ASSESSMENT OF CHALLENGES FACING PRECEPTORS AT KENYATTA NATIONAL HOSPITAL SPECIALIZED UNITS

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MScN REG: H56/71967/08

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE AWARD OF DEGREE OF MASTER OF SCIENCE IN NURSING EDUCATION OF THE UNIVERSITY OF NAIROBI

OCTOBER, 2010

DECLARATION

This dissertation is my own original work and has not been presented for examination in any other university, or for any other award.

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DEDICATION

This dissertation is dedicated to my husband *Dr Peter Chore* for his immense support, both materially and emotionally and for his continuous encouragement in educational pursuits. To my children, *Arnold Hawi* and *Esther Neema* for their patience and understanding. God bless you for being there for me.

ACKNOWLEDGEMENT

I wish to acknowledge the hand of God in the genesis and completion of this work.

I sincerely express gratitude to all those who contributed towards the study and completion of the work described in this dissertation.

I am very grateful to the management of Kenyatta National Hospital for sponsoring this study and permitting me to carry out the study at the hospital.

I thank my supervisors Professor Anna Karani and Dr Margaret Chege for their guidance, support and constructive comments throughout the study. Without you this study will not have been successful.

I also wish to acknowledge the following persons for their contributions to the success of this study proposal; my friends and colleagues, Nobert, Everlyne and Reuben for their valuable critique and encouragement especially in the initial stages of the study.

I am very grateful to all the nurse preceptors and unit managers who participated in this study. Many thanks to my research assistants-Makau, Murunga, Musa, Kapusia and Wang'ombe who worked tirelessly in data collection. My sincere gratitude to the statistician Mr Philip Ayieko of Kemri for his tireless efforts in assisting me with data analysis. Many thanks to Georgina Kalekye for formatting, printing ,photocopying and binding my work.

I do appreciate the Ethics Committee (KNH & UON) for reviewing and approving my research proposal and the Ministry of Education, Science and Technology for granting me permission to carry out this study.

My gratitude to you all, may the Lord be kind to you.

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OPERATIONAL TERMS AND DEFINITIONS

- **Specialized Units**.....a department composed of Critical care unit, Renal and Cardiology units.
- **Preceptor**..... a nurse who participates in clinical teaching of students and acts as their role model
- **Preceptee**.....a student attached to a preceptor/clinical instructor for Purposes of learning by modeling the preceptor
- **Challenges**.....a demanding or difficult task.
- **Environment**.....include the unit area, equipments, patients and various members of the health care team.
- **Critical Care Unit**.....A unit in specialized Units where patients on life support machines are managed.
- **Cardiology Unit**.....A unit in the specialized units whereby investigations of heart diseases are done
- **Cardiothoracic ward**....A unit where patients awaiting cardiothoracic surgery and those who are recovering after the surgery are managed.
- **Renal Unit** .....A unit in specialized units where dialytic therapies are done for patients with renal failure.

ABBREVIATIONS

- **BScN** : Bachelor of Science in Nursing
- **KRCHN** : Kenya Registered Community Health Nurse
- **KRN** : Kenya Registered Nurse
- **RN** : Registered Nurse
- **ECN** : Enrolled Community Nurse
- **DDCS** : Deputy Director Clinical Services
- **CCU** : Critical Care Unit
- **KNH** : Kenyatta Nat ional Hospital
- **KMTC** : Kenya Medical College
- **UON** : University o f Nairobi
- **AMREF** : Africa Medical Research Foundation
- **SPSS** : Statistical Package for Social Scientists

EXECUTIVE SUMMARY

Hospital settings provide the opportunity for students to care for clients under the direct supervision of preceptors (White, (2000). This allows the students to graduate as competent practitioners who can offer safe quality care to a variety of patients in various hospital settings.

Kenyatta National Hospital Specialized unit receives quite a large number of students, among them are Masters Degree students, BScN students, post basic diploma students in specialty courses and ECN upgrading students. All these students come from various colleges/universities with varied backgrounds of knowledge level and experiences.

The students are usually paired up with preceptors who undertake clinical teaching to help the students achieve their learning objectives. However lately, preceptors had been noticed to be reluctant in taking up the role of precepting students. It was thought that the preceptors could have been experiencing some challenges which might have contributed to this behaviour, a situation that required to be investigated since it could compromise skills acquisition by learners. Literature search did not find any study done locally on challenges facing preceptor nurses.

The main objective of this cross-sectional descriptive study was to assess challenges facing preceptors at KNH specialized units. It was conducted among preceptors with more than one year experience at KNH specialized units. A semi-structured questionnaire which was distributed to 113 randomly sampled preceptor nurses was used to collect both quantitative and qualitative data. An interview guide was used to collect quantitative data from 5 unit managers/course managers in specialized units.

The data obtained was checked, cleaned and corrected, before computing and then analyzed using SPSS software package version 17. Qualitative data was analyzed manually. Results of the study are presented in descriptive form using histograms, pie charts and frequency tables. Co- relation of the study variables was calculated using chi square.

The reported challenges commonly experienced by preceptor nurses in the specialized units at KNH included heavy patient workload 72 (85.71%), lack of adequate resources 50 (59.52%), high number of students attached to a preceptors 50 (59.52%) and acuity of patients condition 20 (23.81%). Only 16.9% of the preceptors had formal training in preceptorship role. Motivation to serve as a preceptor was found to be statistically associated with the number of years a participant had served as a nurse. ($\chi 2=11.30$; $p=0.01$).

These study results underlines the need to enhance preceptorship experiences for preceptors at KNH specialized units in order to assist them foster professional socialization of students and help them achieve professional skills and confidence before graduating. Preceptorship orientation programmes should be implemented for preparation of preceptors before engaging them in precepting students.The hospital, nursing schools and other stakeholders should address the challenges facing preceptors at KNH specialized units. This will subsequently improve achievement of teaching and learning objectives for both preceptors and nursing students respectively.

The cost of this study which took an estimated period of nine months was Ksh.105, 875. The study was funded by KNH, the researcher's employer.

CHAPTER ONE

1.1 INTRODUCTORY BACKGROUND

A preceptor is an expert practitioner who can model the role functions of advanced practice nurses, which include; decision making, leadership, teaching and problem solving. The preceptor role is thus more formally that of a clinical teacher (Giberson, & Oermann, 2009). Hospital settings provide the opportunity for students to care for clients under the direct supervision of a preceptor and a faculty member (Skelton-Green and Baumann, 2000).

According to Robbins (2006), the preceptor is expected to have current clinical skills and knowledge, to help students recognize their assumptions and think through their management decisions, and model effective communication with clients that emphasizes psychosocial aspects of care. Robbins (2006), further notes that successful teaching is a complex process that requires not only expertise in clinical content but also positive personal attributes. Therefore lack of essential knowledge, skills, attitude and personal attributes are some of the factors that can possibly pose a challenge to the preceptor while engaging with students. The preceptorship experience is widely used by a number of professional faculties, including nursing, as a cost-effective method of providing quality field experience. However, preceptors were thought to have been experiencing challenges in their role as clinical teachers.

According to results of a mail survey by Younge (2008) 61.4% of preceptors indicated that preceptoring nursing students was a stressful experience, with overwork identified as the main source of stress. Younge (2008) noted that overwork resulted from unsuitability of students for the clinical area, lack of time, and insufficient feedback and guidance. According to Baumann & Chung (2000), lack of resources at universities and teaching hospitals make it extremely difficult to meet the challenges facing preceptors in clinical teaching.

Clinical experience, which has been regarded as the heart of nursing education reinforces and strengthens knowledge, facilitates the professional socialization of students to the nurse's role and provides students or preceptees with the values of the profession (Shelton-Green & Baumann, 2000). Regardless of the learner's level of education and experience, preceptorships provide opportunities for socialization into professional nursing roles and it is crucial in the

molding of any nursing student at various levels of training from basic to post graduate training, (Le Gris & Cote, 2007). This can be derailed by the challenges encountered by preceptors.

Kenyatta National Hospital Specialized units (CCU, Renal Unit, Cardiology) usually receive a variety of students from various disciplines of whom majority are nursing students. The nursing students are from various programs. Among them are Masters Degree students, BScN students, post basic diploma students in specialty courses and ECN upgrading students. The students are usually paired up with preceptors who undertake clinical teaching to help them achieve their learning objectives. However, in the last few years the preceptors had shown reluctance in being involved with the preceptorship of students. The preceptors were thought to have been experiencing some challenges that contributed to their reluctance in precepting students; a situation which could jeopardize the students' learning and subsequently compromises their competency upon graduation.

1.2 Statement of the Problem

Registered nursing staffs sometimes express reluctance to take on the role of preceptor because it slows them down in providing nursing care (Baumann & Chung, 2002). Baumann & Chung (2002), further note that preceptor burnout has become an issue as the same preceptors are called upon time and time again to take students. In a study by Younge et al (2008), 61.4% preceptors indicated that preceptoring nursing students is a stressful experience, with overwork identified as the main source of stress.

It was observed by key informants (ward managers and course managers) that preceptors were no longer enthusiastic in taking up preceptor role at KNH specialized units. From the researcher's experience and observation as a clinical instructor especially in the last two years (2008 & 2009) quite a large number of preceptors reluctantly accepted to participate in preceptorship of students. The preceptors were thought to be experiencing some challenges that could have been contributing to their reluctance in precepting students. This situation could jeopardize the students' learning and subsequently compromise their competency upon graduation.

It was with this in mind that the researcher was keen to investigate and find out the challenges that were faced by preceptors in their role and experience of teaching the nursing students in the

specialized units. The situation needed to be addressed if nursing programs are to maintain quality education for nurses who will cater for the ever increasing number of clients with a variety of critical conditions in the specialized units.

1.3 Justification of the Study

White (2000). noted that clinical education is the cornerstone to preparing competent nurse practitioners. According to White (2000). the clinical experiences provide students with the opportunity to apply their theoretical background to practice. Hence preceptorship is pivotal to students' clinical experiences and is instrumental in preparing them for their role as confident and competent practitioners. This would only be achieved when appropriate preceptorship takes place.

There remains a dearth of research to substantiate the implications of peceptorship to the preceptor (Myrick, 2006). Despite the widespread use of the preceptorship program as a method of clinical teaching, the challenges of such a program to the preceptors which would interfere with their role and subsequently with the learners' acquisition of skills are not well understood, (McCarty & Higgins, 2008). Although there is some research done in other countries about challenges facing nurse preceptors, literature search did not find any study done locally on challenges facing preceptor nurses.

The findings of this study will assist the relevant authorities in policy making, planning and implementing changes in preceptor programs that would motivate preceptors in their role. Improvement of preceptorship and motivation of the preceptors in their role will lead to enhanced preceptorship that will assist the nursing students in acquiring the necessary skills and becoming competent practitioners. Publication of these findings will also stimulate other studies in this area and form a knowledge base on appropriate methods of managing preceptor programs which will motivate the preceptors in their role and continue to enhance students' learning.

1.4 RESEARCH OBJECTIVES

1.4.1 Broad Objective

To determine the challenges facing preceptors in their role as clinical teachers at KNH Specialized units

1.4.2 Specific Objectives

- To evaluate the teaching environment of preceptors.
- To determine the knowledge level of preceptors in preceptorship
- To assess the attitude of preceptors in clinical teaching

1.5 Theoretical Framework

1.5.1 The Social Learning Theory (Bandura, 2008)

People learn through observing others' behavior, attitudes, and outcomes of those behaviors. Most human behavior is learned observationally through modeling. From observing others, one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action. (Bandura, 2008).

The social learning theory was applicable in this study since in preceptorship, students learn through observational modeling of their preceptors as one of the methods in acquiring clinical skills. It is through observational modeling over the period of attachment to preceptors that preceptees become skilled and competent in clinical practice.

Bandura's social learning theory explains human behavior in terms of continuous reciprocal interaction between cognitive, behavioral, and environmental influences. Bandura believed in "reciprocal determinism", that is, the world and a person's behavior cause each other, while behaviorism essentially states that one's environment causes one's behavior. He considers personality as an interaction between three components; the environment, behavior, and one's psychological processes (one's ability to entertain images in minds and language).

The preceptee learns through interaction with the environments that includes the preceptor and the clinical unit settings and components.

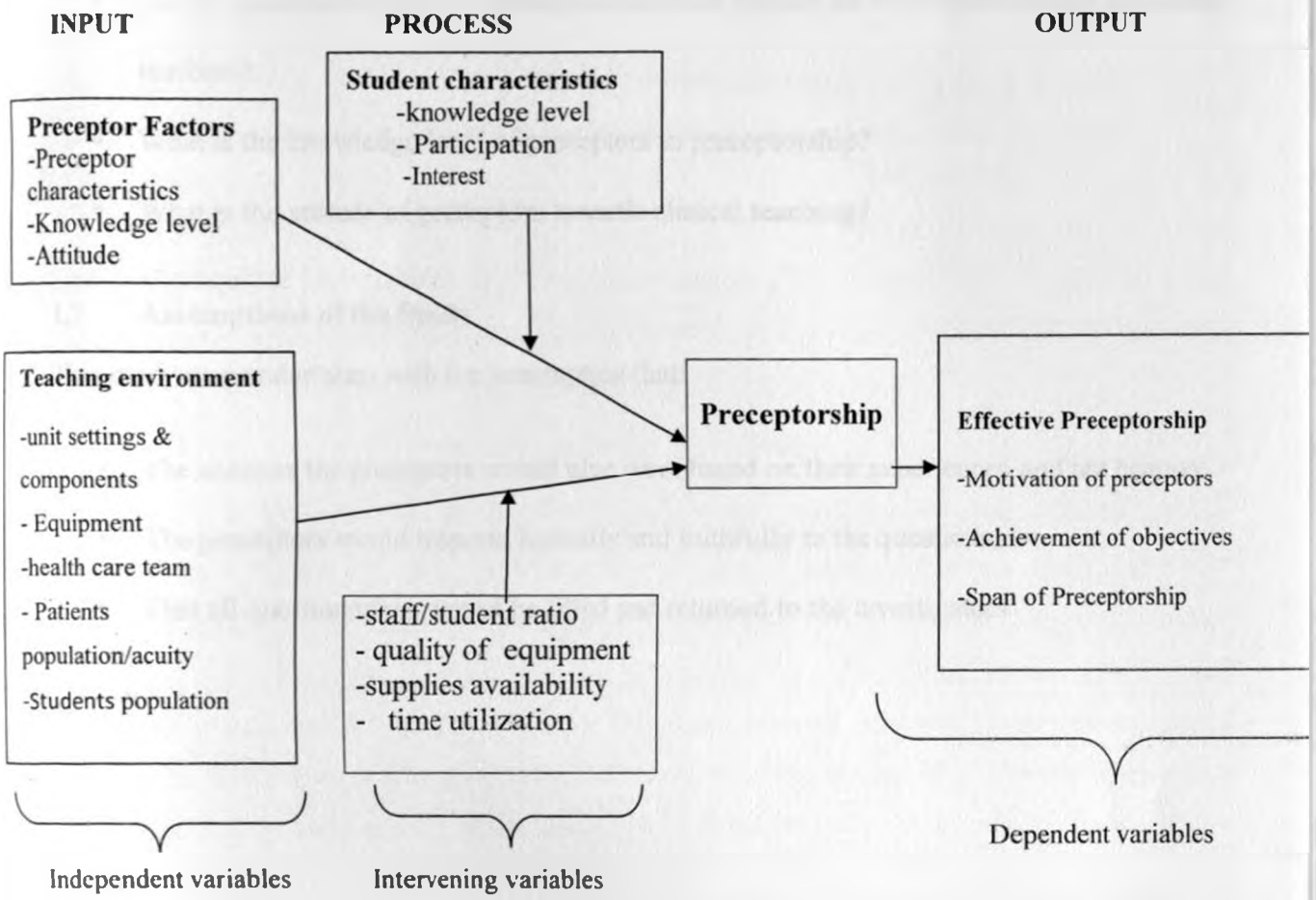
However, McCaslin (2008) implies that, though the social learning theory has strength in its practical applications when considering the concept of self-efficacy, it bears a weakness in that it is reductionist in its explanations of personality development. McCaslin, (2008), believes that Bandura's theory focuses too much on the situation rather than the individual's development and their inner personality traits.

McCaslin (2008), further notes that there appears to be a lack of unity in Bandura's theory as concepts and processes such as observational learning and self-efficacy, although widely supported by research separately, have very little explanation as to how they relate to each other. He implies that the social learning theory of personality development described by Bandura is an oversimplification.

The researcher concurred with the views of McCaslin (2008), since the characteristics of a preceptor/preceptee and their attitude can alter the expected outcome of a learning session.

1.5.2 Conceptual framework

Figure 1: Conceptual Framework



1.6 Research Questions

- What challenges do preceptors encounter in their role as clinical teachers?
- Do the challenges faced by preceptors have an impact on their effectiveness as clinical teachers?
- What is the knowledge level of preceptors in preceptorship?
- What is the attitude of preceptors towards clinical teaching?

1.7 Assumptions of the Study

This study was undertaken with the assumption that:

- The answers the preceptors would give were based on their experiences and not hearsay.
- The preceptors would respond honestly and truthfully to the questionnaire
- That all questionnaires would be filled and returned to the investigators

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of available literature on challenges facing nurse preceptors globally. The chapter also provides some information on preceptorship in clinical teaching.

2.2 Preceptor and Preceptorship

The term preceptor was first used in 15th century meaning tutor or instructor. In nursing, it was first used as a method of clinical teaching by the late sixties while in 1985, 109 generic BSN programs included preceptorship programs in the curriculum (Peirce, 2001).

Preceptorship emerged as a concern to cater for the "reality shock" that students were experiencing at the transition phase from a student to a professional nurse (Kramer, 2004), (McGrath & Koewing, 2009). According to Myrick (2002), preceptorship was adopted as a way for preparing clinically competent graduates who would be able to assume full patient care as soon as they are employed. In education, preceptorship is usually defined as an individualized one to one learning and teaching interchange between a student and a staff nurse who supervises the student. The preceptor acts as a role model and a resource person who is available any time during the clinical instruction (Chickerella & Lutz, 2001).

Preceptorship is pivotal to students' clinical experiences and is instrumental in preparing them for their role as confident and competent practitioners. The concept of preceptorship in nursing education continues to be endorsed as a viable alternative clinical teaching strategy because it has the potential to facilitate the clinical experience of the students by encouraging reflection and enhancing their ability of critical thinking (Mantzorou, 2004).

In a study done by Oermann (2006), BSN programs in the Midwest were surveyed (N = 142). Most (74.7%) of these nursing programs used preceptors from affiliating clinical settings for teaching senior-year clinical courses (90.9%) such as leadership and management, community health nursing, and critical care. And although preceptors played an important role in teaching students, only half (50%) of the programs had a written position statement that described the role

of a preceptor. According to Myrick (2006), there remains a dearth of research to substantiate the implications of preceptorship to the preceptor, preceptee and ultimately the health care consumer.

2.3 Challenges in preceptorship

Various research studies done in other countries reported a variety of challenges faced by preceptor nurses in the course of their duty as clinical teachers. Wilkes (2006), states that the student-preceptor relationship is a complex one, which can be rewarding as well as problematic at times. Wilkes (2006),further states that preceptors want to provide a valuable practice experience for students but are constrained by multiple demands and limited resources. He emphasizes that the preceptor's role is paramount in student's learning and the preceptor should therefore receive the support necessary to enhance the teaching and learning.

Clinical instructors may encounter difficulties in their relationships with students, such as personality conflicts, differences in style and values, and limited skill levels or a lack of interest on the part of students (Cederbaum & Klusaritz, 2009). Limited skill level can be a challenge to preceptors especially those who are employed directly into Specialized units without prior specialty training. This would also affect their effectiveness as preceptors.

According to Baumann & Chung (2000), lack of resources at universities and teaching hospitals make it extremely difficult to meet the challenges facing preceptors in clinical teaching. They imply that additionally, clinical teaching is considered too expensive and is frequently undervalued in workload calculations, hence due to insufficient funding; nursing programs are not able to reimburse sessional instructors to attend nursing faculty meetings and one- on- one meetings to review clinical placement objectives and outcomes. This they say, results in missed opportunities to mentor sessional instructors and assist them in further development of their teaching skills.

The challenges in the health care have given rise to a highly stressful work situation and a more complicated role for preceptor nurses and qualitative studies about daily work as a whole is limited, (Hallin & Danielson2007).

Hallin & Danielson (2007), suggest that it is vital for future development of nursing knowledge and nursing education to recurrently investigate RNs' experiences of their ability to grasp and manage their daily work situation, promote a high quality of care and engage in clinical teaching at the same time. Begat et al (2005), indicate that various studies have demonstrated nursing as stressful and that the incidence of occupational stress-related burnout in the profession is high; yet, for many preceptors working in today's health care environment, work is a stressful part of their lives.

Paton et al (2009), implies that preceptors teach students within complex, unpredictable, and often chaotic environments, yet the teaching expertise that preceptors acquire as they guide, facilitate, and evaluate student learning often is overlooked by both academia and service. Clinical skills teaching have never been the ideal teaching and learning environments, and they are becoming increasingly more difficult to use as service demands stretch goodwill and reduce opportunity. However, workplace-based learning is vital for the acquisition of a comprehensive range of clinical skills that can be used in a variety of complex situations (Johan, 2009),

Baumann, & Chung (2000), in a submission to the Nursing Task Force, the Ontario Council of Teaching Hospitals and its Chief Nurse Executives noted that casualization of nursing, reluctance of staff to act as preceptors, lack of resources and missed opportunities for mentoring of sessional instructors are some of the problems affecting clinical teaching.

There are minimal substantive data regarding the criteria which are required for the actual selection of the clinical preceptor (Myrick, 2006). She implies that not infrequently, preceptors are selected primarily for their availability during the clinical placement of students. That as a result, baccalaureate nursing students are being preceptored by staff nurses with little or no preparation for assuming a role in which they are expected to promote the principles and ideology of graduate nursing education. This she says is not fair to the preceptor, preceptee and the client and hence the nursing faculty, in promoting such a process, is in fact promoting the status quo.

According to Coleen (2010), only experienced nurses were hired to work in critical care areas in the past. However, Colleen,(2010) says, with the prolonged nursing shortage, more and more facilities are hiring recent nursing graduates to work in these fast paced critical care units which impacts negatively on the preceptorship process due to lack of skill competencies. At KNH Specialized Units, some nurses are hired directly after graduating from basic nursing to work in these settings whereby they learn on the job before they go for specialty training. These nurses are among those used as preceptors for nursing students on rotation in the units.

Higher acuity of clients is stressful and affects the ability of preceptors to instruct students to receive appropriate ranges of clinical experiences and in some cases, clients' conditions are too complex for students and are not appropriate for teaching basic concepts, principles and skills (Baumann, & Chung, 2000). For example, patients who have undergone heart surgery are quite delicate and working around them is quite stressful for preceptors hence nursing students are often left out during their initial care especially postoperatively at KNH Specialized units.

Baumann & Chung (2000), also state that registered nursing staffs sometimes express reluctance to take on the role of preceptor because it slows them down in providing nursing care. That preceptor burnout is also an issue as the same preceptors are called upon time and time again to take students. Grealish (2009), indicates that most nurses would like to see themselves, as promoters of nursing but are frustrated and disillusioned with their profession's challenges. She implies that experienced nurses who are already working in stressful conditions with continuous staff shortages and poor recognition of service sometimes see the student nurses as an extra burden to their already increasing workload.

The preceptor model of clinical education uses nurses to fulfill the role of 'teacher' in a one-on-one relationship with students. Lillibridge (2007), however notes that the current nursing shortage adversely affects the preceptors' effectiveness in clinical teaching by placing increased demands on the preceptors and therefore threatens their continuation in this role. Lillibridge (2007), further notes that shortage of nursing faculty also adversely affects clinical teaching since fewer numbers of educators directly impact on the ability of nursing programs to provide quality clinical experiences.

According to Kaviani & Stillwell (2006), preceptorship is comprised of a triad; the student, preceptor and faculty member that work together to achieve students' transition to the role of graduate nurses. When there is shortage of nursing faculty the workload of clinical instruction is normally left with the already overstretched preceptor. Chickerella & Lutz (2001). indicate that although preceptorship offers many advantages, some drawbacks exist in terms of extra responsibilities and time required from the preceptor. Younge et al (2008), in a study done at the University of Alberta indicates that 61.4% of preceptor nurses reported that preceptoring was an informal, extra duty and mostly not part of the job description.

Commenting on a post RN degree program in Canada, Brennan (2008), says that preceptors found it sometimes difficult to cope with the demands of their own position, a matter which if not acknowledged will limit preceptorship to a paper work with just assessment functions which will create frustration to students and fatigue and unfulfilled experiences to preceptors.

CHAPTER THREE

3.0 MATERIALS AND METHODS

INTRODUCTION

This chapter provides an overview of the study methodology which was utilized and a description of the study area, the subjects and tools used.

3.1 STUDY DESIGN

The study was a cross-sectional descriptive study. Questionnaires and interviews guides were used to obtain quantitative and qualitative data respectively.

3.2 VARIABLES UNDER STUDY

Independent	Dependent
Preceptor Factors ▪ Preceptor characteristics ▪ Knowledge level ▪ Attitude **Environment Factors** ▪ Unit settings & components ▪ Equipment ▪ Health care team ▪ Patients population/acuity ▪ Students population **Resources** ▪ health care team ▪ Equipment & supplies ▪ Time	Motivation of preceptors Achievement of objectives Span of preceptorship

3.3 STUDY AREA

The study was conducted at KNH Specialized units which included Critical Care, Renal and Cardiology units. Kenyatta National Hospital is the biggest referral hospital in East and Central Africa and the main medical professionals' training institution in Kenya. The hospital caters for training of doctors, nurses and other paramedical personnel. It is located along Ngong' road and hospital road in Nairobi immediate after the Nairobi area traffic headquarters and bordering the KMTC and UON medical school.

3.4 POPULATION OF STUDY

The population was defined in respect to the objectives of the study. This included;

- Preceptor nurses in Specialized Units who had an experience above one year. These preceptors included those nurses who are trained in specialty courses and others who are trained on the job.
- Nurse Managers and specialty course managers in specialized units.

3.5 INCLUSION AND EXCLUSION CRITERIA

3.5.1 Inclusion Criteria

- All nurses in Specialized Units who had acted as a preceptor for a period of one year or more by the time of the study.
    - This helped the researcher to get tangible and reliable information from the preceptors given the length of their experiences.
- Nurse Managers in specialized units and specialty course managers. These were the key informants in placement of students for preceptorship.

3.5.2 Exclusion Criteria

- Any eligible preceptor who declined to participate in the study.

3.6 SAMPLING

3.6.1 Sample size Calculation

The researcher considered Fisher formula as most convenient to determine the sample size (Kothari, 2003).

$$n = \frac{Z^2pq}{d^2}$$

Where;

n=desired sample size

Z=standard normal deviate at the required confidence level of 1.96

P=proportion in the target population that is estimated at 50%

q= 1-p (1 is standard figure) =1-0.5=0.5

d= confidence limit of prevalence (p) at 95% confidence interval

1-0.95 =0.05 hence degree of accuracy desired set at 0.05

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

The above formula is used when the population is more than 10,000.

If the target population is less than 10,000; and in this case the total is 158, then calculation of a final sample estimate (nf) is done as following;

$$nf = n / 1+n/N$$

Where;

nf=desired sample size (when population is less than 10,000).

n=desired sample size (when population is more than 10,000)

N=The estimate of population size (number of preceptors in specialized units which was 158).

$$nf = \frac{384}{1+(384/158)}$$

$$=112.94 \simeq 113 \text{ preceptors}$$

3.6.2 Sampling Method

Stratified simple random sampling was used to select the study subjects. Stratified sampling approach is most effective when three conditions are met; that is, when; variability within strata are minimized, maximized between strata and the variables upon which the population is stratified are strongly correlated with the desired dependent variable. Stratified sampling also permits greater balancing of statistical power of tests of differences between strata by sampling equal numbers from strata varying widely in size.

A list of preceptor nurses with experience of a period of one year or more was obtained from the Assistant Chief Nurse in charge of the Specialized Units. The list was stratified according to each specific unit (strata) and random numbers were allocated using SPSS. The first number was randomly selected from each stratum and every n^{th} number thereafter was automatically included in the sample. The number of preceptor nurses from each stratum was apportioned to the size of each specific stratum.

3.6.3 Proportionate allocation Formula

Size of proportion = (n1/n2) nf

n1 = number of preceptor nurses in each specific unit.

n2 = total number of preceptor nurses in the Specialized Units at KNH with experience of one year and above which is **158** for this study.

nf = minimum sample size which is **113** preceptor nurses.

Subjects from Specialized Units' management and training were purposively selected. They included the Specific unit managers and course managers.

The proportionate allocation was as follows:

- **CCU** .....116/158 x 113= 82.9 =83
- **Renal Unit**.....35/158 x 113 = 25
- **Cardiology**.....7/158 x 113= 5

3.6.4 Sampling frame and sampling procedure

The sampling frame comprised all preceptors in specialized units with experience of one year or more.

3.7 DATA COLLECTION

3.7.1 Data Collection Tools

A self-administered structured questionnaire was used to collect quantitative and qualitative data. The questionnaire had closed and open ended questions. The questionnaire had several sections each designed to help in gathering specific data addressing the study objectives. These sections included;

- Demographic variables
- Knowledge, practice and attitude in preceptorship
- Teaching and learning environment in the specific units
- Challenges encountered in preceptorship

In measuring adequacy of equipment and supplies that facilitate preceptorship, a tool consisting of items rated on a five point Likert scale was used.

English language was the medium of communication since the target group was composed of literate subjects whose official language of communication was English. The questionnaires were self administered. The principal investigator and trained research assistants were in hand to assist the subjects in understanding the study instruments whenever a need arose. An interview guide was used among the nursing unit managers and course managers to obtain qualitative data. The interview guide was composed of open ended questions.

3.7.2 Pretesting of Tools

The data collection tools (questionnaire, interview guide) were pre-tested at the satellite cardiothoracic critical care unit of KNH, among five preceptor nurses, the ward manager and deputy ward manager. The feedback obtained was used for validation of the tools (questionnaire and interview guide).

Pretesting of the questionnaire helped in eliminating some ambiguity of the initial questions and in clarifying the respondents' understanding of the same. This also helped in identifying sensitive issues included in the questions and paved way of addressing these issues before the actual study begun. Pretesting the interview guide assisted in detecting the flow and span of the interview. This also helped in enhancement of the interview guide before the actual study. The revision of the tools and amendment was done by the principal investigator together with the research assistants and the statistician.

3.7.3 Implementation of the study tools

The questionnaires were administered by the trained research assistants at the specific units of the respondents. The respondents were required to fill in the questionnaire and return in sealed envelops that were provided. Most respondents took an average of 3-5 days to return the questionnaire. The principal researcher was not involved in data collection as this would have increased bias.

3.7.4 Data Management and Analysis

Data obtained was checked, cleaned and corrected. A professional statistician was engaged to analyze the data in consultation with the principal investigator. The data was computed and analyzed using SPSS software package version 17. Qualitative data was transcribed, categorized, analyzed and inferences made based on the study themes. Descriptive and inferential statistical procedures -Chi-square was used to express the relationships between variables.

3.7.5 Minimizing Biases

In order to minimize biases, random sampling was used to obtain the study sample. The research assistants were trained adequately on data collection.

3.7.6 Presentation of results

Results of the study are presented in descriptive form using frequency tables, pie charts and histograms. A written report of the study results and recommendations will be disseminated to all relevant authorities.

3.8 STUDY LIMITATION

Misleading responses were encountered; some of the respondents did not give accurate information while filling in the questionnaires. For instance, some respondents said they had not encountered any challenges as preceptors and yet they enlisted challenges commonly encountered. Some eligible respondents who had agreed and consented to participate in the study (n=30) did not return their questionnaires.

3.9 ETHICAL CONSIDERATION

Approval of the study was obtained from Ethics and Research committee at KNH and UON, Ministry of Education Research Science and Technology, KNH administration; office of Deputy Director Clinical Services. The Participants were requested to sign an informed consent after full disclosure of what entailed the study prior to commencement of data collection. All the subjects were assured that the study posed no harm to their person, that participation in the study was on voluntary basis and subjects were allowed to participate or exit from the study at will. They were assured and accorded utmost confidentiality and protection of information obtained.

3.10 TIME FRAME

The study took duration of nine months (December 2009 to August 2010). Actual data collection took place between April and May and 2010.

3.11 STUDY BUDGET

The cost of the study was Ksh105, 875.00. A detailed budget is attached in the appendix.

CHAPTER FOUR

4.0 STUDY RESULTS

4.1 Introduction

This chapter presents the results of the study on ''assessment of challenges facing preceptors at Kenyatta National Hospital specialized units''.

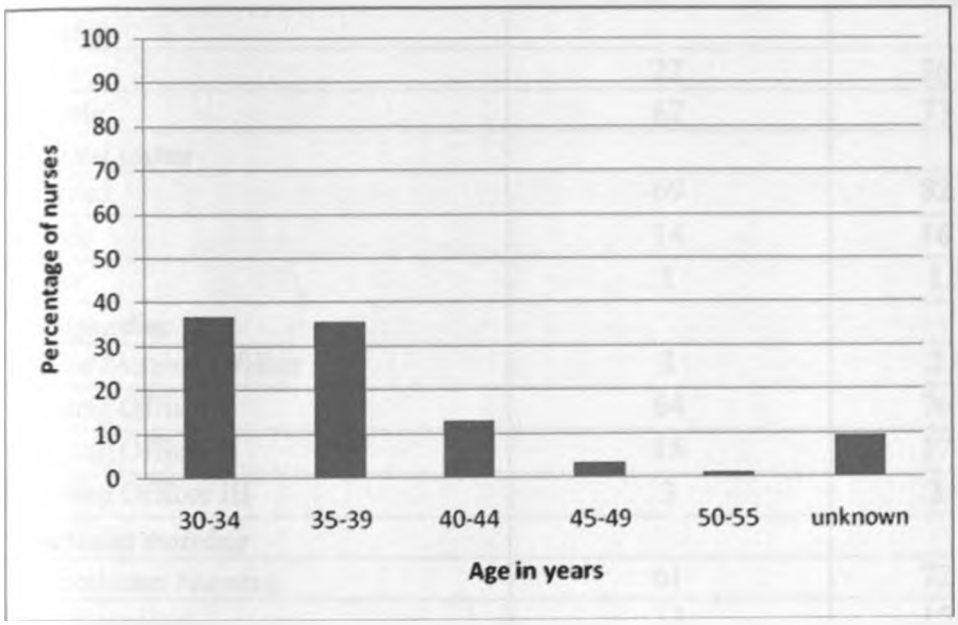
The study enrolled 113 participants, all of them nursing officers working within the 3 main specialized units (critical care, renal and Cardiology units) at Kenyatta National Hospital. Only this cadre of nurses is deployed within specialist areas explaining the absence of enrolled nurses who form the majority of the nursing workforce in other areas. Out of the 113 participants only 84 (74%) returned their questionnaires.

4.2 Demographic characteristics of the respondents

The main socio-demographic characteristics of all the nurses enrolled in the study are summarized in table 1. Among the participants, the female preceptor nurses were 62 (73.8%) and males accounted for the remaining 22 (26.2%) (Male: female ratio 0.4:1). Of the 84 preceptor nurses, 69 (82.1%) of the were married.

The mean age of the sample was 35.8 (SD±4.4) years with a range from 30 years to 50 years. Figure 1 below shows the percent distribution of participants across five-year age groups. Most of the nurses were aged between 30-44 years.

Figure 1: Percent distribution of nurses across different age groups



As shown in table 1 below, the sample comprised nurses with considerable experience in clinical nursing with only 7 (7.2%) nurses having less than 7 years of practice and a similar number having no specialized training. 72% had attained specialist training in critical care nursing and 15.5% in renal nursing. In addition, 51 (61%) of the nurses had recently been promoted (within the last 3 years).

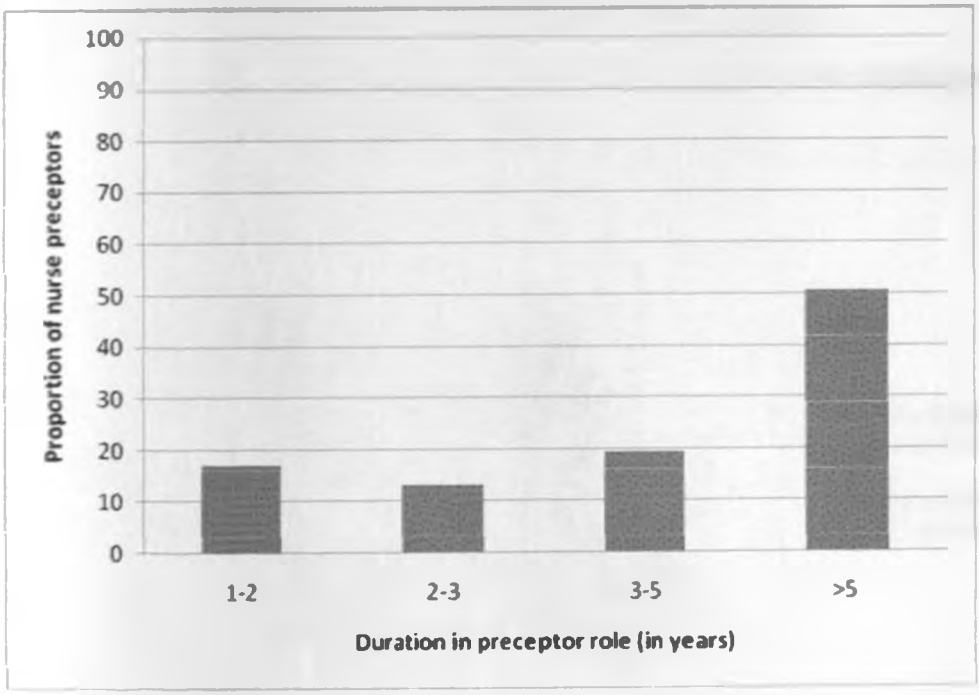
Table 1: Demographic characteristic of nurses enrolled in the study

	Number of participants (n=84)	Percentage (%)
Gender		
Male	22	26.2
Female	62	73.8
Marital status		
Married	69	82.1
Single	14	16.7
Other	1	1.2
Designation		
Senior Nursing Officer	2	2.4
Nursing Officer I	64	76.2
Nursing Officer II	15	17.9
Nursing Officer III	3	3.6
Specialist training		
Critical care Nursing	61	72.6
Renal nursing	13	15.5
Other training	3	3.6
No specialist training	7	8.3
Length of practice (in years)		
Less than 3 years	1	1.2
3-6	5	6.0
7-10	36	42.9
11-15	26	31.0
15 years and above	16	19.1
Recent promotion		
Within the last 3 years	50	61.0
5 years ago	12	14.6
More than 5 years ago	20	24.4

4.3 Preceptor Role

All nurses (100%) in the study had acted as preceptors but for varying lengths of time with approximately half (49.9%) of the nurses having served for more than 5 years. Figure 2 presents the durations in years in the preceptor role. The nurses who had served for less than 5 years were similarly distributed across the different time categories explored in the study.

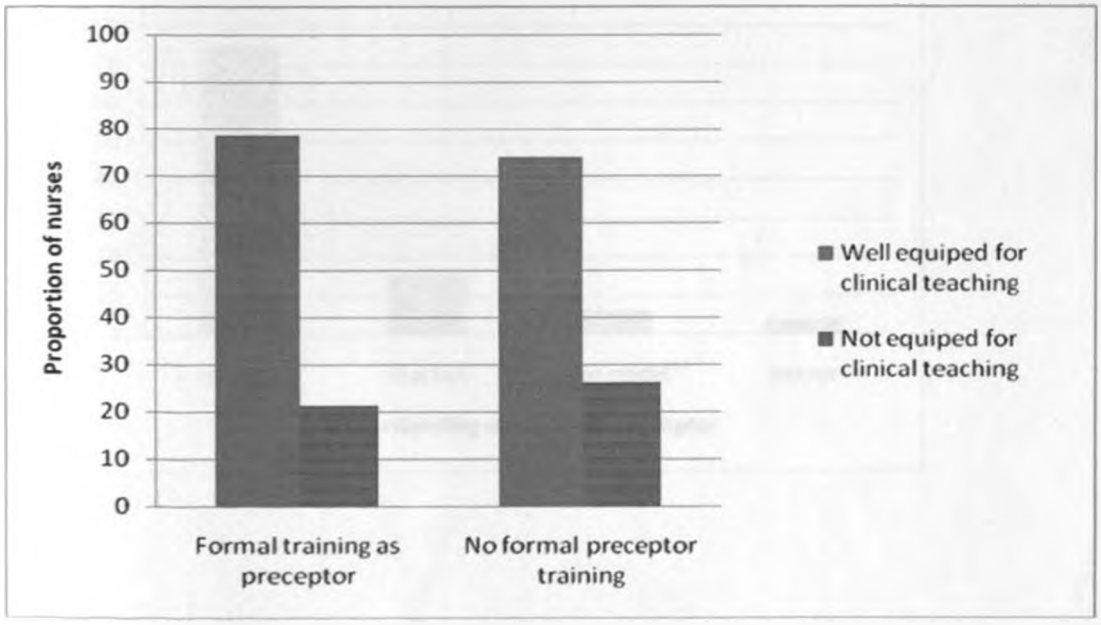
Figure 2: Duration in years that nurses in the study had served as preceptors



Out of all the nurses N= 84 acting as preceptors, 14(16.9%) had undergone formal training on preceptorship. However, formal training as a preceptor did not influence the self reported level of preparation to conduct clinical teaching (Yates χ^2=0.001, d.f =1, P value=0.97). In total, 62 (73.8%) of participants were confident in clinical teaching and felt they were well qualified to conduct clinical teaching.

Considering the impact of formal preceptor training, 11 (78.6%) out of the 14 preceptor nurses with formal training and 51 (73.9%) preceptor nurses without formal training reported that they were confident and qualified to conduct clinical teaching (Figure 3).

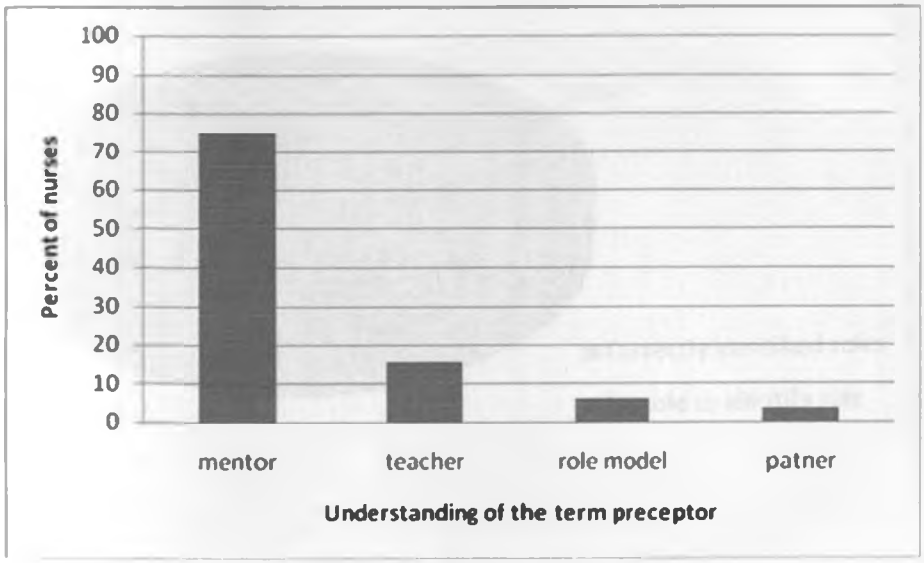
Figure 3: Nurses self-reported preparedness to conduct clinical teaching presented by prior training as a preceptor



4.4 Knowledge level of preceptors in preceptorship

The preceptor nurses gave different responses on their understanding of the term preceptor as shown in figure 4. The most common interpretation among the preceptor nurses 63 (75%) was that a preceptor is a mentor to the students learning within the clinical area. 13 (15%) of the nurses understood preceptorship as mainly being a teaching role with 5 (6%) and 3 (4%) of participants viewing the role as role modeling or partnering with the learner, respectively.

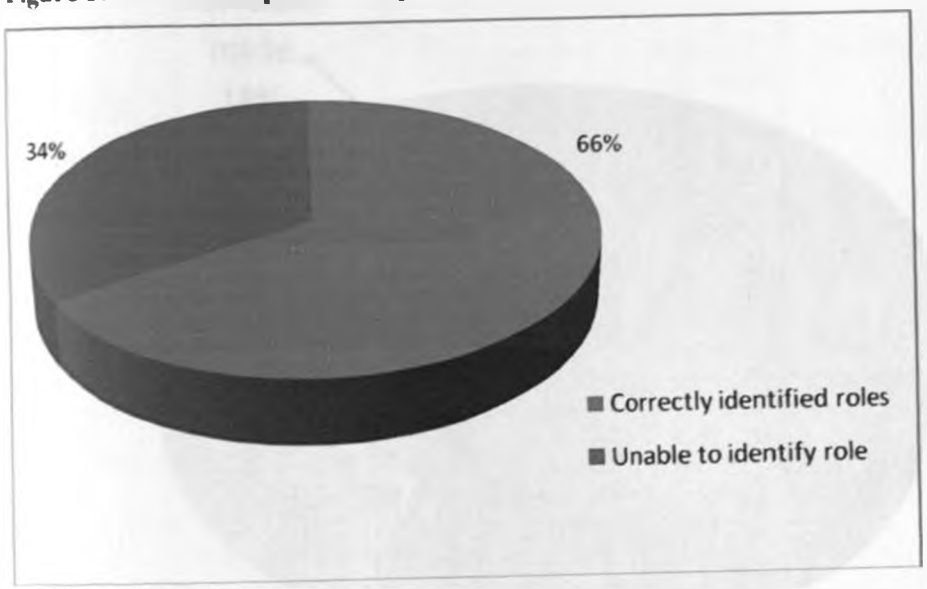
Figure 4: Understanding of the term preceptor



4.4.1 Understaning of preceptors on key functions of a preceptor

An open ended question was used to explore the roles that nurses considered to be key preceptor functions. The responses given for this question showed that most nurses n=55 (66%) correctly identified at least one preceptor role which they also practiced, but n=29 (34%) were unable to correctly state their role, Figure 5 below..

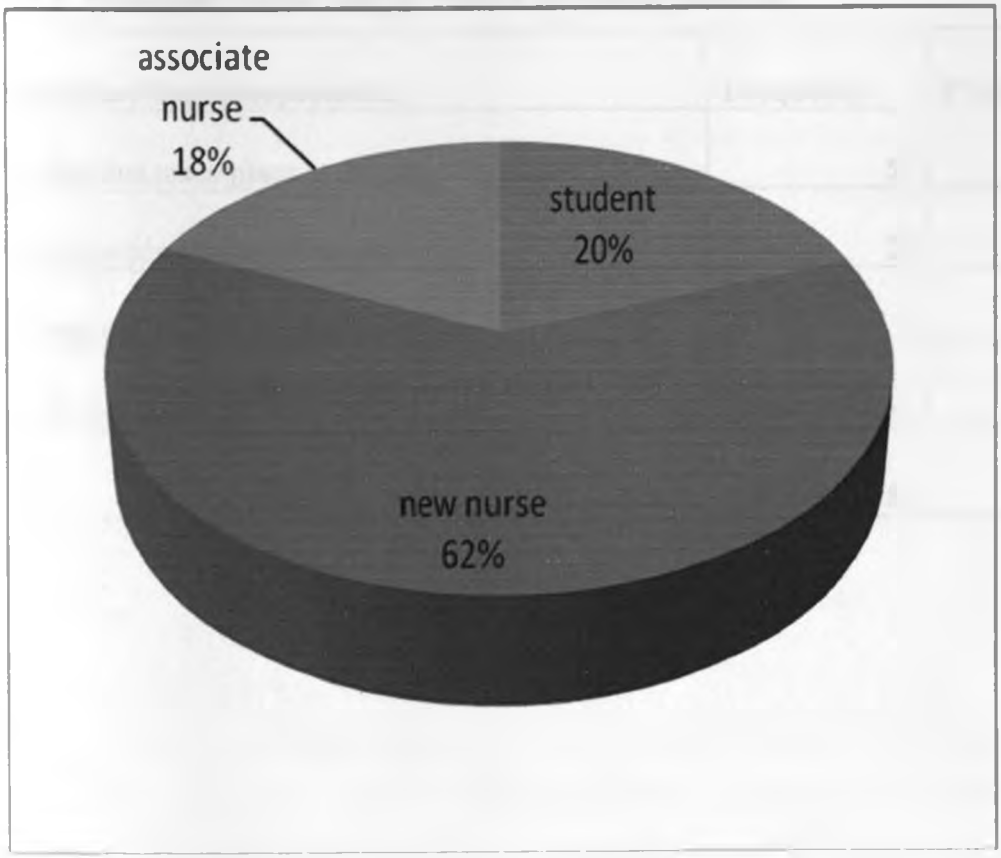
Figure 5: Nurses' responses on preceptor roles



4.4.2 Understanding of the term preceptee

On the understanding of the term preceptee, only n=17 (20%) of the nurses viewed a preceptee as a student (figure 6). The remaining 80% viewed preceptees as either new nurses n= 52 (62%) or associate nurses n=15 (18%).

Figure 6: Understanding of the term preceptee



4.3 Interpretation of clinical teaching among the nurses

Table 2 shows the interpretation of clinical teaching among the nurses. Clinical teaching was most commonly interpreted by n= 81 (96.4%) preceptors as teaching that is conducted by the patient's bed side or teaching students about patients. 2 (2.41%) preceptor nurses thought that clinical teaching was teaching conducted using manikins for demonstration and only n= 1 (1.2%) did not agree with any of the definitions of clinical teaching listed above.

Table 2: Preceptor Nurses' interpretation of clinical teaching

Clinical teaching interpretation	Frequency	Percent
Teaching that takes place at the patient bed side	59	71.08
Teaching students about patients	21	25.3
Teaching using a dummy/manikin	2	2.41
None of the above	1	1.2
Total	83	100

4.4 Facilities commonly used by preceptors to update their knowledge

On being asked whether they had time set aside for preparing clinical teaching, table 3, n= 62 (74%) of the preceptor nurses indicated they were able to set aside time to prepare clinical teaching sessions for the students assigned to them. The rest n=22 (26%) of the preceptors indicated that they rarely got time to prepare for clinical teaching sessions. When asked to specify how they update their clinical knowledge, n=14 (17%) stated they used a library, n=21 (25%) used the internet, and n=45 (53%) said they used both the internet and visited libraries. Only n= 4 (5%) preceptors indicated that they rarely had contact with any source to update their knowledge.

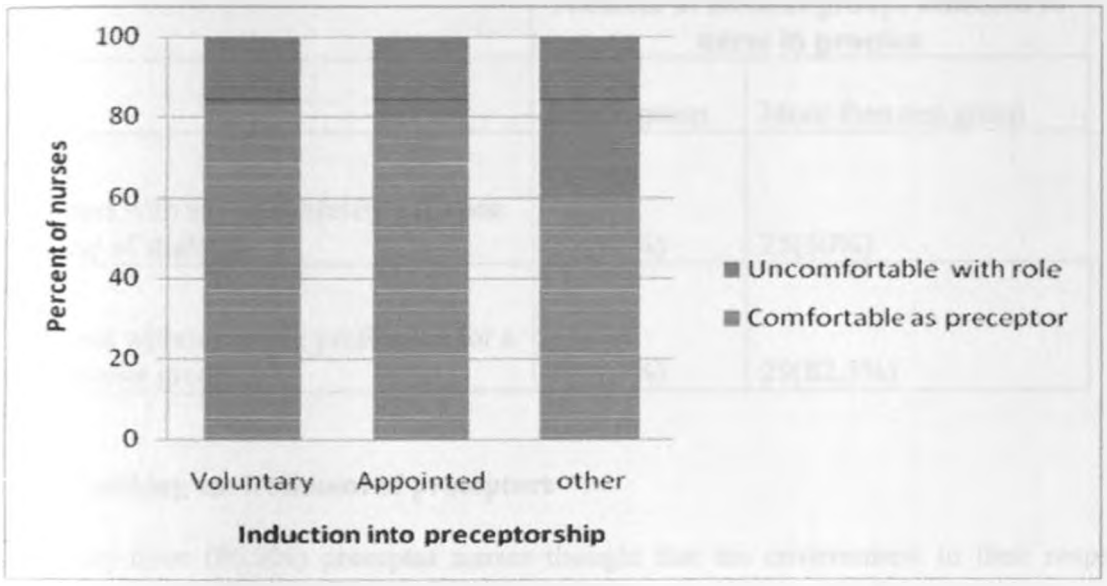
Table 3: Facilities commonly used by preceptors to update their knowledge

Source of update	No. of preceptors	percentage
Library & Internet	45	53
Internet	21	25
Library	14	17
None	4	5
Total	84	100

4.5 Attitude of preceptors towards clinical teaching

Volunteering for the preceptor role was one of the two main ways by which nurses were inducted into preceptorship. Of the preceptor nurses, 64.6% had been appointed to the role of preceptor, 28% had volunteered for the role while the remaining 7.3% had joined the role through other means. As shown in figure 7, at least 60% of the nurses serving as preceptors were comfortable in the role regardless of the method by which they were inducted into the role. However, more of the nurses who volunteered for preceptorship were comfortable in the role (82.6%) as compared to those who were appointed (79.3%) and those joining through other (60%) means.

Figure 7: Proportion of nurses comfortable with preceptor role by method of induction into preceptorship



4.6 Preceptor Nurses' preference for preceptees

Fifty preceptor nurses (59.5%) showed a strong preference for acting as preceptors for a particular group of students. The most commonly preferred groups of students by these preceptor nurses were specialty students and the reasons given for the preference was that these groups of students showed greater commitment to their learning. Secondly, since the preceptors had specialist qualification in certain areas they felt more comfortable acting as preceptors to students seeking similar specialized qualifications.

In practice as shown in table 4, half of the 50 nurses who had a strong preference for one group of students reported that they ended up getting attached to more than one group or their preferred group of students. On the other hand 29 out of the 34 nurses without strong preference for any group got attached to more than one group of students.

Table 4: Preceptor Nurses preference for preceptees and the actual attachment of preceptees to nurses in the clinical areas

	Number of student groups attached to nurse in practice	
	Single group	More than one group
Nurses with strong preference for one group of students	25(50 %)	25(50%)
Nurses without strong preference for a particular group	5(14.7%)	29(82.3%)

4.7 Teaching environment of preceptors

Seventy-three (86.9%) preceptor nurses thought that the environment in their respective units was conducive for learning and teaching. 65(79.3%) reported that they got support from the unit administration and healthcare team during their work as preceptors. However, only 15(18.1% had attended a course on teaching methodology or training of trainers (TOT).

4.7.1 Adequacy of equipment and supplies for facilitation of preceptorship

The responses to statements on a 5 point Likert scale (1=scarce to 5=very adequate) summarized in table 5 showed that gloves, syringes, cannulla, stationery and waste bins were readily available (mean score >4 and minimum score>2). However, dialysis machines, slow injectors and heaters/ warming blankets had relatively low mean scores indicating that these items were generally considered to be scarce or inadequate to meet the needs of facilitating preceptorship within the units.

Table 5: Availability of supplies and equipment within units as reported by nurse preceptors (n=84)

Item	Minimum	Maximum	Mean	SD
Ward space	1	5	3.53	0.87
Patient bed space	1	5	3.38	1.02
Storage areas	1	5	2.92	0.98
Procedure preparation areas	1	5	2.79	0.97
Drip stands	1	5	3.01	0.97
Procedure trolleys	1	5	3.62	1.04
Monitors/pulse oximeter	1	5	3.47	1.23
Ventilators	1	5	3.52	1.33
Dialysis machines	1	4	1.74	0.75
Slow injectors	1	5	1.9	0.93
Nebulizers	1	5	2.59	1.19
Weighing scales	1	5	2.26	1.21
BP machines	1	5	3.48	1.05
Heaters/warming blankets	1	5	1.69	1.11
Basic dressing packs	1	5	3.94	0.96
Solutions & lotions	1	5	3.83	0.96
Gloves	3	5	4.41	0.63
Syringes and needles	3	5	4.47	0.65
Cannulas and branulas	3	5	4.47	0.65
Waste Disposal bins	2	5	4.09	0.81
Stationery	3	5	4.07	0.73
Patient linen	1	5	3.14	1.05

The preceptors' responses on teaching environment were validated by comparing them to responses from 5 nurse/course managers responsible for the units in which the 84 nurses in the sample worked. These nurse managers were all specialists in the departments they worked in (renal or critical care nursing) and had worked for an average of 5.4 (SD=3.1) years within the respective units with a range from 2.5 to 10 years. Therefore, the responses of the managers were considered to be reliable.

3 out of the 5 managers reported that there was a demonstration room in their units, and only one manager reported resources to support teaching were adequate reflecting an agreement with the responses of the sampled nurse preceptors but contradicted the responses of the other four managers. All the managers reported that no preparation was provided for preceptors, and neither orientation nor incentives were provided by either the hospital or faculty of nursing schools. Nevertheless, two nurse managers thought that nurses were adequately prepared for clinical teaching corresponding to the response of 74% of nurses who felt they were qualified and well equipped to handle clinical teaching.

Finally, three managers reported scheduling meeting with preceptors, supporting preceptors and all 5 leaders tried to motivate the preceptors confirming the report of 66 (79%) of nurses that the unit supervisors provided support. The common motivators used by managers were non-monetary and included appreciation and compliments, scheduling of appropriate shifts and off duties.

4.8 Challenges of preceptorship

All the preceptors reported having encountered some challenge in their role. The reported challenges are listed in table 6 below and commonly included heavy patient workload, lack of adequate resources and the high number of students attached to a preceptors.

Table 6: Frequency of the challenges commonly encountered by nurse preceptors

Challenge encountered in preceptorship	Frequency	Percent
Heavy patient workload	72	85.71
High population of students	50	59.52
Lack of adequate resources	50	59.52
Acuity of patients condition	20	23.81
Lack of support from team/administration	12	14.29
Inappropriate teaching environment	11	13.10
Other reasons	1	1.19

4.9 Effective preceptorship

The effectiveness of each nurse's preceptorship was assessed using a criterion based on the following 4 outcomes summarized in table 5:

i. Motivation of preceptors
ii. achievement of objectives
iii. span of preceptorship
iv. relationship with the students

As shown in table 7 the preceptor nurses frequently (88.61%) achieved their set preceptor objectives and 83.3% of preceptor nurses reported that the relationship between them and the students attached to them was good. However, level of motivation in preceptor role was moderate with 44.6% of preceptor nurses reporting that they were motivated in their roles. The preceptor nurses reporting varying lengths of preceptorship with 56.6% of preceptor nurses reporting that students attached to them had long spans of mentorship.

Table 7: Effectiveness of preceptorship among nurses in the study

Preceptor attribute	Frequency	Percent
Motivated		
Yes	37	44.58
No	46	55.42
Relationship with students		
Good	70	83.33
Poor	14	16.67
Achievement of objectives		
Frequent	70	88.61
Infrequent	9	11.39
Span of preceptorship		
Short	36	43.37
Long	47	56.63

4.9.1 Association between preceptor factors and effective preceptorship

The effectiveness of preceptorship was compared to the preceptor factors using chi-square tests. The results of these analyses are presented in table 8.

Motivation to serve as a preceptor was statistically associated with the number of years a participant had served as a nurse. ($\chi2=11.30$; $p=0.01$) In general, more of the newly employed preceptor nurses and those who had served for over 15 years were more likely to be motivated compared to those who had been in employment for between 7 and 15 years. There was a single preceptor nurse employed less than 3 years ago who reported being motivated.

N=3 (60%) and n=12 (75%), of preceptor nurses employed for 3-6 years and those with over 15 years in employment, respectively reported being motivated. In contrast only 7 (27%) of nurses in employment for 11-15 years and 14 (40%) of those employed for 7-10 years were motivated. None of the other preceptor factors including gender, marital status, designation and specialty were significantly associated with effective preceptorship.

The preceptor-student relationship did not show a significant association with any of the preceptor factors included in the analysis. Span of precetorship, however, showed statistically significant associations with the nurse's designation, specialty and years of professional practice. All NOIIIs n=3 and n=10 (67%) of NOIIs reported a short span of mentorship compared to only 22 (35%) of NOIs

Recently recruited preceptor nurses (employed for less than 10 years) consistently reported shorter spans of preceptorship compared to nurses who had worked for over 10 years ($\chi2=11.80$; $p=0.01$). Lastly, specialist preceptor nurses namely critical care and renal nurses reported longer spans of preceptorship compared to non-specialists. ($\chi2=10.25$; $p=0.01$)

Table 8: Association between preceptor factors and effective preceptorship

	Preceptor motivated				Preceptor-student relationship				Span of mentorship			
	No	Yes	χ2	p-Value	Poor	Good	χ2	p-Value	Short	Long	χ2	p-Value
Male	11(50%)	11(50%)			1(5%)	21(95%)			9(43%)	12(57%)		
Female	35(57%)	26(43%)	0.36	0.62	13(21%)	49(79%)	3.15	0.10	27(44%)	35(56%)	0.003	0.84
Marital status												
Single	7(54%)	6(46%)			4(29%)	10(71%)			7(50%)	7(50%)		
Married	39(57%)	30(43%)			10(14%)	59(86%)			28(41%)	40(59%)		
Other	0(0%)	1(100%)	1.29	0.75	0(0%)	1(100%)	1.86	0.37	1(100%)	0(0%)	1.69	0.46
Designation												
NO III	1(33%)	2(67%)			0(0%)	3(100%)			3(100%)	0(0%)		
NO II	8(57%)	6(43%)			5(33%)	10(67%)			10(67%)	5(33%)		
NO I	37(58%)	27(42%)			9(14%)	55(86%)			22(35%)	41(65%)		
SNO	0(0%)	2(100%)	3.24	0.43	0(0%)	2(100%)	4.31	0.28	1(50%)	1(50%)	9.10	**0.01**
Years of nursing practice												
<3	0(0%)	1(100%)			0(0%)	1(100%)			1(100%)	0(0%)		
3-6	2(40%)	3(60%)			1(20%)	4(80%)			5(100%)	0(0%)		
7-10	21(60%)	14(40%)			8(22%)	28(78%)			16(44%)	20(56%)		
11-15	19(73%)	7(27%)			4(15%)	22(85%)			11(44%)	14(56%)		
>15	4(25%)	12(75%)	11.30	**0.01**	1(6%)	15(94%)	2.32	0.63	3(19%)	13(81%)	11.80	**0.01**
Nursing specialty												
CCN	37(61%)	24(39%)			11(18%)	50(82%)			22(37%)	38(63%)		
Renal	6(46%)	7(54%)			2(15%)	11(85%)			5(38%)	8(62%)		
Other	1(33%)	2(67%)			0(0%)	3(100%)			3(100%)	0(0%)		
None	2(33%)	4(67%)	2.91	0.40	1(14%)	6(86%)	0.73	0.98	6(86%)	1(14%)	10.25	**0.01**

4.9.2 Association between knowledge, environment and effective preceptorship

The effectiveness of preceptorship was also compared to the preceptor knowledge and ward environment using chi-square tests. The results of these analyses are presented in table 9 and showed that preceptor nurses who were comfortable with the role of preceptor were more likely to be motivated compared to those who were not comfortable serving as preceptors ($\chi 2=8.54$; $p=0.004$).

The motivation of preceptors did not show significant association with method of recruitment, ward environment or preceptor's perception of preceptees.

However, preceptor-preceptee relationship showed a significant association with the preceptor's perception of a preceptee. Only 60% of preceptors who perceived a preceptee as an associate nurse reported good association with preceptees compared to 81% and 90% of nurses viewing preceptees as students or new nurses, respectively.

The ward teaching environment showed a significant association ($\chi 2= 4.45 p=0.05$) with the span of precetorship. 72 (86.7%) of all the preceptors had reported the environment as conducive for teaching, whereas the rest 11 (13.25%) reported the environment as non-conducive. Of those who reported conducive environment, 44 (61%) experienced long spans of precetorship and only 27% of those who reported non-conducive environment experienced long spans of preceptorship.

Table 9: Association between knowledge, environment and effective preceptorship

	Preceptor motivated				Preceptor-student relationship				Span of mentorship			
	No	Yes	χ2	p-Value	Poor	Good	χ2	p-Value	Short	Long	χ2	p-Value
Perception of a preceptee												
Student	9(56%)	7(44%)			3(19%)	13(81%)			10(67%)	5(33%)		
New nurse	26(51%)	25(49%)			5(10%)	46(90%)	7.50		19(37%)	32(63%)		
Associate nurse	11(79%)	3(21%)	3.41	0.18	6(40%)	9(60%)		**0.02**	7(47%)	8(53%)	4.10	0.13
Comfortable as preceptor												
Yes	31(47%)	35(53%)			10(15%)	56(85%)			25(38%)	40(62%)		
No	14(88%)	2(13%)	8.54	**0.004**	4(24%)	13(76%)	0.68	0.47	10(59%)	7(41%)	2.28	0.17
Ward teaching environment												
Conducive	38(52%)	35(48%)			12(16%)	61(84%)			**28(39%)**	**44(61%)**		
Non-conducive	8(80%)	2(20%)	2.78	0.17	2(18%)	9(82%)	0.02	0.88	**8(73%)**	**3(27%)**	4.45	**0.05**
Inducted through:												
Voluntary	12(52%)	11(48%)			5(22%)	18(78%)			11(48%)	12(52%)		
Appointment	31(60%)	21(40%)			9(17%)	44(83%)			20(38%)	32(62%)		
Other	2(33%)	4(67%)	1.65	0.49	0(0%)	6(100%)	1.59	0.64	4(67%)	2(33%)	2.02	0.37

CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS

5.1 Introduction

This chapter presents the discussion of the main findings of the study whose main aim was to assess challenges facing preceptors at Kenyatta National Hospital Specialized Units.

5.2 Demographic Characteristics of Respondents

The mean age of the sample was 35.8 (SD+4.4) years with a range from 30 years to 50 years. Most of the nurses were aged between 30-44 years. Of the participants, 73.8% were females and the rest 26.2% were males (Male: Female ratio 0.4:1) and 82.1% 0f the participants were married. These variables (age, gender, marital status) had no influence on the results of this study.

5.3 Knowledge level of preceptors in preceptorship

This study revealed that the sample comprised nurses with considerable experience in clinical nursing with only 7.2% nurses having less than 7 years of practice. Of the the participants, 72.6% of preceptors had attained specialist training in critical care nursing and 15.5% in renal nursing. Only 11.9% preceptors had no specialized training.

These findings indicate that majority (88.1%) of the preceptor nurses were knowledgeable since they had acquired specialty training. These findings are fully supported by Cederbaum & Klusaritz (2009) who implied that limited skill level can be a challenge to preceptors especially those who are employed directly into Specialized units without prior specialty training. This would also affect their effectiveness as preceptors. This means that 88.1% of participants in this study could therefore be entrusted with clinical teaching of students since they had acquired specialty training.

A study done by Brammer (2006) at Griffith University-Australia on preceptor nurses' understanding of their role in student learning revealed a variation of knowledge in preceptorship and the role of the preceptor with students. Eight variations of understanding were identified. The understanding varied from a focus that is 'student-centred', to 'completion of workload-centred', to 'preceptor nurse control', to a preference for no contact with students. The study implied that as a consequence some students may have positive learning experiences while others will have limited learning opportunities. In this current study, the preceptors gave different responses on their understanding of the term preceptor thus this study agrees with Brammer (2006). The most common interpretation among the preceptors were; a mentor to the students (75%), a teacher (15%) and a role-model (6%). Therefore, except for the minority (4%) in the group, the majority (96%) understood who a preceptor was and therefore contradicts Brammer's (2006) study where more than 3 far fetched response variations were identified. In a study done by Oermann (2006), BSN programs in the Midwest were surveyed (N = 142) . Most (74.7%) of these nursing programs used preceptors from affiliating clinical settings for teaching senior-year clinical courses (90.9%) such as leadership and management, community health nursing, and critical care. And although preceptors played an important role in teaching students, only half (50%) of the programs had a written position statement that described the role of a preceptor. The current study therefore fails to support Oermann (2006), study since majority (96%) of the preceptors in this current study understood their role. However, it is consistent with Brammer (2006) study since where there is lack of preceptor role definition, a variation of understanding may occur with the preceptors as well.

On the other hand, only 20% of the preceptor nurses viewed a preceptee as a student, with the rest viewing the preceptee as new nurse (62%) and associate nurse (18%) respectively. This together with the variation of understanding of preceptorship in this current study and that of Brammer (2006) can either promote or impede the quality of student learning and development in meeting their learning outcomes and professional competency standards. Therefore there is need to establish programmes that will harmonize preceptorship and empower the nurses in their role as preceptors.

5.4 Preparedness to Conduct Clinical Teaching

Out of all (100%) nurses acting as preceptors, only 16.9% had undergone some formal training on preceptorship. However, formal training as a preceptor did not influence the self reported level of preparedness to conduct clinical teaching (Yates $\chi 2=0.001$, d.f =1, P value=0.97). In total, 73.8% of participants were confident in clinical teaching and felt they were well qualified to conduct clinical teaching. Considering the impact of formal preceptor training, 78.6% out of the preceptors with formal training and 73.9% of preceptors without formal training reported that they were confident and qualified to conduct clinical teaching. This may mean that formal training in preceptorship was not perceived as a hindrance in preceptorship by participants in this current study. The perceptions of participants in this study conflict those of participants in a study by Heffernan et al, 2009 on perceptions of preceptors in preceptorship programmes who reported lack of preparation as the main hindrance to their role. Nevertheless, results in both studies support release of nurses to attend preceptor preparation programmes before involvement in preceptorship. Heffeman et al (2009). defines a preceptor as a registered nurse who has completed a teaching, assessment and preceptorship programme. The current study does not support Heffeman et al (2009). because it revealed that only 16.9% of the preceptors had undertaken some form of training in a preceptorship programme. It is important therefore that the Schools of Nursing and the hospital establish preceptorship programmes to ensure that preceptors are well prepared before involvement in precepting students. This will enhance the teaching/learning and achievement of objectives by both preceptors and their preceptees. Further study should be done after implementation of such programmes to compare the results with this current study.

5.5 Interpretation of clinical teaching among the nurses

Clinical teaching was most commonly (71.8%) interpreted as teaching that is conducted at the patient's bed side and teaching students about patients with or without manikins (27.71%). Only 1.2% preceptor nurses disagreed with any of the definitions

of clinical teaching which were stated as correct. According to Meleca et al (2008), clinical teaching is preparing students to integrate previously acquired basic science information with performance-oriented skills and competencies associated with the diagnosis, treatment and care of patients thus helping learners to acquire the kind of professional and personal skills, attitudes and behaviours thought essential for entering the health care system and embarking on continuing forms of education. This means that the knowledge, skills and attitude of the preceptor during the clinical teaching sessions are critical and therefore this current study supports Meleca et al (2008) in that teaching at the patients' bedside involves application of knowledge into skills orientation.

5.6 Attitude of preceptors towards clinical teaching

There are minimal substantive data regarding the criteria which are required for the actual selection of the clinical preceptor. Not infrequently, preceptors are selected primarily for their availability during the clinical placement of students. As a result, baccalaureate nursing students are being preceptored by staff nurses with little or no preparation for assuming a role in which they are expected to promote the principles and ideology of graduate nursing education. This is not fair to the preceptor, preceptee and the client, the nursing faculty, in promoting such a process, is in fact promoting the status quo (Myrick, 2006).

In this current study, the preceptor nurses who volunteered for the role had a greater percentage (82.6%) of those who indicated being comfortable with the role as opposed to those who were appointed (79.3%) to the role and so this confirms that they had the right attitude in clinical teaching. The current study is congruent with a study by Younge et al (2008), at the University of Alberta which indicated that 61.4% of the preceptor nurses reported that preceptoring students was an informal, extra duty and mostly not part of a job description. And though Johan (2009). implies that workplace-based learning is vital for the acquisition of a comprehensive range of clinical skills that can be used in a variety of complex situations, inappropriate attitude of preceptors can negatively affect the process of preceptorship.

5.7 Preference of preceptees by the preceptors

Fifty preceptor nurses (59.5%) showed a strong preference for acting as preceptors for a particular group of students. The most commonly preferred groups were specialty students. The reasons given for the preference was that these groups of students showed greater commitment to their learning and secondly the preceptors had specialty qualifications in certain areas hence felt more comfortable acting as preceptors to students seeking similar qualifications. In practice,50% of the preceptor nurses who a strong preference for one group of students had reported that they ended up getting attached to more than one group or their preferred group of students. On the other hand, 85.3% of the preceptor nurses without a strong preference for any group got attached to more than one group of students.

These findings are an indicator that there was a high population of students in the specialized units as compared to the number of preceptors available. This implies that preceptors may not be able to give much attention to the preceptees and therefore the preceptees acquisition of skills will be slowed down. This also means that both preceptor and preceptee will not be able to achieve their objectives in preceptorship. The current study is consistent with Lillibridge (2007), who noted that the current nursing shortage adversely affects the preceptors' effectiveness in clinical teaching by placing increased demands on preceptors and therefore threatening continuation in their role. This means that improved preceptor-student ratio would reduce the number of students attached to a preceptor and hence improve teaching/learning and skill acquisition.

5.8 Adequacy of equipment and supplies for facilitation of preceptorship

Preceptors and students alike want and need a positive preceptorship experience. There are some factors, however, that must be considered when arranging such experiences, including sufficient time, workload management, use of space, and monetary payment for preceptorship, preparation for the role, the one-to-one relationship and the learning environment. Preceptors, too, need preparatory workshops, paid time for orientation to the role, evaluation of preceptors and support (Yonge, 2008). This assertion is not fully

supported by the results of this current study. Responses to statements on a 5 point Likert scale (1=scarce to 5=very adequate) showed that gloves, syringes, cannulla, stationery and waste bins were readily available (mean score >4 and minimum score>2). However, dialysis machines, slow injectors and heaters/ warming blankets had relatively low mean scores indicating that these items were generally considered to be scarce or inadequate to meet the needs of facilitating preceptorship within the units. These findings convey scarcity and inadequacy of supplies as one of the challenges in facilitating preceptorship and therefore agree with Baumann & Chung (2000) who states that lack of resources at universities and teaching hospitals make it extremely difficult to meet the challenges facing preceptors in clinical teaching. The current study further agrees with Wilkes (2006), in that preceptors want to provide a valuable practice experience for students but are constrained by multiple demands and limited resources.

5.9 Teaching environment of preceptors

Seventy-three (86.9%) preceptor nurses thought that the environment in their respective units was conducive for teaching and learning, 79.3% of the preceptors reported that they got support from the unit administration and the healthcare team during their work as preceptors. The preceptors' responses on teaching environment were validated by comparing them to responses from 5 nurse managers responsible for the units in which the preceptor nurses in the sample worked. These nurse managers were all specialists in the departments they worked in (renal or critical care nursing) and had worked for an average of 5.4 (SD=3.1) years within the respective units with a range from 2.5 to 10 years. Therefore, the responses of the managers were considered to be reliable as key informants in the study.

Of the managers, 60% reported that there was a demonstration room in their units, and only 20% reported that the resources to support teaching were adequate reflecting an agreement with the responses of the sampled preceptor nurses. All the managers (100%) reported that no preparation was provided for preceptors, and neither orientation nor incentives were provided by the hospital or the nursing schools. Nevertheless, two nurse managers thought that nurses were adequately prepared for clinical teaching corresponding to the responses of 74% of preceptor nurses who felt

they were qualified and well equipped to handle clinical teaching. According to Baltimore (2004), hospitals have a responsibility to provide preceptors with the knowledge and skills required to provide bedside instruction and evaluation of orientees and formal preceptor preparation programs that provide practical information for immediate application are necessary for successful transition of orientees into patient care environments. The current study however revealed lack of congruence with Baltimore (2004) in that there was neither preceptor programme in place nor preparation of preceptors done. The findings of this study also contradict Younge et al (2008) who affirmed that preceptors require higher quality preparation, systematic support, acknowledgment of their work and monetary payment for preceptorship.

Of the managers, 60% reported scheduling meetings with preceptors to support them, confirming the report of 79% of the preceptors that the unit supervisors provided support. These findings of the current study are supported by Wilkes (2006), who emphasizes that the preceptor's role is paramount in student's learning and the preceptor should therefore receive the support necessary to enhance the learning.

All (100%) the managers tried to motivate the preceptors. The common motivators used by the managers were non-monetary and included appreciation and compliments, scheduling of appropriate shifts and off duties. These are external motivators that indicate recognition and are very much valued by every worker. According to Abraham Maslow, (1954), there are general types of needs (physiological, survival, safety, love, and esteem) that must be satisfied before a person can act unselfishly. These are the "deficiency needs." As long as we are motivated to satisfy these cravings, we are moving towards growth and self-actualization. Maslow's model indicates that fundamental, lower-order needs like safety and physiological requirements have to be satisfied in order to pursue higher level motivators along the lines of self-fulfillment and that as a result, for adequate workplace motivation, it is important that leadership understands the needs for preceptor's motivation. This means that, when preceptors are motivated they will act unselfishly in their role and maintain appropriate preceptorship experiences for their preceptees.

5.10 Association between knowledge, environment and effective preceptorship

For Preceptors to be effective within the preceptor/student relationship, they need to integrate both their professional and personal attributes to effectively socialize students to the profession of nursing (Wilkes, 2006). In the current study, the effectiveness of preceptorship was also compared to the preceptors' knowledge and ward environment using chi-square tests. The results of these analyses showed that more of the preceptor nurses who reported being comfortable with the role of preceptor were motivated compared to those who reported not being comfortable serving as preceptors ($\chi 2=8.54$; $p=0.004$).

However the motivation of preceptors did not show significant association with the method of recruitment, ward environment or preceptor's perception of preceptees .However, preceptor-preceptee relationship showed a significant association with the preceptor's perception of a preceptee in that only 60% of preceptors who perceived a preceptee as an associate nurse reported good association with preceptees compared to 81% and 90% of preceptor nurses viewing preceptees as students or new nurses, respectively.

According to this current study those preceptors who did not have the correct perception of a preceptee had the lowest percentage (60%) of good relationship with preceptees as compared to those who viewed the preceptee as a student (81%) or new nurse (90%) respectively. This therefore means that, for preceptors to maintain a good relationship with their preceptees, they have to have the correct orientation about preceptees and their needs. As implied by Brammer,(2006), the quality of the relationship between the preceptor nurse and the student directly affects the learning outcome for students.

The ward teaching environment showed a significant association with the span of preceptorship ($\chi^2 = 4.45$; $p=0.05$). Seventy three percent (73%) of preceptors who said the environment were not conducive reported a shorter spans of preceptorship compared to only 39% of preceptors who also reported a shorter span of preceptorship and said the ward environment were conducive for teaching.

Overall, even though most preceptors (86.7%) had reported a conducive teaching environment, the majority in this group (61%) experienced a longer span of precetorship as compared to 27% of those who had reported the environment as not conducive. This means though not reported, they might also have been experiencing challenges in the environment during their role.

5.11 Effectiveness of preceptorship among preceptor nurses in the study

The effectiveness of each preceptor was assessed using a criterion based on the following 4 outcomes:

i. preceptor's motivation
ii. achievement of objectives
iii. span of preceptorship
iv. relationship with the students

The preceptors frequently (88.61%) achieved their set preceptor objectives and 83.3% of the preceptors reported that the relationship between them and the students attached to them was good. However, level of motivation in preceptor role was moderate with (44.6%) of preceptors reporting that they were motivated in their roles. The preceptors reported varying lengths of preceptorship with 56.6% of them reporting that students attached to them had a longer span of preceptorship (> 4 standard weeks).This may mean that since majority (55.4%) of the preceptors felt demotivated, they could have relaxed in their role hence the longer span of preceptorship. On the other hand specialty preceptors who reported a longer span (> 4 standard weeks). of preceptorship may have been more detailed in their teaching and this might have prolonged the span of preceptorship.

5.12 Association between preceptor factors and effective preceptorship

The effectiveness of preceptorship was compared to the preceptor factors using chi-square tests. The results indicated that motivation to serve as a preceptor was statistically associated with the number of years a participant had served as a nurse. ($\chi 2=11.30$; $p=0.01$) In general, newly employed preceptor nurses and those who had served for over 15 years were more likely to be motivated compared to those who had

been in employment for between 7 and 15 years. There was a single preceptor nurse employed less than 3 years ago who reported being motivated. 60% and 75%, of preceptor nurses employed for 3-6 years and those with over 15 years in employment respectively reported being motivated. In contrast only 27% of preceptor nurses in employment for 11-15 years and 40% of those employed for 7-10 years were motivated. None of the other preceptor factors including gender, marital status, designation and specialty were significantly associated with effective preceptorship.

Preceptorship has been consistently acknowledged as a strategy to maximize the benefits of clinical nursing education in terms of knowledge and skill acquisition, confidence, and professional socialization. Further benefits have also been recognized for preceptors, and for the broader health care agency. Despite recognition of the importance of this role, there has been no clearly articulated model of preceptorship that reflects the broader factors impacting upon the relationship between preceptor nurses and nursing students (Happell, 2009).In this current study, the preceptor-student relationship did not show a significant association with any of the preceptor factors included in the analysis. Though all preceptors reported some challenges in their role, they are likely to have had a rewarding relationship with the students and hence no association. The study agrees with Wilkes (2006) who implied that preceptor-student relationship is a complex one, which can be rewarding as well as problematic at times. Wilkes (2006) further stated that preceptors want to provide a valuable practice experience for students but are constrained by multiple demands and limited resources.

5.13 Span of preceptorship

The Span of preceptorship, however, showed statistically significant associations with the preceptor nurse's designation, specialty and years of professional practice. All NO IIIs (100%) and 67% of NOIIs reported a short span of preceptorship compared to only 35% of NO Is and 50% of SNOs. Recently recruited preceptor nurses (employed for less than 10 years) consistently reported shorter spans of preceptorship compared to preceptor nurses who worked for over 10 years ($\chi2=11.80$; $p=0.01$). The specialty preceptor nurses namely critical care and renal nurses reported longer spans of preceptorship compared to non-specialty preceptors. ($\chi2=10.25$; $p=0.01$) These results could be related to the fact that NO Is and SNOs hold additional administrative duties

which could reduce their effectiveness as preceptors hence the longer spans of preceptorship. It could also be associated to motivation of new workers who are eager to perform their role hence the shorter spans, whereas those preceptors who had worked for more than 10 years could be experiencing some burnout. This is supported by Begat et al (2005), indicating that various studies have demonstrated nursing as stressful and that the incidence of occupational stress-related burnout in the profession is high; yet, for many preceptors working in today's health care environment, work is a stressful part of their lives. These results are further supported by another study by Brennan, (2008). According to Brennan (2008) , preceptors found it sometimes difficult to cope with the demands of their own position, a matter which if not acknowledged by stakeholders would reduce preceptorship to a paper work with just assessment functions which would create frustration to students and fatigue and unfulfilled experiences to preceptors.

5.14 Challenges commonly encountered by preceptor nurses

The preceptor model of clinical education uses nurses to fulfill the role of 'teacher' in a one-on-one relationship with students but the current nursing shortage, however, places increased demands on preceptor nurses and threatens their continuation in this role (Lillibridge, 2007). This is consistent with this current study whereby precepting of students was reported as demanding owing to several challenges indicated here below. According to (Boyer, 2008), to meet the challenges inherent to the 21st century healthcare environment, preceptors require specific preparation for their teaching role, as well as resource materials and policies that support this instructional work. In this current study, all the preceptors (100%) reported having encountered some challenges in their role. The reported challenges commonly included heavy patient workload (85.71%), lack of adequate resources (59.52%) and the high number of students (59.52%) attached to a preceptor. This current study is consistent with a study done at Ottawa Hospital by Young (2009) which indicated that peri-operative preceptors were over-worked and were being faced with the pressure of preceptorship while struggling to meet the daily demands of the waiting lists.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusions

Based on the findings of this study, it can therefore be concluded that preceptors at KNH Specialized units;

- Have adequate knowledge in their specialties and they play an important role in clinical teaching of students
- Have a positive attitude in preceptorship despite lack of preparation into their role. Even though majority (83.3%) of the preceptors lacked formal training in preceptorship, they had a desire to participate in preceptorship.
- Face various challenges which can impact negatively on their effectiveness as clinical teachers, with heavy workload (85.71%) , lack of adequate resources(59.52%) and high population of students (59.52%) being the most common.

As reported by both preceptors and key informants, currently there is no preceptorship program in place to orient preceptors into their role at KNH specialized units. The findings of this study answer all the research questions posed by the researcher. These findings underline the need to enhance preceptorship experiences for preceptors at KNH Specialized units.

6.2 Recommendations

There is need for all stakeholders to be involved in enhancing preceptorship experiences for preceptors at KNH specialized units. This will assist preceptors in fostering professional socialization and help students achieve professional skills and confidence in their practice before graduating and being absorbed into the work force in the society. In relation to the findings of this study, the researcher recommends that:-

1. Challenges faced by preceptors at KNH Specialized units should be addressed expeditiously by both hospital and the nursing schools.
2. Preceptorship orientation programmes should be implemented for preparation of preceptors before engaging them in precepting students so as to ensure the safe development of student competence and confidence for their professional role.
3. A model of preceptorship should be established that will facilitate delineation of the roles and responsibilities of preceptors, students, hospital and the nursing schools.
4. Both the hospital and the nursing schools need to ensure that preceptor nurses are given the necessary support, recognition and resources to enhance their role.
5. The nursing schools and the hospital should determine ways of motivating the preceptors in order to promote quality preceptor-student teaching/ learning experiences
6. Preceptors should be taken through ongoing update workshops and evaluation from time to time to assess their readiness for their role
7. Another follow-up study should be done after implementation of preceptorship programmes to compare the results with this current study.
8. A research study on learners' experiences in preceptorship is also necessary to further assist in enhancing preceptorship programs.

TIME FRAME

MONTH / ACTIVITY	DEC 09	JAN 10	FEB 10	MAR 10	APR 10	MAY 10	JUN 10	JUL 10	AUG 10	SEP 10
Problem identification										
Proposal writing										
Approval by the Research & ethics committee										
Amendments										
Approval by KNH Admn. & Ministry of Ed.										
Selecting & training of research assistants										
Piloting the data collection tools										
Data collection										
Data checking & computing										
Data analysis										
Report Writing & Presentation										
Compiling the final report										
Dissemination of Research findings										
Project report defense										

STUDY BUDGET

	ITEM	QUANTITY	COST PER ITEM	TOTAL COST
A	**Stationery**			
	Internet cable	1	500	500
	Flash disc (2 GB) LG	2	2000	4000
	Stapler	2	350	700
	Staple pins (standard)	1 box	350	350
	Foolscaps	1 realm	550	550
	Spring files	5	30	150
	Box files	5	50	250
	Note books	4	25	100
	Biro Pens	10	25	250
	Pelikan Pencils HB 110	1 packet	165	155
	Pelikan BR 40 Rubber	5 pieces	15	75
	Sub-total A			**6,750**
B	**Secretarial Services**			
	Typing(proposal	60pages	20	1200
	Printing –Proposal	60 pages	20	1200
	-Thesis	3x150 Pages	20	9,000
	-Questionnaire	10 pages	20	200
	-Interview guide	5 pages	20	100
	Photocopy –Thesis	7x150pages	2	2100
	-Proposal	5x60	2	600
	-Questionnaire	10x150 copies	2	3000
	-interview guide	5x10 copies	2	100
	Binding-proposal	5	150	750
	- thesis	7 copies	250	1750
	Sub-total B			**20.000**
C	**Allowances**			
	Statistician	1x4days	5000	20,000
	Principal Researcher	1x30 days	1000	30,000
	Research Assistants	2x10 days	600	12,000
	Sub-total C			**62,000**
	Contingencies	10% of total		17,125
	GRAND TOTAL (A+B+C)+10%			**105,875**

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APPENDICES

APPENDIX I: RESPONDENTS' CONSENT FORM

My name is Jane Chore. I am a student at the University of Nairobi pursuing a master's degree in nursing sciences. I am carrying out a research study on '***Assessment of challenges facing preceptors at KNH Specialized Units***', as a requirement for award of the degree. I am kindly requesting you to participate in this study.

The study will be focusing on various issues relating to preceptorship and the teaching and learning environments. I am kindly requesting you to complete the questionnaire. Please note that you are not required to write your name on the questionnaire. Also please note that participation is voluntary and you may withdraw at any point without any repercussions. There are no risks involved in this study and your responses will be treated confidentially.

The results of this study will provide information on the current situation and advice the stake holders on possible solutions that can be used for improvement of the same. The study results will be communicated to you through the unit head once the study is completed.

Your participation is highly appreciated. If you wish to participate and respond to this questionnaire/interview guide please sign in the space provided:

Respondent's signature..... Date.....

(Optional)

Investigator's Signature..... Date.....

Incase you have any concerns or questions; please feel free to get in touch with me through the contact here below.

Address: **P.O. Box, 2061-00202 (KNH) Nairobi**

Mobile: **0722792931,**

Email : **chorejn@yahoo.com**

APPENDIX II: QUESTIONNAIRE FOR PRECEPTORS: **CODE……..**

A) Socio Demographic Data

Please tick

101. Gender

1. Male ( )
2. Female ( )

102. What was your age by your last birthday?

1. Please indicate in space provided ……years

103. Marital status

1. Single ( )
2. Married ( )
3. Other (please specify)……..

104. Highest level of education

1. 'O' Level ( )
2. 'A' Level ( )
3. Diploma ( )
4. First degree ( )
5. Masters ( )
6. PhD ( )

105. Professional qualification

1. ECN ( )
2. KRN ( )
3. KRCHN ( )
4. BScN ( )
5. MScN ( )
6. PhD ( )

106. Current designation

1. NO III ( )
2. NOII ( )
3. NO I ( )
4. SNO ( )
5. ACN ( )

107. When was your last promotion?

1. 3 Years ago ( )
2. 5 years ago ( )
3. above 5 years ago ( )

108. How long have practiced as a qualified nurse?

1. Less than 3 years ( )
2. 3-6 years ( )
3. 7-10 years ( )
4. 11-15 years ( )
5. above 15years ( )

109. What is your specialty training in nursing?

1. CCN ( )
2. Renal ( )
3. Other (please specify).....

110. When did you start participating in preceptorship?

1. 1 -2 years ( )
2. 2-3 years ( )
3. 3-5 years ( )
4. Above 5 years ( )

111. Have you had any training on preceptorship?

1. Yes ( )
2. No ( )

B) Knowledge, practice and attitude in preceptorship

112.0 What do you understand by the following terms?

112.1 Preceptor

1. A teacher ( )
2. A mentor ( )
3. A partner ( )
4. A role model ( )

112.2 Preceptee.

1. A student ( )
2. A new nurse ( )
3. An associate nurse ( )

113. What is your role in preceptorship? Please explain.....

.....

.....

114. What is clinical teaching?

1. Teaching that takes place at the patient bed side ( )
2. Teaching using a dummy/manikin ( )
3. Teaching students about patients ( )
4. All the above ( )
5. None of the above ( )

115. Do you consider yourself qualified and well equipped to handle clinical teaching?

1. Yes ( )
2. No ( )

If your answer is yes, please explain.....

.....

If your answer is no, please explain.....

.....

116. Do you have any time set aside for preparing clinical teaching sessions for your students?

1. Yes ( )
2. No ( )

If no, please explain.....

.....

117. 1 which of the following facilities do you usually use to update your knowledge?

1. Library ( )
2. Internet ( )
3. Both library & internet ( )
4. None of the above ( )

117.2 If your answer above was1, 2, 3, how often do you visit this resource?

1. Every day ( )
2. Once a week ( )
3. Once fortnightly ( )
4. Seldom ( )

117.3 If your answer in 118.1 above was 4, how do you update your knowledge?

Please explain.....

.....

.....

118.1 How did you become a preceptor?

1. Voluntary ( )
2. Appointed ( )
3. Other.(specify).....

118.2 Are you comfortable being a preceptor?

1. Yes ( )
2. No ( )

If yes give reasons.....

.....

If no, give reasons.....

.....

118.3. How motivated are you to continue being a preceptor?

1. Highly motivated ( )
2. Motivated ( )
3. Fairly motivated ( )
4. Not motivated ( )

If not motivated, please explain.....

.....

119.1 Do you have any incentives as a preceptor?

1. Yes ( )
2. No ( )

119.2 What incentives would you suggest as appropriate for preceptors?

1. Monetary
2. Professional development
3. Time off
4. Other, please specify.....

120.1 Which categories of students do you commonly precept?

1. Masters Students ( )
2. BScN Students ( )
3. Specialty Students (CC, Renal A&E) ( )
4. Upgrading ECN Students ( )
5. Other (specify ( )

120.2. Which category of students among the ones stated in 121.1 above do you prefer to precept?

1. Masters Students ( )
2. BScN Students ( )
3. Specialty Students ( )
4. (CC, Renal A&E) ( )
5. Upgrading ECN Students ( )
6. Other (specify ( )

Please give reasons for your answer.....

.....

120.3 How can you rate your relationship with your preceptees?

1. Very good ( )
2. Good ( )
3. Fair ( )
4. Satisfactory ( )
5. Unsatisfactory ( )

120.4 Out of the last three groups of preceptees attached to you, how many were able to fully achieve their objectives?

1. All three groups ( )
2. Two groups ( )
3. One group ( )
4. None ( )

120.5 On average, after how long did the preceptees take to work confidently on their own?

1. 2 weeks ( )
2. 3 weeks ( )
3. 4 weeks ( )
4. Above 4 weeks ( )

C) Teaching & Learning environment in the unit

121. Do you consider the environment in your unit as conducive for teaching and learning?

1. Yes ( )
2. No ( )

If your answer above is **NO**, please explain.....

.....

122. In your work as a preceptor, do you get any support form the unit administration and the health care team?

1. Yes ( )
2. No ( )

If yes, explain what support you get.....

.....

If no, please explain.....

.....

123. Have you attended any course on teaching methodology or training of trainers (TOT) ?

1. Yes ( )
2. No ( )

I f no do you feel it limits your performance as a preceptor? Please explain.....

.....

124. List three (3) things you consider most important in effective facilitation of clinical teaching.

1. .....
2. .....
3. .....

D) Challenges Encountered in preceptorship

125.1 Have you encountered any challenges in your role as a preceptor?

1. Yes ( )
2. No ( )

125.2 What challenges do you commonly encounter as a preceptor?

1. High population of students ( )
2. Lack of adequate resources ( )
3. Lack of support from team/administration ( )
4. Inappropriate teaching environment ( )
5. Heavy patient workload ( )
6. Acuity of patients condition ( )
7. Other, please specify.....

126. What factors would you associate with the challenges you indicated in no. 12 2.2 above?

1. Lack of schools' program organization ( )
2. Failure of hospital administration to set up program policies ( )
3. Lack of role definition ( )
4. Lack of appropriate training in preceptorship ( )
5. Other, please specify..... ( )

127. In your opinion, what are the best solutions for the difficulties you indicated above?

1. .....
2. .....
3. .....
4. .....
5. .....

CODE....

128. Likert Scale: Adequacy of Equipment & Supplies for facilitation of preceptorship

Rate the adequacy of the following resources in your unit

Item	*Scarce (1)*	*Inadequate (2)*	*Fairly adequate (3)*	*Adequate (4)*	*Very adequate (5)*
1. Ward space					
2. Patient bed space					
3. Storage areas					
4. Procedure preparation areas					
5. drip stands					
6. Procedure trolleys					
7. Monitors/pulse oximeters					
8. Ventilators					
9. Dialysis machines					
10. slow injectors					
11. Nebulizers					
12. Weighing scales					
13. BP machines					
14. Heaters/warming blankets					
15. Basic dressing packs					
16. Solutions & lotions					
17. Gloves					
18. Syringes & needles					
19. Cannulas & branulas					
20. Waste Disposal bins					
21. Stationery					
22. Patient linen					

CODE.....

APPENDIX III: INTERVIEW GUIDE FOR UNIT MANAGERS AND COURSE MANAGERS IN SPECIALIZED UNITS

101) Period of service & Specialty

1. How long have you been a manager in the unit/ course?
2. What is your area of specialty in nursing?

102. Teaching and Learning Environment: Clinical teaching overly depends on the learning environment

1. Is there a demonstration/conference room in your unit?
2. Are there adequate resources to support teaching and learning in your unit?
3. What would you wish/suggest as a unit manager aught to be put in place to enhance preceptorship towards achievement of student's learning outcomes?

103. Policies and procedures: Policies and procedures are important in enhancing clinical teaching.

1. In your own opinion, do you think the preceptors are adequately prepared for their role in clinical teaching?
2. Does the hospital/schools involved offer any preparation for the preceptors
3. Is there a program in place for preceptorship (orientation) of preceptors?
4. Are there any incentives provided for the preceptors?
5. As unit manager what would you suggest that can be done to enhance preparedness of preceptors and their motivation as clinical instructors?

104. Faculty involvement: Faculty involvement is crucial in clinical teaching.

1. Are the schools involved providing any preparation for preceptors before engaging them in clinical teaching
2. Does the faculty provide teaching materials/teaching aids for preceptors?

105. Role modeling: Nurse Managers play an important role in empowering preceptors

1. Do you normally schedule meetings with preceptors to discuss issues on clinical teaching?
2. Do you engage in teaching the preceptors in your unit?
3. As a unit manager, how do you usually motivate the preceptors in their role?
4. Are you able to spend sometime with students in your unit?

APPENDIX IV: LETTER OF REQUEST FOR APPROVAL BY ETHICS AND RESEARCH COMMITTEE

Jane N. Chore
P.O. Box 2061-00202
(KNH)
Tel-0722-792931
Nairobi

The Chairman,

Ethics & Research Committee,

P.O Box 20723-00202

Nairobi-Kenya.

Dear Sir/ Madam,

Ref: Authority to carry out research at K.N.H. Specialized Units (CCU, Renal & Cardiology units).

I wish to request your permission to carry out a research on, **"Assessment of Challenges Facing Preceptors at KNH Specialized Units"**

The research findings will provide information on factors that are contributing to ineffective clinical teaching by the preceptors which can be utilized by the stake holders to enhance the teaching and learning environments that will motivate the preceptor nurses in their role of clinical teaching and subsequently improve achievement of learning outcomes for the nursing students.

Your consideration will be highly appreciated.

Yours faithfully,

Jane N. Chore

MScN student,

School of Nursing Science

University of Nairobi

APPENDIX V LETTER OF APPROVAL BY ETHICS AND RESEARCH COMMITTEE

KENYATTA NATIONAL HOSPITAL
Hospital Rd. along, Ngong Rd.
P.O. Box 20723, Nairobi.
Tel: 726300-9
Fax: 725272
Telegrams: MEDSUP", Nairobi.
Email: KNHplan@Ken.Healthnet.org

Ref: KNH-ERC/ A/446

9th April 2010

Mrs. Jane N. Chore
School of Nursing Sciences
College of Health Sciences
University of Nairobi

Dear Mrs. Chore

RESEARCH PROPOSAL: "ASSESSMENT OF CHALLENGES FACING PRECEPTORS AT KENYATTA NATIONALHOSPITAL SPECIALIZED UNITS" (P41/02/2010)

This is to inform you that the KNH/UON-Ethics & Research Committee has reviewed and **approved** your above revised research proposal for the period 9th April 2010 8th April 2011.

You will be required to request for a renewal of the approval if you intend to continue with the study beyond the deadline given. Clearance for export of biological specimens must also be obtained from KNH/UON-Ethics & Research Committee for each batch.

On behalf of the Committee, I wish you a fruitful research and look forward to receiving a summary of the research findings upon completion of the study.

This information will form part of the data base that will be consulted in future when processing related research study so as to minimize chances of study duplication.

Yours sincerely

PROF A N GUANTAI
SECRETARY, KNH/UON-ERC

c.c. Prof. K. M. Bhatt, Chairperson, KNH/UON-ERC
The Deputy Director CS, KNH
The Director, School of Nursing Sciences, UON
The HOD, Records, KNH
Supervisors: Prof. A. Karani, School of Nursing Sciences, UON
Dr. Margaret Chege, School of Nursing Sciences, UON

APPENDIX VI: LETTER FOR REQUEST OF APPROVAL BY MINISTRY OF EDUCATION, RESEARCH & TECHNOLOGY

Jane N. Chore
P.O. Box 2061-00202
(KNH)
Tel-0722-792931
Nairobi

Ministry of Education, Research & Technology
Research Ethics Body,
P.O Box
Nairobi-Kenya.

Dear Sir/ Madam,

Ref: Authority to carry out research at K.N.H. Specialized Units (CCU, Renal & Cardiology units).

I wish to request your permission to carry out a research on, "**Assessment of Challenges Facing Preceptors at KNH Specialized Units**"

The research findings will provide information on factors that are contributing to ineffective clinical teaching by the preceptors which can be utilized by the stake holders to enhance the teaching and learning environments that will motivate the preceptor nurses in their role of clinical teaching and subsequently improve achievement of learning outcomes for the nursing students.
Your consideration will be highly appreciated.

Yours faithfully,

Jane N. Chore
MScN student,
School of Nursing Science
University of Nairobi

APPENDIX VII: LETTER OF APPROVAL BY MINISTRY OF EDUCATION, RESEARCH & TECHNOLOGY

REPUBLIC OF KENYA

The District Education Officer
Rarieda District

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telegrams: "SCIENCETECH", Nairobi
Telephone: 254-020-241349, 2213102
254-020-310571, 2213123.
Fax: 254-020-2213215, 318245, 318249
When replying please quote

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: **NCST/RR1/12/1/MAS/62/5**

Date: **3rd May 2010**

Ms. Jane Njambi Chore
University of Nairobi
P. O. Box 30197
NAIROBI

Dear Madam,

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Assessment of challenges facing preceptors at Kenyatta National Hospital specialized units"*** I am pleased to inform you that you have been authorized to undertake research in **Nairobi Province** for a period ending ***30th September, 2010.***

You are advised to report **to the Director, Kenyatta National Hospital, Nairobi** before embarking on the research project.

On completion of the research, you are expected to submit two copies of the research report/thesis to our office.

P. N. NYAKUNDI
FOR: SECRETARY/CEO

Copy to:

The Director
KNH

APPENDIX VIII: LETTER OF REQUEST FOR AND APPROVAL BY KNH ADMINISTRATION

Jane N. Chore
P.O. Box 2061-00202
(KNH)
Tel-0722-792931
Nairobi
12th April, 2010

The C.E.O.
Kenyatta National Hospital,
P.O Box 20723-00202
Nairobi-Kenya.

13/4/2010
Permission given, can go ahead
Approved

Att' DDCS
KNH

Dear Sir,

Ref: **Authority to carry out research at K.N.H. Specialized Units (CCU, Renal & Cardiology units).**

I wish to request your permission to carry out a research on, **"Assessment of Challenges Facing Preceptors at KNH Specialized Units".** My research proposal has been approved by the Ethics and Research Committee and if given permission by your office, I wish to start data collection within this month of April.

The research findings will provide information that can be utilized by the stake holders to enhance the teaching and learning environment and motivate the preceptor nurses in their role of clinical teaching and subsequently improve achievement of learning outcomes for the nursing students and quality patient care.

Your consideration will be highly appreciated.

Yours faithfully,

Jane N. Chore
MScN student,
School of Nursing Science
University of Nairobi