

**ASSESSMENT OF MENTORSHIP FACTORS INFLUENCING CLINICAL
COMPETENCES OF DIPLOMA NURSING STUDENTS AT COAST GENERAL
TEACHING AND REFERRAL HOSPITAL, MOMBASA**

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DECLARATION AND RECOMMENDATION

Declaration

This thesis is my original work and has not been presented for a degree or any other award in any other university

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GOD BLESS

ABSTRACT

Nurses work in various health care settings and represent the universal entry access for roughly 90% of healthcare users hence effective graduation of qualified nurses with necessary abilities is a paramount function in the nursing education training (Bvumbwe & Mtshali, 2018). According to Cooley and De Gagne (2016), there is a global scarcity of qualified experienced nurses forcing healthcare administrators to employ recently graduating nurses to fill the gap. Over the last decade, several concerns have arisen concerning newly qualified nurses' clinical competences and suitability for practice after completing their training. Missen et al. (2016) argue that even at the end of their training, nursing students lack clinical competences and are unable to attain the maximum degree of clinical competence required of them and blame this on the theory practice gap. Training initiatives should prioritize the acquisition of competences through mentorship. In South Africa Mentoring in practical placements is not yet codified as there are no regulatory norms to act as a guide for mentors (Mhlaba, 2011). In Kenya, the student lecturer ratio is beyond the expected limit (MOH, 2012). When student mentorship is lacking or inadequate, institutions risk generating half-baked graduates who may not be able to perform nursing procedures adequately and attend to patients appropriately due to a lack of essential competences required for all practicing nurses. This study sought to assess mentorship factors influencing Clinical Competences of Nursing students at Coast General Teaching and Referral Hospital, Mombasa. The study had four objectives and adopted a descriptive cross-sectional survey. The study population was ninety-five (95) basic diploma students in their 3rd year at KMTC Mombasa. The sample size formula of Yamane, (1967) was employed to arrive at a sample size of 77 students. The researcher collected data by use of online google form questionnaires. The statistical package for social science (SPSS) version 25 was used to conduct the analysis for quantitative data. Inferential data analysis was run using Pearson correlation coefficients. The statistical significance was set at $P = 95\%$ (0.05). The students perceived themselves as competent and had acquired average to moderate level competence in communication skills, decision making, teamwork, performance of nursing skills / procedures, problem solving skills and self-confidence [$r=0.406$, $p<0.05$]. The mentor's modeling style helped students integrate the knowledge learnt into practice and had a positive correlation coefficient of [$r=0.703$, $p<0.05$]. Findings on mentor-mentee relationship showed that there were poor interpersonal relationships among mentors and mentee [$r= 0.956$, ($p<0.05$)]. This led to inadequate mentoring and thus poor acquisition of clinical competences. Findings on Institutional factors showed [$r= 0.451$, ($p<0.05$)]. There was no intentional matching of mentees to mentors and the high number of students per mentor hindered proper development of expected skills, knowledge, and competences as it was difficult to assist them all. The results of this study confirmed that the independent variables (mentor, institutional, and mentor- mentee relationship factors) had a strong statistically significant relationship ($p<0.05$) on the dependent variable clinical competences. This study therefore recommends the hospital to improve the mentoring environment, by resolving the mentor-mentee relationship challenges. Both institutions to come up with a policy and implement a formal structured mentorship program so that there is a precedent standard that can be followed to have a mentoring action plan where students are intentionally matched to mentors depending on the placement.

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ABBREVIATIONS AND ACRONYMS

CC	Clinical competence
CGTR	Coast General Teaching and Referral Hospital
CLE	Clinical Learning Environments
CNO	College of Nurses of Ontario
CPET	Clinical Performance Evaluation Tool
HEI	Higher Education Institutions
HDU	High Dependent Unit
ICU	Intensive Care Unit
KMTC	Kenya Medical Training College
KeMU	Kenya Methodist University
MOH	Ministry of Health
NCK	The Nursing Council of Kenya
NCSBN	National Council of State Boards of Nursing
NMC	Nursing Midwifery Council
QSEN	Quality and Safety Education for Nurses
UON	University of Nairobi
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

1.0 Background to the study

Worldwide nurses form majority of the universal health workforce and participate in care crucial roles within the healthcare system where they give, monitor, and control the offered to patients (Cengiz & Yoder, 2020). Nurses represent the universal entry access for roughly 90 percent of healthcare users hence effective graduation of qualified nurses with necessary abilities is a paramount function in the nursing education training (Bvumbwe & Mtshali, 2018). Over the last decade, several concerns have arisen concerning newly qualified nurses' clinical competencies and suitability for practice after completing their training.

With the advent of changing demographic changes and the rising of chronic diseases, experienced professional nurses are required to manage the fast-changing environment (Hofler & Thomas, 2016). According to Cooley and De Gagne (2016), there is a global scarcity of qualified experienced nurses forcing healthcare administrators to employ recently graduating nurses to fill the gap. Furthermore, Missen et al. (2016) argue that even at the end of their training, nursing students lack clinical competence and are unable to attain the maximum degree of clinical competence required of them and blame this on the theory practice gap. These comments are also mirrored by Aboshaiqah and Qasim (2018) who state that despite profession's best efforts the gap still exists. Educators,

practitioners and students in various studies have expressed worry about the rising discrepancy between theory and practice, but noted that the gap can be closed.

Nursing education is distinct from other health science courses in that it requires considerable practical practice in a variety of healthcare settings. Clinical competence is a vital constitute of nursing practice and affects the quality of services offered by nurses (Faraji et al., 2019). The clinical competencies one obtains determine the quality of treatment offered. Furthermore, the training and mentorship offered by experienced nurses has an impact on how nursing care is delivered (Foster & Hill, 2019).

Student nurses are required to acquire vast information, clinical competences and skills during their training to enable them offer pertinent quality care and demonstrate high levels of competence in various healthcare settings as future professional nurses. They are expected to be competent, confident, critical thinkers, to lead others team members, to enquire where not sure and to be examined at the conclusion of their nursing education (Dachew et al., 2016). Safe nursing practice necessitates a healthy relationship between expanding knowledge and various clinical practice contexts to be effective. Bvumbwe and Mtshali (2018) recommends that rather than impromptu brief lectures and seminars, training institutions should epitomize the acquisition of competencies through supporting mentorship, supervision and simulation.

Clinical competence is a vital component when interacting with health care personnel caring for sick patients and their loved ones, thus more knowledge of the notion is essential for nursing education and practice. Due to increased public desire for professional

responsibility, the term clinical competence has been frequently addressed in the nursing literature over the last three decades; nonetheless, it remains ambiguous and is defined variably by healthcare researchers (Goh & Tang, 2020). Because of inconsistencies in the meaning of the word competence, where competency and competence are used interchangeably, the notion of competence remains hazy. Competency relates to the capacity to do a skill, while competence refers to the capacity to evaluate a task while executing a skill and holding the knowledge and capacity (Song & McCreary, 2020). Nursing competence approaches are vital for raising the quality of nursing practice. Until now, they are in the early stages of development thence, creating acceptable standards and frameworks for nursing competence and the proficiency expected of all those practicing nursing, and educational methodologies for nursing remains difficulty (Fukada, 2018).

Clinical competence is defined as observable changes in knowledge, abilities, and attitudes in administration, communication skills, decision-making, collaboration, nursing procedures (professional skills), and the capacity to offer basic, individualized, and medical nursing care. Particular competences such as top-notch care evaluation, process execution, performance monitoring, and the capacity to keep an eye on health and illness are also included (Faraji et al., 2019). Competences, career attributes and awareness are the three personal attributes requirements for all practicing nurses so as to deliver quality services to patients (Fukada, 2018). Nursing is a hands-on profession thus the training of personnel is divided into two major sections which are theoretical and practical. Through mentorship student nurses are exposed to important evidence-based clinical practice

procedures, standardized nursing language, during in the practical rotations. Mentors are assigned to nurses who will assist them in completing their practicum. This is only possible when students study under the supervision of a mentor.

The Nursing and Midwifery Council (NMC, 2010), defines a mentor as "an undergraduate who has obtained the mastery, expertise, and proficiency necessary to satisfy the set goals following accomplishment of the NMC accepted mentor education program.". The role of a mentor includes knowledge and skill transference, assisting in the nursing practicum, facilitation of teaching procedures, providing nursing counselling and being role models whom the student nurses can look upon. The counselling can either be on how to handle academic difficulties, how to effectively retrieve knowledge, writing skills, and offering introductions to the varied Nursing networks. Mentors also give evaluation and feedback. They provide relevant guidance and comments on varied expectations expected of student nurses. They too provide explicit, positive feedback during the mentorship process in order to maintain the mentees self-confidence. They give psychological assistance, or encouragement and assistance, especially during stressful situations. Mentors also serve as role models, shaping ideas, beliefs, viewpoints, character, instill organizational character and empowering nurses. They are crucial for giving mentees the adroitness and resources they need to deal with work. They too are mentored on the use of technology and informatics which thus prepares them for real-world practice place challenges. Finally, mentors in research and academia foster scientific inquiry and hence assist mentees at every level of the research and publishing process

Mentorship is fundamental during nurse students' clinical /practical rotations (Myall et al., 2008). Student mentoring requires considerable mentor preparation to promote clinical competence (Mudaly & Mtshali, 2018).

Mentorship programs are available to assist students in completing their programs, gaining confidence, and transferring to further education or the workforce, furthering the purpose of assisting, challenging, guiding, and encouraging individuals (mentees) to develop and learn personally and professionally. Mentorship is a statutory necessity before registration of both the Nursing and Midwifery undergraduates (Kolawole et al., 2019). A consistent definition of undergraduates' mentorship assists set the requirements and standards of clinical educational experiences for students (Mudaly & Mtshali, 2018). Keeping an eye on students' academic performance and assistance is a method used to guarantee that all worthy students have an equal opportunity to succeed in an undergraduate nursing program, leading in better throughput rates (Mudaly & Mtshali, 2018).

Mentees grow both emotionally and professionally following their involvement in a mentoring relationship. Mentoring takes numerous forms throughout one's career, including sponsoring, directing, coaching, advising, challenging, recommending, safeguarding, and facilitating (Foster & Hill, 2019). Mentorship programs can take many different forms, including official and informal peer mentoring. Students are allocated to mentors according to organizational mentoring program frameworks in formal mentoring programs (Tan et al., 2018), however in others, mentors and proteges create connections casually without any official framework or assistance provided by the institution's management (Johnson, 2015).

The Nursing education program posits that nurse may invent modalities, new theories, and practices to make healthcare safer, more fair, accessible, efficacious, patient-centered, and timely. However, if a range of mechanization and tactics, such as highlighting the significance of mentorship, are integrated into the practical sessions during the rotations the aim is achieved more efficiently. Mentorship includes providing student help in clinical practice, which is seen as an important part of the mentorship position (Thomson et al., 2017).

Nurse mentorship programs are a great way to enhance clinical care in nursing and do it in a long-term way from inside the profession. Mentorship is an excellent technique for easing the transition of student nurses into clinical practice programs. It also has a lot of promise in areas where nurses are geographically distributed and have fewer chances for formal or informal education or training (Muleya et al., 2015). Even though numerous studies have focused on mentoring, its essence, and use in the clinical environments, there has been little attention given regarding the magnitude to which regulatory organizations' rules and impact mentoring policy. According to research, there are few programs that give mentorship to nursing students before they graduate from school (Lavoie-Tremblay et al., 2020).

The notion of mentoring initially emerged in the nursing writings in the early 1980s. There has been uncertainty about what mentoring entails, and many individuals have yet to grasp the notion. Mentorship research in nursing is a relatively new development. Many mentoring studies so far have been observational or qualitative, with mixed results (Nowell et al., 2015). Furthermore, even though various studies have been done on

mentoring, mentoring among undergraduate nurses, is still ambiguous. There lacks a uniform consensus on undergraduate mentoring in the clinical environments, thus mentoring methods differ from one school to the next (Jokelainen et al., 2013a).

Mentoring tactics differ, according to Jokelainen et al. (2013a), consequently student nursing assignments differ as there is no uniform consensus in their mentoring. They noted that just a few papers provide mentorship frameworks or outcomes in nursing, thus necessitate the need to figure out what works and what does not in formal mentoring programs. Despite the lack of empirical evidence on how these programs should be organized to achieve optimal efficacy, formal mentoring programs continue to gain favor inside enterprises (Allen et al., 2006). A study carried out at the Kenya Medical Training Campus, Kabarnet on perception on Mentorship Practices among Nursing Students revealed that the undergraduate nursing students encountered both pleasing and unpleasing experiences during mentorship (Wachira, 2019).

Despite this, a variety of factors influence the development of competences by student nurses through mentorship. As addressed in this section, they include mentor-related variables, institutional variables, mentor-mentee relationship features, and student-related aspects. Nursing educators/mentors have a vital role in enhancing nursing students' clinical experience in clinical practice, hence mentor-related aspects are significant (Kim, 2020). Their contribution to educational programs is crucial, and it must be regarded highly in deciding the student's experience. Mentoring can assist nurse students' belief in oneself, comprehend virtuous and moral dilemmas, and acquire interpersonal skills that are not addressed in the training school (University of Texas Arlington, 2016). The most

important observable change of mentoring is positive notable changes in psychomotor activities, frame of mind and the acquisition of information gained following the mentor and protégé relationship. These changes are concretized against the three learning domains.

Institutional factors also affect the acquisition of competencies through mentoring in that the clinical learning environment contains attributes which affect the student learning experience. These are practice placements, institutional support, ratio of mentors to mentees and the available resources. The presence of these elements ensures that the student nurse is well equipped to handle patients after the training. Further, mentor-mentee relationship characteristics are also important in competencies acquisition as they dictate the kind association between the mentor and the mentee. A warm association means that learning takes place while the reverse is true.

Finally, student-related factors will influence whether the mentees learn the desired skills. These elements have to do with mentees' perceptions of the mentoring experience in terms of perceived advantages, attitude toward the program, expected feedback from the program, and even problems they expect or face throughout the experience. Nursing education faculty is facing major challenges during this time when health system is dramatically changing. This calls for nursing tutors and nursing staff to teach student nurses so that they are able to offer top notch care, evaluate health issues, deal with patient concerns, and inform health guidelines.

Mentoring is a frequently stressed topic in nursing education across the world. In the United Kingdom, for example, before registering as a nurse, students must satisfy specific standards and skills to satisfy the requirements for enrolment with the Council. For this to happen, a nurse mentor who has undergone training in assessing undergraduates is often in charge of continual monitoring and evaluation in the clinical placements and simulations (NMC, 2010).

Manzi et al. (2017) posit that in Ghana, Mozambique, Zambia, Rwanda, and Tanzania mentorship and coaching have contributed largely in building the health care systems through enhancing skills and management quality. Mentoring in practical placements not yet codified in South Africa as there are no regulatory norms to act as a guide for mentors in practical settings and they as well are not taken through a particular training (Mhlaba, 2011).

The Kenya's Ministry of Health (MOH, 2012), research data has shown that mentoring is a viable technique for all health care providers training and is accepted among health care professionals and administrators at all positions as it assists in improving health systems. However, according to a study from Kenya's Ministry of Health and Nursing Council (2012), teacher-to-student ratios at Kenya Medical Training Colleges (KMTCs) range from 1 tutor for every 6 students to 1 Nursing lecturer for 50 undergraduates, with a mean of 1 instructor for 22 undergraduates. This indicates that the student lecturer ratio is beyond the expected limit of 1 clinical tutor for every 4 students in the general wards and 1 clinical tutor for every 2 students in the intensive care wards, high dependency units and labor wards. This consequently hinders proper development of expected skills,

knowledge, and competences. Furthermore, because of their expertise, the tutors who act as mentors are unable to devote to individual learners; the ratio is unfavorable to the learners. As a result, the mentees (nursing students) miss out on clinical competences that should be learned via one-on-one interactions in the wards with mentors while on duty. The Nursing Council of Kenya (NCK, 2012), asserts that qualified nursing officers must have the competences and individual characteristics required to carry out nursing activities effectively while displaying the expected ethical practice norms and morals.

1.1 Statement of the Problem

Educators, practitioners, and students in several research have expressed worry about the growing mismatch between nursing theory and practice. Competence is a vital requirement for all nurses required to enable them to provide top-notch efficient and effective nursing care (Flinkman et al., 2016). Nurse mentorship programs run by members of the profession can help to enhance clinical care in nursing in a long-term way. This is critical for learning, job advancement, closing the practice–theory gap, improving competences, and bolstering social abilities (Setati & Nkosi, 2017).

Mentorship aids student nurses when they change over from the classroom lectures to the clinical practical programs. The availability of mentors and the ratio of mentors to students are important factors to examine when deciding whether a practice area is appropriate for students to study.

The Nursing Council of Kenya recommends that for clinical instruction in the general wards, one clinical tutor be assigned for every four students whereas one clinical mentor

be assigned for every two students in the ICU, HDU, Labor and delivery wards. For students in practice placements where patients require extended health care, in health centers, and dispensary settings experience, one clinical mentor be assigned for every six students (NCK, 2012).

The Coast General Hospital is a tertiary teaching and referral hospital where students are stationed for clinical training. There, mentorship is offered by any qualified nurses on duty or either by the ward in charges, who also have other duties assigned to them. As a result, they are unlikely to offer the nursing student customized, regular, and appropriate supervision. Mentorship techniques too have remained ambiguous due to a lack of uniform consensus on student mentoring in nursing assignments. When student mentorship is lacking or inadequate, the institution risks generating half-baked graduates who may not be able to perform nursing procedures adequately and attend to patients appropriately due to a lack of essential competences required for all practicing nurses. In view of this the researcher sought to assess the mentorship factors influencing clinical competences of nursing students at Coast General Teaching and Referral Hospital, Mombasa.

1.2 Purpose of the study

To assess mentorship factors influencing Clinical Competences of Diploma Nursing Students at Coast General Teaching and Referral Hospital, Mombasa.

1.3 Objectives of the Study

The study was guided by the following specific objectives: -

- i. To examine nursing students' perception on the effectiveness of mentorship on their clinical competences at Coast General Teaching and Referral Hospital
- ii. To assess mentor related factors influencing clinical competences of nursing students at Coast General Teaching and Referral Hospital.
- iii. To assess institutional factors influencing clinical competences of students at Coast General Teaching and Referral Hospital.
- iv. To examine mentor-mentee relationship characteristics influencing clinical competences of nursing students at Coast General Teaching and Referral Hospital.

1.4 Research Questions

To fulfill the study objectives, the study will be guided by the following research questions:

- i. What are nursing students' perceptions on the effectiveness of mentorship on their clinical competences at Coast General Teaching and Referral Hospital?
- ii. What are the mentor related factors which influence clinical competences of nursing students?
- iii. What are the institutional factors which influence clinical competences of students?

- iv. What is the mentor-mentee relationship characteristics which influence clinical competences of nursing students?

1.5 Justification of the study

The study sought to assess the influence of mentorship factors on Clinical Competences of Nursing students. When student mentorship is lacking or inadequate, the institution risks generating half-baked graduates who may not be able to perform nursing procedures adequately and attend to patients appropriately due to a lack of essential competences required for all practicing nurses. There being no universal agreement on mentoring of nursing students within the clinical placements, mentoring practices have remained vague. There is little known information about the state of mentorship program at the Coast General Teaching and referral Hospital. The results of the study will help inform policy makers in Nursing education, Ministry of Health, Kenya Medical Training College and the Coast General teaching and Referral Hospital on mentorship factors which enhance competent among student nurses and help scaffold or integrate theory into practice.

1.6 Limitations of the study

Limited access to previous research studies on the topic. Most of the studies done have focused on mentorship among Bachelor of Science in Nursing students. This presents a challenge to the study as there is limited access in obtaining current or recent data on research studies conducted on diploma nursing students to provide the theoretical foundation for the study.

The study was carried out in Coast region, Mombasa County and the study locale is limited to the Coast General Teaching and Referral Hospital in Mombasa and therefore the information gathered may affect the generalizability of the study findings to other areas of the country.

The data collection process brought some challenge to the data collection process. This is because the initial plan was to present physical hard copies of the questionnaires to the students and collect the filled-up questionnaires on the same day based on the availability of the respondents. However, at the time of data collection, the students were not present at the CGTRH as the campus had been closed down due to the Covid 19 epidemic. When the pandemic subsided, they were sent for their rural experience in various parts of the country. Therefore, the data collection tool was changed to an online google questionnaire. The researcher obtained the email addresses of all the third-year from the Head of Nursing department which was then posted to their email address. This also bought a challenge as not all students had internet connectivity or had finances to purchase the bundles.

1.7 Delimitations of the Study

The study was limited to only nursing students who have undergone mentorship for at least two years.

The study restricted itself to mentor related factors, institutional factors, mentor-mentee relationship characteristics and nursing students' perception and how they influence clinical competencies among nursing students.

1.8 Significance of the Study

The researcher contributed to the extension of knowledge by pointing out how Nursing mentorship programs can help promotes the clinical competence of the students.

The results of this study will be communicated to the KMTC department of Nursing and the Coast General Teaching and Referral hospital nursing department. The results may shed light on the current state of mentorship practices and may help improve mentorship relationships between students and clinical nurses. Policy makers in nursing may also use the data to enhance clinical mentoring and clinical practice.

1.9 Assumptions of the Study

The respondents will provide honest responses to the questionnaire during data collection.

The nursing students in the targeted study area engaged in mentorship practices to improve their clinical competencies.

1.10 Operational Definition of Terms

Basic diploma Nursing Students: Students pursuing a diploma in Kenya Registered Community Health Nursing (KRCHN).

Clinical competence is the expected standard of practice where a student nurse is required to demonstrate while assessing, performing a procedure or providing care to a patient or interacting with patients, staff and significant others.

Clinical Performance is the ability of a student or trained nurse to carry out procedures or provide care in line with the Nursing practice guidelines or standards using evidence-based practice.

Competence is the ability of a student nurse to exhibit the knowledge, ability, experience and appropriate attitude required when performing a nursing procedure.

Effective mentorship is the process of sharing information by a more experienced person to junior or unexperienced student in a respective caring manner to help them learn new knowledge and skills,

Institutional factors are factors outside students' scope that explain their success or challenges of the mentorship practices in the institution being studied and how they contribute towards their clinical competences.

Institutional support – refers to the resources, services, assistance provided by the hospital that is CPGTRH and the learning institution which is KMTC to aimed at enabling the students achieve their goal.

Mentee /protégé is a nursing student who works under supervision by the experienced or qualified nurse from whom he/ she acquires knowledge, skills and attitudes pertaining to nursing competences.

Mentor is an experienced or skilled nurse who has knowledge and experienced in a particular field and shares it with an inexperienced student/ protégé in a guidance relationship with an aim of achieving specific career goals.

Mentor attributes refer to the personal qualities, skills, mannerisms and characteristics that an individual portrays which contribute to a successful mentor-mentee relationship.

Mentor related factors are the qualities which the qualified / experienced nurses portray or have which enhance acquisition of clinical competences by student Nurses.

Mentor-mentee relationship is the association or manner in which the qualified nurses connect or behave with the student nurses

Mentors modelling style -The way in which mentors demonstrate or reinforce certain behaviors, knowledge and values to their mentees.

Mentor-mentee relationship factors are attributes, behaviors, mannerisms, or qualities that identify or distinguish persons such as respect, caring, fairness, responsibility, integrity and enhance acquisition of clinical competences by student Nurses

Mentoring is the act of where a more experienced nurse guides and teaches a student nurse.

Nursing students' perception are the insights, attitudes, or feelings which the students 'have or verbalize towards the mentorship practices and how they influence their clinical competences.

Practice placements – are clinical practical areas which provide students with hands-on experience and allow them to apply and reinforce the knowledge and skills they have learnt in class in their academic coursework

Perception: The student's awareness, understanding, opinion or insight towards something.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews relevant literature on the influence of mentorship factors on the clinical competencies of nursing students globally, regionally, and nationally which will guide in achieving the objectives of the study. The review of the literature examined relevant research on nursing students, mentors, and the clinical learning environment, and was divided into four sections. The first section reviewed information on mentor related factors influencing clinical competencies of nursing students. The second on institutional factors influencing clinical competencies of students. The third explored on the mentor-mentee relationship characteristics influencing clinical competences of nursing and the fourth on the nursing students' perception on the effectiveness of mentorship on clinical competences.

2.1 Empirical Review

2.1.1 Competence and Mentorship

Competences are integral entities that are carried out in clinical environments and consist of a collection of psychomotor, cognitive and affective ethical practices that improve the organization and production based on licensed performance expertise (Foster & Hill, 2019). Nursing competence concepts are vital for increasing nursing quality, although

they have not yet been fully established. As a result, creating standards and mechanisms for nursing competency has become difficult (Fukada, 2018). Unlike clinical biodata which are highly quantifiable, clinical competence is an abstract construct which comprises different attributes, making it difficult to operationalize and measure (Sam et al., 2020). It has been observed that diverse competence-based frameworks exist, resulting in discrepancy between nations and institutions in terms of evaluation methodologies and instruments.

Nursing competence, according to Takase (2013), is a nurse's capacity to display a collection of traits, such as individual qualities, professional ethics, standards, morals values, the know-how and abilities, in performing assigned nursing procedures. Competence, according to Benner (1984), is a continuous growth process where a nurse may be a specialist in a certain field and a beginner in a different field. Based on Benner's (1984) theory, Lojo (2020) posits that nurse competence is a continuous process where an individual goes through various experiences in their profession where one learns something new each time and grows from being a beginner to an expert.

Mentoring, on the other hand, is a crucial tool in the nursing profession, particularly when it comes to student growth, and it is considered as a shared obligation that helps close the knowledge practice gap (Setati & Nkosi, 2017). Mentoring is supposed to improve teaching competence, ability to interact with others, and professional progression, however, little is known about it in underdeveloped nations and its effects on nurse education (Ekong & Sun, 2017).

2.1.2 Mentor related factors influencing clinical competencies of nursing students

A mentor is a skilled nurse with knowledge and experience in a particular area and shares it with an inexperienced student/ protégé in a guidance relationship with an aim of achieving specific career goals.

A mentor is a mandatory requirement for pre-registration nursing and midwifery students. They enhance nursing student clinical skills development, foster the sense of critical and reflective thinking, and practice different alternative strategies to patient care. They too can shape professional principles and conduct to bring about professional integrity (NMC, 2018). Thus, they enable pupils to improve the integration process in practice of the knowledge they have learned. Some of the mentor elements influencing clinical competences are explained below:

2.1.2.1 Support

A mentor encourages and advises students in numerous ways, including assisting to make the most of their education, learning, moral promotion, career development and professional skills. The NMC (2018) state that a mentor provides practical help to students by providing assistance by use of their expertise and teaching of important skills necessary for registration. A mentor can increase student nurses' comprehension over formal schooling and graduation and provide a comfortable atmosphere for the transfer to a new place of practice (Kolawole et al., 2019). Mentors impact the efforts of students to learn and adapt to new surroundings. This is because of their actions and qualifications. Mentors play a key part in clinical education and so their function and attributes, are seen by

students as essential to excellent tutoring and thus should be given further consideration (Al-Hamdan et al., 2014).

Available learning opportunities, professional assistance, monitoring, and student confidence are variables that enable students to develop their clinical ability. The students hope that their staff can aid in clinical practice, by recognizing how students are adapting and fitting their work environment, to promote their study and clinical skills development. Gray and Smith (2000) reported that, as part of their first practical placement, most of the Scottish College of Self and Healing students had anticipatory apprehension and anticipated their mentor to help them, lead, evaluate and monitor them.

According to Twigg and McCullough (2014), mentors not only give support for nursing students' clinical skills development, but they also cultivate a sense of critical and reflective thinking, as well as practice many alternative patients care practices. Nursing students need to be mentored to improve their nursing skills as they move from student nurses to independent practitioners. Clinical care, critical thinking, communication, problem resolution, and quality development and assurance are among these skills.

Student nurses are engaged in a variety of care practices necessitated by the curriculum towards successful completion of the program. They encounter demanding practicums where they are expected to become innovative, communicate effectively, acquire technical skills and be able translate theory into practice. For this to happen, they require mentors who will encourage them to ask questions and be able to explain to them in a simple manner to enhance recall and acquisition of competences.

The student support unit, designed by the University of Dundee, was viewed as crucial to a randomly controlled study of a graduate-to-graduate student mentorship program (Kim, 2020). In this study, students were provided with direct help to improve clinical abilities and participated in critical thinking, practical reflection, and the discovery of alternative healthcare techniques. The study results revealed that mentorship is successful in terms of acquisition of desired nursing skills, it helps reduce anxiety while handling patients, reduces dependence on others and equips someone to provide comprehensive patient care.

2.1.2.2 Role modelling

A role model is someone who inspires others and holds attributes that others look up to and would want to copy. Mentors play a significant part in increasing the competency of undergraduate nurses and act as their role models throughout the clinical practical assignments. When the students work with the nurses, they aim to imitate the conduct of their mentors that helps them improve their career and gain skills.

Therefore, mentors should be trustworthy, peaceful, happy, and eager to help pupils. The students look upon the mentors as role models both good and negative ways according to Hughes and Fraser (2011). To mentor students successfully, the mentors are expected to have a wide range of skills so that they can be able to competently demonstrate them as they interact with the students in the clinical areas (Tuomikoski et al., 2018).

In research done amongst nursing students in Britain by Jokelainen et al. (2013) the results revealed that significant professional features of effective mentors include a good role model and appropriate professional abilities. Mentors viewed their own favorable attitude,

skills, and competences as a key component affecting the efficacy of undergraduate nurses. If mentors have these desirable skills, they can impart them to their mentee when they engage with patients.

2.1.2.3 Motivation

Mentors require many skills, motivating sources and features to properly coach and assist students' learning processes (Tuomikoski et al., 2020). In a study by Grealish (2009), mentors claimed that their engagement in mentoring programs was not acknowledged and that they were not compensated, particularly for informal mentoring. The above findings were reinforced by Oluchina and Gitonga (2016) who argued that 88% mentors were under stress and claimed that they had not been acknowledged or awarded for their engagement in informal mentoring programs. "Mentorship is an additional task of mentors and needs certain benefits or acknowledgment to boost their morale, such as ongoing education, advancement and better salary," Mitchell (2003) noted.

According to Joubert and Villiers (2015), the mentors said that it was regarded challenging and stressful to mentor and support two students on a hectic day in the critical unit environment. They suggested that mentors should meet with mentees to discuss their interests in learning and what is expected of them in advance to provide effective guidance.

2.1.2.4 Academic preparation

Mentors act as advocates between the students, patients, and other health workers. They serve as a role model and motivate students to acclimatize to the clinical practice placements. A good mentor should be knowledgeable in various topics, for instance nursing practice, career counseling and personal advice. They are expected to manage their time well so that they are able to avail time to attend to the assigned clinical responsibilities and hold their scheduled meetings with their mentees. They should have strong interpersonal skills to communicate with clarity especially when providing feedback, they should be compassionate and patient. They are required to be persistent, innovative, insightful, goal oriented and have moral and ethical integrity. They are therefore required to attend trainings, seminars and engage in research, to brace themselves with the current evidence-based practices and information. This equips them and places them in a better position to enable them transmit knowledge on current health care professional skills successfully, without any problems.

The NMC (2010) identifies a mentor as a graduate who has victoriously completed the mentor preparation program which is mandated by the NMC and have mastery, expertise, skills and proficiency needed to attain the described outcomes.

Nurses training colleges are faced with challenges as majority of the Nurses who enter the academic practice have clinical experience and college academic preparation but lack official preparation in the act of teaching (McQuilkin et al., 2020). Nowell et al. (2015) showed that there is paucity of data on mentorship in the nursing field. According to

National Mentoring Partnership (Nowell et al., 2015), the guidance, inspiration, assistance, and hope provided by mentors to students enables them to develop analytic, psychological, psychomotor, and interpersonal skills. The NMC, (2008) states that mentors have a vital role in developing and facilitating students' competences

A study by Puppe and Neal, (2014) recommended that it is important the trained nurses take up the role of an apprentice and train the young student nurses. They however noted that despite their preference, it was unfortunate that not all clinical nurses with whom the student nurses collaborated with in clinical placements have formal training in educating students.

2.1.3 Institutional factors influencing clinical competencies of Nurse Students.

The promotion of efficient mentorship of all the students is a major concern for hospitals and educational institutions. Four factors in the clinical practice placements influence the student's learning experience and determine the student's achievement of their desired learning goals. They include: -physical space, secondly the social and psychological components; thirdly the institutional culture fourthly the teaching and learning components (Flott & Linden, 2016). Other factors which influence acquisition of clinical competences of students include practice placements, institutional policies, institutional support, ratio of mentors to mentees and the available resources as discussed below: -

2.1.3.1 Practice placements

Practice placement are the clinical environs which provide learning opportunities for the undergraduate learners to undertake practice under supervision. The clinical practice areas are a major pillar in the student nurses learning process. According to Royal College of Nursing (2017), Institutions and employers are responsible for putting in place the mechanism that can help promote students learning, retention of workers and improvement of nurses' growth in terms of the cognitive, psychomotor and personal attributes required especially in the nursing field. They too are obliged in maintaining a quality environment that supports and enhances their competencies by taking part in programs that help their staff to further their level of competency.

Practice placements facilitate students' acquisition of competencies by creating supportive learning opportunities which enhance students' acquisition of knowledge and skills. They also strengthen students career progression. The placements should therefore empower the development of the nursing students' professional attributes and identities so that they can attain professional competence in nursing (Jokelainen et al., 2011).

Globally, the purpose of nursing education is to increase clinical skills and provide safe, excellent care (Forsberg et al., 2011). The resource challenged clinical training facilities in which nursing students rotate in are increasingly being called upon to improve the practice placements to enhance student learning. Nursing being a disciplined hands-on profession calls for integration of theoretical information addressed in school to practical hands-on practice in the practical areas (Salifu et al., 2018). The practical placements

should be well equipped and endowed to allow for acquisition of nursing competencies such as clinical reasoning and professionalism.

The toolbox of the Royal College of Nursing (2017) states that an ideal clinical practice placement directly affects one's capacity to work successfully, integrate theory learned in class into practice. It is at the clinical practice placement where they acquire skills which facilitate development of competences that enable them deal with the community needs, interact with the multidisciplinary team and be able to provide critical care. Effective clinical instruction is paramount in the learning process of nursing students since they spend over 50% of their training period within the clinical practice areas. The key objective during the practical rotations is to be able to learn and understand the values, norms, and attitudes of the profession. It also allows them to prepare for their job as nurses, which comprises one of the most crucial components of the education process (Hassan & Elsharkawy, 2017).

A study carried out in Iran found that the journey of professional development in nursing starts at the nursing school through formal structured organized academic programs and evolves during practical rotations until it transitions to workplace. (Khomeiran et al, 2006). Elements which build competences of the student nurses include exposure to various patient conditions experiences, problem solving skills, professional development, independence and the assessment and management of the patients. (Istomina et al, 2011).

2.1.3.2 Institutional Support

Institutional support are factors outside students' scope that explain their success or challenges of the mentorship practices in the institution being studied and how they contribute towards their clinical competences. Institutional support is the backbone or pillar to any progressive development in an organization. It is key in nursing clinical placements as it amalgamates an academic cordial friendly learning work environment with clinical attributes (Carlisle et al., 2014).

Clinical placements for student nurses, according to Berragan (2011), serve three purposes: the learning of skills and knowledge, the application of theory to practice, and the development of professional identity and standard of practice. For effective student learning in the clinical areas the college tutors should link with their respective counterparts in the hospital during the organization of placements and also try to develop additional lines of contact with other multidisciplinary team members involved with their students. Strong understanding of leadership and cooperation in particular health services and a wide range of possibilities for students to take part in clinical practice should assist these processes (Souba, 2004). Several customized strategies may be implemented to guarantee that every clinic staff understands the educational objective of the study course. Strategies may include, for each student, up-to-date information on their placement, including college expectations pertaining to education, supervision, assessment and/or reporting, directly via periodic newsletters or seminars. Above all, the greater the possibility of success, more in line with the local team culture (Bohmer & Edmonson, 2010).

Clinical and mentorship learning settings provide significant support structures that assist student development. Service managers have an equally important obligation and role to assisting their mentors. Thomson et al. (2017) alludes that the clinical practice placements and assistance from the institutions are major elements are necessary in the training of student nurses. In the absence of institutional support, the learners may perceive being unwary to deal with the transition. Nurse students are expected to recognize and be familiar with the surroundings, ability to use available facilities and be well oriented with the procedures that are carried out in each ward. This can only happen through continuous guidance from the ward managers, nurses and other multidisciplinary team members. To acquire competencies, nursing students are placed in the hospitals for clinical practicum which provides an experiential learning environment where they undergo mentoring on how to practice nursing, operate medical equipment in order to develop knowledge, skills, and values essential for professional practice.

In a study examining the conceptions of Finnish and British mentors on how they supervise and assist undergraduate nursing students in the practical placements and professional career development, it was realized that the institution's support to the student nurses was considered most significant. There was also need for support through compulsory mentor education programs amended and formulated in national and cross-cultural co-operation (Jokelainen et al., 2013).

2.1.3.3 Mentor-mentees ratio

A balance between nursing and practical learning should be effectively structured to encourage the integration of information, attitudes, and abilities, so as to provide suitable high-quality assistance to students in the practical setting (Jokelainen et al., 2013b). It is the obligation of the organization and management according to Faraji et al. (2019) to offer sufficient resources for successful student mentoring. The resources are appropriate mentors, skilled nurses, and clinical teachers. Other members of the multidisciplinary team play an important role which is vital in student learning.

The deliberate combination of experienced senior personnel in mentoring interactions with younger and less experienced workers can be utilized in the solutions to workplace challenges. It encourages people to establish their own identities, encourages them to progress their career and provides fast contextual feedback (Gray & Smith, 2000).

A study by Gitonga (2016) alluded that due to paucity of mentors, mentees were matched with unexperienced nurses who had not yet completed their training neither had the desire to mentor but were requested to mentor student nurses. Similar sentiments are echoed by Hutchings et al. (2005), who alluded that 75 percent of the students claim that sometime even unqualified nurses mentored them. When non-qualified nurses and individuals not interested in mentorship programs were involved, mentees were extremely likely not able to achieve their learning expectations, as they were not able to acquire adequate time in mentoring programs. Katherine (2003) also noted that 87% of mentees reported being

exploited as "additional pairs" owing to staff shortages. They were also prodded and pushed too quickly by mentors.

The MoH (2012) reports that, the scarcity of employees in Kenya's hospitals was a widespread concern. A study by Oluchina and Gitonga (2016) revealed that majority (86.7%) of the nursing students in informal mentoring programs complained about a scarcity of nursing personnel and an overburden of work, as opposed to 68 percent in formal official mentoring programs. This impaired the quality of the contact between the mentor and the mentees hence were unlikely to fully acquire the desired clinical competences.

2.1.3.4 Resources availability

The clinical learning placements provide a suitable environment where Nursing students can interact with patients and practice what they have covered at school. In so doing they can integrate theory to practice and hence achieve their learning outcomes. To efficiently acquire the desired skills and competences, they require to have adequate resources which include equipment, experienced nurses to mentor them, adequate time to witness and practice what has been taught to them. Inadequate resources influence the student learning process and expected fulfilment of the nursing profession.

In Malawi, students reported that the hospital practice training placements had a rich learning experience that provide adequate educational experiences but most participants attested that some resources such as material and human were insufficient and as a result, they did not acquire their anticipated learning expectations at the clinical placements.

Some pointed out that due to inadequate resources, they learnt more on effectively improvising other than doing the actual procedure hence forgot the ideal when providing care (Kamphinda & Chilemba, 2019).

A study by Salifu et al. (2018) on diploma nursing student's experiences and their perceptions on the gap between theory learnt in class and actual practice noted that a hospital with inadequate resources lacked the minimum requirements for quality teaching and learning. According to the study the resource constraints confront a multiplicity of issues like insufficient education resources, lack of access to internet data, lack of wireless connectivity and inadequately furnished spaces for teaching simulation. As a result of these resource constraints the nurse students are not exposed to ideal nursing practices thus hindering acquisition of the required nursing competences.

Research by Mhlaba (2011) has shown that students perceived the mentorship provided by professional nurses as insufficient in the clinical context. They stated the reasons included excessive workload of caregivers, time limitations and resource limits, scarcity of personnel and high expectations for patient care. Global research show that clinical learning exposure and mentorship are major elements determining the competences of students in clinical settings. In Tanzania, lack of practitioners, mentors and a high number of students in the program have a restricted opportunity for practical experience in the hospital training system (Gemuhay et al., 2019).

A study carried out in Kenya at KMTC Garissa by Abdi et al. (2016) demonstrated that the resources provided in a hospital were insufficient and that the hospital clinical setting

was not suitable or learning. They proposed that the college should offer efficient guidance programs in the field of practice to students, thereby permitting an operational mentoring program to stimulate knowledge sharing amongst experienced practitioners and nursing students, and create an atmosphere to improve the learning process of students

In another study conducted in Kenya, findings found that the students who were trained at Kenya Medical Training College (KMTC) Nairobi, which at the time of the study had an innovative skills lab, regularly achieved higher in all competence indexes and across the elements of nursing expertise compared to those trained elsewhere using the traditional lecture-based curriculum. The Nairobi students were described as critical thinkers as opposed to their fellow counterparts from elsewhere who were described as better ward managers (Chege, 2009). The study notes that this was attributable to the training environment in Nairobi having better resources than the rest of the country.

2.1.3.5 Workload

Nurses spend a lot of time doing numerous tasks and tasks, involving patient care, physical management, and prevention of diseases, healthcare education, and documentation of processes among many others. Because of these activities, they have limited time to mentor students effectively. In a study conducted on mentors of a mental health unit in England, Sandy (2014) observed that workload is one of the elements which lead to mentor strain and anxiety. This was attributed to job overload, as a result the mentors were not able to assume their duties effectively and even though they performed them, they

were not very successful, consequently the mentoring sessions of the mentee were severely affected.

According to Grealish (2009), "Most mentors preferred to perceive themselves as care promoters but were dissatisfied and disappointed by the work overload of their job." The overburden of labor was recognized as the most prominent impediment for properly discharging their duties as mentors to the students.

Mitchell (2003) observed that over 70 percent of nursing students engaged in informal mentoring programs often complained that mentors did not have enough time to mentor them. There was often insufficient time for mentoring programs, as the two of the Dyads were busy with their own jobs and hence did not take much time for mentoring programs. Mentors noted that 'evaluations and documentation' of the nursing students increased their workload resulting in time constraints. Becker and Neuwirth (2004) echoed similar sentiments and alluded that mentor in almost 85% of informal-mentoring programs had an overwhelming amount of work, had a significant number of patients, a wide range of paperwork and were also required to evaluate mentees as well. Zhang et al. (2016) suggests that during the implementation of any effective mentorship program several challenges such as time limits and time restrictions should be considered.

A study by Mitchell (2003) found that high labor loads diminish the contact time between a mentor and the mentee, hence impairing communication; problem solving in nursing procedures; management, leadership, teamwork, and the ability to interact with others effectively.

2.1.4 Mentor-mentee relationship characteristics influencing clinical competencies of nursing students

Mentoring is a mutual relation between two people when one person shares his knowledge, skills and experience in person or professionally with another person. During the mentorship process, the students learn a range of talents such as leadership, communication and personal skills and advance their careers as well as a sense of fulfillment and personal growth (Cate, 2019).

Mentor-mentee relationships are critical for student nurses to acquire nursing career progression competency, experience, expertise, and self-belief (Komaratat & Oumtanee, 2009). In a study by Parsloe and Leedham, (2009) one mentor affirmed that “mentoring is important in that it encourages mentees to take full charge of their studying in order to leverage their prospects, expand their abilities, enhance their performance and realize or actualize into the individual they desire to become”.

An adept connection with the competent mentors has a strong impact on the learning possibilities and therefore enhances the students’ learning outcomes and professional growth (Puppe & Neal, 2014). A competent mentorship program may increase the academic experience and clinical skills of the students considerably. The connection frequently means that the mentor and mentee continue to have a collegial and/or personal relationship (Cate, 2019).

According to the standards for mentorship of the Academy of Medical-Surgical Nurses (2016), trust, self-disclosure openness, affirmation, willingness, and skills to provide and

reciprocate criticism have been the foundation for successful mentorship. The guidance states: - the mentor and the proteges must have a faithful relationship and be prepared to share knowledge including bad incidences. The mentors must inform the proteges on a regular basis what they are expected to learn or achieve. The nurse mentor can assist the nurse student by educating them on clinical practical skills, how to handle /manage time and assist them discover strategies to deal with the difficulties within the career. Mentoring is important as it helps one build their confidence, comprehend behavioral and moral difficulties and build authentic concrete skills not addressed in nursing schools (University of Texas Arlington, 2016).

The tasks and responsibilities of nurse mentors have been stated in Lovrić et al. (2017) as assuming responsibility and taking care of clinical education while facilitating appropriate atmospheres for learning, transfer of professional know how, expertise and capabilities. Other duties noted include: -introduction of students into the clinical practice; identification of unanticipated events or occurrences, ongoing professional assistance, mentoring, evaluations, progress documentation; promotion of work and ideas for students; building students' confidence and serving as an exemplar for students while interacting with other multidisciplinary team members. The mentor-mentee relationship ought to exhibit the following traits:

2.1.4.1 Respect

Constructive mentorship entails respect, reassurance, trust and annual updates of the programs and extend to comprehension and expertise. Respect is the cornerstone of any

healthy relationship and goes both ways where a student shows respect to the mentor while the mentor also respects the mentee. Respect involves personal and professional respect of one's time, feelings, emotions, abilities, and boundaries. An effective mentoring relationship is characterized by trust, responsiveness, career, and psychosocial support.

A study in Nigeria by Kolawole et al. (2019), revealed that the mentor empowers, encourages and challenge the mentees hence it is therefore paramount that mentees should spend more time with their mentors, respect them, pay attention, observe, demonstrate and document all procedures they learn from their mentors.

2.1.4.2 Mentor Attributes

Effective mentorship requires that a mentor should have a range of personal qualities, have cordial relationship with students and have consideration of other multidisciplinary members in the clinical practice placements. (Jokelainen et al., 2013a). The professional role of Nursing students is established through clinical practice. A good collegial association is paramount amongst mentors and students as it enhances students' clinical adjustment within the practical placements (Kim, 2020).

Studies have shown that the personal attributes of the preceptor like being approachable, patient, and understanding are among the most influential factors that instill positive attitudes and affect student learning, self-esteem, and the development of confidence in students' skills (Gray & Smith, 2000). In a study by Ismail et al. (2015) in Nigeria, nursing students were required to describe a good mentor. A mentor who is pleasant, social, caring, communicates well, is compassionate, approachable, confident and shows regard for

students is what mentees desire. In their opinion, a good mentor is one who teaches and allows them a chance to practice on their own while observing. One who is courteous, hardworking, tolerable, friendly and carries themselves with high regard.

Oluchina and Gitonga's (2016) study indicated that 80% of the mentees felt that an unhealthy association between the mentors and mentees was a result of dissenting personal attributes. They include but are not limited to, non-eagerness to accept challenges, non-welcoming, impatience, haughty, rudeness, lack of responsibility and laziness by the mentors.

In a study by Al-Hamdan et al. (2014) nurse mentees pointed out that mentors should be relaxed and offer a supportive relationship; be knowledgeable and have sound clinical skills; be able to evaluate learners needs, oversee their learning process; be aware of the learners' encounters, challenges and requirements of the program and be willing to help them.

Adequate quality time in a cordial compassionate and respectful association was lacking amongst mentors and mentees in the Republic of Croatia, in a study conducted by (Lovric et al., 2017).

2.1.4.3 Interest in mentoring students

Forte and Fowler (2009) affirm that the mentor's interest in training, education background, skill mix up, expertise, the structure, and levels of experience among the nurses in the practical placement areas has a great influence in mentorship.

Students ask for clarity regarding a procedure, and guidance from their mentors thus for this to happen the mentor must be willing to assist the mentee in the learning process to enable them acquire the competencies (Jackson et al., 2015). Conversely, the mentee should also show interest in mentoring as this motivates the mentors and drives them to go out of their way to mentor them and give them an opportunity to develop important skills and competences. However, there are incidences where the students are not interested in learning as observed by Joubert and Villiers (2015) where the mentors reported that some nurse students would report to the practical placements late, were disinterested in learning and they seemed not well prepared for the practicals.

Findings from a study done to nurses who offered neonatal mentorship in a hospital at Nairobi alluded that they are frustrated because every time they train new nurses, they are taken away. She lamented no one has time spend on nurses on transit. This is an example of a mentor who feels misused and has consequently lost interest in mentoring (Nyikuri et al., 2020). Ideally, medical institutions ought to identify interested experienced mentors to work with the students in order to help them acquire competencies (Eraut, 2011).

2.1.4.4 Interpersonal relationships

The nature of relationship that the mentee has with a mentor is instrumental in attainment of psychomotor abilities and competences in the practice rotations as well as the assessment outcome. Nursing professionals prepare students to provide competent care for all patients under their care. For this to happen there must be a cordial relationship. Students are therefore required to maintain student nurse-patient relationships, maintain a

harmonious teamwork with the staff, patients and other health care workers and be prepared for quick role changes. Gray and Smith (2000) attest that the degree of excellence in a mentor-mentee relationship is paramount to successful mentoring.

The length of time a mentor has worked with a student affects the mentors' expectations of the student and is thus a major issue for student (Hughes & Fraser, 2011). Helminen et al. (2017) remarked that mentees who have had a good inter-personal relationship during the clinical practice often end up passing their assessments very well as opposed to those who have had a bad relationship despite having demonstrated adequate competences. In addition, Hale and Phillips (2018) argue that in some instances the nursing students imaginary or fanciful ideas may hinder a good nurturing relationship between mentors and students.

Struksnes et al. (2012) alluded that there exists a cordial friendly association among the student nurses and mentors which made it difficult to assess students objectively and this had an effect on their assessment's outcomes. For instance, during the practical assessments the mentors were biased on the students' strengths and would deliberate be silent on the weak areas. These sentiments were also echoed by tutors who reported that they had observed that some nursing students had completed some preceding practical assessments yet did not have the expected competences (Docherty & Dieckmanns, 2015). According to a study by Rylance et al. (2017) mentors expressed that it was a challenge to draw the line between the role assigned to them of being a mentor and an assessor. The researcher concludes that negative personality traits affect mentorship relationships. In a study by Katherine (2003), findings indicated that 95% of mentees reported that

smoothness of mentorship plan of action was deterred by inappropriate personal attributes. Similarly, Carey and Weissman (2010), posit that 75% of mentors remarked that varied schools of thought, principles and standards in a mentorship relationship, resulted in some form of strained communication. Studies revealed that students assigned in the clinical area without an effective mentor did not have the opportunities to practice in more complex tasks; instead, they found themselves repeating routine tasks in which they are already proficient (Spouse, 2001). However, Gray and Smith, (2000) note that when inexperienced nurses are intentional matched with mentors who have more experience in the field of helps improve mentoring relationships. Moreover, this pairing enables the students gain more confidence, believe in themselves, develop professional distinctiveness progress in their career and get an opportunity where feedback can be provided immediately. Surveys conducted showed that the students who were placed in the practical placements without supervision by mentors kept repeating the ordinary simple procedures because they had not learnt the complicated advanced nursing procedures.

2.1.5 Students' perception on the effectiveness of mentorship on Clinical

Competences

Students' perception on the effectiveness of mentorship refers to the way the students identify or acknowledge mentorship and its relevance. During their training, they are engaged in a range of care practices which are necessary to complete the program successfully. They are expected to be able to communicate well with patients, other staff members, display professional ethics, values and get technical know-how of how to

perform procedures. To do so, they work under the guidance of mentors who support, guide, explain and demonstrate procedures to improve the student's ability to attain the right skills and be able to transfer theory learnt in class into practice. Studying the student's perception on effectiveness of mentorship will help to identify the strengths and weaknesses of mentorship. It will also provide comprehensive overview and insights about what students feel about mentorship, their mentorship experiences, whether it is important or not and what challenges they face.

Wachira (2019) found out that nursing students had both good and bad encounters in their course of training and mentorship at Kabarnet KMTC. Those who had favorable encounters reported that the mentors were willing to teach and, demonstrated a positive perception towards them as they were willing to teach them procedures. On the other hand, those who had unfavorable encounters reported that some mentors were impolite, used abusive language, while others harassed them. According to a study by Gichigi (2009), 67% students from KEMU, and 49% students from UON pointed out the benefits of mentoring as bridging the gap between theory and practice. Self-confidence and willingness to take on risks, critical thinking and career progression is as a result of mentorship as remarked by over 68% students from the stated universities,

At Kamuzu College of Nursing, students reported that the only people who are interested to teach them were doctors and not fellow nurses as reported by a participant alluded that, (Kamphinda & Chilemba, 2019). These studies point out that the students' experiences vary and differ with both individual mentors and or mentees. These studies however point out that the students' experiences vary and differ with both individual mentors and or

mentees. Students' perception on the effectiveness of mentorship revolves around the following areas: -

2.1.5.1 Perceived benefits

Among the factors that facilitate students' acquisition of clinical skills are the perceived benefits of the clinical practice placement. The students expect that the nurses working with them in their practical rotations to assist them implement the of clinical skills and comprehend how students adapt and 'fit in' to their working environment (Houghton et al., 2012). During the first practical placements, the Nursing and Midwifery students from Scottish College were anxious and had high hopes that their mentor would support, guide, evaluate and assist them acquire the clinical competences (Gray & Smith, 2000). They reported that they perceived mentorship to be beneficial to them since it gave them a real-life experience in the ward to acquire clinical competences.

In another study at the Nursing Training Institute Ministry of Health (Sandakan), John et al. (2020) posits that mentoring program had a favorable effect on students. The nursing students reported to have fairly benefited. The students' attitude in the varying years of study and perceived gain varied.

2.1.5.2 Feedback from mentors

Good communication skills with regular feedback are highly recommended in mentorship. A good remark raises the students' self-esteem and gives them an opportunity to think about their own development. Hence, they need to be encouraged when they perform

poorly as well as when they perform well. Gray and Smith (2000) realized inadequate acquisition of competences could be as a result of lack of feedback from a nursing student's mentors.

Nursing students look out and expect to find mentors who are willing to provide honest feedback, have good communication skills, and those who will help them network and meet other people in their profession. Koohestani and Baghchehi (2016) highlight that students' learning is positively related to the levels of cohesiveness, satisfaction, and task orientation among others. Kamphinda and Chilemba (2019) also state that effective supervision and mentorship at the clinical environments offer nurse mentees offer a chance to put into practice what they have learnt in class and apply it in real life situations.

Findings from a study done at Cairo University, Faculty of Nursing, revealed that the clinical instructor's skills such as effective communication skills, creation of a student-centered environment for learning, giving constructive feedback and ensuring that students get an opportunity to train during clinical practice, promote effective clinical training. They were also of the view that good personality traits and rapport are vital in encouraging and supporting the student in the practical placements where the competences are nurtured (Ismail et al., 2015).

2.1.5.3 Challenges during mentorship

Nursing students like all other medical students' experience various challenges such as fear of handling sick patients, anxiety, and inability to balance between their studies and assignments during their training. They too often face multiple challenges in the practicum due to gaps between theory and practice. They thus appreciate nurses/mentors who will be there for them to guide them and support them during those moments.

According to a study by Wachira (2019), shortcomings realized during mentorship were shortage of mentors, poor interpersonal relations, no support, time shortage, plenty of workload and uncooperative mentees. These hurdles negatively impacted the efficiency of the nursing mentorship program (Wachira, 2019). In Botswana nursing students were unable to put into practice the theory what they had learnt because they were not supervised adequately in the clinical area which resulted to dismal performance in their clinical practices (Gemuhay et al., 2019).

A study by Tseng et al. (2013) on newly graduated nursing students showed that the graduates fail to meet the global nursing perspectives and exhibit professional competence challenges when they enter the workforce. The challenges include unfamiliarity with certain investigations, equipment or procedures, patients' medical condition and diagnosis. They are unable to respond to emergencies, unclear instructions nor take care of patients independently. They too have insufficient professional work ethics and poor interpersonal relationships among the patients, relatives, colleagues, and other health workers. This is attributed to a breach of regulations, minimal institutional support,

inadequate training, and exposure during both the theory and practical placements. In Malawi, students experienced inadequate supportive and irregular supervision by the qualified nurses who had minimal encounters with them during the practical placements. The nursing trainers were also not available to offer supportive supervision and would end a clinical placement rotation without ever being followed up. When faced with unfamiliar conditions or various challenging experiences they imitated the shortcuts or unethical traits from the mentors which caused them to compromise on their learning and owed this to infrequent and insufficient guidance (Kamphinda & Chilemba, 2019).

2.2 Theoretical Framework

2.2.1 The Novice to Expert theory

The Novice to Expert theory propounded by Patricia Benner in 1982 will guide the study. The theory explains how nurses develop abilities and compression of how to manage and take care of patients over time in a paper titled “From novice to expert”. It explains the five stages one undergoes to develop and acquire competences and experience in Nursing practice. They include novice, advanced beginner, competent, proficient, and expert. Each stage is dependent on the preceding stage as concepts and ideas are clarified and increased following various experiences and clinical mastery (Benner, 1984).

A novice is an experience-free starter. They function in a restricted way under context-free and rigid norms when performing tasks, and merely obey instructions. The beginner has no expertise in deciding on tasks that are most relevant to fulfill as in real life scenarios there are no definite standards for regulating task performance or relevance. They cannot

also exercise their discretion; therefore, they have restricted and rigid behavior (Benner, 1984).

The advanced novice offers adequate results, lacks adequate experience to widen his perspective to the past experiences and expectations of patients. The major difficulty for advanced beginners is to focus on the rules and principles that are given while the individual may have some medical expertise (Benner 1984). Benner. To guarantee that crucial patient demands are not unattained, advanced beginners need guidance and help in the clinical field. Shirey (2007) notes that protected mentors contribute to prioritization and constructive input at this stage.

In general, the skilled nurse is experienced in the same profession for two or three years. These staff have extra caution on continuing objectives and acquire ideas via organizing individual initiatives to improve their organization and efficiency. Effective and organizational analytical concepts focus on long-term objectives or objectives can be achieved (Shirey, 2007).

The proficient nurse is more competent and is able to look at things in a broader way as she / he has a better understanding of things and is better placed to handle and make appropriate decisions. From the different situations encountered they have gained skills on how to navigate certain difficulties or challenges and solve problems (Benner, 1984).

Expert nurses experience is more profound, and they understand clinical conditions intuitively. They execute issues smoothly, flexibly and with excellent expertise. They have a connected approach and do not depend on principles, norms, or recommendations to

make choices. They have a broader understanding of conditions are confident and instinctively understand difficult patient scenarios (Dale et al., 2013). They do not rely on regulations, orders, and adages as they are able to understand matters and what must be achieved (Benner, 1984).

This theory is significant for this research since it describes how a nurse grows and develops from a beginner to a specialist. The motive of this study is to assess mentorship factors influencing clinical competences of nursing students. According to Benner's idea, nursing practitioners can increase practical experience and knowledge at varied stages of learning. Moreover, according to this concept, it is a continuous journey that takes place throughout time and with the development of new experiences from the beginner stage to expert stage. This progress is still impacted by elements such as the support, motivation, role modelling ,respect and interpersonal relationship associated with mentors.

Institutional elements have an impact on progress from beginner to expert, including facilities or practice, the proportion of mentors, resource availability, clinical practice placements, mentor mentee relationship and support offered by mentors. For that to be successful mentoring can only take place in the context of mutual respect, where mentors are eager and interested in mentoring. Finally, the opinion of nursing students that mentorship works effectively will also impact students' progress based on the quality of their feedback, the mentoring experience they have gained and even on the problems they face during mentorship.

2.2.2 The apprenticeship Model

Collins et al. (1987) came up with six teaching methods based on cognitive apprenticeship theory. They asserted that these methods help students learn how to "use, manage, and find knowledge" (Collins et al., 1987). The first three, modeling, coaching, and scaffolding, are at the heart of cognitive apprenticeship and help people learn how to think and how to think better. The next two, articulation and reflection, are meant to help novices become aware of problem-solving strategies and how they work like those used by experts. The last step, exploration, is meant to help the novice become more independent and be able to solve and identify problems in the domain on their own (Collins et al., 1987).

A traditional apprenticeship is a sort of on-the-job training in which an individual works under the guidance of a master artisan until he or she has achieved mastery of the profession. When it comes to teaching abilities that can't be easily observed by the teacher, cognitive apprenticeships are the best option (Butler, 2019). Learners must follow role models, be mentored by supervisors, and build on existing knowledge to succeed (scaffolding). Tools for this are generally metacognitive, which necessitate articulation of thoughts and thinking on how to solve an issue or complete a task (Collins, 2014). Students and residents go through a phase of adjustment where they go from viewing patients as merely "cases" to seeing them as actual human beings with free will and agency (Wilkinson, 2013).

Early exposure to typical medical conditions and presentations helps trainees proceed from observation to participation to supervised execution and then full freedom in the apprenticeship approach. The apprentice is given increasing authority while still being closely supervised by a mentor to ensure patient safety and sharpen the apprentice's skills (Kotsis & Chung, 2013). In addition, the student can get a feel for the work environment, procedures, and standards of the medical field by participating in an apprenticeship. It gives students the confidence to interact with patients and to model their own clinical behavior after the behavior of respected.

The major obstacle education in the medical sector faces is to merge formal knowledge with clinical experience and to come up with customs of probing and innovating. Good medical education is measured by how well students grasp the theory and science behind an issue as they are confronted with it in practice (Wilkinson, 2013). Over the recent years, there has been an outcry from several employers about the influx of newly qualified university nursing graduates who lack the competences in the practical skills, are deficient of the knowledge and expertise required in performing nursing roles. Secondly, there has also been a massive attrition of nurses especially among those posted in acute care settings as they have been overwhelmed by the workflow. This has led to mushrooming of apprenticeship or residency programs which are tested and tried, programs designed for teaching as well as learning that make work the place for acquiring knowledge and the place that offers an opportunity to interact with important instructors to enable them integrate theory and practice (Taylor & Care, 1999). Upon graduating from medical school, the medical students begin working in the field as part of a larger clinical team.

They now begin attending to patients professionally. The feedback given to them by their peers helps them broaden their skills and develop professionally. In all stages of the educational process, students gradually gain knowledge and skills, while also receiving graded delegations of responsibility and comprehensive monitoring, supervision, and feedback on their performance as they go along (Rassie, 2017).

Lave and Wenger (1991) downplay the master's instructional value by focusing on the community of practice. In addition, the apprentice gains a tremendous lot of knowledge via observing and interacting with more experienced workers as well as through trial and error. A novice learns from a master in a one-to-one relationship by observing and imitating, which runs counter to Hubert and Stuart Dreyfus' theory. For a novice to succeed, they do not need to be a part of a bigger social group.

It is claimed by some critics that the apprenticeship model has nothing to do with the practice of mentoring. Mentoring courses in Norway, for example, have typically been based on the action-reflection approach. The concept of action-reflection was developed in response to the age-old apprenticeship model. "Parrot teachers," as opponents called them at the time, were nothing

more than a byproduct of the conventional apprenticeship approach. The apprenticeship model can now be included in introductory works on mentoring pedagogy (Skagen, 2004) as one of numerous ways.

Using the apprenticeship model, mentors do not provide their mentees the freedom to set their own goals and expectations for their own development. Instead, mentoring is

governed by the customs of the profession. Progressive education, which places too much emphasis on students' creativity, self-improvement, and autonomy, is criticized by the mentoring method.

Who can serve as a mentor is limited by the fact that the master must be proficient in a craft or career. Communication competence is more crucial in the action-reflection model than technical competence, which is the ability to build strong relationships. The importance of professional knowledge is not given the same weight as the importance of general knowledge. The apprenticeship approach has been criticized for prioritizing practical application over theoretical understanding. An over-emphasis on practical skills might deprive students of the time needed to understand fundamental theoretical ideas (Skagen, 2004).

Nursing students can benefit from using the apprenticeship model to organize their clinical learning experiences, implement them, and evaluate them. This model aims to develop the knowledge and abilities of nursing students and the often-hidden cognition and metacognition skills and culture found in the nursing profession. Even with the extensive and complicated hospital systems that are there today, its implementation in modern medicine still remains flawed.

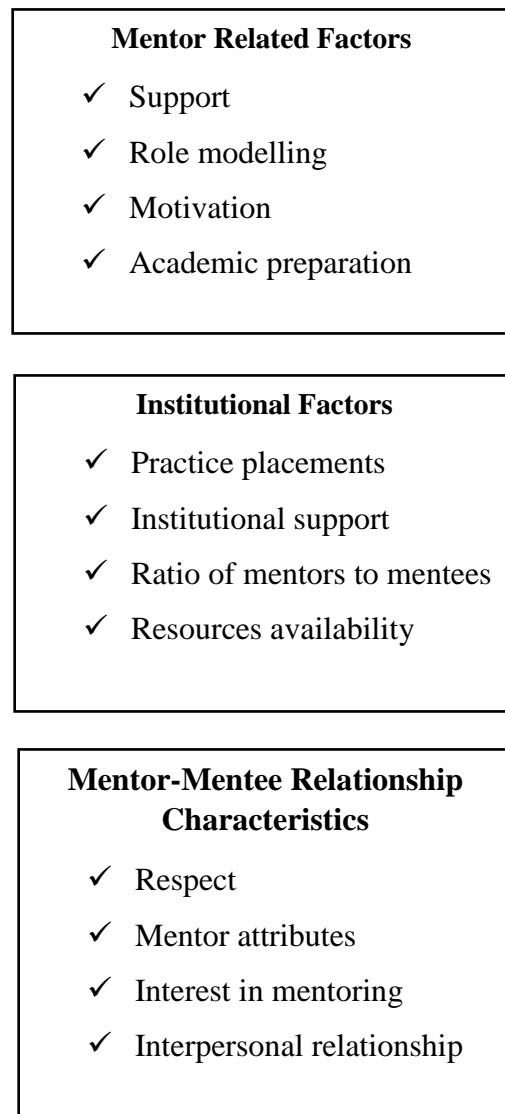
The apprenticeship's model aims at instilling mastery, cognitive content, and critical thinking processes of nursing graduates. Its other objective is to change the mindset, belief and systems within the nursing profession, mental processes, deliberate thinking about how one thinks and learns and traditions within the profession (Taylor & Care, 1999).

2.3 Conceptual Framework

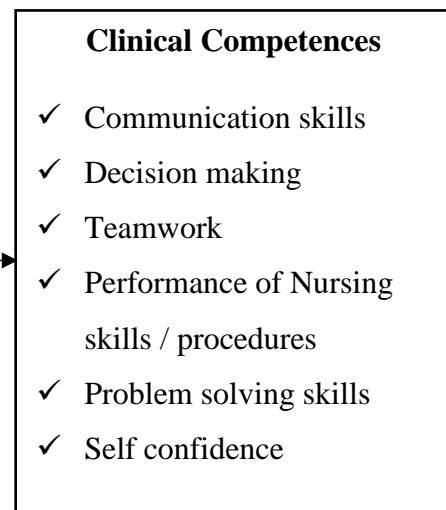
Figure 2.1

Conceptual Framework

Independent Variables



Dependent variable



CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter explains the methodology which was used by the researcher to collect data. This included the research design, study area, target population, sample population, sample size, sampling design, data collection instrument, the process that was used to collect, analyze, and present the data.

3.1 Research Design

Research design is a process aimed at answering the research questions and solves the research problems (Ngechu, 2010). An analytical cross sectional research design was used as it allows for collection of large amounts of data from a sizeable population in an economic way. Analytical cross sectional research design is often used to examine the prevalence of certain characteristics or variables within a population and to explore relationships between variables.

3.2 The Study Area

The study was carried out at Coast General Teaching and Referral Hospital (CGTRH). This is because the nursing students from Mombasa KMTC rotate in almost all the units or various departments within the hospital during their clinical experiences. The hospital is in Mombasa County which is in the South Eastern part of Kenya Coast that covers an

area of about 218.9 Km². It borders the Indian Ocean to the East and South East. It is located along Kisauni road off Mombasa-Malindi Road. It is the major referral center for public hospitals within the County such as Portreiz, Tudor, Likoni, Mariakani, Kwale, Msambweni, Kilifi, Malindi. The institution provides Ambulatory, outpatient, inpatient services in both medical, surgical health services, which are sub-specialized into wellness clinics, ophthalmology, gynecological and obstetrics, chronic care follow-up services, cardiology, oncology, and diagnostics. The CGTRH is a level 5 Government institution established in 1910 and serves as a tertiary training and research center. The hospital serves as a training hospital for various medical faculties and specialties such as Medicine, Nursing, clinical medicine, Anesthesia, Physiotherapy, Orthopedics, Radiology and imaging, Nutrition among many more. The hospital provides clinical experience's placements to students from both the Universities and Kenya Medical Training Colleges (KMTC) within proximity.

3.3 Target population

According to Best and Kahn (2004) a target population consists of a group of persons having one or more similar features which the researcher is interested in. Wallen and Fraenkel (2000) defines target population as the large group set from which the research study and the researcher wishes to generalize findings. The target population was all the three hundred and fifty-six (356) basic diploma nursing students from KMTC Mombasa. In this target population the researcher intended to study all the basic diploma students who are in their 3rd year.

A study population is a subset of the target population from which the sample was selected (Kothari, 2004). The study population was the ninety-five (95) basic diploma students in their 3rd year (as per the Hod Nursing department register 2021) who had undergone mentorship placements at CGTRH for more than two years.

3.3.1 Inclusion criteria

Basic diploma students who were in their 3rd year and therefore had undergone mentorship for more than two years during their clinical placements at the Coast General Teaching and Referral hospital and who were willing to take part in the study.

3.3.2 Exclusion criteria

The first - and second-year nursing students. These students had not gone for the clinical practical rotations and had not undergone mentorship for at least two years. The fourth-year students were also excluded as the three and half nursing program was faced off.

3.4 Sample size and sampling procedure

This involves the process of selecting several individuals who will participate in the study. The researcher purposively selected Mombasa County thereafter clustered all the Kenya Medical Training Colleges (KMTC) within the county and purposively selected Kenya Medical Training college, Mombasa. This is because Mombasa (KMTC) has a higher number of Nursing students who go for the practical placements at CGTRH than the other

training colleges. Secondly since CGTRH is a teaching hospital, the students will have interacted with many mentors during their training.

Purposive sampling method was used to select the third-year nursing students as they had undergone mentorship for more than two years at CGTRH and had the required information in respect to the objectives of the study.

To ensure proportionate representation of all the third-year students, the researcher used a formula by Yamane (1967) to determine the sample size from the ninety-five (95) Mombasa KMTC 3rd year diploma students at CGTRH.

A sample size is a percentage of a population chosen for the purpose of conducting research (Naoum, 2012). To determine the sample size from the given population the formula of Yamane was employed as outlined below where: -

$$n = \frac{N}{\{1 + N(e)^2\}}$$

n = is the desired sample size

N signifies the population under study or the target population

e signifies the margin error (which can either be 0.10, 0.05 or 0.01)

Thus, to obtain the sample size n , the researcher used the margin error of 0.05 and the total number of all the third-year students who were 95.

$N = 95$ total no of third year students

e = the margin error or standard error of estimation is 0.05 or (5%)

$$n = 95 / (1 + 95(0.05)^2)$$

$$n = 95 / (1 + 95(0.0025))$$

$$n = 95 / (1 + 0.2375)$$

$$n = 95 / 1.2375 = 76.7676$$

$n = 76.7676$ was rounded off to 77

Therefore, the sample size was obtained as 77. To identify the 77 students (sample size) who would participate in the study, simple random sampling method was applied. The researcher obtained a complete list of names and email addresses of all the third-year students at KMTC Mombasa from the Head of Department Nursing. The names of the students were then arranged alphabetically in ascending order from letter A to Z. The researcher then randomly selected a starting point, as letter G and counted 77 names.

3.5 Instrumentation

This research primary data was obtained by use of online google form questionnaire. The researcher used closed and open-ended questions to solicit ideas, or responses related to the research problem from the respondents. The questions were framed on a Likert scale and open ended to enable description of the phenomena as it is on the ground and enable qualitative analysis of the data collected. The questions were based on the variables of the study alongside their indicators in line with the conceptual framework. The students responded to the questionnaires. The questionnaires were divided into two parts. The first section was structured questions which addressed socio demographic information, and opinion questions on mentorship respectively. The second section addressed the independent variables that is: - (Mentor Related Factors, Institutional Factors and Mentor-

Mentee Relationship Characteristics) and dependent (Clinical Competences) variables and involved ticking statements from a five Likert scale which ranged from strongly disagree (1) to strongly agree (5). This survey was entirely anonymous, and the respondents were not required to place their names on the questionnaire.

3.6 Pre-testing

Pretesting was done to third year Nursing students from Port Reitz KMTC who rotated for their clinical placement at Port Reitz hospital as they had similar characteristic as those in the study. This was done prior to the actual study to identify any problems on how questions were asked whether they understood and whether response options in close-ended questions were adequate. The implication of pretesting is that it gives prior caution on flaws in the instrument in an expected research study (Simons & Goes, 2012). Pre-testing was done using 10% of the sample size i.e., 10% of 77 = 8 students.

The pre-testing is important as it determines the validity and reliability of the research instruments.

3.6.1 Validity

Validity is the degree to which outcomes acquired from the analysis of data represent the phenomena under study (Kumar, 2014). The researcher attempted to minimize random errors and hence increase the validity and reliability of the data collecting tools. To improve the validity and reliability of the questionnaire, the researcher presented the tool to the experts (faculty) for improvement and approval.

3.6.2 Reliability

Reliability refers to the degree to which, when a particular measuring procedure is used repeatedly in the situation, similar results are acquired (Kline, 2013; Shuttleworth, 2015). Reliability of the research instruments was ensured by conducting a pre-test on 8 (10% of 77 students in KMTC Port Reitz Campus. Simons and Goes (2012) indicated that, pre-testing of the data collection instruments is necessary for testing the reliability of data collection instruments to detect any errors and rectify them before submitting the actual research instruments for this study to the respondent for data collection. However, the data used in the pilot study was not included in the final research.

Table 3.1

Reliability

Statement	Cronbach's Alpha	N of Items
Mentor Related Factors	0.604	12
Institutional Factors	0.686	7
Mentor-Mentee Relationship Factors	0.768	10
Students Perception	0.637	11
Clinical Competence	0.623	11

According to Trizano-Hermosilla, and Alvarado, (2016). Cronbach Alpha is a metric used to evaluate the reliability or internal consistency of a group of test item or scale. A 0.6 or higher indicator of alpha coefficient suggests that the acquired data has a comparatively high internal consistency and may be generalized to express perspectives of entire participants in the population being targeted. As shown in Table 3.1, all the variables

(Mentor Related Factors-0.604, Institutional Factors-0.686, Mentor-Mentee Relationship Factors-0.768, Students Perception-0.637 and Clinical Competence-0.623) indicated an alpha coefficient above 0.6 a comparatively high internal consistency.

3.7 Methods of data collection

The initial plan was to present physical hard copies of the questionnaires to the students and collect the filled -up questionnaires on the same day based on the availability of the respondents. However, at the time of data collection, the students were not present at the CGTRH as the campus had been closed down due to the Covid 19 epidemic. When the pandemic subsided, they were sent for their rural experience in various parts of the country. Therefore, the data collection tool was changed to an online google questionnaire. The researcher obtained the email addresses of all the third-year from the Head of Nursing department. To identify the 77 students (sample size) who would participate in the study, simple random sampling method was applied. The researcher obtained a complete list of names and email addresses of all the third-year students at KMTC Mombasa from the Head of Department Nursing. The names of the students were then arranged alphabetically in ascending order from letter A to Z. The researcher then randomly selected a starting point, as letter G and counted 77 names and posted the questionnaires to the students.

An online questionnaire is a series of questions specifically structured to gather information about a target audience or group of people conducted online. In online questionnaires, the respondents were required to answer the questions easily, accessing them through an internet connection. The consent form together with the google form

questionnaire was sent online to their email addresses and the respondents were informed that filling the questionnaire was voluntary and thus by filling and submitting the questionnaire the consent was implied. Once the respondents filled the questionnaires, they were required to submit the form. Once submitted the researcher was able to view the responses online. This method enabled the researcher to obtain the results in real-time.

Data collection was done when the students were in the rural areas. This did not affect the study findings because the researcher had explained to the respondents that they were required to contribute their opinions and experiences on mentorship having worked with a variety of mentors at Coast General Teaching and Referral Hospital.

3.8 Study variables

3.7.1. Independent Variables

Mentor related factors

Institutional factors

Mentor-mentee relationship characteristics

3.7.2. Dependent Variable

Students' perception on the effectiveness of mentorship on Clinical Competences

3.9 Data Analysis

Data analysis is a procedure that generates a huge amount of the data gathered in order, structure and meaning (Kumar, 2014). Before being analysed, the data was reviewed for any errors. The statistical package for social science (SPSS) version 25 was used to conduct the analysis for quantitative data. Descriptive Data analysis was used (frequency, percentage, mean of score, standard deviation) and inferential (correlation) test) statistics. Descriptive statistics were used because they enabled the researcher to meaningfully describe distribution of scores or measurements using a few indices (Kumar, 2014). Inferential data analysis was run using Pearson correlation coefficients. The statistical significance was set at $P = 95\%$ (0.05). Qualitative data was analyzed by the preparation and organization of data from the questionnaires. Analyzing qualitative data involved reading through the responses of the questionnaires received from the respondents, developing the codes, coding the data, and drawing connections between discrete pieces of data.

3.10 Ethical consideration

Ethical approval for the study was obtained from Kenya Methodist University Ethics Review Committee. Authorization to collect data was obtained from Kenya National Commission for Science, Technology, and Innovation (NACOSTI). The researcher also sought permission from the Coast General Teaching and Referral Hospital, KMTC Mombasa Campus and KMTC Port Reitz institutions' ethics and research committees to gain access to the target population for data collection process.

The researcher ensured quality and integrity of research by obtaining informed consent from respondents. The researcher prepared consent letter which accompanied the questionnaire and assured the respondents of privacy and confidentiality of their information. The online questionnaire was anonymous and did not require collection of the respondent's email. The researcher made sure to keep private any information given by the respondents that touched on their personal or their private life. The respondents were reassured that the information provided was to be used for the stated purpose and that the information would not be handed to a third party. The nature and the purpose of the research was explained to the respondents in the consent letter by the researcher and they were assured that data collected was stored safely prior to analysis. All data from the different respondents was treated as one unit and at no point was the individual respondent's data isolated. The conclusions therefore referred to the population and not individual.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

The chapter presents general findings, analysis and discussion of the study based on the research objectives. The study was conducted on Diploma Nursing Students who are placed for most of the clinical placements during the first, second and junior third year rotations at Coast General Teaching and Referral Hospital, Mombasa. The researcher analyzed the data based on four objectives. The first was mentor related factors which influence clinical competences of nursing students; the second on institutional factors which influence clinical competences of students; the third was on mentor-mentee relationship characteristics which influence clinical competences of nursing students and the fourth was the students' perceptions on the effectiveness of mentorship on their clinical competences.

4.2 Response Rate

Nursing students were the main respondents. A total of 65 responses were received out of the sample size of 77 students. This represented (84.4%) response rate as shown in Table 4.1 which is considered good for analysis as per Mugenda and Mugenda (2012) who allude that a response rate of (50%) is enough for analysis and reporting. A response rate of (60%) is generally good while a response rate of above (70%) is excellent. Based on the recommendations therefore, it implies that the response rate for this study is adequate

and increases confidence for generalization and informed the basis of the analysis and the results found in this chapter.

Table 4.1

Response Rate

Details	Frequency	Percentage
Returned Questionnaires	65	84.4%
Questionnaires not Returned	12	15.6%
Total	77	100%

Source: Researcher (2023)

4.3. Demographic Characteristics of the Respondents

The study sought to establish the demographic data of the respondents which included gender and age. As shown in Table 4.2, the demographic analysis shows that more than half (60%) of the respondents were female while the remaining (40%) of the respondents were male. The study revealed that (54%) of the respondents were between 21 and 23 years, (32%) of the respondents were between 24 and 26 years, while (14%) of the respondents were between 18 and 20 years. None of the respondents were less than 18 years or more than 26 years. From the study findings, (86 %) of the respondents were between 21 and 26 years.

Table 4.2

Demographic Analysis of the Respondents

Characteristic	Subset	Frequency	Percentage
Gender	Male	26	40
	Female	39	60
Age	18-20	9	14
	21-23	35	54
	24-26	21	32

Source: Researcher (2023)

4.4 Mentorship information

4.4.1 Clinical competences acquired after mentorship.

The respondents were interrogated on several aspects regarding clinical competences of students acquired after mentorship. They were required to state the level of Clinical competences which they perceived themselves to have acquired following mentorship as shown in Table 4.3.

All the respondents perceived themselves as being confident in providing safe, timely and coordinated care using the nursing process, working well as team players thus promoting professional socialization in the clinical learning environment, providing non-judgmental care and solving problems through provision of emotional, psychosocial, and psychological support to all and upholding professional nursing ethics while providing nursing care.

Majority of the students (93.4%) agreed that following mentorship, they had acquired moderate to high level competence in communication skills and were able to utilize critical thinking skills during problem solving and when assisting patients. A minority (6.2%) had acquired an average level of competence.

Majority of the students (90.1%) perceived themselves to have acquired moderate to high level competence in using clinical judgment and decision-making skills to analyze situations and prioritize nursing care using scientific researched evidence-based practices. A minority of respondents (9.2%) had acquired average level of competence.

The findings revealed that (76.9%) of students perceived themselves as having acquired high level competence in applying critical thinking skills during problem solving and when assisting patients with activities of daily living. A minority of students (16.9%) had acquired moderately high level of competence while only (6.2%) had acquired average level competence in critical thinking skills during problem solving and when assisting patients with activities of daily living.

The students perceived themselves as having acquired high level competence in providing safe, timely and coordinated care. “I am confident in providing safe, timely and coordinated care using the nursing process” scored a mean of 4.57 and a standard deviation of 4.99. No student perceived themselves as having acquired low level competence but all students had acquired moderate to high level clinical competences in provision of safe timely and coordinated care while utilizing or using the nursing process.

Table 4.3*Students Perception on clinical Competences acquired after mentorship.*

Opinion Statements on Level of competence	High	Moderate	Average	Low	No	Mean	Std Dev.
I use communication skills in listening, written, verbal and nonverbal effectively	51(78.5%)	10(15.4%)	4(6.2%)	0(0%)	0(0%)	4.72	.573
I engage in self-reflection, have an open mind to and accept feedback and constructive criticism when corrected.	37(56.9%)	12(18.5%)	16(24.6%)	0(0%)	0(0%)	4.32	.850
I engage in creative problem solving to identify patient's needs.	45(69.2%)	17(26.2%)	3(4.6%)	0(0%)	0(0%)	4.65	.571
I use clinical judgment and decision-making skills to analyze situations and prioritize nursing care using scientific researched evidence-based practices.	43(66.2%)	16(24.6%)	6(9.2%)	0(0%)	0(0%)	4.57	.661
I work well as a team player which promotes professional socialization in the clinical learning environment.	38(58.5%)	27(41.5%)	0(0%)	0(0%)	0(0%)	4.59	.497
I collaborate with other staff in building interpersonal professional relationships.	46(70.8%)	18(27.7%)	1(1.5%)	0(0%)	0(0%)	4.69	.498
Am confident in providing safe, timely and coordinated care using the nursing process.	37(56.9%)	28(43.1%)	0(0%)	0(0%)	0(0%)	4.57	.499
I adhere to well-established standards of practice while performing duties assigned to me and observe the ethical	39(60%)	25(38.5%)	1(1.5%)	0(0%)	0(0%)	4.58	.527

and legal standards of
practice

I apply critical thinking skills during problem solving and when assisting patients with activities of daily living	50(76.9%)	11(16.9%)	4(6.2%)	0(0%)	0(0%)	4.71	.579
I provide non-judgmental care and solve problems through provision of emotional, psychosocial, and psychological support to all.	50(76.9%)	15(23.1%)	0(0%)	0(0%)	0(0%)	4.77	.425
I uphold professional nursing ethics while providing Nursing care.	37(56.9%)	28(43.1%)	0(0%)	0(0%)	0(0%)	4.57	.499

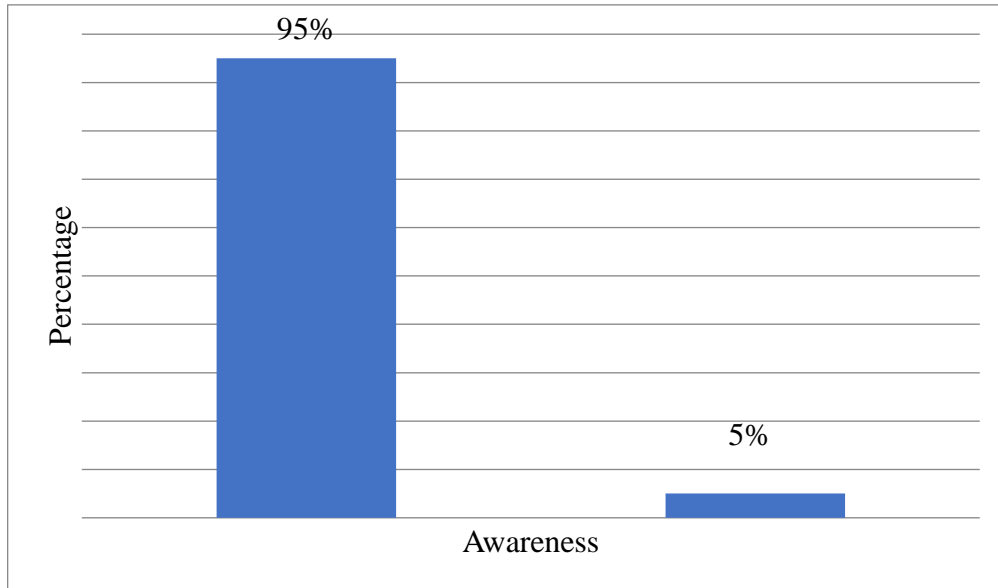
N=65

4.4.2 The term mentorship

Regarding the question of whether the Nursing Students had come across the term mentorship, the results in Figure 4.1 show that majority (95%) of the respondents were aware and indeed had come across the term mentorship. This implies that Nursing Students at Coast General Teaching and Referral Hospital, Mombasa County who took part in this research study were the right target group as they were familiar with the term mentorship.

Figure 4.1

Mentorship Awareness



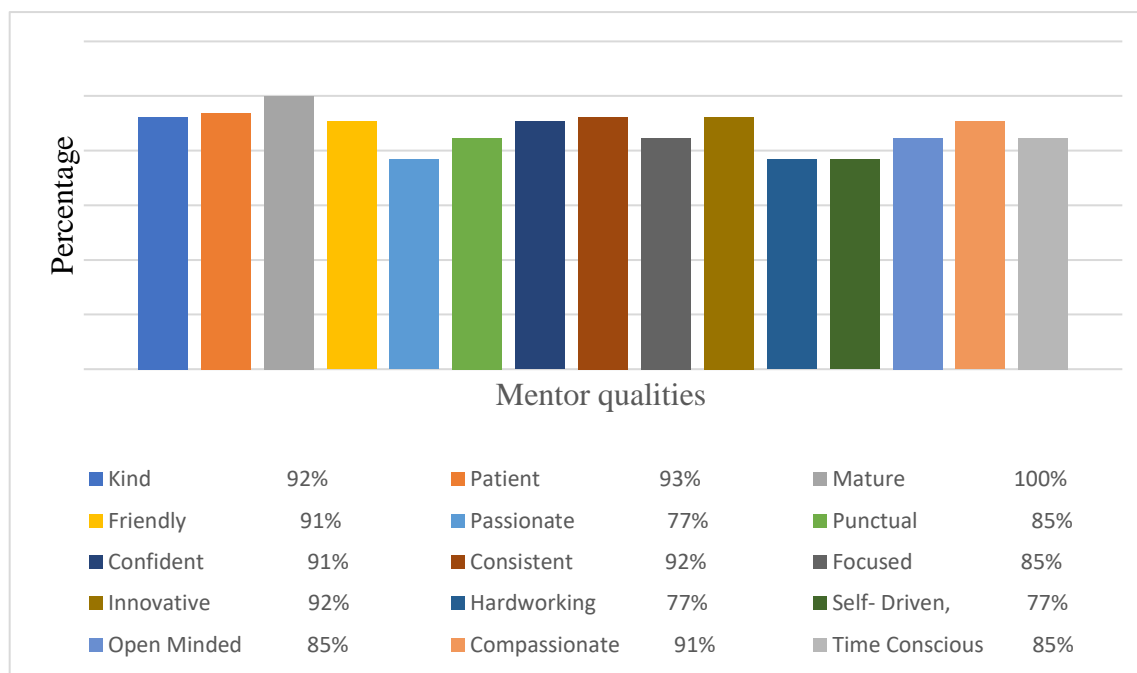
Source: Researcher (2023)

4.4.3 Qualities observed from the Mentors.

The study sought to establish from the respondents the qualities observed from their mentors. The respondents mentioned the following qualities as indicated in Figure 4.2. From the responses, all the respondents reported that mentors were mature. The majority (90%) of the respondents stated that the mentors were patient, kind, innovate, friendly, confident, compassionate, and consistent. Similarly, 76.6% of the respondents observed that the mentors were open minded, focused, punctual, time conscious, passionate, self-driven and hardworking,

Figure 4.2

Mentors' qualities



Source: Researcher (2023)

4.4.4 Experience with the Mentors

The study sought to find out from the respondents the positive and negative experiences they had with the mentors whom they had interacted with during the mentorship period.

4.4.4.1 Positive experiences

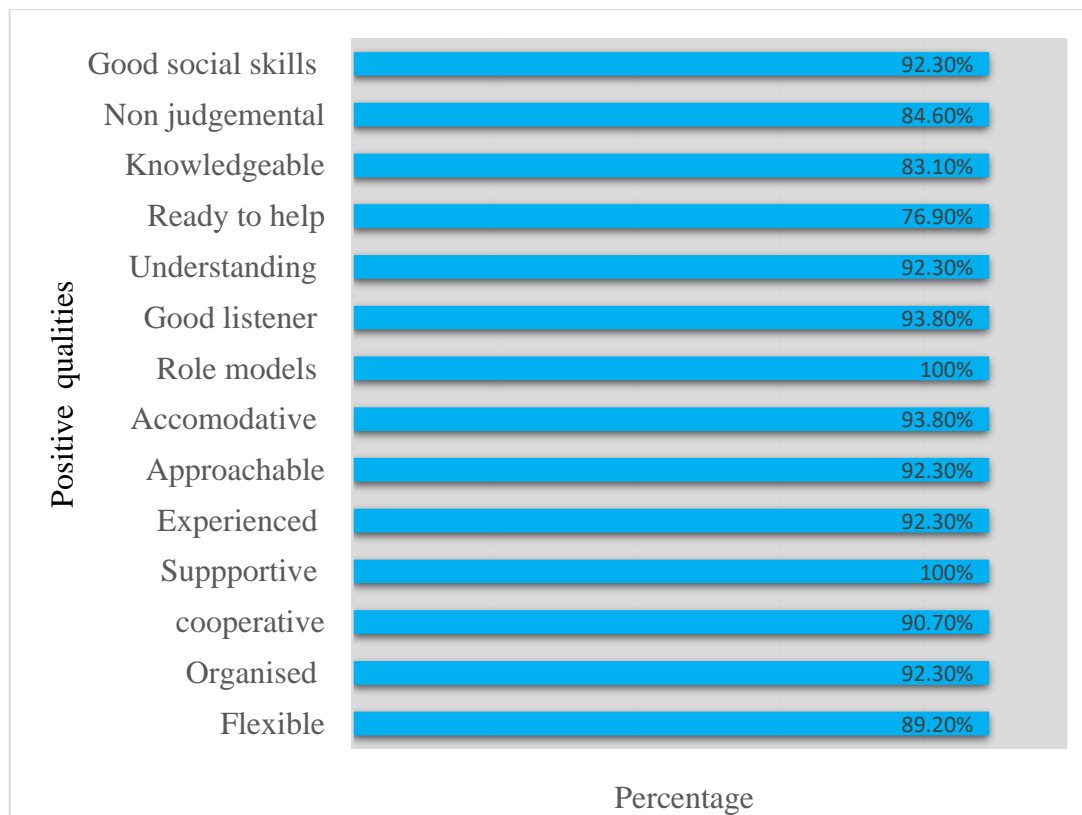
The nursing students had several positive experiences with the mentors they interacted with in the various placements departments at Coast General Teaching and Referral Hospital, Mombasa. All the respondents stated that the mentors were very supportive and were good role models. The majority (>90%) of the respondents stated that the

mentors were organized, cooperative, approachable, understanding had good social skills and thus, the nursing students learnt a lot from them. Majority (76.7%) of the respondents reported that the mentors were ready to help but due of the high workload especially in labor ward, the mentors did not have sufficient time to mentor the students effectively. These observations indicate that the Nursing Students perceive the mentors to possess good qualities.

Outlined in Figure 4.3 are the positive experiences the nursing students had with the mentors they interacted with at Coast General Teaching and Referral Hospital.

Figure 4.3

Positive experiences

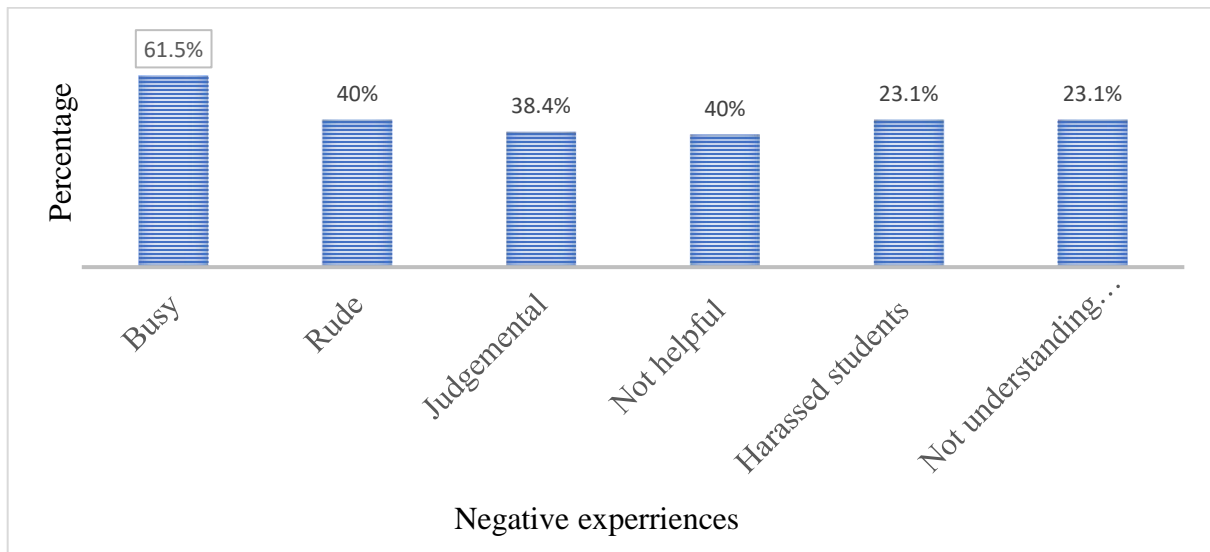


4.4.4.2 Negative experiences

The nursing students also had negative experiences with the mentors they interacted with at Coast General Teaching and Referral Hospital as depicted in Figure 4.4. They reported that a majority (61.5%) of the mentors especially those in the labor ward were very busy thus did not have time to mentor the students effectively due to the heavy workload. Few (23.1%) of the mentors harassed students and did not understand the student's needs, while 38.4% of the mentors were judgmental. The students also reported that about 40% of the mentors were rude, not helpful and therefore did not learn much from them.

Figure 4.4

Mentees Negative experiences with mentors



4.5 Factors influencing Clinical Competences

4.5.1 Mentor related factors

Concerning the mentor related factors influencing clinical competences, the respondents were asked to indicate the extent to which they agreed or disagreed with each of the statements. The results of their responses are shown in Table 4.4

All the respondents agreed that their mentors' knowledge in various nursing procedures helped them acquire the required clinical competences. Moreover, all the respondents agreed that the motivation granted by the mentors has promoted their clinical skills and competences. As depicted on the Table 4.4, (53.8%) of the respondents disagreed that the students were paired with mentors to provide guidance and support to them. However, 30.8% of the respondents agreed while (15.3%) neither agreed nor disagreed on whether students were paired with mentors to provide guidance and support to them.

Further the results shows that the aspect of mentors' knowledge in various nursing procedures helped the students acquire the required clinical competences scored a mean score of 4.46 and standard deviation 0.502 demonstrating that the mentors were knowledgeable. In addition, the motivation granted by the mentors has promoted the students' clinical skills and competences and this scored a mean of 4.46, standard deviation 0.502. Regarding pairing of students with mentors scored a mean of 2.31 with standard deviation of 1.50 indicating that majority of the students were not paired to mentors who are required to provide guidance, and support.

Table 4.4*Mentor Related Factors*

Opinion Statements	SA	A	N	SD	D	Mean	Std Dev.
Mentorship is a supportive relationship established between two individuals	60(92.3%)	5 (7.7%)	0 (0%)	0 (0%)	0 (0%)	4.92	.269
In mentorship, students are paired with mentors to provide guidance, and support.	5 (7.7%)	15 (23.1%)	10(15.3%)	0 (0%)	35 (53.8%)	2.31	1.499
Mentorship support from my mentor has enabled me to cope up with my initial difficulties in psychological adjustments.	44(67.7%)	20(30.8%)	1(1.5%)	0(0%)	0(0%)	4.66	.509
My mentor supports and advises me in numerous ways which promotes my career development and professional skills	32(49.2%)	32(49.2%)	1(1.5%)	0(0%)	0(0%)	4.48	.533
My mentor is a good role model and guides me in the development of clinical skills in a friendly caring manner	43(66.2%)	20(30.8%)	2(3.1%)	0(0%)	0(0%)	4.63	.547
My mentor's modeling style has helped me develop the processes of integrating the knowledge learnt into practice.	45(69.2)	20(30.8%)	0(0%)	0(0%)	0(0%)	4.69	.465
Motivation from my mentor has promoted my clinical skills and competences	45(69.2%)	20 (30.8%)	0(0%)	0(0%)	0(0%)	4.69	.465

My mentor's encouragement makes me feel confident during the clinical practice activities	32 (49.2%)	32(49.2%)	1(1.5%)	0(0%)	0(0%)	4.48	.533
My mentors' knowledge in various nursing procedures has helped me acquire the required clinical competences	30(46.1%)	35(53.8%)	0(0%)	0(0%)	0(0%)	4.46	.502
My mentors are academically well trained and can teach us new skills with ease.	30(46.1%)	35(53.8%)	0(0%)	0(0%)	0(0%)	4.46	.502
My mentors have undergone mentorship training thus are able to mentor the students very well,	30(46.1%)	33(50.8%)	2(3.1%)	0(0%)	0(0%)	4.43	.558
My mentors constantly undergo trainings thus are updated with new information and mentor us on current evidence-based practices	35(53.8%)	30(46.1%)	0(0%)	0(0%)	0(0%)	4.46	.502

N=65

Source: Researcher (2023)

4.5.2 Institutional Factors

Regarding the institutional factors influencing clinical competences of students, the respondents were asked to indicate the extent to which they agreed or disagreed with each of the statements and the results of their responses are as shown in Table 4.5.

As shown in Table 4.5, a majority (97.9%) of the respondents agreed that the resources available in the clinical practice placements had greatly contributed to the high level of the competencies they had acquired.

All respondents agreed that due to the high number of students per mentor it was difficult for them to assist all the students assigned to them. A majority (76.9 %) of the respondents disagreed that there was intentional matching of experienced senior qualified staff with students. However, (23%) agreed that there was intentional matching of experienced senior qualified staff with students which had helped them acquire skills in performing clinical procedures. Slightly more than half (58.5%) of the respondents disagreed that they could apply the knowledge learnt in class because of the institution's mentorship support offered to students in the clinical placements. On the contrary (30.6%) stated that they could apply the knowledge learnt in class because of the institution's mentorship support offered, (10.7%) respondents neither agreed nor disagreed.

The study further computed the means and standard deviation of some aspects of institutional factors to find which aspects are important in influencing clinical competences of students. The result showed that aspect of "High number of students per mentor has made it difficult for them to assist all students" scored a mean 4.95 and standard deviation of 0.211. This clearly demonstrates that if the number of students allocated to the mentors is high then the likelihood that it will not be easy for all students to be assisted by the mentors.

Table 4.5*Institutional Factors*

Opinion Statements	SA	A	N	SD	D	Mean	Std Dev.
The practice placement has facilitated my acquisition of clinical competencies	42(64.6%)	10(15.3%)	0	0	13(20%)	4.05	1.576
The practice placements areas have provided me with the opportunity to practice under supervision.	37(56.9%)	10(15.3%)	0	6(9.2%)	12(18.4%)	3.83	1.616
The clinical practicum has provided me with an experiential mentoring environment for safe practice	20(30.7%)	10(15.3%)	0	14(21.5%)	21(32.3%)	2.91	1.711
Due to the institution's mentorship support offered to students in the clinical placements I can apply knowledge learnt in class.	10(15.3%)	10(15.3%)	7(10.7%)	12(18.5%)	26(40%)	2.48	1.522
High number of students per mentor has made it difficult for them to assist all students	62(95.4%)	3(4.6%)	0	0	0	4.95	.211
Intentional matching of experienced senior qualified staff with students has helped me acquire skills in performing clinical procedures	5(7.7%)	10(15.3%)	0	21(32.3%)	29(44.6%)	2.11	1.359
The resources available in the clinical practice placements have greatly contributed to the high level of the competencies I have acquired	63(96.9%)	2(3.1%)	0	0	0	4.97	.174

N=65

Source: Researcher (2023)

4.5.3 Mentor-mentee relationship factors

Regarding Mentor-mentee relationship factors influencing clinical competences of Nursing students at CGTRH, the respondents were asked to indicate the extent to which they agreed or disagreed with each of the statements. The results showed that there are some Mentor-mentee relationship factors that influence clinical competences of students as depicted in Table 4.6.

Majority (98.5%) of the respondents agreed that the mentors were committed in teaching and freely shared information with them on how to perform various nursing procedures and that these helped the student acquire the desired clinical competences.

The majority (95.3%) agreed that the mentors are respectful and maintained confidentiality in the relationship. They also stated that the mentors psychosocial support empowered them to overcome challenges during their practical placements. A minority (23%) of respondents reported that the mentors harassed the students hence their interaction with them was poor. This scored the lowest mean of 1.81 and a standard deviation of 1.467. However, the majority (75.4%) disagreed that their interaction with mentors had been poor, meaning only a few students had a poor interaction with the mentors.

Regarding the Mentor-Mentee relationship factors which were assessed, the aspect of the mentor's commitment in teaching and freely sharing information on how to perform various nursing procedures scored a mean of 3.98 and a standard deviation of 0.124 meaning that the clinical competences of Nursing students were because of their mentor's

commitment in their teaching that had enabled the student to acquire the desired clinical competences.

Table 4.6

Mentor-Mentee relationship factors

Opinion Statements on Level competence	SA	A	N	SD	D	Mean	Std Dev.
My mentor is respectful and maintains confidentiality in the relationship	0(0%)	62(95.4%)	3(4.6%)	0(0%)	0(0%)	3.9538	.21145
Having a mutual respect with my mentor has enabled me gain time management skills in clinical rotations	0(0%)	56(86.2%)	9(13.8%)	0(0%)	0(0%)	3.8615	.34807
Personal attributes of my mentors such as constant affirmation, has helped me gain confidence in clinical skills	0(0%)	60(92.3%)	5(7.7%)	0(0%)	0(0%)	3.9231	.26854
My mentors' psychosocial support has empowered me to overcome challenges during my practice placement	0(0%)	62(95.4%)	3(4.6%)	0(0%)	0(0%)	3.9538	.21145
Our mentors are always available and ready to guide us despite their various tasks allocated to them	0(0%)	59(90.8%)	0(0%)	0(0%)	6(9.2%)	3.7231	.87514
My mentors' great interest in my teaching has helped me improve in my career goals.	0(0%)	65(100%)	0(0%)	0(0%)	0(0%)	4.0000	.00000
My mentors are committed to teaching and freely share information with us on how	0(0%)	64(98.5%)	1(1.5%)	0(0%)	0(0%)	3.9846	.12403

to perform various nursing procedures							
Mentorship requires mentor and mentee commitments	0(0%)	65(100%)	0(0%)	0(0%)	0(0%)	4.0000	.00000
Students are the focus in the relationship and are respected as individual partners with personal learning goals and objectives	0(0%)	64(98.5%)	1(1.5%)	0(0%)	0(0%)	3.9846	.12403
My interaction with mentors has been poor because they harass the students	5(7.7%)	10(15.3%)	1(1.5%)	0	49(75.4)	1.8154	1.46727
<hr/>							
N=65							

Source: Researcher (2023)

4.5.4 Students perception on the effectiveness of mentorship on Clinical Competences

Concerning the Students' perception on the effectiveness of mentorship on Clinical Competences, the respondents were asked to indicate the extent to which they agreed or disagreed with each of the statements and the results of their responses are as shown in Table 4.7.

The results indicate that all aspects assessed with regard to “Students Perception on the effectiveness of mentorship on clinical competences” scored high at (93.2%) or more. This shows that as a result of mentorship all the Nurse students had acquired clinical competences and skills in performance of various Nursing procedures required in provision of quality Nursing care.

The feedback provided by mentors was adequate in terms of facilitating learning and acquiring clinical competences as indicated by all respondents.

Moreover, majority (95.4%) of the respondents agreed that Mentorship had enabled them to acquire appropriate competences thus were able to perform most nursing procedures confidently. Their perception towards mentoring was positive and viewed it as very beneficial in promoting personal interaction. However, a few (4.6%) respondents remained neutral.

Majority (96.9%) of the respondents agreed that poor interpersonal relationships among mentors and mentee leads to inadequate mentoring thus poor acquisition of clinical competences.

Aspect of “I have a positive perception towards mentoring as I view it as very beneficial in promoting personal interaction” scored the highest mean 4.81 and a standard deviation of 0.587 meaning that students’ perceived mentoring as very beneficial in promoting personal interaction

Table 4.7*Students Perception on the effectiveness of mentorship on clinical competences*

Opinion Statements on competence level	SA	A	N	SD	D	Mean	Std Dev.
The feedback provided by my mentors has been adequate in terms of facilitating learning and acquiring clinical competences	55(84.6%)	8(12.3%)	2(3.1%)	0(0%)	0(0%)	4.67	.473
The communication skills which I have acquired through mentorship have enabled me to communicate with my mentors, patients, and other hospital personnel effectively.	50(76.9%)	10(15.3%)	4(6.2%)	1(1.5%)	0(0%)	4.72	.412
Mentorship has strengthened my decision-making skills and willingness to take risks	55(84.6%)	8(12.3%)	2(3.1%)	0(0%)	0(0%)	4.70	.460
Working with several mentors has taught me how to work together with others as a team	50(76.9%)	12(18.5%)	3(4.6%)	0(0%)	0(0%)	4.75	.436
Mentorship has enabled me to acquire appropriate competences thus am able to perform most nursing procedures confidently.	30(46.1%)	32(49.2%)	3(4.6%)	0(0%)	0(0%)	4.80	.406
Sharing experiences and learning is the greatest benefits that I have gained from my mentors	30(46.1%)	33(50.8%)	1(1.5%)	1(1.5%)	0(0%)	4.52	.504

My mentors supported me and made me have confidence in my work	50(76.9%)	10(15.3%)	5(7.7%)	0(0%)	0(0%)	4.27	.840
Mentorship has inspired me and provided guidance for transformational leadership.	4(6.1%)	60(92.3%)	1(1.5%)	0(0%)	0(0%)	4.61	.429
I have a positive perception towards mentoring as I view it as very beneficial in promoting personal interaction	3(4.61%)	60(92.3%)	2(3.1%)	0(0%)	0(0%)	4.81	.588
Mentorship is beneficial as it enhances critical thinking and career development,	50(76.9%)	14(21.5%)	1(1.5%)	0(0%)	0(0%)	4.36	.651
Poor interpersonal relationships among mentors and mentee leads to inadequate mentoring thus poor acquisition of clinical competences	50(76.9%)	13(20%)	2(3.1%)	0(0%)	0(0%)	3.83	1.216

N=65

Source: Researcher (2022)

4.6 Inferential statistics on Relationship between Independent and Dependent Variables.

4.6.1 Correlation Coefficient

To establish a relation between predicted and actual values obtained, the Correlation coefficient statistical measure was used to predict the influence of the independent

variables (Mentor, institutional and Mentor Mentee relationship factors) on the dependent variables (Clinical competences). Regarding mentor related factors influencing clinical competences of nursing students at CGTRH the results in Table 4.8 indicate there was a strong positive correlation coefficient of 0.703 which is statistically significant ($p < 0.05$). This leads to the confirmation that mentor related factors have an influence on clinical competences of nursing students at CGTRH. This means that on overall, mentorship related factors such as pairing students with mentors to provide guidance, and support positively influence clinical competences of nursing students.

On institutional factors influencing clinical competences of nursing students at CGTRH, the results show a moderate positive correlation coefficient of 0.451 which is statistically significant ($p < 0.05$). This means that on overall, institutional factors such as practice placement positively influence nursing students' acquisition of clinical competences.

The study explored mentor-mentee relationship characteristics influencing clinical competences of nursing students at CGTRH. The findings show that there a strong positive correlation coefficient of 0.956 which is statistically significant ($p < 0.05$). This means that overall, mentor-mentee relationship characteristics such as being respectful and maintaining confidentiality in the relationship positively influence clinical competences of nursing students. This leads to the confirmation that mentor-mentee relationship characteristics have influence on clinical competences of nursing students at CGTRH.

The study also explored the nursing student's perception on the clinical competences acquired after mentorship. The results pointed out shows a moderate positive correlation

coefficient of 0.406 which is statistically significant ($p < 0.05$) which shows that there is a confirmation that the nursing students perceived mentorship at CGTRH had a great influence on their clinical competences.

Table 4.8

Correlation coefficient

Variables		Clinical Competence
Clinical Competence	Pearson Correlation	1
	Sig. (2-tailed)	
	N	65
Mentor related factors	Pearson Correlation	.703**
	Sig. (2-tailed)	.000
	N	65
Institutional factors	Pearson Correlation	.451**
	Sig. (2-tailed)	.000
	N	65
Mentor-mentee relationship	Pearson Correlation	.956**
	Sig. (2-tailed)	.000
	N	65
Students' perception	Pearson Correlation	.406**
	Sig. (2-tailed)	.001
	N	65

4.6.2 Regression analysis

To predict the influence of the independent variables (Mentor, institutional and Mentor Mentee relationship factors) on the dependent variables (Clinical competences) a multivariate regression analysis was applied to establish the relationship between the variables as depicted in Table 4.9. From the data obtained the independent variables

(mentor, institution, and mentor -mentee relationship factors) correlate strongly with the dependent variable clinical competences as shown by the value of R (0.965). A strong correlation is shown between dependent and independent variables as seen by the values R^2 (0.931). In this case the R^2 value (93%) indicates how much the dependent variables (clinical competence) is influenced by the independent variables (mentor, institution, and mentor -mentee relationship factors). This means that mentorship factors (Mentor related factors, Institutional factors, Mentor-mentee relationship) improve the clinical competences of the nursing students at CGTRH by (93%.) The remaining (7%) can be explained by other factors that are not included in the study which can be a basis for further study to ensure this percentage is covered.

Table 4.9

Regression Model Summary Results

Model	R	R Square	Adjusted R square	Std. Error of Estimate
1	0.965	.931	.926	0.08827

Predictors (Constant), Mentor, Institutional, Mentor Mentee Relationship Factors

Source: Researcher (2023)

4.6.3 ANOVA

The study sought to establish analysis of variance (ANOVA) which is a collection of statistical models used to analyze the differences among means and their association. The ANOVA statistics were used to test the fitness of the regression model, based on the ANOVATable10. The significance F value =200.891 was obtained. It was established that

the whole model has a P value = 0.000 which is within the significance level of 0.05. This means that the regression model ($F=200.891$, $P<0.001$) is valid and was statistically significant and was deemed fit for prediction purposes. In this case it predicted that the factors under study have an influence on the students nurses clinical competences as indicated in Table 4.10.

Table 4.10

ANOVA output

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	6.260	4	1.565	200.891	.000 ^b
Residual	.467	60	.008		
Total	6.728	64			

a. Dependent variables: Clinical competences

b. Predictors: Mentor, Institutional, Mentor Mentee Relationship Factors

4.6.4 Multiple Regression Coefficients

To assess the independent variables that could predict clinical competences, a multiple regression model was developed using the variables as indicated in Table 4.11. The forward method was employed to get the best fit. The three variables Mentor, institutional and mentor mentee relationship factors were assessed. All the three variables contributed statistically significant to the prediction of the clinical competences, $p<0.05$. Results depict that at (95%) confidence level mentor-related factors influence is significant ($B=0.189$, $P=0.019$), institutional factors are significant ($B=0.183$, $P=0.002$), mentor-mentee relationships significant ($B=0.954$, $P=0.000$) and students' perception is also

significant ($B=0.174$, $P=0.012$). The fact that the p-values are less than the significance level 0.05 infers that the three factors strongly influence the students' clinical competences.

This means that for every unit increase of mentor-related factors clinical competence improves by 18.9% ($B=0.189$), a unit increase in institutional factors clinical competence improves by 18.3% ($B=0.183$), a unit increase in mentor-mentee relationship clinical competence improves by 95.4% ($B=0.954$), and a unit increase in students' perception clinical competence improves by 17.4% ($B=0.174$). The clinical competence remains at constant (64.8%, $B=0.648$). This therefore shows that there is a strong relationship between mentor factors, institutional factors, and mentee mentor relationship characteristics to the effectiveness of mentorship on the clinical competences.

Table 4.11*Regression Coefficients*

	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.648	.266		2.432	.018
Mentor related factors	.189	.078	.120	2.421	.019
Institutional factors	.183	.057	.211	3.194	.002
Mentor-mentee relationship	.954	.050	.917	19.262	.000
Students Perception	.174	.067	.160	2.596	.012

4.7 Discussion of findings.

This section presents a discussion integrating the findings of the study.

The first objective was to explore nursing students' perception on the effectiveness of mentorship on their clinical competences at CGTRH. These included the perceptions the mentees had regarding the mentoring experience in terms of perceived advantages, attitude toward the program, expected feedback and even problems they faced throughout the mentorship experience.

Majority (95.4%) of the respondents agreed that Mentorship had enabled them to acquire appropriate competences thus were able to perform most nursing procedures confidently. These findings correlate with a study by Gichigi (2009) who posited that (67%) students from KEMU and (49%) students from UON agreed that mentoring enhances acquisition of clinical competences such as critical thinking, readiness to take risks and increases self-esteem.

Apart from a few (4.6%) respondents who remained neutral, majority (95.4%) had a positive perception towards mentoring and viewed it as very beneficial in promoting personal interaction. Cate (2019) posit that during mentorship, the students learn a range of talents such as leadership, communication, personal skills, advance their careers and develop a sense of fulfilment and personal growth.

The respondents were interrogated on several aspects regarding clinicalcompetences acquired after mentorship. They were required to state the level of Clinical competences which they perceived themselves to have acquired following mentorship.

All the respondents perceived themselves as being confident in providing safe, timely and coordinated care using the nursing process. Majority (93.4%) of the students agreed that following mentorship, they had acquired moderate to high level competence in communication skills while a minority (6.2%) had acquired an average level of competence. Similar sentiments were echoed by Nursing students from KEMU and UON who alluded that because of mentorship they were able to apply what had been taught in class hence bridged the gap between theory and practice. In so doing they acquired several clinical competences (Gichigi, 2009).

Majority (90.1%) of students have acquired moderate to high level competence in using clinical judgment and decision-making skills to analyze situations and prioritize nursing care using scientific researched evidence-based practices. A minority (9.2%) respondents had acquired average level of competence. The findings relate with Puppe and Neal (2014)

who postulate that an adept connection with competent mentors has a strong impact on learning and enhances the students' outcomes and professional growth.

The findings revealed that a high (76.9%) number of students perceived themselves as having acquired high level competence in applying critical thinking skills during problem solving and when assisting patients with activities of daily living. A minority (16.9%) of students had acquired moderately high level of competence while only (6.2%) had acquired average level competence in critical thinking skills. This means that through mentorship the students are able to build their confidence, comprehend behavior and build authentic concrete skills not addressed in nursing schools (University of Texas Arlington, 2016).

The study findings showed that some students perceived themselves as not having acquired high level competence in performing some procedures or assisting patients. This inferred that they lacked some clinical competences. In Malawi the student Nurses had infrequent, insufficient guidance and minimum encounters with their mentors. Thus, when faced with unfamiliar conditions during their practical placements they imitated the shortcuts or unethical traits from the mentors hence did not practice the required ethical standards of care. Upon graduation the nurse students fail to exhibit the professional competences, and this brings challenges when they enter the work force (Kamphinda & Chilemba, 2019).

From the study findings, it is evident that not all students had acquired high level competences. There are those who had acquired moderate to average level of competence.

This can be attributed to inadequate and irregular support and supervision by the mentors, or the students may themselves not be interested in learning or may lack the initiative and self-drive. Some students may finish some practice placement without acquiring the needed clinical competences due to lack of exposure to some procedures, unfamiliarity with some medical conditions and diagnosis, poor interpersonal relations, excessive workload.

A study by Gemuhay et al. (2019) showed that Nursing students in Botswana had poor or inadequate clinical competences in applying theory into practice due to lack of support and inadequate supervision within the clinical area. In another study by Lovric et al. (2017) it was realized that adequate quality time in mentoring and lack of a respectful association was lacking among mentors and mentees at 12 clinics at the University hospital which led to inadequate acquisition of clinical competences.

Several inferential statistical methods were used to investigate and draw conclusions on the relationship between independent variables and their effect on the clinical competences of student nurses. The results showed that there is a strong relationship between mentor factors, institutional factors, and mentee mentor relationship characteristics on the effectiveness of mentorship and acquisition of the required clinical competences.

The second objective was to assess mentor related factors influencing clinical competences of nursing students at CGTRH. These factors include the support granted by

mentors to mentees, motivation, how the mentee role models and the academic preparation of the mentor.

A mentor encourages and advises students in numerous ways, including assisting to make the most of their education, learning, moral promotion, career development and professional skills. Mentoring can assist nurse students' belief in oneself, comprehend virtuous and moral dilemmas, acquire interpersonal skills that are not addressed in the training school and thus develop the processes of integrating the knowledge learnt in class into practice. The NMC (2008) states that mentors have a vital role in developing and facilitating students' competences. Similar sentiments are echoed by Kim (2020) who retorted that Nursing educators/mentors have a vital role in enhancing nursing students' clinical experience in clinical practice, hence mentor-related aspects are significant.

The study revealed that all the respondents agreed that their mentors' knowledge in various nursing procedures helped them acquire the required clinical competences. The findings concur with a study by Al-Hamdan et al. (2014) which indicated that students acknowledged the role played by mentors in clinical education and their attributes, which are seen by students as essential to excellent tutoring. Students learn a lot from their mentors as some of them are old in the profession hence have more knowledge and experience in performing various nursing procedures.

All respondents agreed that the motivation granted by the mentors has promoted their clinical skills and competences. This relates to a study by Ismael et al. (2015) where nursing students alluded that the support and motivation granted by their mentors enabled

them to foster their competences. Motivation, feedback, and encouragement are important aspects in learning and as they encourage the students to work hard and add more effort in their studies. In so doing they become eager to learn more and practice as they have the assurance of their mentor's support, and this goes a long way in development and acquisition of various clinical competences.

The negative experiences pointed out by the nursing students included: - inadequate number of mentors, poor interpersonal relations, lack of support, inadequate time, excessive workload, and uncooperative mentors. Majority (61.5%) of the respondents stated that the mentors in the labor ward were very busy thus did not have adequate time to mentor the students effectively due to the heavy workload. The findings relate to a study by Wachira (2019), who postulated that the challenges encountered in mentorship include lack of time, inadequate mentors, lack of support and poor interpersonal relations.

A few (23.1%) respondents stated that some mentors harassed students and did not understand the student's needs. A few (38.4%) respondents pointed out that they did not learn much from some mentors as they were judgmental, rude, and not helpful. Findings of a study by Katherine (2003) retorted that negative and inappropriate personality trait of a mentor affect a mentorship relationship and deter the smoothness of a mentorship plan.

The study established that the nursing students had both positive and negative experiences with the mentors they interacted with in the various placement departments

at CGTRH, Mombasa. These findings relate to a study carried out at the Kenya Medical Training Campus, Kabarnet on perception on Mentorship Practices among Nursing Students that revealed that the undergraduate nursing students encountered both pleasing and unpleasing experiences during mentorship (Wachira, 2019).

The third objective was to establish institutional factors influencing clinical competences of students at CGTRH. The practice placements, institutional support, ratio of mentors to mentees and the available resources are a major prerequisite necessary for providing an enabling environment where student nurses are well equipped to handle patients after the training.

Faraji et al. (2019) postulate that it is a requirement that the hospitals offer sufficient resources for student mentoring. For efficient effective learning, students are required to be paired with mentors. The study revealed that, most (53.8%) respondents disagreed that at CGTRH the students were paired with mentors to provide guidance and support to them. This could probably be attributed to the scarcity of employees in hospitals within Kenya as reported by the MoH (2012). Moreover, findings from a study by Oluchina and Gitonga revealed that majority of the nursing students within Kenya were in informal mentoring programs meaning that they too were not paired to mentors. A balance between nursing and practical learning should be effectively structured to encourage the integration of information, attitudes, and abilities, to provide suitable high-quality assistance to students in the practical setting (Jokelainen et al., 2013b).

All respondents agreed that there were adequate resources available within the clinical practice placements which contributed to the high level of the competences which the Nursing students acquired. They however retorted that due to the high number of students, it was difficult for the mentors to assist all the students assigned to them. These findings relate to a study carried out by the Kenya's Ministry of Health and Nursing Council (2012), which showed that the teacher-to-student ratio at Kenya Medical Training Colleges (KMTCS) is below the expected limit which consequently hinders proper development of expected skills, knowledge, and competences. The Nursing Council of Kenya recommends that for clinical instruction in the general wards, one clinical tutor be assigned for every four students whereas one clinical mentor be assigned for every two students in the ICU, HDU, Labor and delivery wards. For students in practice placements where patients require extended health care, in health centers, and dispensary settings experience, one clinical mentor be assigned for every six students.

The study findings revealed that (76.9 %) of the respondents stated that the students were not intentionally matched with experienced senior qualified staff which is required to help them acquire skills in performing clinical procedures. According to Faraji et al. (2019), it is the obligation of the organization and management to offer sufficient resources such as mentors, skilled nurses, and clinical teachers for successful student mentoring.

The findings of the study showed that (58.5%) stated that they were not able to apply the knowledge learnt in class following the institution's mentorship support offered to students in the clinical placements. A few (10.7%) respondents neither agreed nor disagreed and only (30.6%) stated that they could apply the knowledge learnt in class

because of the institution's mentorship support offered. This shows that not all the students who underwent mentorship during the clinical placements at CGTRH acquired the recommended competences of applying knowledge obtained in class in performing certain procedures. There being no structured mentorship programme, mentorship practices differ among the various mentors, and this influences the acquisition of clinical competences by students. Similar sentiments are echoed by Jokelainen et al. (2013a), who retorted that there are just a few papers which provide framework on mentorship practices and as a result there is no uniform consensus in mentoring tactics and hence the outcomes in nursing differ. In South Africa, as well, mentoring in practical placements had not yet been codified as there is no regulatory norms to act as a guide for mentors in practical settings neither do they go through a particular training (Mhlaba, 2011).

The fourth objective was to explore mentor-mentee relationship characteristics influencing clinical competences of nursing students at CGTRH. The nature of mentor mentee interaction is paramount as it dictates the kind of association between the mentor and the mentee. A warm association means that learning takes place while the reverse is true. Mentor-mentee relationship characteristics are important in students' acquisition of clinical competences. The results showed that there are some Mentor-mentee relationship factors that influence clinical competences of students.

Commitment and sharing information by the mentors are key in mentor mentee relationship. Majority (98.5%) of the respondents agreed that the mentors were committed in teaching and freely shared information with them on how to perform various nursing procedures and that these helped the student acquire the desired clinical competences.

Forte and Fowler (2009) affirm that the mentor's interest in training, skill mix up, expertise and level of experience has a great influence in acquisition of student's clinical competences. Helminen et al. (2017) in his study postulates that students who have a good relationship during the clinical practice end up passing their assessments very well.

The majority (95.3%) agreed that the mentors are respectful and maintained confidentiality in the relationship. They also stated that the mentors psychosocial support empowered them to overcome challenges during their practical placements. The findings relate to a study by Ismail et al. (2015) who postulated that psychosocial support and interpersonal relationships are very important characteristics which provide support and encouragement to the students during the clinical practice where the competences are nurtured. Majority (75.4%) of the respondents disagreed that their interaction with mentors had been poor. However, a minority (23%) of respondents reported that some mentors harassed the students hence their interaction with them was poor. Similar sentiments were reported by Nursing students at Kabarnet who reported that although most of the mentors demonstrated a positive perception towards them, a few of them were rude and used abusive language (Wachira, 2019).

Majority (96.9%) of the respondents agreed that poor interpersonal relationships among mentors and mentee leads to inadequate mentoring thus poor acquisition of clinical competences. Kamphinda and Chilemba (2019) in a study carried out at Kamuzu College of Nursing stated that the student Nurses were not happy with the quality of supervision and support which they received from their mentors. A participant stated that the Nurse in charge did not show interest in teaching when asked a question. These findings relate to

other studies which showed that students assigned in the clinical area without an effective mentor did not have the opportunities to practice in more complex tasks; instead, they found themselves repeating routine tasks in which they are already proficient (Spouse, 2001). Immonen et al. (2019) also allude that clinical and mentorship learning settings provide significant support structures that assist student development.

This harassment of students hinders acquisition of the clinical competences as the students will not be keen to observe or listen to what their mentors teach them. Gray and Smith (2000) also attest that the degree of excellence in a mentor- mentee relationship is paramount in a successful mentor mentee relationship. In a study carried out by Carey and Weissman (2010), (75%) of the mentors reported that poor mentor -mentee relations resulted in some form of strained communication. This strained communication hinders acquisition of the desired clinical competences.

Regression coefficients was tested to determine the strength, direction, and significance of the independent variables on the dependent variable. At 95% confidence level, the mentor-related factors influence was significant ($B=0.189$, $P=0.019$), institutional factors were significant ($B=0.183$, $P=0.002$), mentor-mentee relationship were also significant ($B=0.954$, $P=0.000$). In all the independent variables the p-values were less than the significance level 0.05 which infers that the three factors strongly influence the students' clinical competences. It was also observed that every unit increase improved the clinical competences of the student nurses.

Correlation coefficient results of this study confirmed that the independent variables (mentor, institutional, and mentor- mentee relationship factors) had a strong statistically significant relationship ($p < 0.05$) on the dependent variable clinical competences.

ANOVA statistics was used to test the fitness of the regression model. The significance F value = 200.891 was obtained and it was established that the whole model had a P value = 0.000 which was within the significance level of 0.05. This means that the regression model ($F=200.891$, $P < 0.001$) was valid as statistically significant and was deemed fit for prediction purposes. In this case it predicted that the factors under study had an influence on the students nurses clinical competences.

In conclusion: - The students perceived themselves as competent and had acquired average to moderate level competence in communication skills, decision making, teamwork, performance of nursing skills / procedures, problem solving skills and self-confidence. This had a positive relationship of [$r=0.401$, $p < 0.05$]

Mentor related factors showed a positive correlation coefficient of [$r=0.703$, $p < 0.05$] meaning that the mentor's modeling style helped students integrate the knowledge learnt into practice.

Mentor-mentee relationship had a positive relationship of $r=0.956$, $P\text{-value} < 0.05$ which showed that poor interpersonal relationships among mentors and mentee leads to inadequate mentoring thus poor acquisition of clinical competences.

Institutional factors had a moderate positive correlation coefficient of [$r = 0.451$, ($p < 0.05$)], which showed that due to the high number of students per mentor it was difficult to assist all the students assigned to them. Secondly, there was no intentional matching of experienced senior qualified staff with students. This consequently hinders proper development of expected skills, knowledge, and competences.

Every unit increase of the independent variables caused a positive influence on the dependent variable which means it improves the clinical competences. This therefore shows that there is a strong relationship between mentor, institutional and mentee mentor relationship characteristics to the effectiveness of mentorship on the clinical competences.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this chapter, a summary of the study of factors influencing Clinical Competences of Nursing Students at CGTRH Mombasa in Kenya is given. In addition, it highlights the conclusion and recommendations of the study as well as suggestions for further areas of study.

5.2 Summary

Clinical competency is a continuous process, and it is influenced by a myriad of factors. Clinical Competences of Nursing Students at CGTRH Mombasa in Kenya are influenced by mentor related factors, institutional factors, and mentor mentee relationship factors.

The findings of the study revealed that the students had a positive perception towards mentoring and viewed it as very beneficial in promoting personal interaction.

The findings of the study showed that although the participants perceived themselves as having acquired high level competence clinical competences, majority of them had acquired moderate and average level of competence in communication skills, decision making, critical thinking skills, teamwork, performance of nursing skills / procedures, problem solving skills and self-confidence.

The results on the mentor related factors showed that the mentor's knowledge in various nursing procedures helped them acquire the required clinical competences. Further the study result showed that students are not paired with mentors, but the mentors whom they interacted with provided them support guidance and motivation which promoted their clinical skills and competences,

On the institutional factors, the findings showed that there were adequate resources available within the clinical practice placements which contributed to the high level of the competences which the Nursing students acquired. However due to the high number of students, it was difficult for the mentors to assist all the students assigned to them. There was no intentional matching of experienced senior qualified staff with students which helps the students acquire skills in performing clinical procedures. A minority of the students could apply the knowledge learnt in class because of the institution's mentorship support offered.

Findings on mentor-mentee relationship showed that the students had a positive perception towards mentoring and viewed it as very beneficial in promoting personal interaction. The feedback provided by mentors was adequate in terms of facilitating learning and acquiring clinical competences. Mentorship too had allowed them to acquire appropriate competences thus were able to perform most nursing procedures confidently. However poor interpersonal relationships among mentors and mentee lead to inadequate mentoring thus poor acquisition of clinical competences. Bad or poor mentor-mentee relationships involve things such as unavailability of the mentor, a mentor being overly

critical or ‘a mentor not being open to feedback or new ideas from the mentee. Good mentor-mentee relationships can positively influence students’ perception and vice-versa.

The study findings showed that the positive experiences are perceived well by the students and helps the learning experience, while the negative experiences lower the morale of students. This may influence their perception towards mentorship and have an impact on the acquisition of the required levels of clinical competences.

For this study the findings showed that the negative experiences by the nursing students were much fewer than the positive experience and never affected the objective of students’ mentorship.

5.3 Conclusion

The objectives of the study were tested and from the results of the study, it can be concluded that: Mentor related factors, Institutional factors, Mentor-mentee relationship, Students’ perception have a significant influence on the Clinical Competences of Nursing Students at CGTRH, Mombasa.

The study revealed that the participants perceived themselves as competent as majority of them agreed that following mentorship, they had acquired moderate to high level competence in communication skills, decision making, teamwork, performance of nursing skills / procedures, problem solving skills and had self-confidence.

Under Mentor related factors the study found that mentor's modeling style helped them integrate the knowledge learnt into practice. Findings on mentor-mentee relationship, showed that poor interpersonal relationships among mentors and mentee leads to inadequate mentoring thus poor acquisition of clinical competences. Poor interpersonal relationships between mentors and mentees can influence mentors modeling techniques which in turn can cause negative effects such as lower competences levels on the students.

Further, Institutional factors showed that because of the high number of students per mentor it was difficult for them to assist all the students assigned to them. Secondly, there was no intentional matching of experienced senior qualified staff with students which helps the students acquire skills in performing clinical procedures.

The bivariate correlation results among mentorship variables (Mentor related factors, Institutional factors, Mentor-mentee relationship) and Clinical Competences of Nursing Students at CGTRH, Mombasa showed a strong positive correlation coefficient. This infers that the three factors strongly influence the students' clinical competences of the Nursing students.

5.4 Recommendations

Based on the findings, this study therefore recommends that:

- 1.The Nurse training schools, and the hospital institution to design and implement strategies that can assist in resolving mentor-mentee relationship challenges by cultivating and encouraging a cordial, mutual mentor -mentee relationship. This will encourage the

students to relate better with the mentors, will avert fear when in need of assistance and in turn will acquire the required clinical competences through mentorship.

2. A policy on implementation of a structured mentorship program so that there is a precedent standard that can be followed to achieve good results and avoid unnecessary mistakes in future programs. Formal structured mentoring program, and guidelines be put in place. The program to have well defined clear roles and expectations of both mentors and mentee, a list of competences, and skills for a successful mentoring relationship.

3. Both the training institution and the clinical placement areas to have a mentoring action plan and a mentoring agreement where a certain number of students are intentionally matched a mentor depending on the placement. For instance, two students per mentor during the critical placements such as labor, delivery ward, ICU, HDU, and four students per mentor while in the general ward. This will avoid overburdening one mentor with many students and will enhance students' acquisition of clinical competences.

4. Every student is gifted differently and has different learning abilities; hence it is appropriate and highly recommended that more clinical tutors and Nurses be employed in the hospitals and training institutions. This will allow for the students to be well distributed among the several mentors available and this will ease the burden of one mentor assisting several students and facilitate the student's ability to acquire the required competences in applying what has been taught in class within the practical areas.

5. There is need for CGTRH and other Nursing training institutions to improve the experiential mentoring environment so that the students can be offered appropriate mentorship support while in the clinical placements for them to be able to apply knowledge learnt in class.

6. To prevent producing incompetent or half-baked Nurses, CGTRH being the largest teaching and referral hospital within Coast region, it is highly recommended that a strategy on mentorship of students rotating within the institution be urgently addressed and implemented.

5.5 Suggestions for Future Research

The results stated here are limited to the findings of Mentorship factors influencing Clinical Competences of Nursing Students at CGTRH, Mombasa. Thus, similar studies can be replicated in other National teaching and Referral hospitals in Kenya such as Moi teaching and Referral hospital, Kenyatta National hospital. Kisii Teaching and Referral Hospital, Jaramogi Oginga Odinga Moi Teaching and Referral hospital as well as in other teaching hospitals and nursing training institutions.

To widen the knowledge on Mentorship practices within the hospitals and Nursing training institutions, further research on Mentorship practices can be conducted in various Nursing training institutions and teaching hospitals within the Country.

Further research be conducted on ways to improve Mentorship practices among Nursing students in the various Nursing training institutions and teaching hospitals within the Country.

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Appendix A: Respondents Consent Form

Dear Respondent,

My name is Milka Muthui a Master of Science (Nursing Education) student at Kenya Methodist University. I am conducting a study on assessment of mentorship factors influencing clinical competences among diploma nursing students at Coast General Teaching and Referral Hospital, Mombasa.

This research project is being undertaken as part of the requirements for the Degree. This study is a quantitative survey which involves participants completing a questionnaire consisting of basic demographic information, a rating scale and opinion questions.

I am inviting you to take part in this research by contributing approximately 10-15 minutes of your time to complete the questionnaire. You are invited to participate in this research as you will have worked with a variety of mentors by this stage of your studies.

This survey is entirely anonymous. You will not be required to place your name on the questionnaire.

The anticipated benefit of participating in this research is the opportunity to contribute your opinions and experiences of mentorship to enable a better understanding of the needs of nursing student who voluntarily participate in mentorship program. Should you choose to participate, consent is implied when the questionnaire is submitted.

Should you have any queries regarding this research, please contact me at the contact details below.

I thank you for taking time to read this information and wish you the best of luck in your studies.

Milka Muthui

milkamus2015@gmail.com

Cellphone – 0722238957

Appendix B: Questionnaire

My name is Milka Muthui a Master of Science (Nursing Education) student at Kenya Methodist University. I am conducting a study on assessment of mentorship factors influencing clinical competences among diploma nursing students at Coast General Teaching and Referral Hospital, Mombasa. This research project is being undertaken as part of the requirements for the Degree. Kindly answer the following questions fully and honestly. The information provided will be used for research purposes only, thus do not indicate your name.

SECTION 1: Demographic Information

1. What is your gender?

Male ☐ Female ☐

2. Indicate your age bracket in years?

Under 18 ☐ 18-20 ☐ 21-23 ☐ 24-26 ☐ More than 26 years ☐

SECTION 2: Mentorship information

3. Have you come across the term mentorship? Yes ☐ No ☐

4. State five qualities you observe from your mentor

.....
.....

5. Briefly explain your experiences with the mentor or mentors you interacted with

a) positive experiences

.....
.....

b) Negative

experiences.....

.....
.....

SECTION 3

3:(A). Mentor related factors influencing mentorship of clinical competences of nursing students.

The statements in this section concern the mentor related factors influencing clinical competences of students. Using the key below, please indicate the extent to which you agree with each of the statements, by ticking in the appropriate box.

1= Strongly Agree 2=Agree 3=Neutral 4=Disagree 5= Strongly Disagree

Opinion Statements	1	2	3	4	5
Mentorship is a supportive relationship established between two individuals					
In mentorship, students are paired with mentors to provide guidance, and support.					
Mentorship support from my mentor has enabled me to cope up with my initial difficulties in psychological adjustments.					
My mentor supports and advises me in numerous ways which promotes my career development and professional skills					
My mentor is a good role model and guides me in the development of clinical skills in a friendly caring manner					
My mentor's modeling style has helped me develop the processes of integrating the knowledge learnt into practice.					
Motivation from my mentor has promoted my clinical skills and competences					
My mentor's encouragement makes me feel confident during the clinical practice activities					
My mentors' knowledge in various nursing procedures has helped me acquire the required clinical competences					
My mentors are academically well trained and can teach us new skills with ease.					
My mentors have undergone mentorship training thus are able to mentor the students very well,					

My mentors constantly undergo trainings thus are updated with new information and mentor us on current evidence-based practices					
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3(B). Institutional factors influencing clinical competencies of students

The statements in this section concern the Institutional factors influencing clinical competences of students. Using the key below, please indicate the extent to which you agree with each of the statements, by ticking in the appropriate box.

1= Strongly Agree 2=Agree 3=Neutral 4=Disagree 5= Strongly Disagree

Opinion Statements	1	2	3	4	5
The practice placement has facilitated my acquisition of clinical competencies					
The practice placements areas have provided me with the opportunity to practice under supervision.					
The clinical practicum has provided me with an experiential mentoring environment for safe practice					
Due to the institution's mentorship support offered to students in the clinical placements they are able to apply knowledge learnt in class.					
High number of students per mentor has made it difficult for them to assist all of them.					
Intentional matching of experienced senior qualified staff with students has helped me acquire skills in performing clinical procedures					
The resources available in the clinical practice placements have greatly contributed to the high level of the competencies I have acquired					

3 (C).Mentor-mentee relationship factors influencing clinical competencies of students.

The statements in this section concern mentor – mentee relationship factors influencing clinical competencies of students using the key below, please indicate the extent to which you agree with each of the statements, by ticking in the appropriate box.

1= Strongly Agree 2=Agree 3=Neutral 4=Disagree 5= Strongly Disagree

Opinion Statements	1	2	3	4	5
My mentor is respectful and maintains confidentiality in the relationship					
Having a mutual respect with my mentor has enabled me gain time management skills in clinical rotations					
Personal attributes of my mentors such as constant affirmation, has helped me gain confidence in clinical skills					
My mentors' psychosocial support has empowered me to overcome challenges during my practice placement					
Our mentors are always available and ready to guide us despite their various tasks allocated to them					
My mentors' great interest in my learning has helped me improve in my career goals.					
My mentors are committed to teaching and freely share information with us on how to perform various nursing procedures					
Mentorship requires mentor and mentee commitments					
Students are the focus in the relationship and are respected as individual partners with personal learning goals and objectives					
My interaction with mentors has been poor because they harass the students					

3.(D)Students' perception on the effectiveness of mentorship on competence

The statements in this section concern the students' perception on the effectiveness of mentorship and how it influences the clinical competencies of students. Using the key below, please indicate the extent to which you agree with each of the statements, by ticking in the appropriate box.

1= Strongly Agree 2=Agree 3=Neutral 4=Disagree 5= Strongly Disagree

Opinion Statements	1	2	3	4	5
The feedback provided by my mentors has been adequate in terms of facilitating learning and acquiring clinical competences					
The communication skills which I have acquired through mentorship have enabled me to communicate with my mentors, patients, and other hospital personnel effectively.					
Mentorship has strengthened my decision-making skills and willingness to take risks					
Working with several mentors has taught me how to work together with others as a team					
Mentorship has enabled me to acquire appropriate competences thus am able to perform most nursing procedures confidently.					
Sharing experiences and learning is the greatest benefits that I have gained from my mentors					
My mentors supported me and made me feel and have confidence in my work					
Mentorship has inspired me and provided guidance for transformational leadership.					
I have a positive perception towards mentoring as I view it as very beneficial in promoting personal interaction					
Mentorship is beneficial as it enhances critical thinking and career development,					
Poor interpersonal relationships among mentors and mentee leads to inadequate mentoring thus poor acquisition of clinical competences					

(4) The statements in this section concern clinical competencies of students acquired after mentorship. Using the key below, please indicate the extent to which you agree with each of the statements, by ticking in the appropriate box.

1 = Not competent, 2 = Low level of competence, 3 = Average level of competence, 4 = Moderately high level of competence, 5 = High level of competence.

Opinion Statements	1	2	3	4	5
I use communication skills in listening, written, verbal and nonverbal effectively					
I engage in self-reflection , have an open mind to and accept feedback and constructive criticism when corrected.					
I engage in creative problem solving to identify patient's needs.					
I use clinical judgment and decision-making skills to analyze situations and prioritize nursing care using scientific researched evidence-based practices.					
I work well as a team player which promotes professional socialization in the clinical learning environment.					
I collaborate with other staff in building interpersonal professional relationships.					
Am confident in providing safe, timely and coordinated care using the nursing process.					
I adhere to well-established standards of practice while performing duties assigned to me and observing the ethical and legal standards of practice					
I apply critical thinking skills during problem solving and when assisting patients with activities of daily living					
I provide non-judgmental care and solve problems through provision of emotional, psychosocial, and psychological support to all.					
I uphold professional nursing ethics while providing Nursing care.					

END OF QUESTIONNAIRE

Thank-you for your participation.

Please send back the questionnaire upon completion.

milkamus2015@gmail.com, 0722238957

Appendix C: Online Questionnaire Tool - Google Form

This screenshot shows a Google Form titled "ASSESSMENT OF MENTORSHIP FACTORS INFLUENCING CLINICAL COMPETENCES OF DIPLOMA NURSING STUDENTS AT COAST GENERAL TEACHING AND REFERRAL HOSPITAL, MOMBASA". The form is displayed in a window with a purple header. Below the title, there is a "Form description" field. The first question is "What is your gender?*", which has two radio button options: "Female" and "Male". The form is part of a series, indicated by "Section 1 of 4" in the top left corner. The Windows taskbar is visible at the bottom.

This screenshot shows the same Google Form, but from the perspective of a user who has already responded. The browser tabs at the top show "ASSESSMENT OF MENTORSHIP F...", "ASSESSMENT OF MENTORSHIP F...", and "You've already responded". The URL in the address bar is "docs.google.com/forms/d/e/1FAIpQLSfAwvyQ_fVi2zX7zJPUS000IESBzPFtDoGRe-1nHdK2evVdUw/viewform?vc=0&c=0&w=1&ftr=0&pli=1". The form title is "FACTORS INFLUENCING CLINICAL COMPETENCES OF DIPLOMA NURSING STUDENTS AT COAST GENERAL TEACHING AND REFERRAL HOSPITAL, MOMBASA". Below the title, the user's email address "mmilka3280@stu.kemu.ac.ke" is displayed, along with a "Switch account" link and a "Not shared" status. A red asterisk indicates a required question. The question "What is your gender?*" has two radio button options: "Female" and "Male". At the bottom, there is a "Next" button, a progress bar showing "Page 1 of 4", and a "Clear form" link. A footer message states "Never submit passwords through Google Forms." and "This form was created outside of your domain. Report Abuse - Terms of Service - Privacy Policy". The Windows taskbar is visible at the bottom.

Appendix D: Introduction letter from KeMU



KENYA METHODIST UNIVERSITY

P. O. Box 267 Meru - 60200, Kenya
Tel: 254-064-30301/31229/30367/31171

Fax: 254-64-30162
Email: deanrd@kemu.ac.ke

DIRECTORATE OF POSTGRADUATE STUDIES

June 16, 2022

Commission Secretary,
National Commission for Science, Technology and Innovations,
P.O. Box 30623-00100,
NAIROBI.

Dear Sir/Madam,

RE: MILKA NGONYA MUTHUI – (REG. NO. MSN-3-9940-3/2018)

This is to confirm that the above named is a bona fide student of Kenya Methodist University, in the School of Medicine and Health Sciences, Department of Nursing undertaking a Masters' Degree in Nursing. She is conducting research on: **"Assessment of Mentorship Factors Influencing Clinical Competences of Diploma Nursing Students at Coast General Teaching and Referral Hospital, Mombasa"**

We confirm that her research proposal has been presented and approved by the University.

In this regard, we are requesting your office to issue a research license to enable her collect data.

Any assistance accorded to her will be appreciated.

Thank you

For
16 JUN 2022

Dr. John Muchiri, Ph.D.
Director, Postgraduate Studies

Cc: Dean SMHS
CoD, Nursing
Postgraduate Co-ordinator- Nursing
Supervisors

Appendix E: Clearance Letter from KeMU Ethics Committee



KENYA METHODIST UNIVERSITY

P. O. BOX 267 MERU - 60200, KENYA
TEL: 254-064-30301/31229/30367/31171

FAX: 254-64-30162
EMAIL: INFO@KEMU.AC.KE

June 14, 2022

KeMU/SERC/MSN/2/2022

MILKA NGONYA MUTHUI
MSN-3-9940-3/2018

Dear Milka,

SUBJECT: ASSESSMENT OF MENTORSHIP FACTORS INFLUENCING CLINICAL COMPETENCES OF DIPLOMA NURSING STUDENTS AT COAST GENERAL TEACHING AND REFERRAL HOSPITAL, MOMBASA

This is to inform you that Kenya Methodist University Scientific Ethics and Review Committee has reviewed and approved your research proposal. Your application approval number is KeMU/SERC/MSN/2/2022. The approval period is 14th June, 2022 – 14th June, 2023.

This approval is subject to compliance with the following requirements:-

- i. Only approved documents including (informed consents, study instruments, MTA) will be used.
- II. All changes including (amendments, deviations, and violations) are submitted for review and approval by Kenya Methodist University Scientific Ethics and Review committee.
- III. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to KeMU SERC within 72 hours of notification.

- IV. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to KeMU SERC within 72 hours.
- V. Clearance for export of biological specimens must be obtained from relevant institutions.
- VI. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- VII. Submission of an executive summary report within 90 days upon completion of the study to KeMU SERC.






Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,

DR. A. WAMACHI
CHAIR, SERC



Appendix F: NACOSTI Research Authorization

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 127000	Date of Issue: 04/July/2022
RESEARCH LICENSE	
	
<p>This is to Certify that Ms.. Milka Nonya Muthui of Kenya Methodist University, has been licensed to conduct research in Mombasa on the topic: ASSESSMENT OF MENTORSHIP FACTORS INFLUENCING CLINICAL COMPETENCES OF DIPLOMA NURSING STUDENTS AT COAST GENERAL TEACHING AND REFERRAL HOSPITAL, MOMBASA for the period ending : 04/July/2023.</p>	
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