

**AN EXPLORATION OF CLINICAL LEARNING EXPERIENCES OF
HIGHER DIPLOMA NURSING STUDENTS AT KENYATTA NATIONAL
HOSPITAL, KENYA.**

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UNIVERSITY**

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DECLARATION AND APPROVAL

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This thesis is my original work and has not been submitted to any other university for the same or a different certification.

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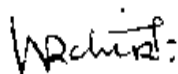


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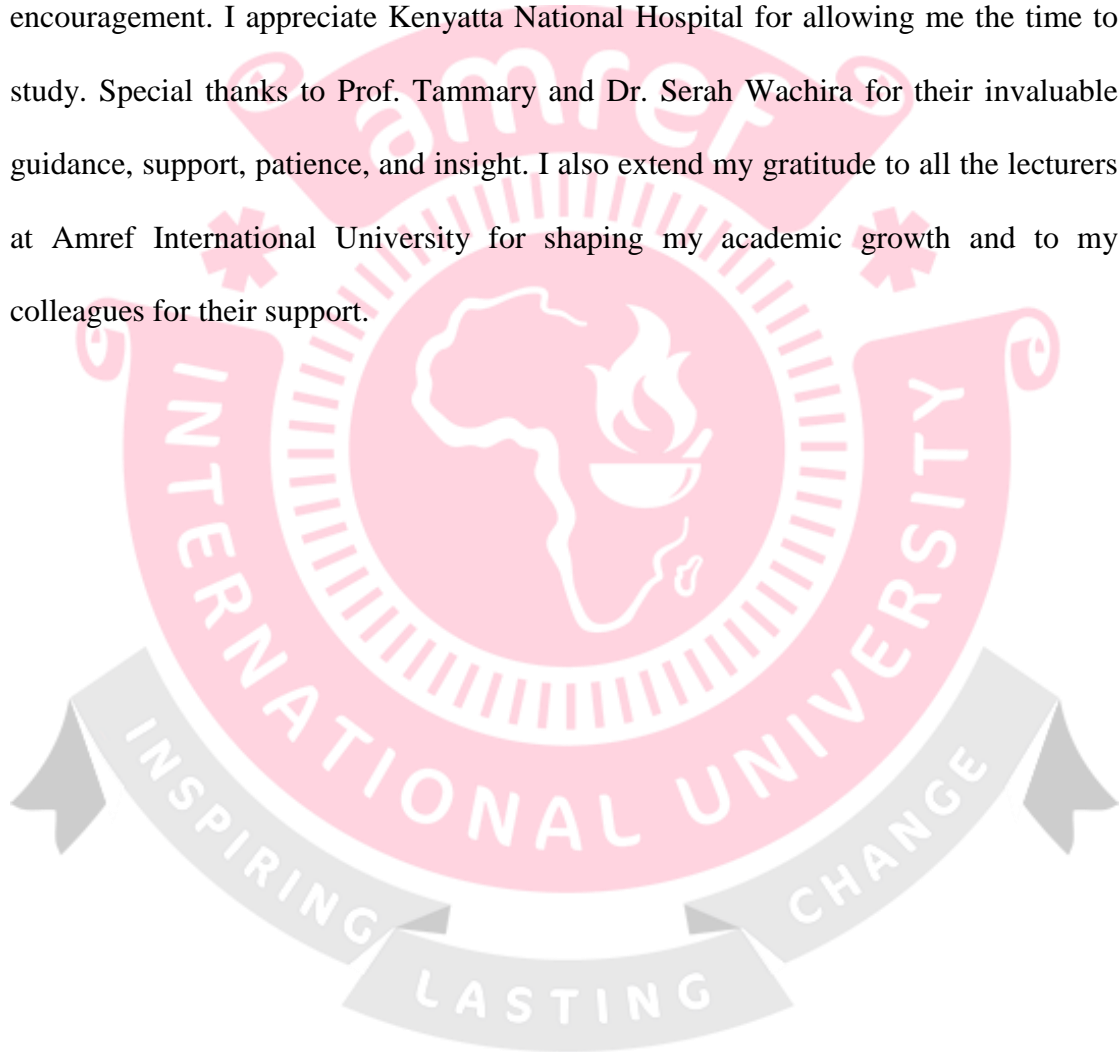
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ABSTRACT

Background: Clinical learning experiences, defined as active student engagement in direct patient care under the supervision of experienced educators, are essential for developing nursing competency and confidence. However, many nursing students face difficulties translating theoretical knowledge into practice, particularly in high-pressure hospital settings. An internal review at Kenyatta National Hospital (KNH), a major referral facility in Kenya, revealed that several Higher Diploma nursing students felt inadequately prepared for clinical assessments and struggled with hands-on skills.

Objective: This study aimed to explore the clinical learning experiences of Higher Diploma nursing students at KNH, focusing on factors influencing their clinical engagement and preparedness.

Method: A qualitative descriptive approach was used. Data were collected through in-depth interviews (n=12) and two focus group discussions (n=12) involving purposively sampled Higher Diploma nursing students. A semi-structured interview guide facilitated data collection. Thematic analysis was conducted using Braun and Clarke's six-step framework, with attention to trustworthiness principles such as credibility and confirmability.

Results: Three major themes emerged: First, personal challenges and triumphs, including work-life balance, health, and financial constraints; secondly, systemic support structures, such as mentorship, peer learning, policy gaps, and access to resources; and thirdly a holistic clinical learning environment, encompassing space adequacy, emotional safety, and coping with stressors. These factors collectively influenced students' engagement and learning outcomes during clinical placements.

Conclusion and Recommendations: The clinical learning experiences of higher diploma nursing students at Kenyatta National Hospital are influenced by personal, institutional, and environmental factors. Students' work-life balance, health, and financial stability impact their effectiveness in clinical learning. Equally important are effective mentorship, peer learning, clear policies, and access to functional resources. A safe, well-equipped, and supportive clinical environment promotes emotional resilience. The findings highlight the need for targeted strategies to improve the clinical learning experiences. Future research should include longitudinal studies to explore how students' physical and mental health relates to their clinical learning experiences.

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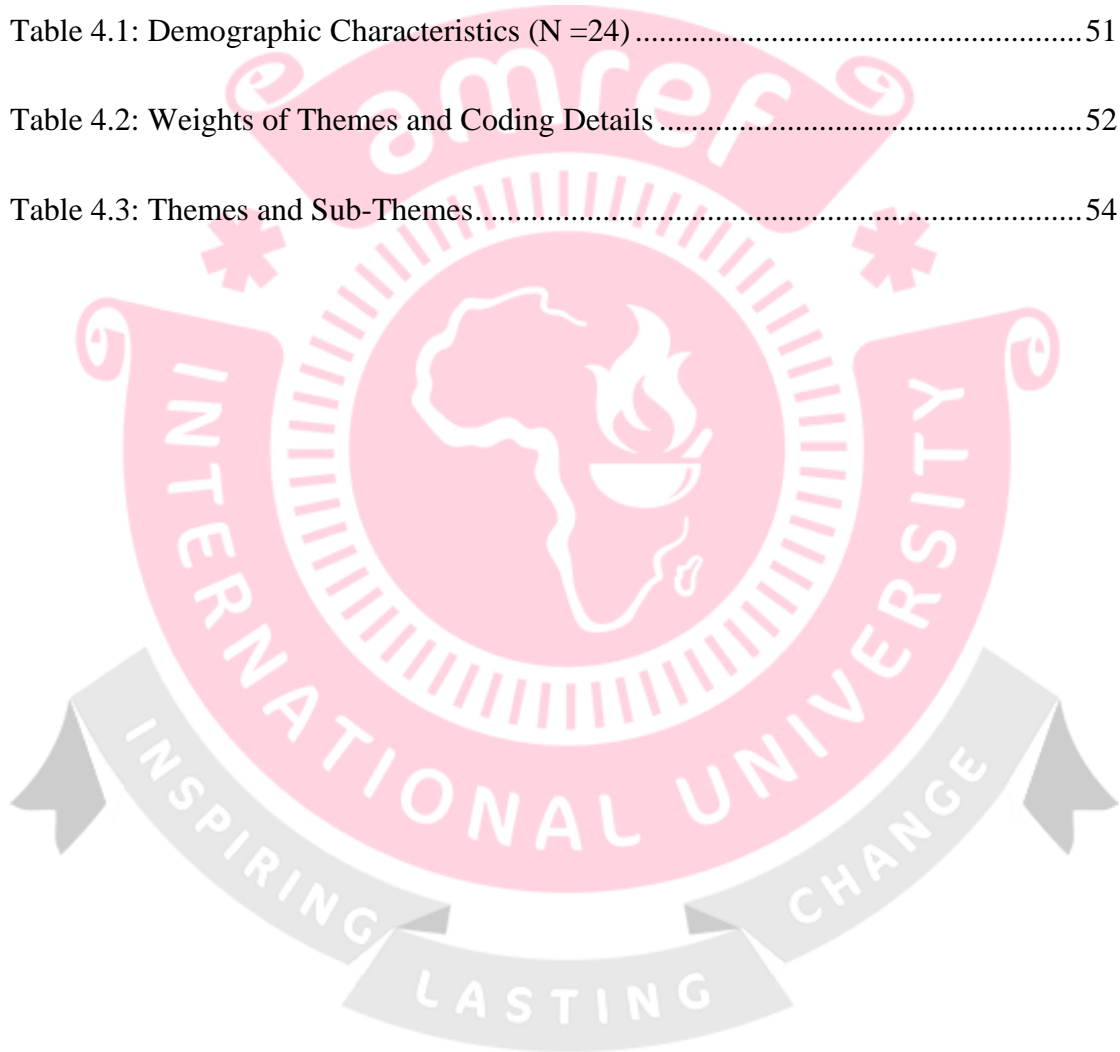
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ABBREVIATIONS

CINAHL: Cumulative Index To Nursing And Allied Health Literature

CLE: Clinical Learning Environment

ESRC: Ethics and Scientific Review Committee

HDNS: Higher Diploma Nursing Students

KNH: Kenyatta National Hospital

NACOSTI: National Commission for Science, Technology and Innovation

PMC: PubMed Central

SoN: School of Nursing

TPSN: Teacher Patient Student Nurse Model

WHO: World Health Organization

DEFINITIONS OF TERMS

Clinical educator: This is an individual charged with teaching, coaching, guiding, and supervising nursing students within the clinical environment who are also referred to as clinical supervisors or clinical preceptors.

Clinical learning environment: This refers to the actual physical space, social, and psychological setting in which a higher diploma nursing student receives hands-on training and education in a healthcare facility, such as Kenyatta National Hospital in Nairobi, Kenya.

Clinical learning: Refers to how nursing students learn practical skills and information by direct patient care in a healthcare facility and observing real medical situations, rather than just learning in a classroom.

Clinical setting: A healthcare facility or environment where medical treatments and procedures are carried out.

Experience: Practical or hands-on knowledge and skills gained through working in a particular field or role, in this case, nursing.

Higher diploma nursing: Refers to a postgraduate diploma or post-diploma nursing education program that prepares registered nurses for specialized roles and advanced nursing practice

Patient acuity: Refers to a life-threatening state where patient's condition changes rapidly requiring intensive care engaging a mentor, imitating opportunities for student nurses to receive mentorship

Perception: The process of receiving and interpreting information from the environment through the senses.

Specialized nurses: Registered nurses who have advanced training and expertise in a particular area of nursing, such as Critical care, Nephrology, Neonatal, Trauma and Emergency, Oncology, and perioperative nursing.

Student nurse:

A person who is currently enrolled in a higher diploma nursing program to become a registered nurse in a given specialty.

Supervision:

The act of overseeing and providing guidance to someone in a specific task or role.



CHAPTER 1: INTRODUCTION

1.1 Overview

This chapter provided a detailed background to the problem, the problem statement, research questions, the purpose of the study, the broad objective, specific objectives, and justification for the study and its significance.

1.2 Background of the Study

Clinical learning experience is an active engagement in observation, contact, and providing direct patient care under the supervision of experienced clinical educators, an important factor in training student nurses in the provision of quality, safe patient care as specialists (Kalyani et al., 2019; Serah et al., 2020). Clinical learning is described as practical or hands-on learning that involves gaining knowledge and skills in a clinical setup rather than in a traditional classroom (Zhang et al., 2022).

Positive clinical learning experiences are fundamental to successful nursing education, empowering students to effectively integrate theoretical knowledge into practical competence and deepen their understanding of real-world complexities (Sarojini & Thampy, 2025). These enriching experiences are characterized by environments that actively facilitate skill acquisition and foster professional growth, directly contrasting with known challenges such as inadequate supervision, resource limitations, and a lack of psychological safety (Panda et al., 2021; Mahasneh et al., 2020). The quality of the clinical

learning environment significantly influences clinical learning experiences ultimately affecting clinical learning outcomes (Larsson et al., 2023; Closs et al., 2022).

In nursing education, the major goal of clinical learning experiences is to provide a range of hands-on opportunities (Wangensteen et al., 2023). These learning opportunities boost student nurses' confidence and allow them to apply theoretical concepts in practical settings, ultimately achieving their clinical learning objectives.

Globally diverse learning environments expose student nurses to a variety of patient groups, health issues, and healthcare delivery approaches, enriching their clinical learning. (Mbakaya et al., 2020). The World Health Organization (WHO) has acknowledged the importance of a proper clinical learning environment in influencing the clinical learning experiences for nursing students, emphasizing that it is an important factor in producing proficient and qualified nurses (Chang et al., 2023).

One challenge experienced globally is the shortage of qualified nursing faculty to cater to the growing number of student nurses (ICN, 2020). A study pointed out a concern that there is a shortage of qualified and experienced clinical supervisors and preceptors (Henry-Okafor et al., 2023). The inter-professional collaboration of nursing faculty, clinical instructors, preceptors, and healthcare practitioners is instrumental in delivering clinical learning experiences (Stanley et al., 2020). The collaboration enhances clinical learning by fostering professional development, role modelling, and concentrating on the progression of student nurses, therefore defining the standards of clinical learning (Dyar et al., 2021).

Inadequate facilities and unavailability of physical resources are significant barriers to student nurses' clinical learning compounded by cultural and language barriers that hinder communication with patients (Panda et al., 2021; Al Shamsi et al., 2020). Therefore, the global findings underscore gaps in clinical learning resources, clinical supervisors, and physical facilities, making it a matter of concern in health professions education.

Regionally, student nurses experience similar challenges to those faced by student nurses globally during placement. In a South-western Nigeria study, student nurses experienced a shortage of clinical instructors, unclear role guidelines, and inadequate equipment all influencing their clinical learning experiences despite the study further specifying the time required for a student nurse to interact with a clinical instructor for guidance in the clinical area which lacked in this case (Akpor et al., 2023). Similarly, research in Malawi found that essential supplies like clinical equipment and protective gear, and a shortage of human resources for clinical competence, affected the learning of nursing students (Mbakaya et al., 2020). Inadequate resources are a fundamental impediment to hands-on training, and a shortage of supervisors. These findings reveal significant gaps in the clinical learning environment affecting clinical learning for African student nurses.

Additionally, a study in Namibia found the absence of clear role guidelines for clinical instructors (Hoebes & Ashipala, 2023). This confusion can result in inconsistent and unpredictable learning experiences, potentially leading to errors by nursing students This

research tried to understand the factors influencing nursing students' clinical learning and clarify the role of the gaps identified in the African context. Furthermore, the lack of clear guidelines for clinical instructors contributes to inconsistent and unpredictable learning experiences, thereby undermining the clinical process and leading to nursing student errors that would have been prevented.

In the local context, there has been a paucity of studies on student nurses' clinical learning experiences for higher diploma students. In Kenya, nursing students are typically placed in hospitals and other healthcare institutions where they engage in hands-on patient care under the supervision of clinical instructors, preceptors, or registered nurses (Mutisya et al., 2021). The Kenya Medical Training College (KMTC) and various universities offering nursing programs collaborate with teaching hospitals such as Kenyatta National Hospital (KNH) to facilitate clinical placements. However, despite the structured curriculum, several challenges affect the quality and effectiveness of clinical learning. These include overcrowded clinical sites, inadequate supervision, lack of resources, and inconsistent evaluation methods (Munyewende et al., 2018; Owuor et al., 2020). Moreover, there is often a gap between classroom instruction and clinical practice, with students reporting difficulties in applying theoretical concepts due to limited opportunities for hands-on practice. The mentorship and support provided by clinical staff are also inconsistent, affecting students' confidence and learning outcomes (Mutunga et al., 2022). Most studies in this area have focused on the perceptions of student nurses in the clinical environment, assessing the supportive role of nurse educators, and a recent qualitative study examined

the clinical experiences of undergraduate nursing students (Otunga et al., 2021; Serah et al., 2020). The literature gaps have far-reaching implications, affecting not only the preparedness of nursing students but also the quality of healthcare delivery.

At Kenyatta National Hospital (KNH), higher diploma nursing students pursue specialized clinical training in fields such as nephrology, critical care, perioperative, and oncology, neonatal, and trauma and emergency nursing. These programs are governed by the Nursing Council of Kenya (NCK). According to NCK guidelines, the clinical learning environment should support competency-based education through structured mentorship, appropriate student-to-patient ratios (1:4–1:6 in general wards, and 1:1 in intensive care), access to necessary equipment, and alignment with the national curriculum through clinical placement oversight and signed institutional agreements. Furthermore, clinical activities must adhere to defined scopes of practice (NCK, 2019). Despite KNH's diverse learning opportunities, the high demands of its national referral mandate sometimes create supervisory and resource gaps, resulting in a disconnect between clinical learning area standards and the actual experiences of nursing students. Exploring the clinical learning experiences of student nurses at KNH will help uncover the personal, institutional, and environmental factors that shape these experiences. Gaining insight into these factors is essential for informing future discussions, policy considerations, and further research aimed at enhancing nursing education and practice. This study, therefore, explored the clinical learning experiences of nursing students at KNH to understand and identify the

factors related to students, institutions, and the clinical environment that either enhance or hinder clinical learning objectives.

1.3 Statement of the Problem

Globally, nursing students encounter either positive or negative experiences upon entering the clinical environment, affecting the nursing students' motivation and learning outcomes (Kalyani et al., 2019). Inadequate resources, lack of competent preceptors, inadequate supervision, and insufficient support from clinical staff are factors that pose real-world challenges for student nurses as they strive to acquire practical skills and knowledge in a clinical setting (Munangatire et al., 2023; Panda et al., 2021).

Regionally, a South African study revealed that student nurses complained about overcrowding within the clinical space, an uncondusive learning environment, prevalent negative interpersonal issues among experienced nurses, and individual nursing students' negative emotional experiences (Fadana & Vember, 2021). Similarly, a study in Ghana found that students often acquired new skills in the clinical setting through observation and replication of activities (Amoo et al., 2022). These challenges are evident even within the Kenyan context, where studies on undergraduate nurses highlight concerns regarding inadequate resources and supervision in clinical learning environments (Otunga et al., 2021).

It remains unclear to what extent higher diploma nursing students at Kenyatta National Hospital (KNH) encounter challenges that may influence their clinical learning experiences. However, evidence from the KNH 2022 end-of-clinical rotation report highlights areas that warrant further exploration, noting that 24% of students performed poorly in their clinic assessments, 32% felt unprepared for these assessments, and 20% reported difficulties operating advanced medical equipment (KNH, 2022). This highlights a critical need to explore the factors that may influence practical skills application, preparedness for clinical assessments, and proficiency with advanced medical equipment, as these are integral to effective clinical learning. Failure to address these factors could have significant implications, including compromised attainment of clinical learning objectives, suboptimal development of competent nursing professionals, and potential adverse effects on the quality and safety of patient care delivery. Therefore, this study aims to comprehensively explore the clinical learning experiences of higher diploma nursing students at KNH.

The findings will be used to develop evidence-based recommendations for improving clinical teaching, institutional support, and relevant policies in health professions education. Ultimately, the goal is to enhance the standard of clinical education, leading to the development of highly capable and confident higher diploma nurses who can provide excellent patient care and reduce medical errors. In addition, the study will provide insights to guide future research priorities and inform strategies for continuous improvement in clinical training and institutional practices.

1.4 Research Questions

1. What personal factors influence the clinical learning experiences for higher diploma nursing students at Kenyatta National Hospital (KNH)?
2. How do institutional factors influence the higher diploma nursing students' clinical learning experiences at Kenyatta National Hospital (KNH)?
3. What are the perceptions and experiences of higher diploma nursing students regarding the clinical learning environment at Kenyatta National Hospital (KNH)?

1.5 Research Objectives

1.5.1 Broad Objective

To explore the clinical learning experiences for higher diploma nursing students at Kenyatta National Hospital (KNH).

1.5.2 Specific Objectives

1. To explore personal factors influencing clinical learning experiences among higher diploma nursing students at Kenyatta National Hospital (KNH)
2. To examine institutional factors that affect clinical learning experiences among higher diploma nursing students at Kenyatta National Hospital (KNH)
3. To understand the perceptions and experiences of higher diploma nursing students regarding the clinical learning environment at Kenyatta National Hospital (KNH)

1.6 Justification of the Study

Quality clinical learning within a given environment significantly impacts the acquisition of clinical decision-making, analytical, and hands-on abilities (Otunga et al., 2021). Exploring clinical learning experiences for higher diploma nursing students is imperative to understand whether the personal, existing clinical learning placement sites offer the resources and support required for the best possible learning outcomes. There are several justifications for this study.

First, the exploratory design enabled the researcher to gain in-depth insight into how personal, institutional and environmental factors affect clinical learning. The learning environment is important to nursing education because it provides hands-on experience and supports articulation of theoretical knowledge gained in the classroom (Alammar et al., 2020). However, this clinical practical area is not always favourable, and nursing students are exposed to negative experiences that hinder their clinical learning. Through this study, the researcher comprehended the root causes of variables influencing learning in the clinical space for higher diploma nursing students and developed appropriate strategies to address them effectively.

Second, nursing students' clinical learning experiences are enhanced positively depending on the clinical learning placement area (Alammar et al., 2020; Kalyani et al., 2019). Factors such as nursing workload, inadequate support, and supervision can negatively affect clinical learning experiences, leading to frustration among nursing students. Therefore, an

exploration into the factors influencing the acquisition of knowledge, skills, and attitudes by nursing students during clinical placements, which greatly affect their learning outcomes, was conducted (Wuni & Shen, 2020).

Third, exploring the elements influencing clinical learning is vital in incorporating appropriate clinical teaching approaches into the curriculum, essential in shaping both the teaching methods and the learning end results of students, giving the distinctive character of a higher diploma nursing student (Al-Daken et al., 2024). A study found out that harassment is common in higher education at all levels and among all disciplines (Henning et al., 2017; Melrose, 2022). Further it proposed that a clinical curriculum should be revised frequently with the ongoing changes that occur in both theoretical and clinical settings specifying the appropriate specifications and qualities of clinical trainers who influence the clinical learning for a student nurse. Nurse educators should design nursing curricula that incorporate engaging learning strategies to enhance students' knowledge and confidence for sound and efficient delivery of nursing care, ensuring patient safety during clinical teaching and prevention of medical errors (Butcher et al., 2017).

Finally, local studies have been conducted on the perception of student nurses in clinical practice, focusing on undergraduate nurses (Tuitoek, 2022). At KNH, the nursing students are trained at a higher level of competency and possess superior skills in the use of modern equipment compared to undergraduate nursing students (Almarwani & Alzahrani, 2023).

Therefore, the conducted research has pinpointed varied clinical learning experiences for higher diploma nursing students as compared to their undergraduate counterparts.



1.7 Significance of the Study

The research findings on clinical learning experiences among higher diploma nursing students at Kenyatta National Hospital (KNH) are crucial in addressing gaps in nursing education. The identification of the personal, institutional, and environmental factors helps the health professional educators tailor their teaching methods, support systems, and resources to better meet students' needs (Butcher et al., 2017). Improved clinical learning enables student nurses to develop the necessary skills, knowledge, and attitudes necessary to attain learning goals (Kalyani et al., 2019). In the end, the research findings aid in the development of competent and confident nursing professionals, leading to improved patient outcomes at KNH and beyond.

Findings from this research inform policy decisions and practices within nursing education and healthcare institutions (Salifu et al., 2022). Policy makers and administrators may implement changes to better support student nurses and improve learning outcomes. Identifying and understanding these challenges helps stakeholders to work collaboratively to implement solutions and create a more conducive learning environment for students (Amoo et al., 2022). The study's results close a significant gap in the amount of knowledge currently available on clinical learning among higher diploma nursing students locally.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This literature review was conducted through a systematic search of published articles, journals, and books on clinical learning and nursing education. The databases used for the search included PMC, CINAHL, Science Direct, and the National Library of Medicine, in addition to Google Scholar. This search was limited to studies conducted in the last ten years to ensure relevance and currency of information. The keywords used included “clinical learning environment,” “Clinical Learning,” “Clinical learning experience,” and “student nurse”.

As an exploratory study, findings provide invaluable initial insights that are very beneficial to nursing educators, hospital administrators, and policymakers in raising the clinical education standards and consequently enhancing the overall learning of higher diploma nursing students (Baker et al., 2020).

2.2 Theoretical Framework

2.2.1 *Albert Bandura’s Social Cognitive Theory of Learning*

Several theoretical frameworks have been applied to research on nursing students’ clinical learning experiences, each offering unique insights into the learning process. One widely used framework is Benner’s Novice-to-Expert theory, which highlights how students

evolve from depending on rules to intuitively understanding clinical situations. The theory was employed to show how students' progress through various stages, while focused on its role in helping students develop professional identity and practical skills (Landers et al., 2020 ; Clark, 2018). The theory is significant in guiding students' progression through different stages during clinical learning, emphasizing the incorporation of conceptual understanding with practical application. Another framework, the Teacher, Patient, Student, Nurse (TPSN) Model, has been used to explore nursing students' experiences. It focuses on mentorship, real-world clinical scenarios, and reflective practice, essential in preparing students for diverse clinical environments (Zamanzadeh et al., 2024). While the TPSN Model can be used effectively to bridge the theory-practice gap, it lacks clarity in explaining how students learn through observation, peer interaction, and self-efficacy (Vosoughi et al., 2022). These elements are addressed clearly by Bandura's Learning Theory.

Bandura's theory emphasizes observational learning, imitation, and social interaction as key components of skill acquisition, making it particularly useful for understanding the way nursing students acquire knowledge in placement areas. The theory is comprehensive, addressing the role of role models, peer learning, and self-efficacy in clinical education. It promotes nursing care delivery as an essential part of learning, where students develop their skills while contributing to patient care. Bandura's theory also explains how individuals perceive their ability to think, feel, and act, and how this perception influences behaviour (Haugan & Eriksson, 2021).

An important idea in Bandura's Learning Theory is the reciprocal determinism, which describes how cognitive, behavioural, and environmental factors interact to shape learning and behaviour. One study that was conducted emphasized on the importance of these interactions in clinical education, noting that observational learning and self-efficacy play critical roles (McGinness et al., 2023). Bandura's theory helps understand how individuals acquire knowledge, attitudes, and behaviours through their social environment (de la Fuente et al., 2023). Bandura's concepts of observational learning, self-efficacy, and reciprocal determinism offer a structured framework for evaluating clinical learning outcomes among nursing students. Several studies have applied this theory to explore learners' experiences and their use of social cognitive principles in clinical settings (Horsburgh & Ippolito, 2018).

Observational learning, a cornerstone of Bandura's theory, is crucial in clinical education. This concept is applied in nursing education to show how students learn by observing their peers, mentors, and instructors (Harmanci, 2018). Learners adopt behaviours valued by their peers and instructors, engaging in learning not only through their own experiences but also by observing the actions of others (Stanley et al., 2020). This process is essential in clinical placements, where students interact with peers, mentors, and healthcare professionals, acquiring new behaviours by paying attention, retaining information, and being motivated to replicate observed actions (Harmanci, 2018).

Self-efficacy is another vital aspect of Bandura's theory, involving the trust people have in carrying out tasks and accomplishing objectives. In clinical settings, this belief significantly influences students' motivation, effort, and performance as confirmed by other studies highlighting self-efficacy as a motivating factor that enhances nursing students' clinical performance (Kim & Sohn, 2019). Confident students tend to study far better and perform clinical tasks. This study uses the self-efficacy concept to analyse themes related to how nursing students perceive their abilities in clinical settings.

Bandura's Social Cognitive Theory therefore offers an ideal framework for understanding nursing students' clinical learning experiences. By incorporating the theory's key concepts, observational learning, self-efficacy, and reciprocal determinism, researchers can systematically analyse how students learn and develop in clinical settings.

The theoretical model is illustrated in Figure 1.0. The model illustrates the reciprocal interaction between personal, behavioural, and environmental factors (Bandura, 1977).

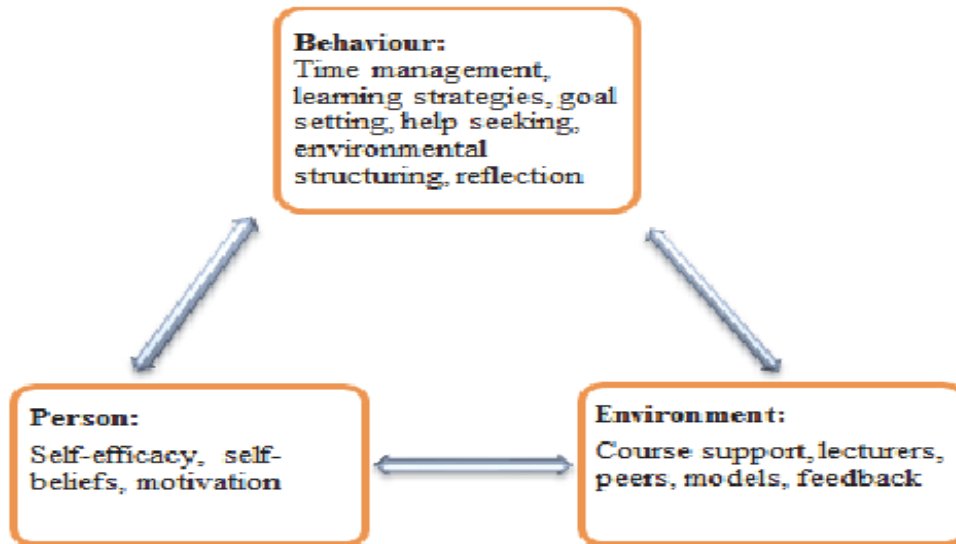


Figure 1.0: Albert Bandura's Social Learning Theory (Bandura, 1977)

Source: Available via license: Creative Commons (Sasai, 2017).

2.3 Review of Related and Empirical Literature

The clinical learning component of nursing education plays a critical and necessary role in connecting conceptual comprehension with actual hands-on nursing abilities in the field of nursing and accounts for more than half of all theoretical nursing education. (Alshammari et al., 2020; Salifu et al., 2022). The importance of clinical learning experiences for student nurses can't be overemphasized because the quality of clinical learning largely depends on exposure to the clinical learning environment (AACN, 2018). An ideal clinical learning setup should support clinical learning by empowering and encouraging nursing students, eventually fostering positive learning outcomes (Subke et al., 2020). The overall satisfaction of nursing students depends on their interactions with the clinical preceptors,

other healthcare professionals, and the support and resources available to them during their clinical placement (Terefe & Gudeta, 2022).

2.3.1 Clinical Learning Experiences

Clinical learning experiences encompass the active involvement of nursing students in real-world healthcare settings, allowing learners to practice skills they have never used before (Purwarini, 2021; Stanley et al., 2020). Therefore, cognitive comprehension acquired in class is applied to actual hands-on provision of patient care (Mbakaya et al., 2020). Clinical learning experience is acknowledged globally as a crucial element affecting learners' academic performance, level of satisfaction, and future career development (Al-Daken et al., 2024; Zhang et al., 2022). Throughout clinical learning, student nurses work alongside qualified professionals, including registered nurses, physicians, and clinical educators under their supervision. By engaging in hands-on practice, students have the opportunity to enhance their practical skills, critical thinking, decision-making capabilities, and reflective writing, which promotes positive learning experiences (Almarwani & Alzahrani, 2023; Serah et al., 2020). Ultimately, this prepares learners to become competent and caring nurses in their future roles (Bindon, 2017).

2.3.2 Personal Factors Influencing Clinical Learning Experiences

Personal characteristics influence student nurses' clinical learning experience greatly. Student nurses possess personal factors such as empathy, accountability, selflessness, compassion, tolerance, respectfulness, cooperation, and self-confidence (Wang et al.,

2022). These elements can promote or inhibit clinical learning, eventually influencing students' academic growth and development. However, these personal factors differ for each student; therefore, medical educators and institutions must comprehend these factors to maximize the effectiveness of clinical learning experiences and improve student outcomes.

Personal factors influencing clinical learning experiences include student attitude, confidence, and interest in a subject (McTier et al., 2023). Further, students who are self-confident and interested in a subject matter acquire more knowledge and skills during learning in the clinical area (Alshammari et al., 2020). A study suggested that motivated and interested student nurses tend to perform better in clinical settings (Ndayisenga et al., 2021). Motivation drives active participation, initiative-taking, and the ability to recognize learning opportunities during clinical rotations (Munangatire et al., 2023). Student nurses are usually motivated by a genuine desire to achieve clinical objectives, pursue professional goals, and uphold personal values (Al-osaimi & Fawaz, 2022). Conversely, students who lack interest in clinical learning may struggle to derive meaning from their clinical rotation, potentially leading to disengagement and limited participation in assignments.

Self-confidence is a personal factor believed to be the learner's ability to carry out clinical activities efficiently with accurate judgment, critical in clinical learning (Alrashidi et al., 2023). Student nurses with higher degrees of self-drive are more comfortable in applying theoretical knowledge to practice, participating in critical thinking, and dealing with

challenges faced in practice (Alharbi, 2022). On the contrary, those with low self-esteem or confidence may find it challenging to speak up or participate in clinical activities, leading to poor learning outcomes.

A sense of acceptance is an important challenge encountered by student nurses within the clinical space (Panda et al., 2021). Nursing students who feel supported and accepted by their fellow students and clinical educators are likely to take part actively in their learning process without feeling alienated or isolated in clinical activities. This is supported by a study that stated that high-quality clinical learning is more likely to be fostered by instructors who are kind, receptive, compassionate, eager, committed, and positive (Reising et al., 2018). Further, the study revealed that some student nurses felt neglected and unsupported by clinical educators and were left to complete tasks on their own without proper guidance. The fear of making mistakes, especially when there is a higher possibility of causing harm to a patient, can be a significant obstacle to learning for a student nurse (Valiente et al., 2018). The clinical setting might be scary due to the high stakes, use of high technological machines, and real-life implications. Student nurses may be concerned about embarrassing themselves in front of their peers or endangering patients as they encounter certain patients who could be difficult, aggressive, irate, uncooperative, or in chronic pain, which can lead to anxiety and a reluctance to take chances affecting their clinical learning (Burgess et al., 2020). In such circumstances, individual support and feedback from clinical instructors can make a huge impact (Baraz et al., 2015).

In addition to the factors related to communication skills, time management, and coping with stress, emotional intelligence emerges as a crucial factor influencing clinical learning (Altwijri et al., 2021). Emotional intelligence is the ability to notice, analyse, and manage one's and others' emotions (Fiori & Vesely-maillefer, 2018). Nursing students with strong emotional intelligence demonstrate empathy, good communication skills, and resilience while dealing with clinical learning experience issues and interpersonal challenges (Codier & Codier, 2017). Emotional intelligence improves clinical learning by encouraging teamwork, self-awareness, and meaningful interaction with patients.

2.3.3 Institutional Factors Affecting Clinical Learning Experiences

Clinical learning experiences for nursing students are affected by various institutional aspects such as organizational culture, organizational governance structure, language, and lack of resources (Atakro et al., 2019; Panda et al., 2021). These elements may significantly affect the standard of nursing education and training that student nurses receive, which in turn may affect their ability to meet their learning goal (Panda et al., 2021).

A positive organizational culture in a clinical setup for nursing students resulted in a more positive awareness of their clinical learning objectives (Matsuo, 2015). By cultivating a culture of excellence, empathy, and innovation, institutions can enhance the standard of clinical learning and prepare student nurses as competent professionals in the future (Foshee et al., 2022). Furthermore, a culture of blame and criticism leads to negativity

within the clinical setting for student nurses, affecting their self-esteem and confidence (Park & Kang, 2020).

Studies have shown that language barriers can hinder understanding of instruction and interaction between patients and medical personnel (Chang et al., 2023). This barrier can significantly lead to misunderstanding, decreased confidence, and difficulties developing critical thinking skills, affecting student nurses' clinical learning experience. On institutional governance structure, institutional hierarchical structure can contribute to a lack of psychological well-being, which inhibits open discussion and knowledge sharing among team members, including student nurses (Amoo et al., 2022). A rigid and hierarchical organizational structure can be a barrier that creates a learning atmosphere where student nurses feel intimidated and are less likely to ask questions or seek clarification.

The lack of resources in nursing education negatively affects training quality and clinical learning experiences. A study revealed that the primary cause of insufficient clinical learning is a shortage of clinical instructors, followed by inadequate resources (Gemuhay et al., 2019; Salifu et al., 2022). Providing adequate clinical equipment, such as mannequins and simulation labs, for simulation equipment would be the best substitute for real patients to supplement clinical placements (Alrashidi et al., 2023). Technology, infrastructure, equipment, and supplies are crucial for student nurses to apply theoretical knowledge in practical settings (Ndayisenga et al., 2021). Adequate resources and facilities enable

student nurses to perform their clinical skills in a secure and organized space, therefore improving their learning outcomes.

Budgetary constraints and poor management often result in the use of outdated equipment, limited access to technology, and inadequate learning materials, posing challenges for students to acquire current competencies and impacting their confidence and motivation (Salifu et al., 2022). Moreover, the lack of resources may lead students to observe rather than actively participate in clinical activities, impairing their skill development (Dubovi et al., 2018).

Regarding institutional policies, one study stated that adopting a zero-tolerance policy towards negative attitudes and behaviours towards student nurses can promote positive clinical learning (Suikkala et al., 2021). It is worth noting that a supportive educational system policy can promote effective learning and facilitate knowledge acquisition and skill development. Another study revealed that nearly all the teaching staff, like the learners, emphasized the importance of a sense of belonging and support within the institution as an important aspect of clinical learning, something they had anticipated, but found to be lacking (Rusticus et al., 2023). This gap can be resolved by the implementation of supportive policies, along with awareness and training programs that help nurses and healthcare professionals recognize and understand their roles as trainers, mentors, and role models for student nurses (Chang et al., 2023).

2.3.4 Clinical Learning Environment (CLE) Perceptions and Experiences

A CLE is described as the actual physical space, psychological, and emotional factors affecting students' learning, where hands-on experience, applying theoretical knowledge, and developing essential clinical skills take place (Flott & Linden, 2016; Amimaruddin & RuditaIdris, 2021). The CLE in clinical settings is influenced by psychological, emotional, and social elements affecting students' learning experiences (Kalyani et al., 2019). CLE enables collaborative learning, trust, mutual respect, and instructors' motivation in teaching and patient care, highlighting its critical role in the quality of nurse education (Akpor et al., 2023). Consequently, the clinical learning environment impacts student nurses' satisfaction, learning outcomes, as well as clinical learning experiences (Bøe & Debesay, 2021). A study suggested that each year, the health educational management committee should evaluate learning environments, establish learning expectations for the upcoming year, and propose actions to enhance them to provide positive clinical learning for student nurses (Gruppen et al., 2018). Therefore, the excellence of nurse training depends on the level of clinical learning experiences within the clinical environment (Terefe & Gudeta, 2022).

Learning is a response to physical and psychological stimuli. The clinical learning environment aspects play a crucial part in generating stimuli in the clinical learning experience of student nurses (Aliakbari et al., 2015). This was confirmed by a study that suggests that the physical space must suit the learners and their activities (Baars et al., 2023). The constant increased activity and lack of space may make it difficult for student

nurses to concentrate, communicate effectively with patients and colleagues, or focus on learning tasks (Al Shamsi et al., 2020; Salifu et al., 2022). A noisy and overcrowded clinical environment, for example, can create significant barriers to an effective clinical learning experience (Motsaanaka et al., 2020). An effective learning environment in nursing education should be safe and conducive to learning. However, overcrowding is a common issues that affect clinical learning environments, particularly in setups with limited budgets or facing high patient demand (Ngozika Ugwu et al., 2023). Therefore, in many clinical settings, this ideal is not always met hence unfavourable conditions can have detrimental effects on student nurses' clinical learning.

Several studies have highlighted the increasing demand for clinical placements compared with the limited availability of clinical learning sites for student nurses (Motsaanaka et al., 2020). This scarcity often ends up in overcrowding, compromising both supervision and hands-on learning opportunities, thereby hindering the acquisition of fundamental clinical learning (Wangensteen et al., 2023; Kagawa et al., 2021). Clinical training institutions should invest in upgrading their facilities for physical space fosters student confidence and ultimately helps in achieving desired clinical learning outcomes (Beiranvand et al., 2021).

A major challenge identified in the study is delivering high-quality clinical teaching, hindered by a growing shortage of nursing faculty and limited clinical placement opportunities. As a result, developing essential skills such as clinical reasoning, clinical judgment, and critical thinking has become increasingly difficult (Persico et al., 2019).

Another added that improving the learning environment for staff and students, clinical placement sites, and educational institutions should work closely together to investigate and create acceptable models of supervision and learning experiences (Purwarini, 2021). This will enable student nurses receive the support and feedback they need to improve and facilitate the acquisition of knowledge and skill development (Zulu et al., 2020).

Providing adequate supervision and guidance to student nurses is crucial in optimizing their clinical learning experience (Gemuhay et al., 2019). Inadequate faculty support and mentorship can negatively impact student nurses' clinical learning experiences (Hagqvist et al., 2020). This is confirmed by a study that highlighted that absence of supervision caused many students to drop out (Bano et al., 2023). Lack of support from experienced faculty can lead to low morale, feelings of isolation, and discouragement among student nurses (Henning et al., 2017). This also impacts student nurses' confidence and ability to perform clinical tasks, decreases the level of motivation, and a lack of interest in learning, making it difficult for them to meet learning objectives, ultimately affecting their learning outcomes (Panda et al., 2021).

Clinical educators who lack mentorship qualities may be unable to provide effective guidance to student nurses, hindering their learning experience. However, high patient acuity, inadequate preceptor-to-student ratios, and limited time and resources may result in inadequate mentorship of student nurses in the clinical learning setting (Mlaba et al., 2019). This lack of mentorship can significantly impact student nurses' learning experience, as

they may not receive the feedback and guidance necessary for their skill development, leading to a lack of confidence and competence (Papastavrou et al., 2016). Effective mentorship and support from clinical educators and healthcare professionals are essential for nursing students to acquire their clinical abilities, as well as self-confidence.

The situation is further complicated by the increasing enrolment in nursing programs alongside the limited availability of clinical facilities (Bvumbwe & Mtshali, 2018). To enhance clinical learning, it is necessary to invest in facility upgrades and resources that will enable student nurses to engage in practical application of clinical skills within a secure and well-structured environment, thereby leading to improved learning outcomes (Beiranvand et al., 2021). A clinical learning environment with a low preceptor-to-student ratio, it is often perceived to be deficient in the support necessary for more direct supervision (Akpor et al., 2023). High patient acuity can restrict access to clinical learning experience, certain facilities may not provide conducive clinical learning environments for student nurses due to the frequent emergencies that need rapid attendance (Akram, 2018). Therefore, it is essential to ensure a sufficient number of trained and experienced faculty to influence the clinical learning experience of student nurses.

The social interactions within the CLE include relationships with peers, engagement with faculty or staff, and connections with patients (Gruppen et al., 2019). The quality of these interactions significantly influences students' learning experiences. Clinical educators play a critical part in enhancing the clinical learning experiences for student nurses (Zhang et

al., 2022). Their attitudes and behaviours toward student nurses can have a profound impact on their motivation, confidence, and clinical performance. Moreover, clinical educators who support, encourage, and provide constructive feedback and develop trust can enhance clinical learning experiences (Dyar et al., 2021).

A study reported that student nurses have negative experiences regarding communication with faculty (Al-Daken et al., 2024). Such experience leads to communication breakdown between students, faculty, and clinical preceptors, hindering the clinical learning process and negatively affecting the quality of clinical teaching (Al Shamsi et al., 2020). Therefore, poor communication is a critical factor that can lead to misunderstandings, confusion, and missed opportunities for learning, significantly impacting the acquisition of essential knowledge, skills, and attitudes needed for clinical learning. Incorporating communication and interpersonal relations training into its curriculum is vital in addressing communication and interpersonal challenges (Chang et al., 2023). This would equip student nurses with the necessary skills to effectively communicate with their clinical instructors and healthcare professionals, hence preventing medical errors, improving collaboration, and learning outcomes (Granier, 2020).

A study at Mater Hospital, Nairobi, found that intrinsic motivation and collaboration among peers significantly enhanced clinical learning among nursing students (Waswa, 2021). However, high anxiety levels, particularly in high-intensity clinical areas such as

the intensive care units, hindered students' participation and confidence in clinical tasks, thereby affecting learning outcomes.

Another study conducted at the University of Nairobi among final-year medical students reported that self-efficacy, academic preparedness, and a positive attitude toward patients were key determinants of successful clinical practice (Kiptoo, 2023). Students who displayed higher levels of confidence and readiness were more likely to engage actively in

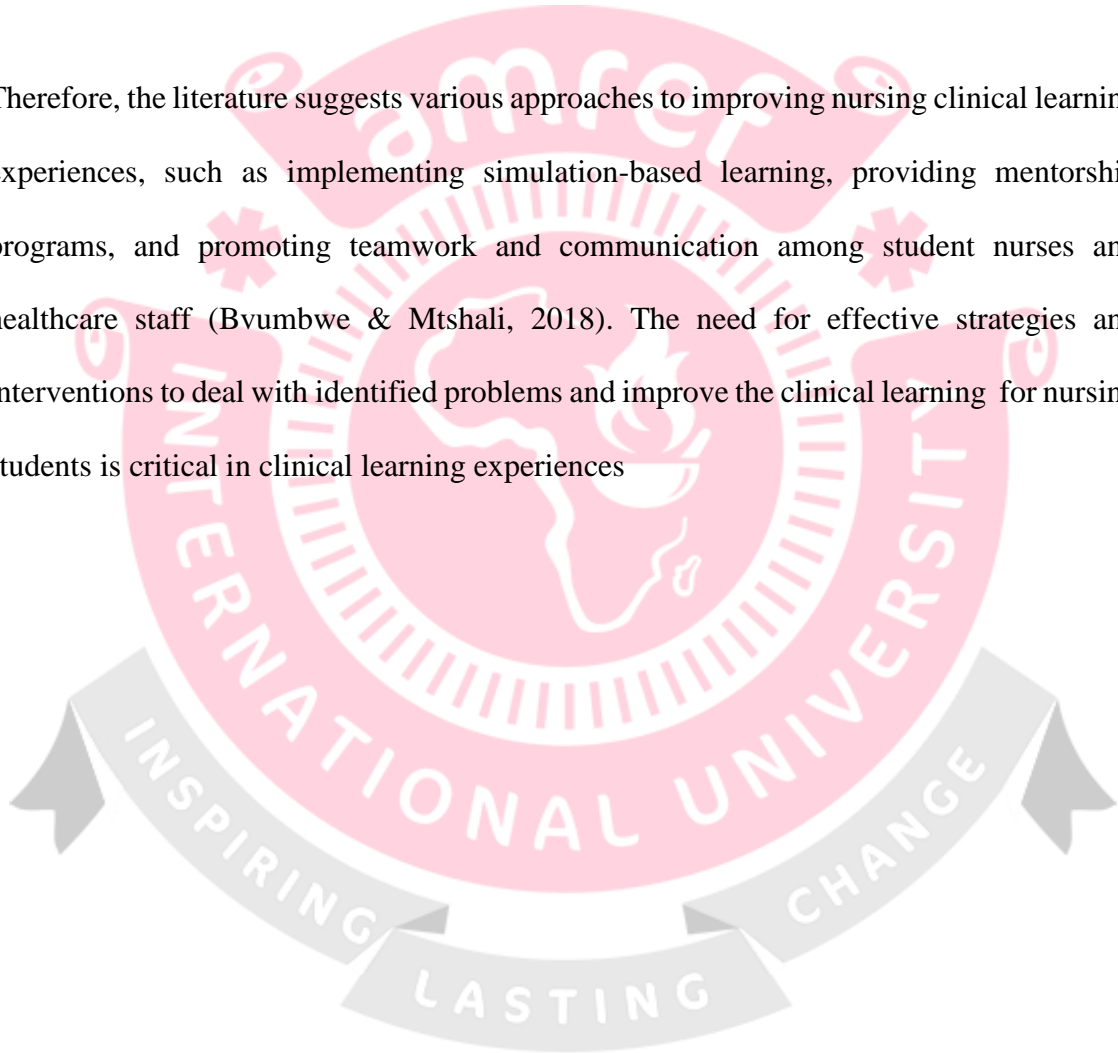
An Health Profession Education (HPE) graduate from the University of Nairobi found that student engagement, such as asking questions, seeking feedback, and volunteering in clinical procedures, was a major contributor to successful clinical learning clinical environments and demonstrate better clinical competencies (Mwikali, 2023). Nonetheless, the study also revealed that language barriers, fear of error, and lack of orientation reduced students' willingness to participate fully, highlighting the need for structured mentorship and supportive supervision.

2.4 Identification of Knowledge Gap

This literature review highlights general studies on clinical learning experiences in nursing training. The study addressed the specific needs of nursing students and focused on the unique factors facing higher diploma nursing students. The findings are crucial in coming up with effective ways of addressing factors hindering clinical learning skills and self-confident student nurses (Panda et al., 2021). One of the main knowledge gaps in this area

is the lack of comprehensive and updated qualitative studies on the detailed factors encountered by higher diploma student nurses. Additionally, there is a paucity of research on the factors influencing clinical learning experiences and their clinical learning consequences for the future practice of higher diploma nursing students.

Therefore, the literature suggests various approaches to improving nursing clinical learning experiences, such as implementing simulation-based learning, providing mentorship programs, and promoting teamwork and communication among student nurses and healthcare staff (Bvumbwe & Mtshali, 2018). The need for effective strategies and interventions to deal with identified problems and improve the clinical learning for nursing students is critical in clinical learning experiences



2.5 Conceptual Framework

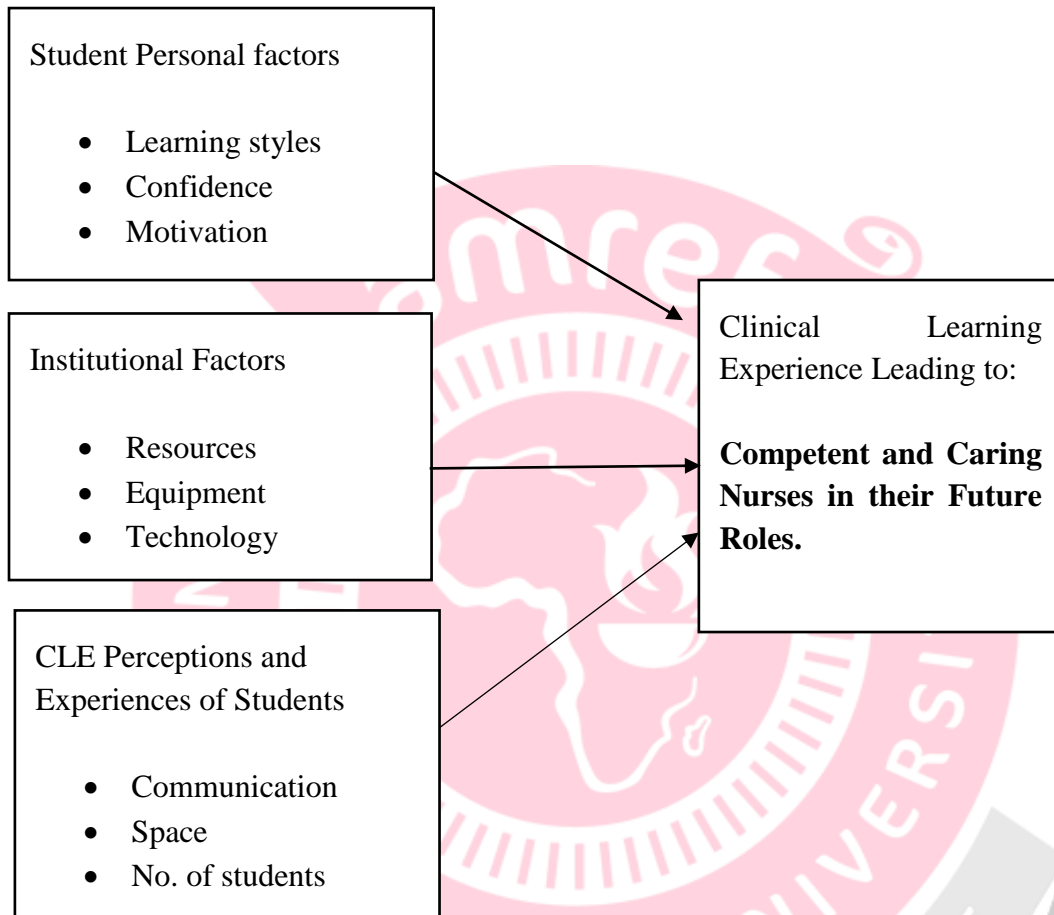


Figure 2 : Conceptual Framework

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter examined the methodology that was used to collect data to help answer the research questions. It covered the research design, study setting, study population, sampling and sampling method, data collection, data analysis and presentation, and ethical considerations (Mimansha & Nitin, 2019). The methodology helped explore the clinical learning experiences for higher diploma nurses at Kenyatta National Hospital.

3.2 Research Design

The study employed a qualitative exploratory research design to gain an in-depth understanding of the clinical learning experiences of higher diploma nursing students at Kenyatta National Hospital (KNH). This design was appropriate because it allowed for the flexible exploration of participants' real-life perceptions and experiences. Unlike quantitative designs that test predefined hypotheses, the exploratory approach enabled the researcher to uncover new insights and themes directly from participants' narratives. This design was therefore best suited to capture the complex, context-specific factors influencing clinical learning. The study involved holding two Focused Group Discussions (FGDs) and 12 In-Depth Interviews (IDIs) among 24 students enrolled at the KNH School of Nursing (September 2024/2025 student nurses undertaking higher diploma nursing studies). Qualitative research methods were considered suitable for this study, to allow for

an in-depth synthesis of information while focusing on understanding the phenomenon of interest and how it unfolds in the context of personal, institutional, and clinical learning environment perceptions and experiences influencing clinical learning experiences (Ames et al., 2019). The study therefore, explores the clinical learning experiences for the higher diploma nursing students at KNH.

3.3 Study Area

This study was conducted at Kenyatta National Hospital (KNH), a premier tertiary referral and teaching hospital in Kenya with a capacity of 2,400 beds. KNH hosts nursing education programs, including higher diploma nursing courses in intensive care, newborn, renal, oncology, peri-operative, trauma, and emergency. KNH is a central training hub for institutions, including the University of Nairobi, Kenya Medical Training College (KMTTC), Jomo Kenyatta University of Agriculture and Technology (JKUAT), and various private colleges. These institutions utilize KNH for both undergraduate and postgraduate clinical placements. The hospital was selected for its high patient volume, multidisciplinary scope, and role in training higher diploma nursing students in specialized fields, making it an ideal site to explore clinical learning experiences within a complex healthcare setting

3.4 Study Population

The study population comprised 101 September 2024/2025 higher diploma nursing students undertaking varied specialty courses such as Critical Care, Operative Theatres,

Neonatal, Nephrology, Trauma and Emergency, and Oncology Nursing at KNH, enrolled as per the School admission register.

3.4.1 Inclusion Criteria

All September 2024/2025 student nurses undertaking higher diploma nursing at KNH (critical care nursing, peri-operative, neonatal, nephrology, accident and emergency, and oncology) who consented took part in the study (Miller et al., 2020).

3.4.2 Exclusion Criteria

Student nurses who had taken academic leave were excluded.

3.5 Sample and Sampling Procedure

Purposive sampling was conducted to select 24 participants from a pool of 101 higher diploma nursing students from the September 2024/2025 cohort, ensuring a balance between obtaining detailed, diverse, contextually meaningful information and effectively managing the study. The number of participants allowed the researcher to include students from six nursing specialty courses: critical care, peri-operative, neonatal, nephrology, trauma and emergency, and oncology nursing. This approach was guided by the need for maximum variation sampling to capture a wide range of experiences ensured that the study captured varied experiences and perspectives based on the various higher diploma courses, students' diverse ages, professional experiences, educational backgrounds, and current clinical settings (Nowell et al., 2020).

Specifically, 12 participants were selected purposively based on their willingness, availability for one-on-one in-depth interviews to provide detailed insights into their viewpoints. The remaining 12 participants were the class leaders, representing the six courses selected for FGDs due to their dual roles as both students and peer representatives, consistent with recommendations that focus groups be used to explore common norms and experiences within specific social groups (Neal et al., 2024). This enabled them to speak not only to their own experiences but also to broader, shared challenges discussed among peers. The class leaders often serve as peer representatives and are in regular communication with both students and faculty, making them well-suited to reflect on collective student perspectives. Their participation helped enrich the data with group-level insights and patterns across specialties, supporting the exploratory aim of the study. These participants were divided into two groups of six for focused group discussions, facilitating a broader range of interactions. Employing in-depth interviews and focus groups is a robust qualitative data collection strategy that collects detailed personal narratives, whereas focus groups provide insights into shared experiences. The combined use of in-depth interviews and FGDs enabled method triangulation, enhancing the credibility and trustworthiness of the data (Korstjens & Moser, 2021). While interviews allowed for deep personal reflection, focus groups provided interactional depth and revealed group-level themes and consensus. The participants expressed their views flexibly in their own words (Ames et al., 2019).

Table 1.1 Participants' Distribution Across Specialties

Specialty Area	In-depth Interview Participants	Focus Group Participants (Class Leaders)	Total
Critical Care Nursing	2	2	4
Perioperative Nursing	2	2	4
Neonatal Nursing	2	2	4
Nephrology Nursing	2	2	4
Trauma & Emergency Nursing	2	2	4
Oncology Nursing	2	2	4
Total	12	12	24

3.6 Data Collection Instrument

An interview guide containing open-ended questions set according to study objectives, which focused on personal, institutional factors, and the clinical learning environment perceptions and experiences. To ensure alignment, each question was mapped to a specific

objective. Additionally, insights from existing qualitative studies on clinical learning were used to inform the relevance and depth of the questions. This helped ensure that the tool captured key themes commonly reported in related research, thereby enhancing its content validity and contextual appropriateness. The instrument underwent a validation process. Two subject matter experts, one in nursing education at the Agha Khan University and the other in qualitative research from the KNH Research Department were invited to review the tool to ensure the content validity of a qualitative data collection instrument (Ngozika Ugwu et al., 2023). The experts' review focused on assessing the content validity of the instrument, specifically evaluating the clarity, relevance, and coverage of the questions in relation to the intended constructs. Adjustments were made which enhanced the tool's ability to elicit meaningful and contextually appropriate responses. Following validation, two research assistants were recruited and trained on ethical considerations, techniques for conducting interviews and focus group discussions, note-taking and proper use of audio recording devices. This ensured consistency and reliability in data collection. During data collection, the interviews and the focus group discussion were audio-recorded with participants' consent. Additionally, interviewers maintained field notes to supplement and contextualize the recordings, enhancing the richness and depth of the collected data.

3.7 Principles of Trustworthiness in Qualitative Research

The "Trustworthy" criteria established by Guba & Lincoln is a dependable and lasting measure for assessing the trustworthiness of content obtained from interviews in qualitative

research (Ghafouri & Ofoghi, 2016). Maintaining trustworthiness is crucial in ensuring the integrity and validity of the research process, particularly in the evaluation of clinical learning experiences. "Trustworthy" criteria include credibility, transferability, dependability, and confirmability (Hadi & José, 2016).

Credibility refers to the confidence in the truth and accuracy of the findings in qualitative research, playing a crucial role in validating the accuracy and genuineness of the results (Valiee et al., 2018). This research utilized interviews and note-taking during interviews to triangulate the data and boost credibility. Two research assistants, who were qualified nurses with a bachelor's degree, were recruited and trained to conduct the one-on-one interviews. This was to avoid biases from the researcher owing to the close relationship with the nursing students. Additionally, the research assistant established a connection with participants, creating a welcoming atmosphere that promotes open communication and helps participants acknowledge their biases. The September 2024/ 2025 class students had their clinical rotation for a considerable duration of time to acquire a deep understanding of the varied clinical areas before the interviews. Clear research objectives were shared with participants, along with guarantees of confidentiality, to promote honest feedback and open dialogue about their clinical learning.

Transferability relates to the applicability of the findings to other contexts. The study ensured detailed descriptions of the research setting, participants, and data collection methods were provided. This included information on the clinical setting, participants'

backgrounds, and specific research objectives, along with contextual details to help learners grasp the unique aspects of the clinical learning. Furthermore, the research findings were analysed to assess their applicability to similar clinical settings or educational programs. Key similarities and differences that could impact the transferability of the results were emphasized. Data was presented through descriptions and direct quotes to showcase the complexities of the clinical learning experiences, allowing the participants' perspectives to be conveyed in their own words. This method ensured that the research findings were generalized to various contexts or populations (Ngozika Ugwu et al., 2023).

Dependability concerns the stability and consistency of the research process over time, which was guaranteed by maintaining consistency and stability in the research outcomes, regardless of time passing or different researchers being involved. This was achieved by thorough documentation, which includes keeping a detailed audit trail of all research activities and involving research assistants in cross-checking information to validate data interpretations (Bvumbwe & Mtshali, 2018). Additionally, peer review or external experts assessed the research design, data analysis, and interpretation of results. Their insights were integrated to improve the rigor and credibility of the study. The inter-coder reliability established consistency in data analysis (Connor & Joffe, 2020). As a result, the thorough level of documentation enhanced transparency and permitted other researchers to replicate the study, which in turn strengthened the trustworthiness of the research results.

Confirmability is crucial as a principle of Trustworthiness to ensure objectivity and eliminate personal biases (Daniel, 2019). Further to ensure that the study findings are documented without judgment or opinion and dependable, the study employed triangulation, member checking, peer debriefing, maintaining an audit trail, practicing reflexivity, and ensuring coding consistency through a team of coders (Nowell et al., 2017; Bitsch, 2014). Therefore, the researcher accounted for all the research decisions and activities to show how the data were collected, recorded, and analysed, as well as utilizing two data collection methods (one-on-one interviews and focused group discussions) to ensure triangulation of data. Two coders, consisting of external researchers trained in qualitative data analysis, whom the researcher sought their services independently, evaluated the data and then engaged in a peer debriefing process to reach a consensus on the interpretation of the findings. The consistency of data coding was assured by conducting systematic meetings involving the principal investigator, qualitative analysis research assistants, and through collaborative analysis and discussion to maintain uniformity in coding practices (Connor & Joffe, 2020). The study's results and understandings were presented and discussed with the co-researchers to get feedback on how the researcher aligned the study findings with the study's objectives. Thereafter, the researcher concluded (Bitsch, 2014).

The researcher maintained active self-reflection to monitor and mitigate potential biases in concurrence of the principle of reflexivity. Ongoing reflection was maintained on the research process and interpretations to effectively minimize any impact of bias especially

due to existing relationships. Regular meetings were held with the qualitative analysis team to ensure transparency throughout data interpretation, participants' views are represented fairly, fully, and with contextual accuracy in accordance to the principle of authenticity. This study upheld authenticity by incorporating verbatim quotations during data presentation.

3.8 Data Collection Procedure

Qualitative data were gathered through individual one-on-one interviews and focused group discussions among student nurses. Before commencing interviews with the purposively selected students, approval was sought from the appropriate authorities at KNH School of Nursing. Participants were briefed on the study's objective, their rights, and thereafter consent was obtained.

The one-on-one indepth interview and the focus group discussions were conducted in the clinical areas conference rooms, which are usually located at the furthest end of the units (clinical area). The room was booked early and prepared. A comfortable chair and a small table for note-taking and recording was available in the room, and the door remained closed with a note of "do not disturb" pinned on it to ensure that the interview was free from interruptions and maintain privacy. Upon obtaining consent, permission to start recording before proceeding with the interview was obtained. One assistant researcher facilitated the interviews guided by the interview guide, while another took comprehensive notes, including non-verbal cues. These notes were compiled into a study logbook, which also

recorded the start and stop times of each session for verification. Participants were given an opportunity at the end of the interview to identify any parts of the discussion they wished excluded from analysis. The interviews lasted for approximately 25-40 minutes.

To maintain confidentiality and facilitate accurate data tracking, each participant was assigned a unique identity code. For individual interviews, participants were labeled as Interview Participant 1 (IP1), to IP12. This code included the participant number. For FGDs, codes such as FGD1-P1 to FGD1-P6, FGD2-P1 to FGD2-P6 were used.

To avoid accidental loss, the taped interviews were stored in a password-protected folder on the computer, and audio recordings were kept safe before data analysis. The study tools and consent forms for the respondent were locked in a cupboard and accessed by the researcher alone. The data collection period took five weeks to complete the interviews for the purposively selected group.

3.9 Data Analysis and Presentation

The data were analysed thematically. The themes were analysed guided by the six-step process for identifying, interpreting, and reporting themes in data (Naeem et al., 2023). The six steps were as follows:

- 1) The original recordings were transcribed verbatim, and the investigator got acquainted with the data by reading the written transcripts. The researcher referred to published information in journals to interpret non-verbal expressions, while taking notes on possible

codes after the transcription. This process guarantees that the information is presented in a manner conducive to analysis.

2) The two qualitative research coders developed initial codes independently to improve the uniformity and credibility of the coding to conform to the confirmability principle of trustworthiness; thereafter, the transcripts were imported into the Dedoose 9.2.22 application to categorize the data and develop themes. The software provides tools for organizing and managing coded data, making it easier to identify and explore emerging themes.

3) The researcher subsequently applied content analysis to critically analyse the transcripts and identify the major themes and subthemes. Deductive coding was utilized where predetermined codes were established according to the research-specific objectives. The codes were grouped into possible themes, and a theme map was created to ensure that the themes are compatible with the extracts and data collections.

4) The themes were then discussed and agreed upon.

5) An appropriate theme definition and titles were established, and finally,

6) the report is completed. The synthesis and presentation of the analysis findings were documented in a written report. This included showcasing significant themes as compared to the study objectives and Bandura's social cognitive theory, and examining their implications (Kim & Sohn, 2019). Results were given verbatim; therefore, the exact

reproduction of the statement without any alteration or paraphrasing was written. Conclusions were drawn, and recommendations regarding clinical teaching and policy changes for higher diploma nursing training were made to KNH.

A summary table was developed to illustrate how associated codes, categories, and main themes were derived from sample verbatim quotes.

Table 1.2 Codes, Themes, and Categories

Sample Quote -Verbatim statements	Code	Category	Theme
<i>"Managing work and studies at the same time is challenging,--."</i>	work-life balance	Personal Challenges and Triumphs	Personal factors
<i>"I feel that students should not be used just to cover staff shortages-"</i>	Policy pitfalls	Systemic support structure	Institutional factors
<i>"Learning from others has been a key part of my clinical learning—"</i>	Peer learning	Systemic support structure	Institutional factors
<i>"There is a lot of emotional support-,"</i>	emotional support	holistic learning environment	Perceptions and experiences of the clinical environment
<i>"Being self-sponsored adds financial strain, and sometimes, I am concerned about meeting my clinical fees-----."</i>	Financial constrain	Personal Challenges and Triumphs	Personal factors

This thematic analysis framework helped to ensure a rigorous, transparent, and structured interpretation of qualitative data. The conclusions drawn reflect both individual and systemic factors affecting the clinical learning experience and support actionable recommendations for improving clinical training for higher diploma nursing students.

3.10 Ethical Considerations

Obtaining consent to conduct the study was achieved through approval from the Amref Ethics and Scientific Review Committee (ESRC), and the National Commission for Science, Technology and Innovation (NACOSTI). The researcher sought permission from the Head of Department at the KNH School of Nursing to obtain data through one-on-one interviews with the student nurses. The researcher emphasized to the participants that the study would only proceed with their written informed consent. The consent clearly stated that there were no physical, emotional, or legal damage to the participants as a result of their involvement in the study. However, in situations where the study participants suffered emotional or psychological stress, the researcher informed them that they could stop the discussions at any point during the interviews and that their views and opinions recorded thus far were discarded. It was made clear to the participants that, although they may not directly benefit from the study, its findings would contribute to the advancement of nursing education as a whole. Overall, the utmost care and consideration were taken in obtaining consent and protecting the rights and well-being of the participants throughout the entire research process. Each participant received a unique identification code, with no master

list linking codes to identities included in the data analysis. Participants were assured that their responses were confidential and used solely for research. Data was aggregated to prevent tracing individual responses. Quotes or views used in publications were anonymized to protect participants' identities. Finally, to avoid the possibility of coercion and undue influence due to the close relationship between the principal researcher and the respondents, the principal investigator sought help from two research assistants recruited to administer the study tools. The researcher recruited two nursing staff at KNH. The research assistants were trained to conduct the interview. A mock session of one-on-one interviews and focused group discussion was conducted for research assistants to practice and refine their skills. Training on the proper use of recording equipment to ensure high-quality audio recordings was provided. The study data (transcripts and notes) were securely stored in a digitally encrypted cloud storage, OneDrive platform. The physical data was stored in a locked file cabinet located in the principal investigator's office at KNH within a restricted-access area. The data will be stored for 7 years, in accordance with the KNH data storage and disposal policy, as guided by the Data Protection Act, which stipulates that every institution must have clear internal procedures for deletion and destruction (Moulton, 2019). Finally, the research findings were not only shared with the participants but also with the broader academic community through the students' dean's forum and departmental continuous medical education platform. The principal investigator has published the findings in reputable, peer-reviewed journals (Zhang et al., 2022).

3.10.1 Quality Assurance

The research adhered to the ethical standards of autonomy, beneficence, non-maleficence, and justice. Before the beginning of the study, approval was obtained from the Amref ESRC and the National Commission for Science, Technology and Innovation (NACOSTI). All participants gave their written consent, and their privacy and confidentiality were protected for the whole study. Only the researcher had access to the collected data and made it available to the research team (Tenopir et al., 2020). Additionally, the study adhered to the guidelines and regulations set forth by the Kenyatta National Hospital School of Nursing regarding research involving higher diploma specialized nursing students. This included obtaining permission from the school before conducting the study and ensuring that the results are shared with the school for potential improvement of the clinical learning for the nursing students.

3.11 Study Constraints and Limitations

One of the limitations of this research was the aspect of desirability bias, considering the nature of the study and interaction with participants, which could limit their ability to comprehensively and accurately report their experiences. Some participants gave short replies, limiting the depth of the data. While the main findings were retained, this may have limited prospects for further research of certain subjects. Due to participant availability, several adjustments to interview scheduling were required, which occasionally resulted in shortened or postponed sessions. These modifications might have affected the

general flow and depth of some interactions, even though data collection was properly finished.

3.12 Community Engagement

To sensitize the target community about a research study, a comprehensive engagement strategy has been implemented. The target community includes nursing students, nursing clinical instructors, mentors, qualified nurses, and hospital administrators. Awareness were raised through existing hospital structures, such as student forums and clinical briefings, formal staff meetings, and continuous medical education presentations where study objectives and benefits of the research study findings were discussed. Face-to-face meetings with the Director of the School of Nursing and the managers of the specialised units were done to foster participation and address concerns. Ethical considerations, including voluntary participation and confidentiality, were stressed. The approval from Amref ESRC and National Commission for Science, Technology and Innovation (NACOSTI) ethics board sought were communicated.

3.13 Study Findings Dissemination

The research findings were disseminated through a written report, presentations, and publications in relevant journals (Moher et al., 2020). The data was then presented using narrative descriptions to convey their findings. These narratives were organized around key themes similar to those of Bandura's social cognitive learning theory. Direct quotes and

excerpts from interviews were frequently used to illustrate key points. These quotes were typically integrated into the text and were accompanied by brief explanations or interpretations.

3.14 Management and Organisation of the Study

The management and organization of the research study involved a collaborative team of researchers. To ensure efficiency, clearly defined roles were designated. A Gantt chart planning tool was in place to provide tracking of progress (Kennett, 2014). The principal investigator oversaw the overall study design, progress, and adherence to ethical standards, writing and dissemination of findings. Co-researchers guided the principal investigator. Research assistants and coders helped with data collection and, bringing expertise in qualitative methods to ensure depth and credibility, supported logistical tasks such as transcription, coding, documentation of emerging themes, and maintaining data security. The principal investigator organized regular team meetings and facilitated communication, addressed arising challenges as well as wrote the findings, discussions, conclusions, and recommendations.

CHAPTER 4: RESULTS

4.1 Introduction

This chapter presents the findings of the study based on the data collected through in-depth one-on-one interviews and focused group discussions conducted in a conference room within the clinical area. The higher diploma nursing students who were requested to participate in the study came and provided their consent. The qualitative data gathered from these interviews offered valuable insights into the personal, institutional, and clinical learning environment of clinical learning experiences for Higher Diploma Nursing Students at Kenyatta National Hospital. The chapter describes the participants' demographic information, coding details, weights, and frequencies of themes, and the elaborate presentation of findings according to the emerging themes aligned with the specific objectives.

4.2 Presentation of Results

4.2.1 Demographic Characteristics

Demographic characteristics of the higher diploma nursing students who were included in the study were summarized. The mean age of the participants was 31.2 (SD±3.4) years. The majority, 15(62.5%), were married, and 20(83.3%) were Christians, as shown in Table 3.

Table 3: Demographic Characteristics (N =24)

	Frequency	Percent
Age (Mean, SD)	31.2±3.4	
Marital status		
Single	9	37.5
Married	15	62.5
Religion		
Christian	20	83.3
Muslim	4	16.7

4.2.2 Data Coding

The weights of themes that emerged from the qualitative analysis of interview transcripts were summarized as shown in Table 4.

Table 4: Weights of Themes and Coding Details

Theme/subtheme	Weight	Coding Details
Personal Challenges and Triumphs	42	
Work-life balance	22	Coded through references to family obligations and learning needs
Health challenges	12	Health-related challenges were discussed briefly, focusing on illness and its impact on clinical attendance.
Financial constraints	8	Direct references to financial struggles in the data
Systemic Support Structures	53	
Mentorship from clinical instructors	13	Mentorship and guidance from clinical instructors were briefly mentioned as crucial for learning.
Peer learning	15	Learning from colleagues was implied.
Policy pitfalls	8	Strong focus on how institutional policies sometimes prioritize service delivery over learning.
Access to resources	17	Frequent references to the availability of resources like equipment, Wi-Fi, and learning materials.
Holistic learning environment	22	
Adequacy of space	4	Concerns about overcrowding in clinical areas are affecting learning opportunities.
Safety and comfort	7	The learning environment at KNH was discussed in terms of emotional and physical safety, impacting focus.
Supportive atmosphere	5	Emotional support from peers and mentors could be implied.
Stress and Emotional Resilience	6	Implied on managing emotional challenges to stay focused

The weighting of themes in Table 2 was derived using Dedoose version 9.2.22, a qualitative data analysis software that allows for the systematic coding and quantification of qualitative data. Interview transcripts were uploaded and coded for recurring concepts based on participants' narratives, with each identified theme or subtheme being tagged whenever it appeared in the data. The resulting frequency count used as the weight represents how often each code was applied across all transcripts, rather than the number of participants referencing it. For example, "work-life balance" was coded 22 times, thus receiving a weight of 22. These individual sub-theme frequencies were then aggregated to form higher-order themes. For instance, the theme "Personal Challenges and Triumphs" had a total weight of 42, derived from sub-themes like work-life balance (22), health challenges (12), and financial constraints (8). Similarly, "Systemic Support Structures" emerged as the most frequently referenced theme with a total weight of 53, indicating its prominence in the dataset. This approach to thematic weighting enabled the identification of the most emphasized issues across participants' accounts. It provided a quantitative lens through which the richness and distribution of qualitative insights could be understood. Three major themes were identified. They include personal challenges and triumphs, systemic support structures, and the holistic learning environment. The themes and sub-themes are summarized as shown in Table 5.

Table 5: Themes and Sub-Themes

Objective	Themes	Sub-themes
Personal factors influencing clinical learning	Personal Challenges and Triumphs	Work-life balance Personal health battles Financial Constraints
Institutional factors	Systemic Support Structures	Mentorship from Clinical Instructors Peer Learning and Mentorship Policy pitfalls Access to resources
Clinical learning environment experiences	Holistic learning environment	Adequate Space and Facilities Safety and Comfort Supportive Atmosphere Stress and Emotional Resilience

The alignment between the study objectives, themes, and sub-themes in Table 5 demonstrates a coherent structure derived from systematic qualitative analysis. Each objective informed the thematic development process, ensuring consistency in data interpretation. Specific objective 1, which focused on personal factors, led to the theme "Personal Challenges and Triumphs", encompassing sub-themes like work-life balance, personal health battles, and financial constraints. These reflect individual-level struggles influencing students' engagement in clinical learning. Specific objective 2 examined institutional influences and resulted in the theme "Systemic Support Structures", with sub-themes including mentorship, peer learning, policy pitfalls, and resource availability,

highlighting organizational enablers or barriers. Whereas specific objective 3 explored the clinical learning environment experiences, captured by the theme "Holistic Learning Environment", which included sub-themes such as adequate space, safety, supportive atmosphere, and emotional resilience, reflecting the students' broader learning context.

4.2.3 Personal Factors Influencing Clinical Experiences of Higher Diploma Nursing Students at KNH

Personal factors refer to individual circumstances, such as health, family obligations, and work-related challenges, that affect the students' engagement in clinical learning.

Theme 1: Personal Challenges and Triumphs

Participants were asked about personal factors influencing clinical learning experiences among higher diploma students. This was aimed at understanding individual circumstances that shape how students learn during clinical placements. The key sub-themes that were identified from the interviews and discussions included family obligations, health challenges, and the balancing act between work and study.

Sub-theme 1: Work-Life Balance

Most participants stated that balancing family obligations and learning significantly influences their clinical learning experiences. Some reported that multitasking family care with their clinical learning hindered their ability to achieve their intended learning goals.

Some of the participants stated that:

"Managing work and studies at the same time is challenging, as I have to balance both and sometimes, it is difficult to meet all my clinical obligations." (Interview Participant 4) .

Similarly, another affirmed that:

"this is an adult learning where we still have other responsibilities with the family and at the same time, we are still working. So, you find that maybe you are working elsewhere and you have to come here for people to listen and maybe from the next to the other side, and this other side, you will try to do it so still. So, learning won't be as smooth as much" (FGD 1).

Sub-theme 2: Personal Health Battles

Another key subtheme that was identified is the personal health battles. It was noted that health issues, whether physical or mental, also play a critical role in students' clinical learning experiences. Being unwell either due to illness or stress prevented participants from attending clinical placement as well as fully engaging in the learning process. These factors require institutions to be understanding and flexible in supporting students' health challenges. Some of the participants stated that:

"Health issues like being unwell affect my ability to attend clinical and thus, I miss some experiences." (Interview Participant 2) .

"When I'm feeling unwell, it makes it difficult to focus on learning and I often have to take time off, which can impact my progress." (Interview Participant 5) .

Sub-theme 3: Financial Constraints

The findings also showed that financial constraints are a common concern for many students, especially those who are self-sponsored. The pressure to manage tuition, living expenses, and clinical fees is a major concern to students hence make it difficult for students to focus on their clinical learning, as their minds may be occupied with financial worries. The participants affirmed that:

"Being self-sponsored adds financial strain, and sometimes, I am concerned about meeting my clinical fees while ensuring I manage my academic requirements."

(Interview Participant 2)

"Financial difficulties, especially since I am self-financing my studies, sometimes make it hard for me to focus on clinical learning as I worry about money." (Interview Participant 9) .

4.2.4 Institutional Factors Affecting Clinical Learning Experiences of Higher Diploma Nursing Students at KNH

Theme 2: Systemic Support Structures

Systematic support structures refer to the support provided by the institution, including clinical instructors, institutional policies, and available resources, that either enhance or hinder students' clinical learning experiences. Participants were asked to identify and

explain how institution influence their clinical learning based on their interaction with faculty, existing policies as well as existing resources.

Sub-theme 1: Mentorship from Clinical Instructors

One of the key institutional factors identified affecting clinical learning was supportive supervision and mentorship from faculty. The mentorship provided by clinical instructors was often described as a crucial component of the clinical learning experience. Participants mentioned that clinical instructors in school and KNH motivate students to learn more and understand key nursing components. The participants stated that:

"Mentors at KNH are crucial to my learning. They ensure that I am not only performing tasks but understanding the reasons behind each action." (Interview Participant 8) .

"KNH School of Nursing is supportive of the students, we have the coordinator and the instructors. You come here to school and are taught, and in the wards, you are taught again. In addition, practical sessions at KNH has numbers so it becomes easy for practice" (FGD 1)

Sub-theme 2: Peer Learning and Mentorship

Most of the participants also stated that the institution has integrated peer learning, which has been essential in improving their clinical learning. Peer learning was considered a

major source of support, as more experienced students often mentor their peers, reinforcing a sense of collaboration within the clinical learning. The participants stated that:

"I usually depend on the primary nurse for the duties because mostly we are located one student per primary nurse, so I learn a lot from them." (Interview Participant 2).

"Learning from my colleagues and senior staff nurses has been invaluable. They guide me through procedures I've never encountered before." (Interview Participant 9) .

"Learning from others has been a key part of my clinical learning, and it is so encouraging and efficient for me" (FGD 2).

Sub-theme 3: Policy Pitfalls

Some students felt that institutional policies are sometimes skewed towards prioritizing service delivery over learning. The pressure to fulfil the role of a nurse while still being a student can interfere with learning opportunities, leading to frustration and missed educational chances. The participants noted that:

"I feel that students should not be used just to cover staff shortages. We are here to learn, not to work as a replacement for nurses." (Interview Participant 10) .

Some of the participants also felt that the institution has not developed clear strategies to balance clinical learning and service delivery, which has had a negative influence on their clinical learning. One of them noted that:

"There needs to be a better balance between clinical learning and staff shortages. Too often, we are expected to cover shifts, which takes away from valuable learning time." (Interview Participant 4) .

Sub-theme 4: Access to Resources

Some of the participants also mentioned issues relating to accessing resources within the institution. Access to appropriate learning materials and equipment is vital for a meaningful clinical learning experience. While many students noted that KNH has advanced equipment, others mentioned challenges with faulty or unavailable tools that hinder their ability to learn and perform tasks efficiently.

Most of the participants affirmed that there is a well-developed technological infrastructure such as Wi-Fi as well as technical support which enhances their learning. Some of the participants noted that:

"The technology and access to computers at KNH allow us to research and learn more efficiently, which enhances our learning experience." (Interview Participant 6).

"Access to technology like Wi-Fi and computers makes it easier to look up medical conditions and procedures during clinical hours. It's a great resource." (Interview Participant 9) .

Participants also identified challenges relating to the use of medical equipment, with some of the equipment being faulty, hence unusable. Participants noted that:

"The equipment at KNH is top-notch. However, sometimes we face challenges when some equipment is faulty, which affects patient care and our learning." (Interview Participant 8) .

"There is a good variety of equipment available, but at times, some of the equipment is not functioning, and this hampers both patient care and our learning opportunities." (Interview Participant 3).

4.2.5 Perceptions and Experiences Regarding Clinical Learning Environment of Higher Diploma Nursing Students at KNH

Theme 3: Holistic Learning Environment

The key theme identified in this context was a holistic learning environment that encompasses the physical and emotional atmosphere of the clinical settings, which significantly impacts how effectively students can engage with their learning.

Sub-theme 1: Adequacy of Space and Facilities

Participants highlighted that the physical learning environment is well equipped and adequate to help them achieve their clinical learning and obtain the much-needed skills. Some of the participants stated that:

"The physical environment at KNH is good. However, sometimes there is overcrowding in the wards, which makes it harder for students to get adequate learning opportunities." (Interview Participant 6) .

"The environment is well-equipped, but when the wards are overcrowded, it limits the number of students who can engage directly with patients." (Interview Participant 4) .

Sub-theme 2: Safety and Comfort

The findings also showed that safety and comfort were a key part of the learning environment and played an instrumental role in enhancing clinical learning. They affirmed that the learning environment at KNH was very welcoming and safe.

"The environment at KNH is very welcoming, which makes it easier to learn. There are no physical barriers that could prevent effective learning." (Interview Participant 5) .

"The physical setting is very safe, which allows me to focus entirely on learning without worrying about my safety." (Interview Participant 10) .

Sub-theme 3: Supportive Atmosphere

The participants asserted that they felt valued and encouraged, which was instrumental in shaping their clinical learning. Several participants emphasized the importance of a positive emotional climate in motivating them to persevere through challenging tasks and remain engaged in their learning.

"There is a lot of emotional support from both mentors and peers. When you make mistakes, they are used as opportunities to learn, not to criticize." (Interview Participant 5) .

"The supportive atmosphere at KNH is amazing. We are always encouraged to ask questions and improve our skills without fear." (Interview Participant 6) .

Sub-theme 4: Stress and Emotional Resilience

The participants stated that managing emotions in high-stress clinical environments was a key challenge; however, some of them shared how they manage their emotions to perform well in clinical tasks.

"Managing my emotions in high-stress environments is challenging, but I have learned to stay composed, especially when dealing with critical situations." (Interview Participant 3) .

"It is important to manage my emotions, especially when dealing with difficult situations, such as a patient's passing. I've learned to cope better over time." (Interview Participant 9) .

CHAPTER 5: DISCUSSIONS

5.1 Introduction

This chapter presents the findings of the study which sought to explore the clinical learning experiences of student nurses pursuing a higher diploma at Kenyatta National Hospital (KNH). The discussion highlights how personal, institutional, and clinical environmental factors shaped the clinical learning experience. The discussion is structured to interpret the results in light of the study's objectives and existing literature, interprets reflect on the strengths and limitations of the study, and considers its implications

5.2 Discussions

5.2.1 Personal Factors Influencing Clinical Learning Experiences

One of the dominant themes that emerged influencing the clinical learning experience among higher diploma nursing students is that student nurses often struggle to balance their professional, family, and academic responsibilities. This juggling act highlights a gap in how clinical learning programs are designed, as they do not account for the important obligations outside their studies. Requiring student nurses to follow strict schedules reveals a gap between nursing schools' expectations and the complex realities of students' lives. When student nurses must divide their focus between caregiving, work, and school, the quality of their clinical learning outcomes suffers.

This aligns with findings from Ghana, where nursing students who were married or had children struggled to balance family responsibilities with their studies (Pwavra et al., 2025). The resulting stress impacted academic performance and clinical engagement. Many of these students requested more flexible scheduling and enhanced support services. Similarly, another study reported that mature healthcare students, particularly those with family responsibilities, experienced greater challenges in managing time (Asadi et al., 2023). However, they also tend to show higher perseverance due to their life experience. These findings are echoed in the local context, where it was reported that nursing students at Mater Hospital in Nairobi found balancing clinical practice with family obligations to be overwhelming and often detrimental to their academic focus (Waswa, 2021).

The study also revealed that illness or stress prevented participants from attending clinical placements and fully engaging in the learning process. This highlights a significant challenge faced by many nursing students, especially those managing both academic and personal responsibilities. Illness and stress can greatly affect students' ability to perform well in clinical settings, which, in turn, can impact their learning experience and academic success. A study showed that clinical stress among final-year nursing students at the University of Nairobi was significantly linked to poor clinical performance and absenteeism (Kiptoo, 2023). A global study found that high stress levels led to burnout and decreased learning capacity among Saudi nursing students (Aboalshamat et al., 2021). However, emotional labor and stress varied depending on family structure, with students

from extended families showing more resilience due to better support systems, underscoring the role of family in moderating academic stress (Li et al., 2024).

The study also indicated that financial stress impacts clinical learning experiences. Self-funded students struggle to cover tuition and living costs while meeting clinical requirements. This stress can shift their focus away from developing essential clinical skills needed for nursing competence, as their thoughts may be preoccupied with financial concerns. Nursing schools should reconsider how they distribute scholarships, financial aid, and manage the costs associated with clinical training to address this challenge. Financial anxiety among UK nursing students was a primary reason many considered dropping out (Molesworth et al., 2025). Likewise, in Australia, financial pressures during unpaid placements led students to cut back on necessary expenses, including food, which affected their concentration and learning (Grant-Smith & De Zwaan, 2019). Locally, self-funded nursing students at the University of Nairobi reported difficulties affording transportation and meals during clinical rotations, resulting in frequent absences (Mwikali, 2023).

In applying Bandura's Social Cognitive Theory, it is clear that personal factors like work-life balance, illness, stress, and financial constraints significantly influence nursing students' clinical learning by impacting their self-efficacy, opportunities for observational learning, and clinical behaviours. Thus, clinical training strategies must incorporate these realities if they aim to improve outcomes. The research strongly supports the view that

academic institutions should go beyond traditional teaching methods and incorporate policies that support student well-being through flexible learning schedules, wellness programs, and financial assistance. To enhance clinical learning, nursing education programs must adopt a student-centered approach that incorporates flexible scheduling, mental health support, and financial aid systems tailored to the realities of mature and self-sponsored learners

5.2.2 Institutional Factors Affecting Clinical Learning Experiences

Institutional factors were also examined to understand how they influence clinical learning experiences, revealing that there was supportive supervision and mentorship. The mentorship provided by clinical instructors was often described as a crucial part of the clinical learning experience. The KNH support framework is vital for students' clinical learning. This research highlights the importance of institutional policies and support systems in providing quality learning experiences. A key finding is the value of mentorship; students greatly appreciate the guidance from clinical instructors and mentors at KNH, which helps them develop skills, confidence, professional identity, and critical thinking. Nursing schools should establish structured mentorship programs across all departments to ensure all students benefit, as mentorship is essential for personalized support in skills development and achieving learning goals. Without such programs, nursing students may miss these critical benefits, hindering their overall learning experience. These findings align with a study in China that examined Chinese nursing students' perceptions of their clinical learning environment (Zhang et al., 2022). The

research emphasized that mentor support is crucial for professional growth, with positive mentorship experiences motivating students to stay committed to the nursing profession. Additionally, the study noted that negative learning environments could negatively impact students' career decisions. Another study explored mentors' roles in clinical settings, stressing that effective mentorship is vital for successful learning among nursing students (Mikkonen et al., 2022). It identified key mentor competencies, including the ability to foster interactive relationships, support students' learning processes, and provide constructive feedback, all of which greatly improve the clinical learning experience. Another study in Mauritius looked at experienced nurses' perceptions of clinical mentoring (Foolchand & Maritz, 2020). The results showed that while mentoring was practiced, it was often informal with unclear role expectations, underscoring the need for structured mentorship programs, especially in resource-limited settings.

Peer learning was considered a major source of support, as more experienced students often mentor their peers, reinforcing a sense of collaboration within the clinical learning. This study further found that peer learning allows students to share their knowledge and experiences. Nursing training schools need to consider formalizing peer-to-peer support systems to enhance this collaborative learning and help students develop leadership and teaching skills. Peer learning fosters a sense of community and collaboration, which is crucial for effective learning. By formalizing these support systems, institutions can ensure that all students have access to this valuable resource, promoting a more inclusive and supportive learning environment. These findings are consistent with a meta-synthesis of

qualitative studies examining nursing students' experiences with peer mentoring during clinical placements (Jacobsen et al., 2022). The findings indicated that peer mentoring served as a significant source of support, with mentees experiencing reduced anxiety and increased confidence. Mentors benefited by reinforcing their knowledge and developing leadership skills. This reciprocal relationship enhanced the overall clinical learning environment. Similarly, a pilot study explored the potential of peer mentorship to improve clinical learning outcomes. Another study focused on peer mentoring in antenatal assessment found that mentees perceived mentors as supportive and encouraging (Subramanian & Johnson, 2017). The mentorship relationship motivated mentees to improve their clinical skills and work output, highlighting the effectiveness of peer mentoring in mastering specific clinical competencies. Another study in India focused on peer mentoring in antenatal assessment and found that mentees perceived mentors as supportive and encouraging. The mentorship relationship motivated mentees to improve their clinical skills and work output, highlighting the effectiveness of peer mentoring in mastering specific clinical competencies.

The study identified a policy conflict between the institution's need to provide services and its training goals. Sometimes, students are used to fill staffing gaps, which can harm their learning. A critical issue needing urgent attention is that nursing training schools considers review of staffing and student placement policies to ensure that learning objectives are prioritized and students are not exploited. Students often find themselves in clinical environments where the focus is mainly on patient care, which can overshadow their

educational needs. While clinical placements are crucial for practical learning, institutions must find a balance between service delivery and students' educational development. These findings align with a study in the United Arab Emirates on undergraduate nursing students' perceptions in clinical learning. While students valued diverse clinical experiences and support from instructors, they faced challenges such as differing perceptions of supervision and learning tensions related to academic workload. These challenges suggest that institutional priorities may sometimes favor service delivery, which can negatively impact the learning experience (Maalouf & El Zaatari, 2024). Overall, these findings show that nursing students' perceptions of their clinical learning environments are shaped by institutional policies that may prioritize service over education, affecting the balance between service responsibilities and learning opportunities.

Finally, while technology and advanced clinical resources at KNH are beneficial, there are issues with their accessibility and functionality. The participants highlighted that despite the institution being equipped with learning materials and resources, most of these machines are faulty or unavailable for learning, which limits their ability to learn and improve their clinical education. Technology and resources should be managed with a learner-centric approach. Consistent availability and proper maintenance are essential, and involving students in planning and providing feedback can help ensure these resources meet their needs and enhance their learning experience. These findings align with a study in Jordan, which found that nursing students faced challenges due to a lack of facilities, including essential equipment in the clinical setting. This scarcity hindered their ability to

practice and improve their clinical skills effectively (Al-Dweik et al., 2021). Another meta-analysis highlighted that the absence of adequate resources, such as functional equipment, posed significant challenges for nursing students during clinical training. This deficiency impeded their capacity to perform necessary procedures and gain hands-on experience. The issues observed regarding the availability and functioning of clinical learning resources are well-documented in existing studies. Addressing these problems is vital for improving the quality of clinical education.

In this study, mentorship from clinical instructors was a key institutional factor that positively influenced students' motivation and professional growth, aligning closely with Bandura's concept of observational learning. When students observe their mentors and peers performing clinical tasks, they not only acquire technical skills but also build a stronger sense of self-efficacy, or belief in their ability to succeed in similar situations. This was clear in the findings, where students described mentorship as a vital part of their clinical learning, boosting their confidence and motivation to pursue nursing as a career, much like the findings from Zhang et al. (2022).

Additionally, Bandura's theory highlights the importance of modelling and social interactions, which were evident in the peer-to-peer support observed in the clinical environment. Experienced students, acting as mentors, helped reduce anxiety and build confidence among their peers. However, the study also revealed that institutional policies can hinder effective learning, as the focus on patient care sometimes overshadows the

educational needs of students. According to Bandura, the environment significantly influences behaviour, and when the learning environment prioritizes service delivery over educational development, it can negatively impact students' ability to engage and learn effectively. This agrees with the study findings that faulty or unavailable equipment further impeded their ability to gain hands-on experience, which is crucial for clinical learning. This mismatch between institutional priorities and students' learning needs can lead to frustration and reduced self-efficacy, especially when students feel that they lack the necessary resources or opportunities to learn.

5.2.3 Perceptions and Experiences Regarding Clinical Learning Environment

The research findings established that the clinical learning environment at KNH played an integral role in shaping clinical learning experience. It was affirmed that the physical learning environment is well equipped and adequate to help them achieve their clinical learning and obtain the much-needed skills however faulty machines and overcrowding was a concern. A conducive physical environment, which includes well-maintained facilities, modern equipment, and appropriate resources, is essential in fostering an effective learning experience for nursing students. Although students generally find the physical infrastructure adequate, overcrowding remains a significant issue. Overcrowding undermines the effectiveness of the learning environment. Institutions must ensure an appropriate ratio of students to bed capacity to provide optimal learning conditions. These findings are comparable to those from a study in China, which revealed that a positive clinical learning environment, characterized by adequate supervision and resources,

supports the development of students' clinical competence and enhances their satisfaction with the learning experience (Zhang et al., 2022). Another study targeting first year nursing students highlighted that early exposure to a supportive clinical environment positively influences first-year nursing students' empathy levels and aids in shaping their professional identity (Wang et al., 2022).

Safety and comfort are key components of the clinical learning environment, and that these elements play an instrumental role in enhancing clinical learning, are well-supported by existing research. A positive, safe, and welcoming learning environment helps students feel more confident, reduces anxiety, and enables better focus on developing their clinical skills. Physical and emotional security are necessary for deep engagement and critical thinking. KNH provides a secure and welcoming space, encouraging students to take intellectual risks. A secure and comfortable environment is foundational for effective learning, and institutions should prioritize creating spaces where students feel safe and supported. These findings are comparable to a systematic review that sought to explore literature on the influence of the clinical learning environment on caring behaviours of undergraduate nursing students. The review suggested that elements within the clinical learning environment, such as supportive interactions and a nurturing atmosphere, significantly influence students' ability to develop caring behaviours, which are fundamental to nursing practice (Inocian et al., 2022). A study conducted at Fiji National University assessed the relationship between the clinical learning environment and learning outcomes as perceived by final-year nursing students. The study found that a positive

learning environment was associated with high levels of clinical learning outcomes, emphasizing the role of safety and comfort in educational settings (Masilaca et al., 2018). The studies reinforce our findings that a safe and comfortable clinical learning environment significantly enhances clinical learning. Such environments foster student engagement, reduce anxiety, and promote the development of essential clinical skills. Investing in creating and maintaining these environments is crucial for the effective education and professional growth of nursing students.

The findings of this study showed that most of the students felt valued and encouraged, with a positive emotional climate being instrumental in shaping their clinical learning experience. The supportive atmosphere at KNH, characterized by encouragement and peer solidarity, is vital for professional socialization. It fosters initiative and turns mistakes into learning opportunities, highlighting the powerful influence of institutional culture on the hidden curriculum. Institutions should cultivate this supportive culture to enhance learning outcomes. However, the high-stakes and emotionally charged nature of the clinical environment presents a paradox. It serves as both a place of support and a test of resilience. Students are developing emotional regulation strategies. The high-stakes environment is both a challenge and an opportunity, testing students' resilience while helping them develop emotional regulation strategies. Institutions should formally recognize and support these skills within the curriculum to better prepare students for the demands of the profession. Positive emotional environments contribute significantly to student motivation, engagement, and resilience, especially when faced with challenging tasks. Feeling valued

fosters, a sense of belonging and boosts self-confidence, crucial for clinical learning and professional development. These findings were consistent with those of a study which emphasized the importance of creating a psychologically safe learning environment where students feel included, empowered, and well within the clinical setting (Hardie et al., 2022). Such environments enable students to engage fully, ask questions, and admit uncertainties without fear of judgment, leading to enhanced learning outcomes from Another qualitative study among undergraduate students explored students' understanding of 'emotional well-being' and the factors influencing it within the learning environment. It was found that a supportive and positive emotional climate contributes significantly to students' emotional well-being, which in turn positively impacts their learning experience and academic performance (Tharani et al., 2017).

Nursing students often face stressful clinical settings that require them to not only manage their clinical tasks but also their emotional responses. Developing coping mechanisms to manage stress is critical to maintaining focus, well-being, and high performance in these environments. Similar findings were observed in a study in United Arab Emirates investigating stressors and coping strategies for nursing students revealed that three main themes describing students' stress and coping strategies during clinical training: managing expectations, bridging the theory-practice gap, and learning to cope (Dias et al., 2024). Effective coping strategies included problem-solving and seeking social support, while negative coping mechanisms involved avoidance behaviours. The study emphasized the need for nursing faculties and clinical agencies to recognize these stressors and assist

students in developing positive coping strategies. Another study that explored the relationship between anxiety, perceived stress, and coping strategies among nursing students during clinical training expressed a moderate level of stress among participants, with significant correlations between perceived stress and both state and trait anxiety (Onieva-Zafra et al., 2020). Students predominantly employed problem-solving, social support, and cognitive restructuring as coping strategies. The study highlighted the importance of preparing students to handle clinical challenges effectively.

According to Bandura, self-efficacy influences students' motivation and persistence. Financial and emotional stressors may lower students' belief in their ability to succeed, thereby diminishing their engagement in clinical tasks. The clinical environment at KNH has both strengths and constraints. This prompts a broader discussion on how institutions can create a climate that profoundly shapes skills development, character, resilience, and the attainment of clinical learning objectives. A well-rounded learning environment is essential for the holistic development of nursing students, and institutions should intentionally create a climate that supports emotional, psychological, and social well-being.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The findings of this study explicitly confirm that the clinical learning experiences of Higher Diploma nursing students at Kenyatta National Hospital (KNH) are essentially shaped by a dynamic interplay of three key factors: personal, institutional, and clinical learning environment factors.

Specifically, students' personal factors, including work-life balance, health, and financial stability, are critical in influencing their clinical learning. Students who successfully manage these factors tend to demonstrate greater resilience and are more likely to thrive in achieving clinical learning outcomes. However, those who face ongoing personal difficulties may experience diminished focus and performance in clinical settings. Furthermore, institutional factors, particularly effective mentorship and peer learning, is vital for guiding students and building their confidence, while existing policy gaps and resource limitations significantly impede their learning. Lastly, the physical and psychological perception and experiences of the clinical learning environment, such as adequate space, safety, a supportive atmosphere, and opportunities for emotional resilience, are paramount to fostering effective, anxiety-free learning.

This study conclusively demonstrates that these interconnected elements collectively influence the students' experiences as they develop essential practical skills and confidence. These findings provide a foundational basis for designing targeted strategies

aimed at improving clinical education and student support systems at KNH and similar institutions in Kenya.

6.2 Recommendations

Based on the findings regarding the clinical learning experiences of Higher Diploma nursing students at Kenyatta National Hospital (KNH), the following recommendations are proposed to enhance clinical learning experiences, inform nursing education, guide policy development, and inform future research.

6.2.1 Recommendations for Clinical Learning Practice and Nursing Education

The study suggests several considerations to enhance the clinical learning experiences of higher diploma nursing students at Kenyatta National Hospital (KNH). One consideration is the development and implementation of more flexible clinical rotation schedules, which could include varied shift options and clear mechanisms for managing excused absences with opportunities for makeup sessions. Establishing a structured, hospital-wide mentorship program may also be beneficial. Such a program could formally link students with experienced nurses and clinical instructors, supported by guidelines for regular feedback, skill demonstrations, and constructive guidance.

Integrating formal peer-assisted learning sessions into clinical rotations may further promote collaboration, knowledge sharing, and mutual support among students. Additionally, the introduction of a comprehensive system for auditing and maintaining

medical equipment, particularly devices essential for student learning, could ensure consistent access to functional tools for hands-on practice. This might be complemented by a rapid reporting and repair protocol to address equipment faults, especially for advanced medical devices.

Another important consideration is the provision of training for clinical staff, including nurses, instructors, and preceptors, focused on fostering a supportive and non-judgmental learning environment. This training could emphasize the delivery of constructive feedback and the use of mistakes as valuable learning opportunities. Ultimately, developing structured mental health and well-being programs for students may help alleviate stress, foster resilience, and enhance overall academic and clinical performance.

6.2.2 Recommendations for Policy

The study suggests that the KNH administration and the School of Nursing collaborate to review and revise existing policies, clearly delineating dedicated learning time for higher diploma students during clinical placements, separate from routine service delivery responsibilities. This would help ensure that students are not primarily utilized to cover staff shortages.

Additionally, the study recommends formulating an institutional policy to outline mechanisms for student financial support. This could involve actively collaborating with external partners and sponsors to meet students' financial needs and providing guidance to help higher diploma nursing students access higher education loans.

6.2.3 Recommendations for Research

The study suggests that future research is needed to better understand the specific factors influencing clinical learning at KNH. Nurse educators and scholars are encouraged to investigate the direct impact of financial stress on students' clinical learning experiences and explore practical ways to reduce these effects. A longitudinal study could also help determine how students' physical and mental health relate to their clinical learning experiences.



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APPENDICES

Appendix i: Informed Consent Form

Title: An Exploration of Clinical Learning Experiences for Higher Diploma Nursing Students at Kenyatta National Hospital

Investigator: Mary Jebichii Kipsoi Signature: 

Supervisors: Prof. Tammary Esho Signature: 

Dr. Serah Wachira Signature: 

Introduction: I am a Health Profession Education Master's student at AMREF International University, conducting an explorative research on clinical learning experiences for higher diploma nursing students at KNH.

Purpose of the study: The purpose of the study is to understand the factors influencing the clinical learning of higher diploma nursing students at the Kenyatta National Hospital.

Description of the research: The research seeks to explore the clinical learning experiences for higher diploma nursing students at the Kenyatta National Hospital; therefore, I invite you as a participant to express your views and opinions about the research

subject through the one-on-one interview. With your consent, the researcher requests your time and participation in the interview guided by prompts based on the research objectives.

Volunteering: Participation is completely voluntary, and only willing participants will be recruited for the study. By participating, you are giving the researcher permission to collect information from you. Your decision to decline to participate in this study has no consequence on your academic performance.

Process: An opportunity will be provided to you to ask questions and clarify any concerns before giving consent to participate. Your participation will involve a one-to-one interview guided by designed prompt questions on an interview guide which will take 30-45 minutes. The interview will be audio-recorded and notes taken during the interview. Confidentiality will be maintained.

Risks: The risk associated with this study is the breach of confidentiality where sensitive information shared may be disclosed. There are no other anticipated risks; however, if you suffer emotional or psychological distress from participating in this study, you can withdraw from the study at any time without facing any consequences or penalties.

Confidentiality: The information you provide will remain confidential. Only the researcher will have access to it, and no identifying information will be used in the presentation or publication of the results.

Benefits: Your participation will contribute to the existing knowledge in higher diploma nursing education. The findings will be used to improve the clinical learning experiences for higher diploma nursing students in the future.

Sharing of results: The results will be shared with the KNH fraternity for their reference and may be published.

Withdrawal: You are free to decline or withdraw from the study at any time without facing any consequences. There will be no financial costs or compensation for participation or non-participation. On withdrawal, your views and opinions recorded thus far will be discarded.

Approval: This study has been approved by the relevant bodies. If you have any questions or concerns, you may contact the researcher directly or the AMREF Ethics and Research Committee. You can also contact the principal researcher, Mary Jebichii Kipsoi on cell: 0721347669, email: kipsoimary12@gmail.com

Relevant ethical body & Supervisors' Contacts

The Research Officer	First supervisor	Second supervisor
Amref Health Africa Kenya		

Tel: +254 20 6994000	Prof.Tammary Esho	Dr.Serah Wachira
Mobile No: 0795746777	+254722319369	+254722635468
Fax: +254 20 606340	tammary.esho@amref.org	serahwachira45@gmail.com
P.O Box 30125-00100		
Nairobi, Kenya		

Researchers declaration

I have fully disclosed all the relevant information regarding this study to the study respondent

Researcher Signature..... Date.....

Respondent declaration

I acknowledge that I have read and understood the information provided. I am over 18 years old and voluntarily consent to participate in this research conducted by Kipsoi Mary. I am free to ask questions or withdraw from the study at any time.

Participant's Signature..... Date.....

Research Assistant: Name..... Signature..... Date.....

Appendix ii: Interview Guide for One-on-one In-depth Interview

Study Title: An Exploration of Clinical Learning Experiences of Higher Diploma Nursing Students at Kenyatta National Hospital, Kenya.

My name is Mary Jebichii Kipsoi, a Master of Health Profession Education student at Amref International University. As part of my academic endeavours, I am conducting a research study among higher diploma nurses at KNH during their clinical practice to explore their clinical learning experiences. Your participation in this study is greatly valued and all information provided will be treated confidentially. To gather data for this study, I have utilized an interview guide which serves as the primary tool for data collection. I kindly request you to voice out your opinion truthfully and to the best of your ability to ensure accurate results.

Instructions

The research assistant makes the respondent aware of the major and specific objectives of the study before the interview.

The research assistant appreciates the respondents for their time, willingness to participate, and contribution in the study.

Study title: Exploring Clinical Learning Experiences for Higher Diploma Nursing Students at Kenyatta National Hospital, Kenya.

Questions and prompts

Main Questions	Prompts
<p>1. Tell me about yourself.</p>	<p>Your Age Your Marital status Your Religion Your academic progression Professional progression</p>
<p>2. What personal factors influence clinical learning for higher diploma nursing students at KNH?</p>	<ol style="list-style-type: none"> 1. As an individual, what can you say about the aspects that influence your clinical learning? 2. Tell me about your learning style in the clinical site. 3. How do you perceive your self-confidence during clinical learning at KNH? 4. What motivates you during your clinical learning? Can you describe a situation where you felt particularly motivated to engage in clinical learning at KNH? 5. What do you think about your ability to understand and manage your emotions? How do you think it contributes to effective clinical learning at KNH? 6. How do you provide and receive feedback during your clinical learning at KNH? 7. What's your opinion on how being part of KNH affects your clinical learning?

<p>How do institutional factors influence the higher diploma nursing students clinical learning experiences at KNH?</p>	<ol style="list-style-type: none"> 1. From your point of view, how would you describe the KNH culture in supporting clinical learning? 2. What's your opinion on the equipment and technology for clinical learning at KNH? 3. What do you have to say about resources for your clinical learning at KNH? 4. Could you describe the language of communication among clients/patients at KNH? 5. In your views, how would you describe the policies addressing the balance between clinical service delivery and clinical learning in your daily routine at the KNH clinical site? 6. What do have to say about the accessibility of unit in-charges at the KNH clinical site where you are undertaking your clinical learning? 7. If given an opportunity during your clinical learning at KNH, what guideline would you change?
<p>3. What are the perceptions and experiences of higher diploma nursing students regarding the clinical learning environment at Kenyatta National Hospital (KNH)?</p>	<ol style="list-style-type: none"> 1. In your view, what do you have to say about the physical environment for your clinical learning at KNH?

	<ol style="list-style-type: none"> 2. Comment on the student population at KNH during your clinical learning experience. 3. Could you share your experience on communication during your clinical learning at KNH? 4. I would like to hear your thoughts on clinical educators in the clinical setting at KNH. 5. What characteristics would you like to see from the qualified staff and other health professionals at the KNH clinical area? 6. How do interactions with mentors at KNH contribute to your clinical learning? 7. How would you rate your hands-on clinical learning practice opportunities at KNH?
<p>Is there any other information you would like to add/share regarding our discussion? If so kindly proceed.</p>	<p>If there is none, then I would like to thank you for taking part in this study</p>

We appreciate your participation in this study.

Appendix iii: Focus Group Discussion (FGD) Guide

Study Title: Clinical Learning Experiences for Higher Diploma Nursing Students at Kenyatta National Hospital, Kenya

Introduction by the Research Assistant

My name is Mary Jebichii Kipsoi, a Master of Health Professions Education student at Amref International University. I'm conducting a research study to explore the clinical learning experiences of higher diploma nursing students at Kenyatta National Hospital.

You have been invited to this focus group discussion to help us understand your experiences during clinical practice.

There are no right or wrong answers, and all responses are respected. Please feel free to agree, disagree, or add to what others say. Everything discussed here will be confidential.

Instructions to Research Assistant

Briefly explain the purpose of the study and the structure of the discussion

Establish ground rules: respect, confidentiality, no interruptions, one speaker at a time.

Encourage equal participation from all group members.

Take notes or use an audio recorder (with participant consent).

Section A: Participant Demographic Characteristics (for each participant)

Collect brief background information before the discussion begins

1. Age group:

- 18–29 years 30–39 years 40–49 years 50 years and above

2. Marital status:

- Married Not Married

3. Religion:

- Christianity Muslim Hindu None Other (Specify):

Section B: Focus Group Discussion Questions and Probes

Main Questions	Prompts
2. What personal factors influence clinical learning for higher diploma nursing students at KNH?	<ol style="list-style-type: none">1. What's your opinion on how being part of KNH affects your clinical learning? What personal experiences have influenced how you learn during clinical placement at KNH?2. How do your learning styles vary, and how do they affect your clinical practice?3. Can anyone share an example of how their self-confidence affected their clinical learning?4. What factors keep you motivated while on clinical placement?5. How do emotions affect your learning during clinical experiences?

	<ol style="list-style-type: none"> 6. How comfortable are you giving and receiving feedback in clinical areas? 7. How do you feel being part of the KNH clinical team? Does it affect your learning?
<p>How do institutional factors influence the higher diploma nursing students clinical learning experiences at KNH?</p>	<ol style="list-style-type: none"> 1. What is your perception of KNH's support for student learning? 2. Do you think the hospital has adequate resources, equipment, and technology for effective learning? 3. How does the availability (or lack) of these resources affect your practice? 4. How does the hospital's language and communication culture influence your learning? 5. Are the policies supportive of balancing service delivery with learning? 6. How approachable and supportive are unit in-charges? 7. If you could suggest a change in clinical learning guidelines or support structures, what would it be?
<p>3. What are the perceptions and experiences of higher diploma nursing</p>	<ol style="list-style-type: none"> 1. How would you describe the physical environment where you learn at KNH? 2. How does the number of students in your placement affect your learning?

<p>students regarding the clinical learning environment at Kenyatta National Hospital (KNH)?</p>	<ol style="list-style-type: none"> 3. What are your experiences communicating with staff, peers, and patients? 4. How supportive have the clinical educators been in your placements? 5. What qualities do you value in qualified staff and health professionals you work with? 6. How have your interactions with mentors shaped your learning? 7. How would you rate your hands-on clinical practice experiences?
<p>Would anyone like to add or build on that?</p> <p>Do others feel the same or differently</p>	<p>If there is none, then I would like to thank you for taking part in this study</p>

Thank you all for sharing your experiences and thoughts

Appendix iv: Approvals and Authorization Licenses

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 789665	Date of Issue: 11/January/2025
RESEARCH LICENSE	
	
This is to Certify that Ms. Mary Jebichii Kipsoi of Amref International University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: Determining Factors that Influence Clinical Learning for Higher Diploma Nursing Students at Kenyatta National Hospital Kenya for the period ending : 11/January/2026.	
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REF: AMREF ESRC P1780/2024

Amref Health Africa in Kenya

December 9, 2024

Mary Kipsui
Amref International University
P.O Box 27691-00506
Nairobi, Kenya
Tel: 0722718521
Email: mary.kipsui725@mcampus.amref.ac.ke

Dear Mary Kipsui,

RESEARCH PROTOCOL: DETERMINING FACTORS THAT INFLUENCE CLINICAL LEARNING FOR HIGHER DIPLOMA NURSING STUDENTS AT KENYATTA NATIONAL HOSPITAL, NAIROBI, KENYA

Thank you for submitting your protocol to the Amref Ethics and Scientific Review Committee (ESRC).

This is to inform you that the ESRC has reviewed and approved your protocol. Your application approval number is ESRC P1780/2024. The approval period is from December 9, 2024 to December 8, 2025, and is subject to compliance with the following requirements:

- a) Only approved documents (including informed consent, study instruments, advertising materials, material transfer agreements, etc.) will be used.
- b) All changes including (amendments, deviations, violations, etc.) are submitted for review and approval by Amref ESRC before implementation.
- c) Death and life-threatening problems and serious adverse events (SAEs) or unexpected adverse events whether related or unrelated to the study must be reported to the Amref ESRC within 72 hours of notification.
- d) Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to Amref ESRC within 72 hours.
- e) Clearance for export of biological specimen must be obtained from the relevant government authorities for each batch of shipment/export.
- f) 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.
- g) In case of late renewal, the Amref ESRC shall not be held responsible for any serious adverse events (SAEs) that may occur as a result of research activities that were carried out after the expiry of approval.
- h) Submission of an executive summary report within 90 days upon completion of the study to the Amref ESRC.
- i) All government regulations for prevention and control of the spread of COVID-19 including social distancing, provision of personal protective equipment for participants and research assistants should be adhered to during data collection. All research assistants should be monitored for COVID 19 symptoms and referred for testing in case they present with symptoms.



AMREF INTERNATIONAL UNIVERSITY
GRADUATE SCHOOL

Email: amiu.deangraduatestudies@amref.ac.ke

P.O Box 27691-00506
Nairobi, Kenya
Tel. 0206993236

Website: <https://amref.ac.ke/>

FROM: Dean, Graduate School

DATE: 9th October 2024

TO: Mary Jebichii Kipsoi

REF: AMIU/ARP/725-1

RE: APPROVAL OF RESEARCH PROPOSAL

Following your full proposal presentation on 26th September 2024, and subsequent review of your revised proposal, Graduate School Board has approved your research work entitled, "Exploring Clinical Learning Experiences for Higher Diploma Nursing Students at Kenyatta National Hospital, Nairobi, Kenya."

You may now proceed with data collection subject to clearance with Amref Ethical Scientific Review Committee and the National Commission for Science, Technology & Innovation. Please note that ethical approval is a mandatory requirement for all research process.

Additionally, you are required to update Graduate School of your progress after every three months by submitting progress reports using the forms attached.

Sincerely,

Dr. Dancan Irungu
Dean, Graduate School & Director Health Entrepreneurship
CC: Supervisors & HOD

Appendix v. Plagiarism Report

Mary Kipsoi

AN EXPLORATION OF CLINICAL LEARNING EXPERIENCES FOR HIGHER DIPLOMA NURSING STUDENTS AT KENYATTA N...

 Masters Thesis
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Mary Kipsoi

AN EXPLORATION OF CLINICAL LEARNING EXPERIENCES FOR HIGHER DIPLOMA NURSING STUDENTS AT KENYATTA N...

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