improvement standards for Nursing degree programs, preceptors are qualified nurses and/or

clinicians who are working on full-time basis in the respective experiential practice sites and have signed a formal agreement with the higher education institutions to coach the students while guidelines for selection of these preceptors should include criteria such as desire to teach; having adequate time, teaching skills, excellent communication skills; and having a clearly documented role and responsibility (46). Moreover, it is also implied that nursing schools must have written guidelines for the selection of preceptors who are working at practice sites and providing service while these preceptors must have also have a minimum of two years of experience in the specific area with a qualification of at least a bachelor's degree (46). However, in many higher education institutions in Ethiopia, preceptorship programs are not being properly applied. In a survey that was carried out among clinical Nurse Educators in Cameroon, lack of incentives was also listed as one of the difficulties they faced. Which implied that clinical educators may not be sufficiently motivated to teach. But the study added that the group of nurses still taught the students on clinical placements largely emanating from the love for the profession (47).

It is reported that novice nurse educators and nurses transitioning from clinical practice to academia are often ill-prepared for the faculty role and mentoring them has been suggested as a major way to prepare and advance nurses for a variety of roles (48). Therefore, similar to health science teaching institutions in many countries, especially developing ones, the Ethiopian setting suffers from a lack of nurse educators and those with appropriate pedagogical skills. In addition, teacher preparation is not part of the educational program in many health educational settings, yet many health professional graduates become teachers or preceptors almost immediately after graduation (49). Researches that are conducted on the many aspects that are concerned with nurse educators are almost non-existent rare and none can be found. Most nurse educators are also largely

unfamiliar with either the concept, application or implication of nursing clinical preceptorship and their perception regarding it remains unknown.

2.1 CONCEPTUAL FRAMEWORK

The eventual successes in the implementation and executions of nursing preceptorship programs in Ethiopia are largely dependent on nurse educators. Considering the absence of specific literatures concerned with the topic that would serve as a base, the conceptual framework has been developed by the researcher after review of studies concerned with preceptorship in general and others that targeted nurse educators. The determinant factors that inter-relate nurse educators and clinical preceptorship are presented in the figure below.

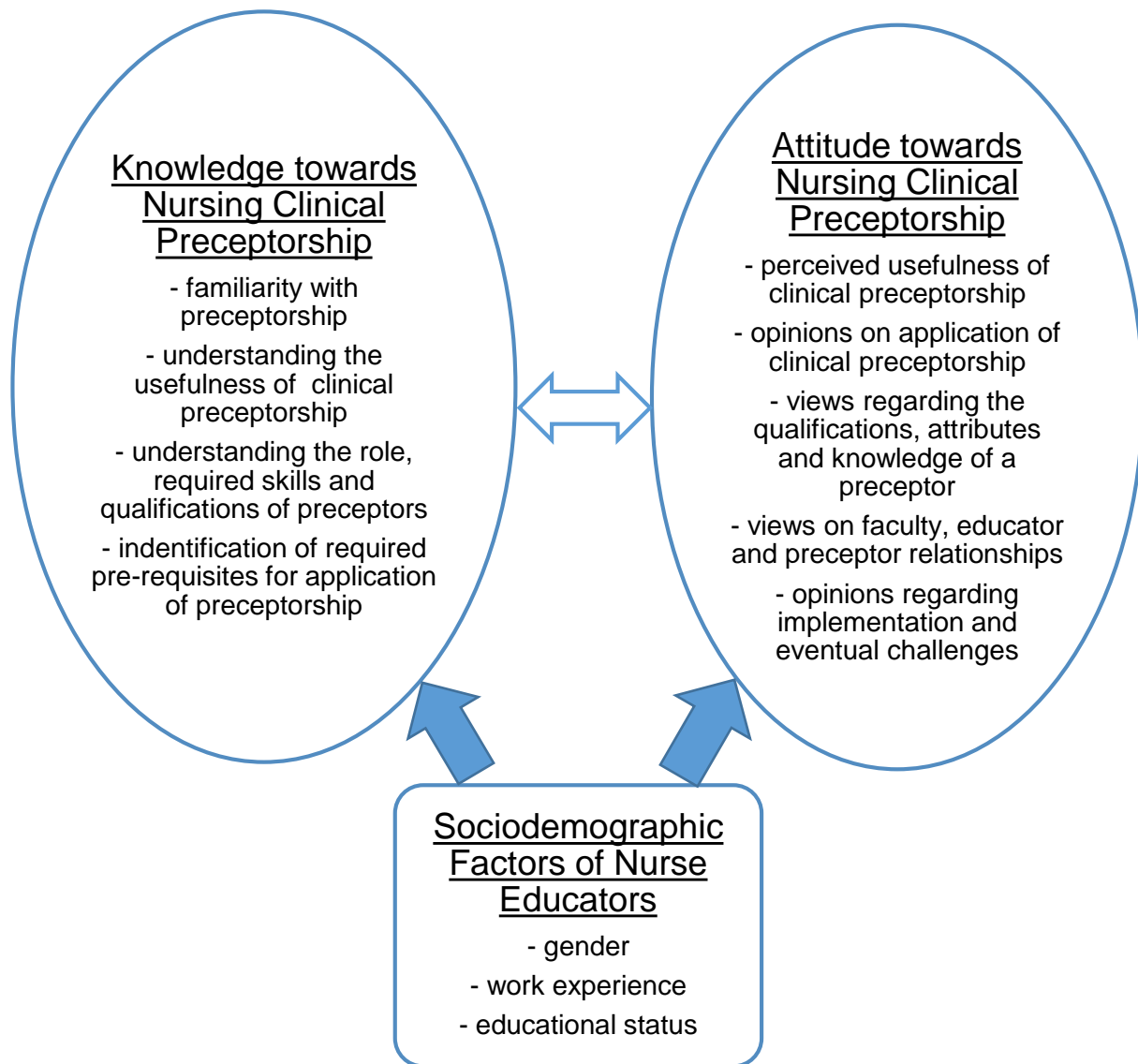


Figure 1: Conceptual framework for the determinants of the Knowledge and Attitude of Nurse Educators towards Clinical Preceptorship

2.2 SUMMARY

Review of these publications reveals the benefits and essentiality of nursing clinical preceptorship programs by underlining the various roles nurse educators are expected to play in the design and implementation of the programs. Despite the absence of literature that specifically addresses relations between nurse educators and preceptorship, it can be seen that there are several challenges that might arise in attempting to apply preceptorship. In certain countries, where the healthcare and educational setup is rather similar to Ethiopia's, issues such as shortage of professional nurses and healthcare facilities that can be used as preceptors as-well-as apparent lack of finances to support the programs can be major challenges. In addition, based on literatures that studied nurse educators knowledge and attitude to similar issues that were concerned with practice and education, it can be deduced that there can be a lack of knowledge that might potentially hinder development and integration of these programs while the general attitude and desire towards implementation seems positive. Reviewed Ethiopian literature concerned with the provision of nursing education clearly indicates the need for the use of preceptorship programs and their formal integration to students learning, but the role nurse educators are expected as-well-as their insights towards it remain unknown.

2.3 DEFINITION OF TERMS

Clinical Instructor: A person mainly qualified as a nurse educator but also undertakes an additional role to teaching, guiding and supervising students in clinical practice.

Nursing Clinical Preceptorship: A period of clinical practical experience and training for a nursing student that is supervised by an expert or experienced professional nurse.

Nurse Educator: also broadly known as a lecturer or instructor, is a person working in higher educational institutions, who mainly undertakes a role of theoretical teaching targeting undergraduate nursing students or is involved with nursing education in general.

Nurse Preceptor: a professional nurse who is primarily responsible for the practical teaching of nursing students in the clinical setting.

Nursing values: principles that guide decisions and actions in nursing practice.

Theory-practice gap: the discrepancy between what is taught in the classroom and what is being practiced in the healthcare institutions.

CHAPTER 3: OBJECTIVES

3.1 GENERAL OBJECTIVE

- To assess the knowledge and attitude towards nursing clinical preceptorship among nurse educators working in teaching institutions in Addis Ababa, Ethiopia.

3.2 SPECIFIC OBJECTIVES

- To assess the knowledge towards nursing clinical preceptorship among nurse educators working in teaching institutions in Addis Ababa, Ethiopia.
- To assess the attitude towards nursing clinical preceptorship among nurse educators working in teaching institutions in Addis Ababa, Ethiopia.
- To identify factors associated with nursing clinical preceptorship among nurse educators working in teaching institutions in Addis Ababa, Ethiopia.

CHAPTER 4: METHODOLOGY

4.1 STUDY AREA AND PERIOD

The study was carried out from April 2015 to May 2015 in Addis Ababa, Ethiopia. Addis Ababa is the capital of Ethiopia and according to the national census of 2007, its largest and most populous city with over 3.3 million people (50). Of over 150 registered higher education institutions nationwide, approximately half of them are found in Addis Ababa (51). For the purpose of this study, only nationally accredited governmental and privately owned health science teaching institutions located in Addis Ababa, who have a bachelor's degree programme in Nursing were considered. Hence, fourteen private teaching institutions and three governmental institutions with similar qualifications were identified and housed the educators that participated in this study (52).

4.2 STUDY DESIGN

An institution-based descriptive cross-sectional study design with mixed quantitative and qualitative approaches was implemented to assess the knowledge and attitude of nurse educators towards nursing clinical preceptorship.

4.3 SOURCE AND STUDY POPULATION

All randomly selected nurse educators with a minimum of six months of experience in teaching students, working as full timers or part timers in either governmental or private teaching institutions in Addis Ababa, Ethiopia.

4.4 ELIGIBILITY CRITERIA

4.4.1 Inclusion Criteria

Nurse educators having a teaching experience above six months in duration were included.

4.4.2 Exclusion Criteria

Nurse educators who have a teaching experience less than six months in duration and those who were not present in their work environments during the data collection period were excluded.

4.5 SAMPLING & SAMPLING TECHNIQUE

4.5.1 Sample Size calculation

Using the formula to calculate a single population proportion

$$n = \frac{(Z_{\alpha/2})^2 P(1-P)}{d^2}$$

While assuming n = minimum sample size desired, P =estimated proportion of nurse educators knowledge and attitude towards clinical preceptorship (50%), d = the margin of sampling error tolerated (5%) and $Z_{\alpha/2}$ = the standard normal variable at $1-\alpha\%$ confidence level (5%=1.96); the sample size was;

$$n = \frac{(1.96)^2 0.5(1-0.5)}{(0.05)^2} = 384$$

But, since the population at hand is less than 10,000, a correction formula was used to calculate the final sample size. Thus, n_f (final sample size) = $n_o / (1 + (n_o / N))$ where n_o = the calculated sample size and N = total number of participants in the selected teaching institutions. Therefore, the final sample size was $384 / (1 + (384 / 147)) = 106$. Finally, by adding a non-response rate of 10%, the sample size that was used in this study is 117.

Similarly, considering the saturation of data and the redundancy of information, the investigator purposively selected five individuals who participated in qualitative data gathering (in-depth interview). Two of the participants were health science college deans while three were

nursing department heads. In-depth interviews were carried out, aimed at identifying associated factors that are related to nursing clinical preceptorship, nursing education and clinical practice.

4.5.2 Sampling Technique

All the identified 17 (seventeen) teaching institutions who have an undergraduate program in nursing were considered for the study. Seven institutions, for ensuring maximum representativeness and the gathering of adequate sample size, were randomly selected and contained the educators that participated in the study. Keeping the total number of nurse educators in each college into consideration and using the final number obtained from the sample size correction formula, a proportion to size allocation was implemented to calculate the number of participants from the selected colleges. Finally, nurse educators that are available and present at their work settings participated in the quantitative data gathering; and repeated attempts were made until the desired number was reached. Purposively, the principal investigator selected five people involved in nursing education, two college deans and three nursing department heads, which participated in the in-depth interview for qualitative data gathering.

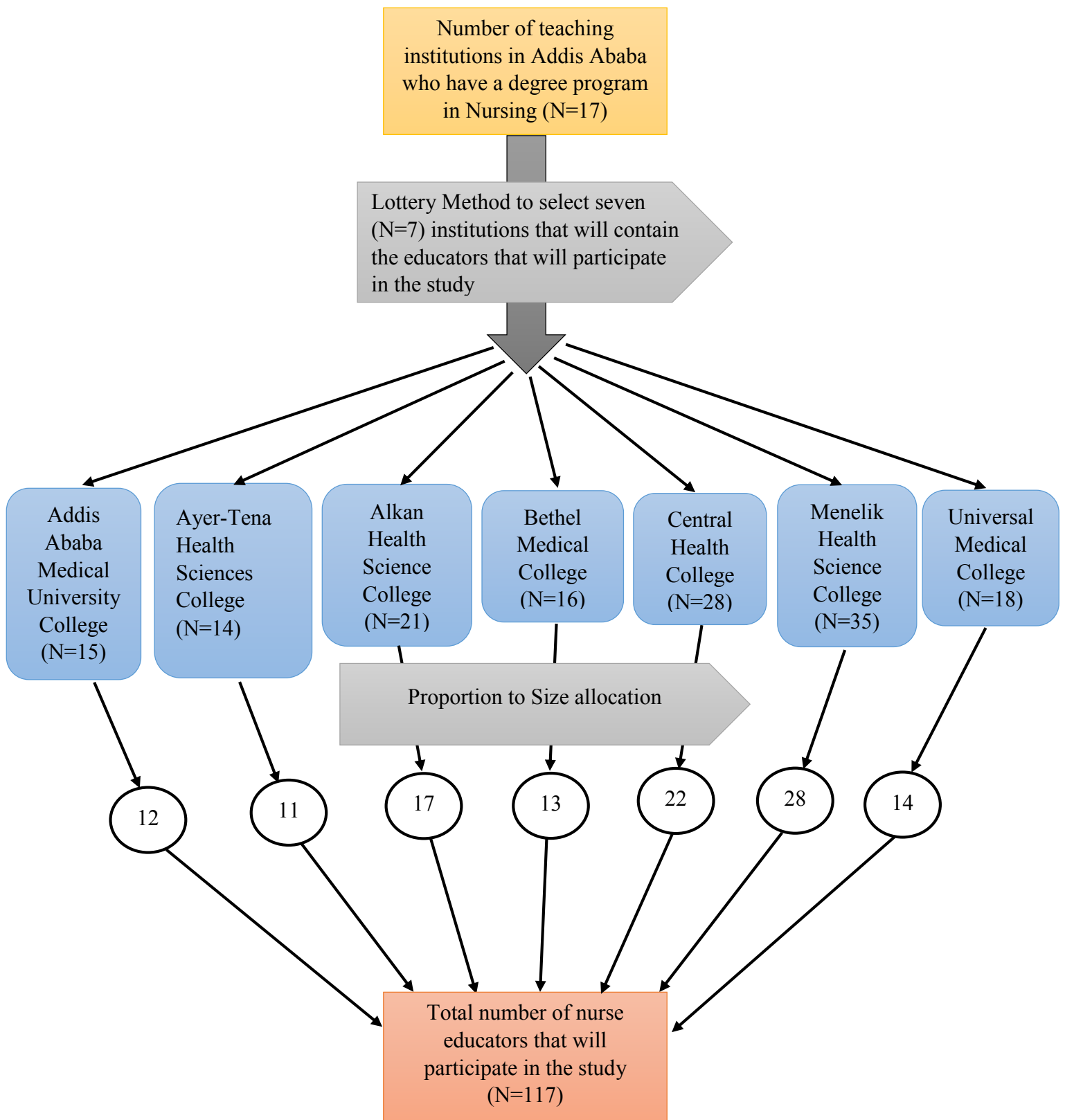


Figure 2: Schematic Presentation of the Sampling Procedure

4.6 VARIABLES

4.6.1 Dependent Variables

- i. Knowledge towards nursing clinical preceptorship
(familiarity with preceptorship, understanding the usefulness of clinical preceptorship, understanding the role required skills and qualifications of preceptors, identification of required pre-requisites for application of preceptorship)
- ii. Attitude towards nursing clinical preceptorship
(perceived usefulness of clinical preceptorship, opinions on application of clinical preceptorship, views regarding the qualifications attributes and knowledge of a preceptor, views on faculty educator and preceptor relationships, opinions regarding implementation and eventual challenges)

4.6.2 Independent Variables

- i. Socio-demographic characteristics
(*gender, work/teaching experience, educational status*)

4.7 OPERATIONAL DEFINITIONS

Knowledgeable: respondents are considered knowledgeable if they correctly answered more questions than the median score among the fourteen questions aimed at assessing knowledge towards nursing clinical preceptorship. Some items contained multiple responses thus, only participants who chose all the possible answers were classified as those who correctly responded to that specific question.

Not-Knowledgeable: respondents are considered not-knowledgeable if they answered less questions than the median score among the fourteen questions aimed at assessing knowledge towards nursing clinical preceptorship. Some items contained multiple responses thus, only

participants who chose all the possible answers were classified as those who correctly responded to that specific question.

Favorable Attitude: respondents are said to have favorable attitude if they answered ‘yes’, ‘very important’ or ‘important’ to more than 75% of the twelve questions aimed at assessing attitude towards nursing clinical preceptorship.

Unfavorable Attitude: respondents are said to have an unfavorable attitude if they answered ‘yes’, ‘very important’ or ‘important’ to less than 75% of the twelve questions aimed at assessing attitude towards nursing clinical preceptorship.

4.8 DATA COLLECTION AND INSTRUMENTS

4.8.1 Instruments

Quantitative data was collected by using a semi-structured questionnaire in English (Appendix II) which was designed to meet the study objectives. The questionnaire has three major parts; the first part consisting of demographic questions (gender, work experience, educational status), the second containing questions the aimed at assessing knowledge towards clinical preceptorship and the final section aimed at assessing attitude among nurse educators towards clinical preceptorship.

For qualitative data collection, five broad questions that enable to elicit abundant information associated with nursing clinical preceptorship were used to guide the in-depth interviews.

4.8.2 Data Collection Techniques

For quantitative data collection, the pre-tested self-administered semi-structured questionnaire were hand delivered to selected nurse educators and lecturers in their working environments. Written information sheet with a section of informed was attached to the questionnaire to ensure all participants get the same directions and information.

For qualitative data collection, the entirety of this phase was carried out by the principal investigator by using a semi-structured guideline containing probing question. Written informed consent was provided to the informants (college deans and nursing department heads), after arranging a comfortable interview time approximately 15-20 minutes in length. The interview was conducted in Amharic and recorded with an electronic voice recorder.

4.9 QUALITY CONTROL

The questionnaire for quantitative data collection was pre-tested on three nurse educators who are working at teaching institutions outside of the Addis Ababa region. After pre-test, some questions and wordings were arranged and modified. The data collection process was closely monitored by the principal investigator. The questionnaire is also provided in the original language of English, avoiding the need for translation and maintaining consistency of the questions and responses.

4.10 DATA PROCESSING AND ANALYSIS

The collected data was checked for completeness and inconsistencies before the analysis process. The responses for the completed questionnaires were coded and entered to the data entry template and later analyzed by using SPSS for Windows version 20. Descriptive statistics were used for describing variables and analysis was run to identify associations such as relationships between the components of the dependent variables as-well-as between the dependent and

independent variables. Bivariate and multivariate regression analysis were also computed to assess statistical association between variables. This was done by using odds ratio and significance of statistical association was assured or tested using 95% confidence interval and p value (<0.05). Finally the results were summarized and presented by texts, graphs, frequency tables and other summary statistics.

The voice recorded qualitative data was transcribed and translated to English under selected themes based on the questions that aim to assess factors associated with nursing clinical preceptorship and were summarized manually. The result was presented in narratives.

4.11 ETHICAL CONSIDERATIONS

Ethical approvals for the study was obtained from the Institutional Review Board (IRB) of the Department of Nursing and Midwifery, Addis Ababa University. For the data collection stages of both the qualitative and quantitative parts, a written Informed consent was provided to each participant, providing him/her with total autonomy towards participation or refusal. Confidentiality was assured by eliminating the need of providing a name in the questionnaires or interviews.

4.12 DISSEMINATION OF STUDY RESULTS

The findings was submitted and will be presented to Addis Ababa University, College of Health Sciences, Department of Nursing and Midwifery in a thesis defense which will mainly target the academic community. Moreover, the results will also be forwarded to various stakeholders concerned with nursing education, clinical practice, curriculum development and health quality improvement. There is also a plan of publishing the research on a reputable scientific journal so that it can be accessible for all, serving as a knowledge base and a reference for similar studies in the future.

CHAPTER 5: RESULTS

5.1 SOCIO-DEMOGRAPHIC CHARACTERISTICS

A total of 117 educators were identified from teaching institutions located in Addis Ababa, Ethiopia. Among these, eight did not take part in the study for either refusal of participation or submitting largely incomplete questionnaires. This resulted in a final sample size of 109 with a response rate of 93.1%.

Table 1: Socio-demographic characteristics of respondents, Addis Ababa, May 2015.

Variables	Frequency	Percentage
Gender		
Male	68	62.4
Female	41	37.6
Educational Qualification		
Bachelor's Degree	60	55.6
Master's Degree	44	40.7
Diploma	3	2.8
Doctorate Degree	1	0.9
Teaching Experience		
6 months – 1 Year	9	8.7
1 – 2 Years	22	21.2
2 – 4 Years	31	29.8
Above 4 Years	42	40.4

Among the 109 respondents, 68 (62.4%) were male and 41 (37.6%) were female. Moreover, 60 (55.6 %) of the respondents had an educational qualification of a Bachelor's degree whereas 44 (40.7%) reported to have a Master's degree. From the 104 nurse educators who gave a response to the question enquiring the duration of teaching experience, 42 (40.4%) said they have an experience exceeding four years.

5.2 NURSE EDUCATORS KNOWLEDGE TOWARDS NURSING CLINICAL PRECEPTORSHIP

Respondents were asked whether they know what clinical preceptorship is and 90 (82.6%) acknowledged that they do. Among these, 50 (56.8%) said that attending trainings and workshops was how they familiarized themselves with it. Hearing people talk about preceptorship with 19 (21.6%) and reading about it 12 (13.6%) were also the most frequently reported ways of familiarization with preceptorship. (*Figure 3*)

Apart from that, among the respondents who reported familiarity with the concept of nursing clinical preceptorship, 66 (74.2%) of educators said that their respective teaching institutions do apply nursing clinical preceptorship while 13 (14.6%) answered that their teaching institution do not apply clinical preceptorship. The remaining 10 (11.2%) said that they were not sure whether their institution applied clinical preceptorship or not.

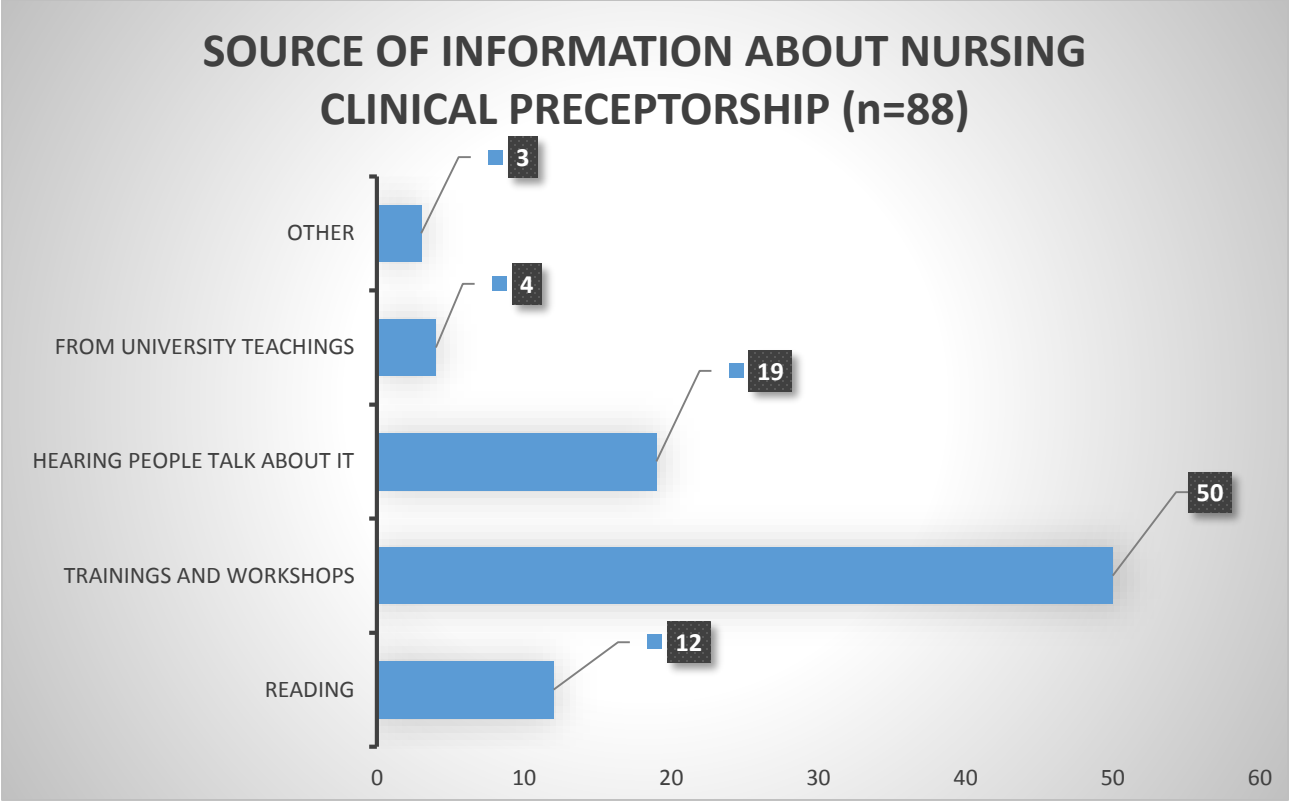


Figure 3: Source of information about Nursing Clinical Preceptorship among Nurse Educators, Addis Ababa, May 2015

Table 2: Distribution of knowledge of some basic concepts of nursing clinical preceptorship among nurse educators, Addis Ababa, May 2015.

Variable	Frequency	Percentage
Know what clinical preceptorship means		
Yes	90	82.6
No	19	17.4
Clinical preceptorship programs mainly take place in		
Hospitals/Healthcare Facilities	90	83.3
Classrooms	17	15.7
Both hospitals and classrooms	1	0.9
Main purpose of clinical preceptorship		
Develop clinical skills	37	33.9
Ease transition from being a student to being a professional	6	5.5
Both	66	60.6
A preceptor is **		
A facilitator of student success	56	51.4
A teacher, student advocate and performance evaluator	77	70.6
A professional role model	52	47.7
A resource person	22	20.2
none	1	0.9
The ideal ratio of preceptors to students		
1:1	20	18.5
1:3	26	24.1
1:5	60	55.6
Are teaching faculty responsible for the designation or assignment of a preceptor for each student		
Yes	72	67.9
No	33	31.1
Other		
Role of preceptors in clinical setting **		
Teaching clinical skills to students	74	67.9
Teaching nursing professional values to students	63	57.8
Effective coaching in integrating knowledge and practice	74	67.9
None	1	0.9

Table 2 Continued

Clinical preceptors should show or possess **		
Knowledge	77	70.6
Effective communication skills and collaboration	68	62.4
Reasoning and problem solving skills	76	69.7
Care, compassion and professionalism	53	48.6
Leadership	39	35.8
Responsibility(ies) of preceptors **		
Follow specific course policies as outlined by the faculty	57	52.8
Provide direct supervision of the student	70	64.8
Appreciate the level of knowledge and limitations of a student	51	47.2
Maintain professionalism	55	50.9
None	2	1.9
Should a preceptor demonstrate effective problem solving skills, compassion and care in professional practice		
Yes	95	88.8
No	11	10.3
Is clinical preceptorship a form of adult learning		
Yes	67	63.2
No	28	35.8
A faculty member can develop a practicum schedule based on the preceptors established work schedule		
True	83	79.8
False	21	20.2
Effective and timely communication is key to successful preceptor-faculty relationships		
Yes	99	95.2
No	5	4.8
Positive outcome(s) of preceptorship towards healthcare institutions **		
Increased recruitment of new nurses	61	56.0
Increased retention of those already in the workforce	49	45.0
Improved outcomes for patients	76	69.7

**** Indicates a multiple response question set. Respondents provided more than one answer for the questions and the total responses and the total percent of cases is indicated in the corresponding columns. Percentage will also not add up to 100 for these types of questions as multiple responses are expected.**

When asked about where clinical preceptorship programs mainly take place in of 90 (83.3%) of respondents answered hospitals and healthcare facilities. The majority of respondents, 66 (60.6%) responded that the main purpose of clinical preceptorship programs is to develop clinical skills as-well-as ease the transition into being a healthcare professional. Knowledge is the most frequently ticked response to a question that asked what characteristics a clinical preceptors should show or possess with 77 (70.6%) of the total 313 responses. Out of 107 respondents, 95 (88.8%) answered ‘yes’ to a question asking whether preceptors should demonstrate effective problem solving skills. Similarly, among a total of 106 respondents, 67 (63.2%) said that clinical preceptorship is a form of adult learning. (Table 2)

Table 3: Distribution of correct responses about knowledge towards nursing clinical preceptorship among nurse educators, Addis Ababa, May 2015.

No of correct answers	Frequency of respondents with correct answers	Percentages of respondents with correct answers	
3	1	0.9	Mean score = 7.33 Median score = 7.00 Maximum score = 13 Minimum score = 3
4	9	8.3	
5	10	9.2	
6	20	18.3	
7	22	20.2	
8	19	17.4	
9	11	10.1	
10	10	9.2	
11	2	1.8	
12	2	1.8	
13	3	2.8	

Fourteen questions were used to assess knowledge towards nursing clinical preceptorship. Scores for each knowledge related question were summarized and the responses categorized into two variables, namely correct and incorrect. Nurse educators who answered the questions that were

aimed at assessing knowledge towards clinical preceptorship correctly were classified in the correct responses category while respondents who gave incorrect or missing answers were classified in the incorrect category. Responses for multiple response questions were classified as correct only if all the possible correct answers were ticked by the respondents whereas missing answers to questions are classified as incorrect.

Based on the correct and incorrect responses each respondent gave, a count was made for each respondent. Then the aggregate scores of each of the 109 respondents were used to calculate mean, median and other descriptive statistics. Based on these results and the operational definition, respondents who have correctly answered more than the median among the questions that were aimed at assessing knowledge towards clinical preceptorship were to be considered as knowledgeable. Thus, out of the 109 respondents 7 was the median score among the 14 knowledge-related questions that were asked. (*Table 3*)

Based on this, the respondents were categorized as those who are knowledgeable about nursing clinical preceptorship and those who are not-knowledgeable about nursing clinical preceptorship. Thus, 62 (56.9%) of the 109 respondents were classified as not-knowledgeable, whereas the remaining 47 (43.1%) of the respondents were deemed to be knowledgeable.

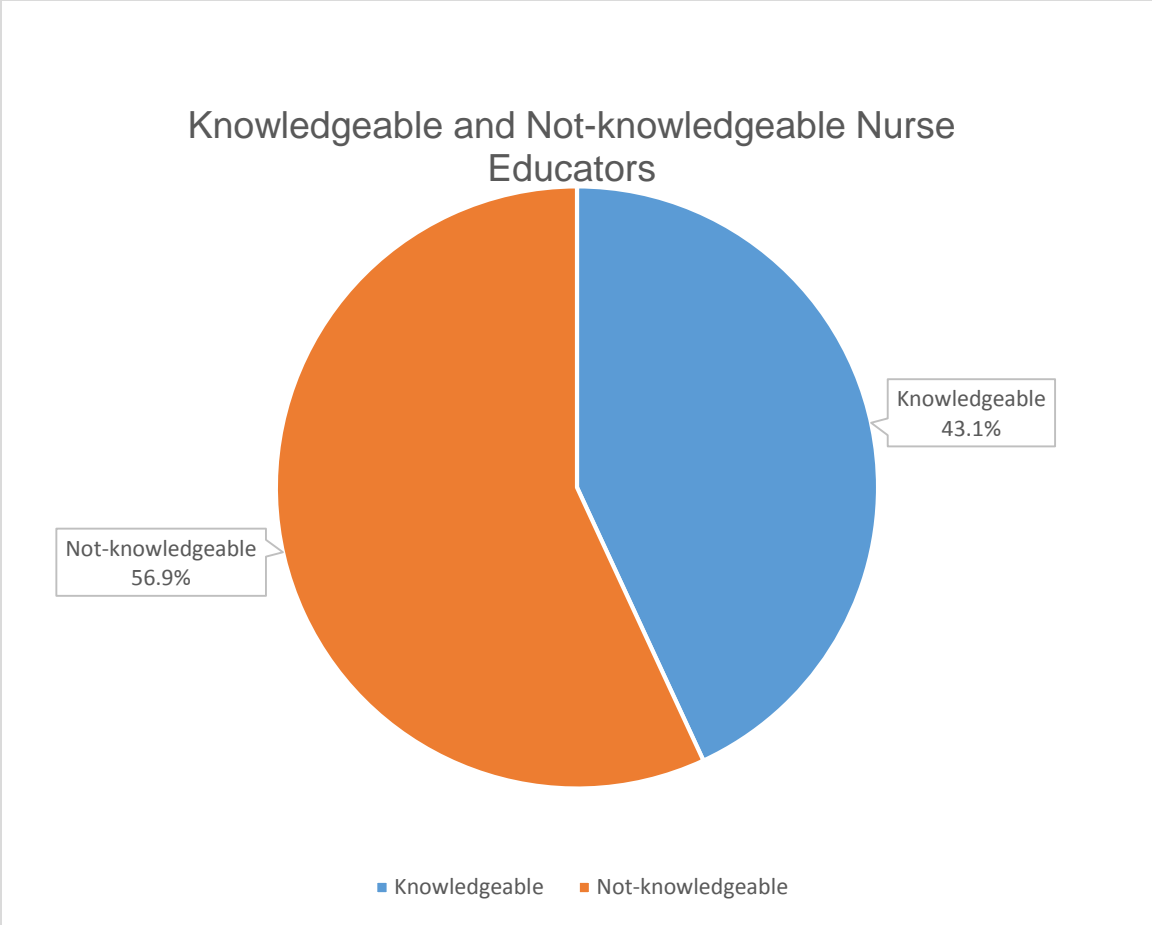


Figure 4: Distribution of Knowledgeable and Not-knowledgeable Nurse Educators towards Nursing Clinical Preceptorship, Addis Ababa, May 2015.

5.3 NURSE EDUCATORS ATTITUDE TOWARDS NURSING CLINICAL PRECEPTORSHIP

Nursing clinical preceptorship's usefulness was agreed with all the respondents (100%) while 88.9% said that it should be formally integrated to the nursing curricula and applied nationwide. All the participants (100%) stressed the importance of the theoretical and scientific knowledge to be a preceptor. (Table 4)

Table 4: Distribution of attitude related responses towards nursing clinical preceptorship among nurse educators, Addis Ababa, May 2015.

<i>Variable</i>	<i>Frequency</i>	<i>Percentage</i>
Is nursing clinical preceptorship useful for students, the profession and the public		
Yes	109	100
No	0	0.00
Can nursing clinical preceptorship enhance students practical skills and nursing values		
Yes	108	99.1
No	1	0.9
Should clinical preceptorship be integrated in the nursing curricula and be applied nationwide		
Yes	96	88.9
No	12	11.1
Is teaching ethical principles during clinical preceptorship important		
Yes	101	97.1
No	3	2.9
Is clinical preceptorship useful for educators and preceptors		
Yes	104	97.2
No	3	2.8
How important is having theoretical and scientific knowledge to undertake the role of a preceptor		
Very important	82	77.4
Important	24	22.6
Not important	0	0.00

Table 4 Continued

Is using preceptors who have a qualification other than nursing, in teaching and mentoring nursing students appropriate		
Yes	72	66.7
No	36	33.3
How important is the role of teaching faculty and educators in implementing an effective preceptorship program		
Very important	82	75.2
Important	25	22.9
Not important	2	1.8
Is having an adequate teaching skill necessary for being a good preceptor		
Yes	94	86.2
No	15	13.8
Should nurse educators be involved in enhancing the teaching skills of preceptors		
Yes	102	95.3
No	5	4.7
Should preceptors be involved in providing evaluation and feedback to students		
Yes	102	94.4
No	6	5.6
How important is an incentive or payment for the clinical preceptor in his/her role of teaching and mentoring students		
Very important	69	63.3
Important	33	30.3
Not important	7	6.4

**** Indicates a multiple response question set. Respondents provided more than one answer for the questions and the total responses and the total percent of cases is indicated in the corresponding columns. Percentage will also not add up to 100 for these types of questions as multiple responses are expected.**

Preceptors should have a minimum of a Bachelor's degree to undertake the role of being a preceptor according to 55 (50.9%) of 108 respondents, A diploma 24 (22.2%) and a Master's degree 20 (18.5%) were also reported as being the minimum education qualifications for being a preceptor. Correspondingly, 76 (70.4%) of the educators said that a clinical or work experience exceeding two years should be a requirement for being a preceptor, 13 (12.0%) said that an

experience of six months is enough to be a preceptor while 10 (9.3%) answered that no experience was necessary to undertake the role of being a clinical preceptor. A multiple response question asking the most important aspects in the selection of a preceptor found that a clinical experience exceeding two years was the frequently chosen response with 72 (66.1%) of the total 228 responses. This was followed by highly developed communication skills 62 (56.9%), desire for professional growth 56 (51.4%) and leadership skills with 38 (34.9%) of the overall responses.

From a total of 148 responses directed to a question asking which body should undertake the main responsibility towards the application of nursing clinical preceptorship, teaching institutions ranked first with 72 (66.1%) responses followed by hospitals with 54 (49.5%) and the government with 22 (20.2%) of the overall responses. Analogously, lack of funding and incentives or preceptors was the most frequently ticked response to a question asking the perceived challenges towards applying nursing clinical preceptorship in Ethiopia, with 67 (61.5%) of the total 162 responses. Inability or unwillingness to apply 63 (57.8%) and shortage of nurses or preceptors 29 (26.6%) were also identified as challenges towards the application of clinical preceptorship.

For the twelve questions targeted at assessing attitude, scores for each attitude related questions were summarized and the responses were categorized into two variables, namely positively and negatively worded. Nurse educators who have answered 'yes', 'very important' and 'important' were considered to use positive words and thus categorized as having favorable attitude; whereas respondents who answered 'no' or 'not important' and incorrect or missing answers were classified in the unfavorable attitude category. Only question with a dichotomous 'yes' or 'no' response and those with 'very important', 'important' and 'not important' answers were used for analyzing the attitude of nurse educators towards nursing clinical preceptorship.

After calculating the total count of the positively worded responses; mean, median and other descriptive statistics were calculated. Based on the operational definition, respondents who have answered ‘yes’, ‘very important’ and ‘important’ to more than 75% of the questions that were aimed at assessing attitude towards clinical preceptorship were to be considered as those who have favorable attitude. Accordingly, the respondents were categorized as those who had favorable attitude about nursing clinical preceptorship and those who had an unfavorable attitude about nursing clinical preceptorship.

Accordingly, 105 (96.3%) of the 109 respondents were classified as having favorable attitude, whereas the remaining 4 (3.7%) of the respondents had an unfavorable attitude towards nursing clinical preceptorship. (*Figure 5*)

Favorable and Unfavorable Attitude towards Nursing Clinical Preceptorship

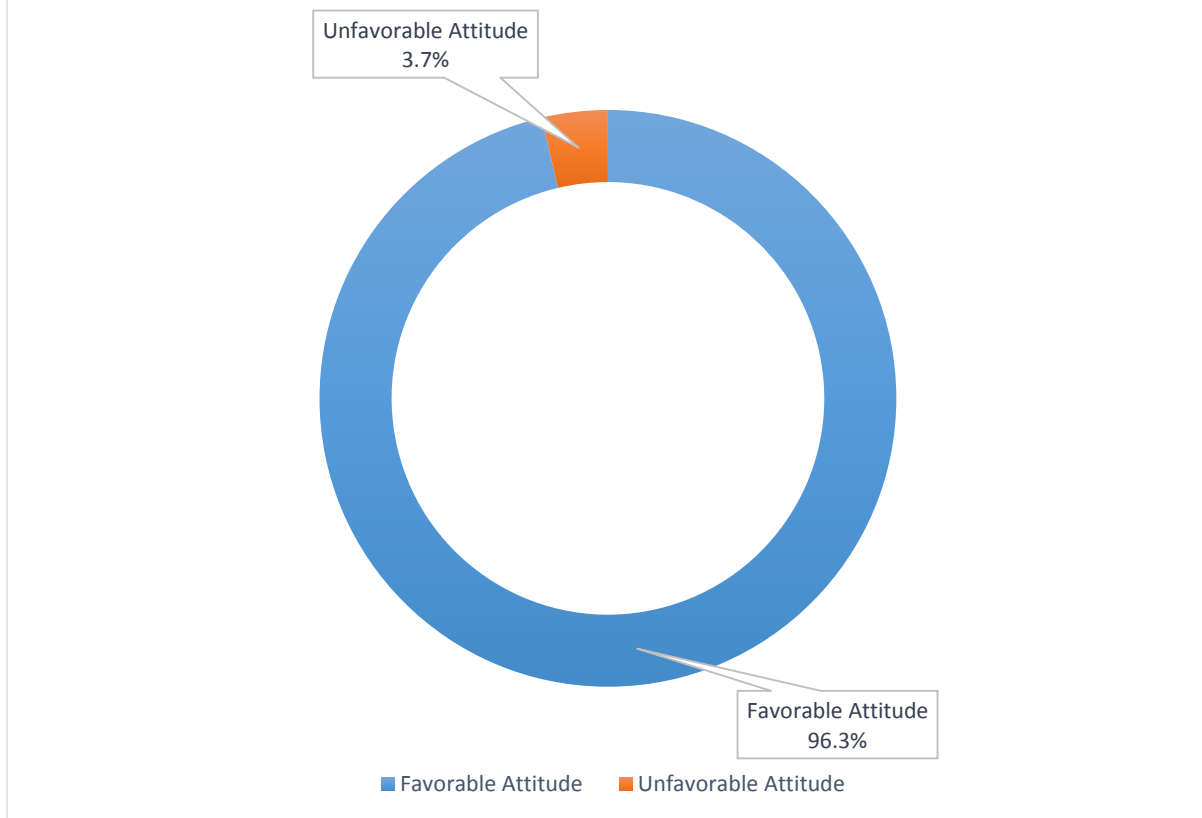


Figure 5: Favorable and Unfavorable Attitude towards Nursing Clinical Preceptorship among Nurse Educators, Addis Ababa, May 2015.

5.4 STATISTICAL ANALYSIS

Logistic regression analysis was carried out, which showed that current educational qualification of nurse educators and years of teaching experience have a statistically significant association with knowledge towards nursing clinical preceptorship (with p-value <0.05 at 95% CI). However, the gender of respondents and other concepts related with clinical preceptorship such as expressed familiarity with preceptorship and source of information about preceptorship, showed no statistically significant association with knowledge towards nursing clinical preceptorship.

Table 5: Results of multiple logistic regression analysis for knowledge towards nursing clinical preceptorship among nurse educators by selected socio demographic characteristics, Addis Ababa, May 2015

Characteristics	Knowledge towards Clinical Preceptorship		Crude OR (95% CI)	Adjusted OR (95% CI) **
	Knowledgeable	Not-knowledgeable		
Current Educational Qualification:				
Bachelor's Degree	20 (42.6%)	40 (65.6%)	0.346 (0.155, 0.775)	0.377 (0.150, 0.948)*
Master's Degree	26 (55.3%)	18 (29.5%)	1.00	1.00
Teaching Experience in years:				
Six months – 1 year	1 (2.2%)	8 (13.8%)	0.077 (0.09, 0.674)	0.088 (0.010, 0.796)*
1 – 2 years	10 (21.7%)	12 (20.7%)	0.513 (0.180, 1.458)	0.905 (0.284, 2.889)
2 – 4 years	9 (19.6%)	22 (37.9%)	0.252 (0.093, 0.681)	0.368 (0.128, 1.056)
Above 4 years	26 (56.5%)	16 (27.6%)	1.00	1.00

* Significant at p-value <0.05

** Adjusted for selected socio-demographic variables

Regarding the relationship between nurse educators' knowledge towards nursing clinical preceptorship and their educational qualification, those who have a Bachelor's degree were found

to be less knowledgeable than educators holding a Master's degree with an AOR of 0.377 and 95% CI (0.150, 0.948). Additionally, nurse educators with a teaching experience between six months to one year were found to be less knowledgeable than their counterparts who have been teaching for more than four years (AOR= 0.088 and 95% CI (0.010, 0.796)). (Table 6)

Moreover, there was a statistically significant evidence of relationship between educators' view of the minimum educational qualification to be a preceptor and their responses to the ideal work/clinical experiences the preceptors should have. ($\chi^2(25)=53.007$, p-value < 0.05). However, the likes of gender, education qualification, teaching experience and other concepts related to attitude towards nursing clinical preceptorship showed no statistically significant association with the educators overall attitude towards clinical preceptorship.

5.5 QUALITATIVE DATA RESULTS

As stated in the sampling procedure, a total of five individuals, two college deans and three nursing department heads, participated in the interview. All had experiences related to the provision of nursing education and are working in teaching institutions in Addis Ababa, Ethiopia. Participants are referred to as P1-5 and each interview was conducted using a semi-structured interview guideline with probing questions linked to nursing education, with a particular focus on the clinical practice aspect. Main themes of the conversations are used as sub-headings.

Current Provision of Nursing Education

Participants were asked to forward their opinion on the state of the current nursing education provision in the country. Thus, some participants agreed the theoretical aspect of the educational provision is progressing well, many raised major concerns on the clinical practical aspects of nursing education. Issues such as shortage of clinical demonstration materials, practice settings and hospitals as-well-as lack of clinical skill proficiencies of educators were reported. One participant in the interview said this;

P1: “to some extent there is an observed improvement in nursing education. However, issues such as shortage of teaching materials and clinical demonstration rooms are hindering its overall progress”

Other participants supported the opinions of P1 by saying;

P3: “Though the theoretical aspect of nursing education is good, there is an imbalance between the number of students and the number of healthcare facilities the students can practice in. Even in the presence of hospitals, most are reluctant to let students practice in their facilities”

P5: “In-terms of clear set, standard curriculums and modularized theoretical education; nursing education has improved dramatically. But basic nursing components such as teaching and practicing nursing ethics are slowly being eroded away”

However, one participant claimed that the current state of nursing education in Ethiopia is in decline. He reported that issues such as the shortage of skilled and proficient nurse educators is derailing its progress;

P2: “I do not believe there is a progress in nursing education. In fact, I believe that the provision of the education together with the profession are in decline. There are policies to maintain the quality of the educational system, but unfortunately it is only on paper terms and it is not being applied. Novice educators are usually not skillful in clinical terms and they are not confident enough to teach clinical aspects to students. Lack of standards are also an issue, for example, you cannot clearly see the difference in knowledge and skills between nurses who have a bachelor’s degree and those holding a diploma”

The theory-practice gap

Participants said that there is a very apparent gap between what is thought in the classrooms in form of theoretical education and what is being practiced in the hospitals and healthcare facilities. An excerpt from the interviews read as;

P1: “There is a clear theory-practice gap in nursing education in Ethiopia. One of the reasons is because lecturers do not properly accompany students to the clinical practice setting. Even if they do, there is a visible lack of clinical skill that is observed in the educators”

P2: “A very wide gap exists between theory and practice. The increasing number of students makes it very difficult to teach clinical skills individually, in a proper manner. There used to be 15-20 students per classroom a few years ago but nowadays the number usually exceeds 50 ... A clear

mismatch also exists between the number of healthcare institutions and the number of students, which also is an obstacle in teaching practical skills to students”

P5: “Yes, there is a gap. Nursing education has a strong scientific base but that is rarely applied in hospitals. Unless we try to curb that, the gap will continue to widen”

P4 raised a rather different point by saying;

P4: “... feedback and evaluation systems are contributors to the observed theory-practice gap. Unlike evaluation methods for theoretical education, practical teachings lack proper evaluation and the students are usually not assessed properly, which will result in unskilled graduates in the nursing workforce ...”

Main challenges to students’ clinical practice

There were some challenges that were frequently reported by the participants, which were related to the clinical practice aspect of students. Shortage of practical settings and materials, lack of professionalism, irresponsibility and reluctance to accept changes among nurses were some of the points that were raised.

P1, P3 and P5 raised similar points. They said that the shortage of clinical practice settings were the major obstacles faced.

P1: “There are many problems linked to students’ clinical practice assignments to hospitals, one of these is shortage of healthcare facilities to practice in. Hospitals in Addis Ababa are usually packed to the limits with nursing students from different institutions, and it is common to see up-to 30 students in a single ward”

P3: “The policies support the production of vast quantities of health professionals. However, there is a clear discrepancy between the number of students and the eligible clinical practice settings.

This is coupled with the shortage of clinical practice materials in both demonstration rooms and hospitals.”

P5: “the demand and supply between the number of students and practicing faculties are not on par, it is very tough to assign students to practice in hospitals and healthcare facilities”

P2 raised a slightly different challenge;

P2: “... often there are disagreements between teaching institutions and hospitals that mainly stem from individual interests. For us to send our students to practice in hospitals, we have to pay a substantial amount of money for the institution and for the preceptors ...”

Issues related to hospital staff and nurses in particular were also mentioned as challenges faced during clinical practice. Lack of responsibilities, displaying minimal professionalism, being careless in handling students and showing adamance to learn and apply new things were reported by the participants. For example;

P1: “staff nurses who have been working for a long duration of time are not usually willing to learn or apply new and scientific ways of practicing nursing. Students mimic these and they will see a difference on how they learn nursing procedures in the classrooms and how it is actually being done in the hospitals”

P4: “... healthcare professionals in the hospitals want to apply what they have learned years ago and are resistant to change”

P5 also supported this claim and also mentioned the minimal interest shown by students;

P5: “... senior nurses are mostly unmotivated to help fellow student nurses and are not showing the professionalism expected ... In addition, students sometimes show minimal attention and interest towards their clinical practice ...”

Application of preceptorship

All participants said that their respective institutions do apply clinical preceptorship, though they all agreed that the system is at its early stages and it has many flaws. Majority of the participants reported that the payment of incentives for preceptors is a must, not an option;

P1: "We do apply preceptorship. Hospital nurses take the main responsibilities of taking care of students whilst in the hospitals. We do offer payments for nurses, we have to. I think it is a good motivator"

P2: "...nowadays offering payments to preceptors is a must or else it is almost impossible for students to practice in hospitals. Unfortunately, there is no clearly set payment amount for the preceptors and sometimes that creates problems ..."

One participant said the standard ratio of preceptor to student is questionable;

P4: "The standard of preceptor to student that is forwarded from the authorities is 1 to 12. This number is large and it makes effective mentoring very difficult"

Role of nurse educators in clinical practice

According to the majority of participants, the role of nurse educators and lecturers in the clinical setups is often inadequate. Conflict of interests with hospital staff, lack of clinical skills in the educators and lack of mandates supporting educators' involvements were raised. All reported that educators should be more involved in the clinical teaching of students.

P5 said;

P5: "educators are clearly not involved in clinical areas as they are in the classrooms. This is not ideal for students and it needs to change"

P2: “nurse educators should be involved more in the clinical teachings. They should be able to link theoretical teachings with real-life scenarios. However, even when educators accompany students to the hospitals, they will usually be conflicts with the staff. The nurses would feel that they will lose their monetary interests if the educators are present in the hospitals. In addition, the educators are sometimes not skillful enough and they prefer to undertake classroom teachings only”

P4 supported this by saying;

P4: “There is no mandate that supports the rights of the educators to be present in the clinical areas. If there were such policies, it would be much easier and productive”

CHAPTER 6: DISCUSSION

The main purpose of this research was to examine the overall knowledge and attitude of nurse educators towards nursing clinical preceptorship. In both the national and international contexts, studies that specifically aim to assess the existing awareness, knowledge or outlook of nurse educators towards nursing clinical preceptorship are practically absent. The study has attempted to address this by assessing the level of knowledge and attitude towards nursing clinical preceptorship and identify factors associated with nursing clinical preceptorship.

The study showed that 90 (82.6%) of the 109 respondents claimed to be familiar with the concept of nursing clinical preceptorship. However, only 47 (43.1%) were later found to have adequate knowledge about nursing clinical preceptorship. In another research which has the utmost similarity though being different in what it aimed to assess, a Nigerian study aimed at finding out educators' knowledge and belief towards Evidence-based Practice, found that among 88% of respondents who claimed to have knowledge towards EBP, 65% were later found to be not-knowledgeable (35).

The study also reports that 96.3% of the respondents were classified as having a favorable attitude, while a statistically significant association was found between the level of knowledge towards nursing clinical preceptorship and the educational qualification as-well-as the teaching experience of the educators. Another study which assessed knowledge and attitude among nurse educators towards another similar concept, EBP, found that 88.6% of Iranian nurse educators had positive attitudes towards EBP and there was a significant relationship between the level of knowledge, the educational qualification and the work experiences of the lecturers (33). Similarly, another study from Egypt assessing attitudes and barriers towards EBP among nursing educators, found that a positive attitude towards evidence-based practice was generally found to increase with advancing

educational level, academic ranking, years of experience in teaching and research role (34). This shows that teaching faculty are not adequately knowledgeable when it comes to newer concepts in nursing education, considering that both EBP and clinical preceptorship are relatively recent concepts. On the contrary, it can be seen that there is a largely positive outlook when it comes to applying these programs and concepts.

Training and workshops (56.8%) were the most reported modality of knowing about clinical preceptorship. This might indicate that trainings are a major way of acquiring knowledge about newer concepts in healthcare and education. This study also identified that knowledge towards clinical preceptorship is significantly related to the educators educational qualification and teaching experiences. This could be due to the fact that the longer and deeper an educator is exposed to nursing and nursing education in general, there is a tendency to know more and be exposed to concepts like clinical preceptorship.

Educators in this study identified that a preceptor's main roles are being a performance evaluator (70.6%), a professional role model (47.7%) and a resource person (20.2%). In another research, students nurses and preceptors in South Africa identified acting as role models, acting as resource people for students and doing a formative and summative evaluation of students as the main responsibilities of preceptors (14). Teaching clinical skills to students (67.9%) and teaching professional values to students (57.8%) were also found to be the most chosen answers for a question assessing what the role of a preceptor is; which are congruent with a research that indicates the most important features of a preceptor are personal qualities, clinical and teaching skills and motivation (Burke 1993, as cited by (53)). Shamian & Inhaber (1985), cited by (53), believed that the desire for professional growth should be considered as criteria for the selection

of the preceptors, which is also supplemented by this study where 51.4% of responses identified desire for professional growth as an important aspect in the selection of a preceptor.

According to educators who participated in this study, knowledge is the most important character a preceptor should possess (70.6%), which is in-line with what was studied in the UK where preceptors viewed knowledge of the clinical area as their “greatest asset” (54). Majority (74.2%) of respondents also said that their respective teaching institutions do apply clinical preceptorship, similarly a study in the US found that 85.9% of surveyed 158 school deans and directors said that their institutions used preceptorship programs (4) while a study in Canada found that 70% of Canadian Schools of Nursing used preceptorship programs (Myrick and Barrett 1992, as cited by (4)).

The overwhelming majority of respondents displayed favorable attitude towards clinical preceptorship programs. They expressed that it is useful (100%) and it should be a critical component of the nursing curricula nationwide (88.9%). This points that educators are ready to further implement and integrate preceptorship to nursing education.

In addition, this study also found that an educational qualification of a Bachelor’s degree (50.9%) is the most frequently chosen response to a question asking what the minimum educational qualification of a preceptor should be, while analogously, a clinical experience of two years or more (70.4%) was the minimum that a preceptor should have. A research from the US also supports this by reporting that a minimum of a baccalaureate degree (79.1%) and two years of experience (32.3%) were the most frequently chosen responses to a question enquiring minimum educational qualification and years of practices for the selection of preceptors (4). Thus, the similarities in these two results emphasizes that preceptors should be clinically skillful and be backed by sound theoretical knowledge. Furthermore, 95.3 % of respondents in this study said that educators should

be involved in enhancing the teaching skills of respondents. Another study supports this by reporting that preceptors' teaching skills should be nurtured by teaching staff (55).

Providing incentives for preceptors is considered to be an important aspect in the application of preceptorship programs with 93.6% of educators supporting it. This is backed by the results of the qualitative data, where participants reported that giving payments is useful, though some did mention that the payments offered to preceptors are often obligatory. The fact that 66.1% of responses identified teaching institutions as the primary bodies that should take the main responsibility in the effective implementation of nursing clinical preceptorship stresses that educators view teaching faculty as vital players in the eventual successes of preceptorship programs. Lack of funding or incentives for preceptors (61.5%) and unwillingness to apply (57.8%) were also identified as challenges towards preceptorship which means that perceptions regarding preceptorship and lack of finances are still a potential obstacle for clinical preceptorship in general.

As it was learnt from the in-depth interviews, the discrepancy between the number of students and the number of health care facilities to practice in, are a huge challenge for teaching institutions in Addis Ababa. This is likely because of the ever increasing number of nursing students and the limited number of hospitals and healthcare institutions in the capital. It is also a major area of concern for the educational provision in general, playing a huge role in widening the theory-practice gap because lack of practical opportunities will mostly result in unskilled nursing graduates. Questionable professionalism and irresponsibility that was displayed by nurses and hospital staff when handling students who are on clinical practices has a negative effect on students' clinical stay. This is supported by a study analyzing students learning experiences in

clinical settings, where good relationships and communications with hospital staff together with providing practice opportunities to students was important for effective clinical learning (27).

In accordance with the findings of this study, theory-practice gap has been reported as a major source of concern for nursing education globally; where students from multiple countries reporting that there are disparities between what is learnt in classrooms and the actual practice in clinical settings (27).

Participants of the in-depth interview in this study often mentioned that nurse educators' role in clinical practice was not enough and it should be multi-faceted. They added that educators are often on-lookers in clinical teachings, emanating from lack of clinical skills and/or conflicting relationships with hospital staff. Research agrees with this, it is stated that the role of nurse educators should be diverse and should include student support, directing, monitoring, troubleshooting and advocating (38). Similar to this, another study found that nurse educators role in clinical teachings focused more on evaluation than the actual teaching and supervision of students (Sharif and Masoumi 2005, as cited by (27)). Students in Oman also shared the same views as the educators that participated in this study by expressing that continuous supervision, ongoing feedback, interpersonal relationships and personal support from nurse educators are useful in the clinical practice (22). Minimal supervision of students by nurse educators was also reported in this study. A study in Malawi assessing students' perceptions of nurse educators' role also supported this and added that educators role in clinical setting should be maximized (43).

In addition, as displayed in the qualitative results; despite being in its early stages, clinical preceptorship is being applied by some teaching institutions. According to a study, Ghanaian nursing schools were reportedly applying preceptorship; although it also was reportedly not well established (13). Related to this, the recommended ideal preceptor to student ratio is 1 to 1 (10).

However, only 18.5% of respondents in the questionnaires answered this correctly while a participant of the in-depth interview mentioned that a preceptor to student ratio of 1 to 12 was the recommended ratio in the national setup. High preceptor to student ratio is also reported in Ghanaian nursing education setup, where the number generally exceeds 1 to 5 (13). Though the ratio of a single preceptor to student might be impractical to apply in healthcare setups in developing nations, usually due to the shortage of nurses, a high preceptor to student allocation is likely to obstruct effective clinical teaching.

CHAPTER 7: STRENGTHS AND LIMITATIONS OF THE STUDY

7.1 STRENGTHS OF THE STUDY

The major strength of this research lies in the fact that it has attempted to provide answers for a newer research question. That is, assessing the knowledge and attitude towards nursing clinical preceptorship among nurse educators working in teaching institutions in Addis Ababa, Ethiopia. Thus, it can be a valuable baseline data for future studies related to nursing education and practice. In addition, the use of a supplementary qualitative study approach has helped in the gathering of a richer data that can be a reference for future researches.

7.2 LIMITATIONS OF THE STUDY

The questionnaire that was used for quantitative data gathering was designed by the principal investigator for the purposes of this study. Hence, being a non-standard questionnaire might limit the reliability and exhaustibility of the study's findings. Moreover, the lack of literature in both national and international settings for comparing the results of the study should be considered and this study is hoped to be an input to this regard.

CHAPTER 8: CONCLUSIONS

Based on the findings of the study, the following are concluded:

- Less than half of nurse educators were found to be knowledgeable about nursing clinical preceptorship and its related concepts.
- The overwhelming majority of respondents had a favorable attitude towards nursing clinical preceptorship.
- Existing knowledge towards nursing clinical preceptorship among educators tends to increase with advanced education and longer teaching experiences.
- Discrepancies between the number of practice facilities and the number of students are major obstacles for students' practical attachments.
- Widening theory-practice gap and inadequate involvement of nurse educators in clinical teachings are additional challenges for students' clinical learning.

CHAPTER 9: RECOMMENDATIONS

By considering the results of the study, the following recommendations are forwarded:

1. Though as a new and preliminary study, the results of the research represent a good endeavor to recognize the state of nursing clinical preceptorship in Ethiopia, further studies assessing nursing clinical preceptorship and those focusing on assessing the state of nursing education with special focus on clinical practice teachings, should be conducted.
2. Authorities involved with educational quality improvement, policy development and healthcare provision need to scale up their involvements in matters related to nursing education and quality assurance. A particular focus should be on advocating for and enhancing the clinical practical skills of students.
3. Institutions should equip their faculty and staff with adequate knowledge regarding clinical preceptorship and other matters related with nursing clinical practice.
4. Teaching institutions should pay a great attention to the further integration of clinical preceptorship in their teachings along with enhancing clinical practice learning. Using educators with ample clinical skills and improving practical demonstration rooms also needs attention.
5. Healthcare professionals, particularly nurses should feel an increased responsibility in supporting student nurses during their practical attachment stay in hospitals.
6. Hospitals and healthcare institutions should play their part in clinical education, supporting nursing students' during their stay in their respective institutions and involving them in the healthcare provision.

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APPENDIX I: INFORMATION LETTER AND CONSENT FORM

Title of Research: Knowledge and Attitude towards Nursing Clinical Preceptorship among Nurse Educators Working in Teaching Institutions in Addis Ababa, Ethiopia.

Institution: Addis Ababa University, College of Health Sciences, School of Allied Health Sciences, Department of Nursing and Midwifery (Graduate Program)

Principal Investigator: Andreas Admassu, Masters of Science in Nursing student, Mobile - +251911418501, E-mail: imagineandreas@yahoo.com

Advisor: Daniel Mengistu, Assistant Professor

Background Information: It is known that nursing is a practice based profession that is built on theoretical knowledge, both of which are gained through a programme of nursing education. Clinical practice is where students will gather real-life experiences and skills that will immensely help both in the clinical setting and outside of it. This study is focus is nursing clinical preceptorship, which is concerned with students' clinical practice, with the fundamental aim of assessing the knowledge and attitude of nurse educators towards it.

Why should I participate in the study? Your participation in this study will help in understanding the existing awareness and perspective of nurse educators towards clinical preceptorship. This will in-turn result in identifying key statistics and patterns related to clinical preceptorship as-well-as constructing a base for further research for nursing education curriculum and policy review.

Do I have to participate in the study? Participation in this study is voluntary, and you have the right to refuse. All responses provided will be held in strict confidentiality.

What are the risks of participating? There is no harm of any degree associated with participating in this research, other than a few minutes of your precious time.

Are you willing to Participate in this study? If your response is yes, place your signature in the space below and please continue to the next page.

Signature: _____

Date: _____

APPENDIX II: QUESTIONNAIRE

GENERAL INSTRUCTIONS: THIS QUESTIONNAIRE WAS DEVELOPED TO ASSESS THE KNOWLEDGE AND ATTITUDE TOWARDS NURSING CLINICAL PRECEPTORSHIP AMONG NURSE EDUCATORS WORKING IN TEACHING INSTITUTIONS IN ADDIS ABABA, ETHIOPIA. THE QUESTIONNAIRE HAS THREE PARTS, EACH ASKING QUESTIONS REGARDING SOCIO-DEMOGRAPHIC CHARACTERISTICS, KNOWLEDGE AND ATTITUDE RELATED TO NURSING CLINICAL PRECEPTORSHIP. PLEASE READ THE INSTRUCTIONS AND QUESTIONS CAREFULLY BEFORE PRECEDING TO ANSWERING THE QUESTIONS.


Part I: Questions assessing the Socio-demographic characteristics of respondents

Instructions: Please circle the number in front of the option you choose. If you are asked to write a response, please do in the blank space provided.

Q. no.	Questions	Responses	Skip to
101	What is the name of Educational Institution or College you work in?	_____	
102	What is your gender?	1. Male 2. Female	
103	What is your current educational qualification?	1. Bachelor's Degree 2. Master's degree 3. Doctorate degree 4. Other (specify) _____	
104	How long is your teaching experience (in years)?	1. Six months – 1 year 2. 1 – 2 years 3. 2 – 4 years 4. Above 4 years 5. Other (specify) _____	

Part II: Questions assessing knowledge towards clinical preceptorship

Instructions: Please circle the number in front of the option you choose. If you want to write a response instead of choosing among the alternatives, please do in the blank space provided. If you are asked to “circle all that apply” you can provide more than one answer to the question. If there is a ‘skip to’ option next to the option you have answered, you can jump straight to the question number indicated.

Q. no.	Questions	Responses	Skip to
201	Are you familiar with nursing clinical preceptorship?	1. Yes 2. No 	203

202	If your response to the question above is 'Yes', how did you come to know about nursing clinical preceptorship?	<ol style="list-style-type: none"> 1. Reading 2. Training/Workshops 3. Heard people talk about it 4. Other (specify) _____ 	
203	Does your teaching institution apply nursing clinical preceptorship programs?	<ol style="list-style-type: none"> 1. Yes 2. No 3. I am not sure 	
204	Clinical preceptorship programs mainly take place in?	<ol style="list-style-type: none"> 1. Hospitals/Healthcare Facilities 2. Classrooms 3. Other (specify) _____ 	
205	The main purpose of clinical preceptorship to students is to?	<ol style="list-style-type: none"> 1. Develop clinical skills 2. Ease transition from being a student to being a professional 3. Both 	
206	A preceptor is? (circle all that apply)	<ol style="list-style-type: none"> 1. A facilitator of student success 2. Teacher, student advocate & performance evaluator 3. Professional role model 4. Resource person 5. None 6. Other (specify) _____ 	
207	The ideal ratio of preceptor to students is?	<ol style="list-style-type: none"> 1. 1:1 2. 1:3 3. 1:5 	
208	Are teaching faculty (educators) responsible for the designation or assignment of a preceptor for each student?	<ol style="list-style-type: none"> 1. Yes 2. No 3. Other (specify) _____ 	
209	What is/are the role/s of preceptors in the clinical setting? (circle all that apply)	<ol style="list-style-type: none"> 1. Teaching clinical skills to students 2. Teaching nursing professional values to students 3. Effective coaching in integrating knowledge and practice 4. None 5. Other (specify) _____ 	

210	Clinical preceptors should show or possess? (circle all that apply)	<ol style="list-style-type: none"> 1. Knowledge 2. Effective communication skills and collaboration 3. Reasoning and problem solving skills 4. Care, compassion and professionalism 5. Leadership 6. None 7. Other (specify) _____ 	
211	Which is/are responsibility/ies of preceptors? (circle all that apply)	<ol style="list-style-type: none"> 1. Follow specific course policies as outlined by faculty 2. Provide direct supervision of the student 3. Appreciate the level of knowledge and limitations of a student 4. Maintain professionalism 5. None 6. Other (specify) _____ 	
212	Should a preceptor demonstrate effective problem solving skills and show compassion and care in professional practice?	<ol style="list-style-type: none"> 1. Yes 2. No 3. Other (specify) _____ 	
213	Is clinical preceptorship a form of adult learning?	<ol style="list-style-type: none"> 1. Yes 2. No 3. Other (specify) _____ 	
214	A faculty member or student can develop a practicum schedule based on the preceptors established work schedule?	<ol style="list-style-type: none"> 1. True 2. False 3. Other (specify) _____ 	
215	Effective and timely communication is key to successful preceptor-faculty relationships?	<ol style="list-style-type: none"> 1. Yes 2. No 3. Other (specify) _____ 	
216	Which of the following can be positive outcome(s) of preceptorship programs towards healthcare institutions? (circle all that apply)	<ol style="list-style-type: none"> 1. Increased recruitment of new nurses 2. Increased retention of those already in the workforce 3. Improved outcomes for patients 4. Other (specify) _____ 	

Part III: Questions assessing attitude towards clinical preceptorship

Instructions: Please circle the number in front of the option you choose. If you want to write a response instead of choosing among the alternatives, please do in the blank space provided. If you are asked to “circle all that apply” you can provide more than one answer to the question.

Q. no	Questions	Responses	Skip to
301	Do you think that nursing clinical preceptorship programs are useful to students, the profession and the public?	1. Yes 2. No 3. Other (specify) _____	
302	Do you believe that nursing clinical preceptorship programs will enhance students' practical skills and nursing values?	1. Yes 2. No 3. Other (specify) _____	
303	Should clinical preceptorship programs be integrated in the nursing curricula and applied nationwide?	1. Yes 2. No 3. Other (specify) _____	
304	Do you think that teaching ethical principles is important during clinical preceptorship?	1. Yes 2. No 3. Other (specify) _____	
305	In your view, to undertake the role of being a preceptor, the nurse should have an educational qualification of?	1. A diploma 2. A bachelor's degree 3. A master degree 4. No qualification is needed 5. Other (specify) _____	
306	In your view, to undertake the role of being a preceptor, the nurse should have a work/clinical experience of?	1. no experience required 2. six months 3. less than a year 4. more than a year 5. more than two years 6. Other (specify) _____	
307	Which of the following do you think is the most important aspect/s in the selection of a preceptor? (circle all that apply)	1. A minimum of two years of clinical experience 2. Leadership skills 3. A desire for professional growth 4. Highly developed communication skills 5. None 6. Other (specify) _____	

308	Other than their benefits for the students, do you think that clinical preceptorship programs are useful for educators and preceptors?	<ol style="list-style-type: none"> 1. Yes 2. No 3. Other (specify) _____ 	
309	How important is having theoretical and scientific knowledge to undertake the role of a preceptor?	<ol style="list-style-type: none"> 1. Very important 2. Important 3. Not important 4. Other (specify) _____ 	
310	Do you believe that using preceptors who have a qualification other than nursing, in teaching and mentoring nursing students is appropriate?	<ol style="list-style-type: none"> 1. Yes 2. No 3. Other (specify) _____ 	
311	How important is the role of teaching faculty and educators in implementing an effective preceptorship program?	<ol style="list-style-type: none"> 1. Very important 2. Important 3. Not important 4. Other (specify) _____ 	
312	Is having an adequate teaching skill necessary for being a good preceptor?	<ol style="list-style-type: none"> 1. Yes 2. No 3. Other (specify) _____ 	
313	Should nurse educators be involved in enhancing the teaching skills of preceptors?	<ol style="list-style-type: none"> 1. Yes 2. No 3. Other (specify) _____ 	
314	Should preceptors be involved in providing evaluation and feedback to students?	<ol style="list-style-type: none"> 1. Yes 2. No 3. Other (specify) _____ 	
315	In your view, how important is an incentive or payment for the clinical preceptor in his/her role of teaching and mentoring students?	<ol style="list-style-type: none"> 1. Very important 2. Important 3. Not important 4. Other (specify) _____ 	
316	Who do you think should take the upper hand(s) in the implementation of nursing clinical preceptorship programs? (circle all that apply)	<ol style="list-style-type: none"> 1. Teaching institutions 2. Hospitals 3. Government 4. Other (specify) _____ 	
317	What do you think will be the challenge/s for implementing nursing clinical preceptorship in Ethiopia? (circle all that apply)	<ol style="list-style-type: none"> 1. Shortage of nurses (preceptors) 2. Inability or unwillingness to apply 3. Lack of funding and/or incentives for preceptors 4. Other (specify) _____ 	

APPENDIX III: IN-DEPTH INTERVIEW GUIDELINES

Good Morning/Afternoon, I am Andreas Admassu and I am a postgraduate student at Addis Ababa University, Department of Nursing and Midwifery. I am conducting a research focused on assessing the knowledge and attitude towards nursing clinical preceptorship among nurse educators working in Addis Ababa, Ethiopia.

This particular interview aims to identify factors associated with nursing clinical preceptorship among nurse educators or individuals concerned with nursing education working in teaching institutions in Addis Ababa. If it is okay with you, I will be recording our conversation. The purpose of this is so I can get all the details but at the same time be able to carry on an attentive conversation with you. I assure you that all your comments will remain confidential and no reference to individuals will be made during the compilation of the interviews. The interview will take approximately 15 to 20 minutes of your time and you are free to provide your responses in either Amharic or English.

If you agree to this interview, please sign this consent form.

Signature: _____

Date: _____

Questions:

1. What are your views on the current provision of nursing education in Ethiopia?
2. Do you believe, there is a theory-practice gap in nursing practice in Ethiopia? Explain?
3. What do you think are the main challenges for nursing students' clinical practice?
4. What are your views on preceptorship and its application?
5. What role should nurse educators and lecturers play in the clinical practice of students?

APPENDIX IV: DECLARATION

I, the undersigned, declare that this is my original work and has never been presented in this or any other University and that all the source materials used for this thesis have been duly acknowledged;

Name: Andreas Admassu Teferra

Signature: _____

Place: _____

Date of Submission: _____

The thesis has been submitted for examination with my approval as a university advisor.

Name: Daniel Mengistu (BSc, MSc, Assistant Professor)

Signature: _____

Date: _____