

Research



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 Mary Jebichii Kipsoi,  Serah Wanjiru Wachira, Tammary Esho

Corresponding author: Mary Jebichii Kipsoi, Department of Health Systems Management, School of Public Health, Amref International University, Nairobi, Kenya. kipsoimary12@gmail.com

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An exploration of clinical learning experiences of higher diploma nursing students at a tertiary referral hospital in Kenya

Mary Jebichii Kipsoi^{1,&}, Serah Wanjiru Wachira², Tammary Esho¹

¹Department of Health Systems Management, School of Public Health, Amref International

University, Nairobi, Kenya, ²Department of Nursing, School of Nursing and Midwifery, Aga Khan University, Nairobi, Kenya

&Corresponding author

Mary Jebichii Kipsoi, Department of Health Systems Management, School of Public Health, Amref International University, Nairobi, Kenya

Abstract

Introduction: clinical learning experiences are critical in shaping nursing students' competency and confidence. Despite comprehensive theoretical instruction, challenges persist in translating knowledge into practice, particularly in high-pressure clinical environments. An evaluation at a tertiary referral hospital revealed that many Higher Diploma nursing students felt unprepared for clinical evaluations and struggled with practical skills, yet limited local research exists to explore these experiences. The study aimed to explore the clinical learning experiences for Higher Diploma Nursing Students at Kenyatta National Hospital, Kenya. **Methods:** a qualitative descriptive design was employed. A purposive sample of 24 Higher Diploma nursing students participated in individual in-depth interviews (n=12) and two focus group discussions (n=12). Data were collected using a semi-structured interview guide and were analyzed thematically using a six-step process, ensuring adherence to trustworthiness principles, including credibility and confirmability. **Results:** three major themes emerged: The first was personal challenges and triumphs, with most participants reporting struggles related to work-life balance, health issues, and financial constraints. The second theme focused on institutional support mechanisms, as over half of the students described inconsistent mentorship, unclear policies, and limited access to learning resources. The third theme involved the clinical learning environment, where many students experienced overcrowded settings, emotional insecurity, and stress related to workload. These factors collectively influenced students' engagement and learning outcomes during clinical placements. **Conclusion:** clinical learning experiences among higher diploma nursing students are shaped by the interplay of personal, institutional, and environmental factors. Tailored support systems, structured mentorship, and learner-centered policies are essential to enhancing the clinical learning environment. Further research is recommended to assess how

these factors impact learning outcomes and professional development.

Introduction

Globally, nursing students encounter both positive and negative experiences upon entering the clinical learning environment. These experiences significantly affect their motivation, confidence, and learning outcomes [1]. Despite the pivotal role of clinical practice in developing essential competencies, student nurses continue to face persistent challenges, including limited access to resources, inadequate supervision, and insufficient support from clinical staff [2,3].

Regionally, similar barriers have been reported across various African countries. In South Africa, Fadana and Vember [4] found that nursing students reported overcrowded clinical spaces, hostile interpersonal interactions, and emotional distress due to negative staff attitudes. In Ghana, Amoo *et al.* [5] observed that students often acquired clinical skills through observation and imitation rather than structured supervision. While this approach sometimes improved clinical skills, it often failed to meet key clinical learning objectives. These findings highlight inconsistencies in clinical learning experiences across institutions and raise concerns about the effectiveness of current clinical training practices.

Locally, research on clinical learning has largely focused on undergraduate nursing students, with limited attention to higher diploma students. Challenges such as inadequate supervision, limited resources, and restricted access to equipment have been identified [6]. According to the Nursing Council of Kenya (NCK) guidelines, the clinical learning environment should support access to necessary equipment and adhere to defined scopes of practice [7]. Despite structured curricula, issues such as overcrowded sites, limited supervision, resource shortages, and inconsistent assessments hinder effective learning [8,9]. A disconnect between theory and practice, along with variable mentorship, further affects students'

confidence and skill acquisition [10]. Preliminary feedback from higher diploma students at a tertiary hospital highlights gaps in preparation, competency development, and support. The lack of focused research on their clinical experiences limits efforts to strengthen training and practice. This study seeks to explore personal, institutional, and environmental factors influencing clinical learning among higher diploma nursing students in a Kenyan teaching hospital, to gain insights to inform curriculum improvement, strengthen faculty support, and enhance clinical education practices.

Methods

Research design: the study employed a qualitative descriptive design chosen for its ability to provide an in-depth exploration of personal, institutional, and clinical learning environment factors [11]. This design is suitable for this study, for it enables the exploration of under-researched phenomena with findings directly applicable to practice [12].

Study setting: 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 care, renal care, oncology, perioperative care, trauma care, and emergency care. KNH is a central training hub for institutions, including the University of Nairobi, Kenya Medical Training College (KMTC), 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. The diversity of specialties offers a wide range of clinical exposures, enabling the capture of diverse learning experiences, challenges, and learning dynamics across different clinical contexts.

Study population: the study included all nursing students enrolled in Higher Diploma programs at Kenyatta National Hospital (KNH), specifically in Critical Care, Peri-operative, Neonatal, Nephrology, Trauma and Emergency, and Oncology Nursing, who provided informed consent. Those who had taken academic leave and higher diploma nursing students from other training institutions, taking their clinical teaching at KNH, were excluded. A total of 24 participants were purposively recruited from the cohort of 101 student nurses enrolled in the September 2024/2025 academic year, undertaking Higher Diploma nursing programs in Critical Care, Peri-operative, Neonatal, Nephrology, Accident and Emergency, and Oncology Nursing. The sample comprised two Focused Group Discussions (FGDs), each consisting of six participants, and 12 In-Depth Interviews (IDIs), selected to ensure diverse representation of experiences among the Higher Diploma nursing students at the KNH School of Nursing.

Sampling procedure: a purposive sampling technique, incorporating the principle of maximum variation, was employed to select 24 participants from the cohort of 101 Higher Diploma Nursing Students enrolled in the September 2024/2025 academic year at Kenyatta National Hospital (KNH). The aim was to ensure broad representation across the six specialized nursing programs offered at KNH: Critical Care, Peri-operative, Neonatal, Nephrology, Accident and Emergency, and Oncology Nursing. Of the 24 participants, 12 were selected for one-on-one in-depth interviews based on their willingness to articulate personal experiences in detail and availability during the data collection period. The remaining 12 participants were selected from the class leaders, who represent the six specialized nursing courses offered at KNH. To minimize potential bias, the selection of class leaders was guided by class nomination records, and care was taken to ensure that participation was voluntary and that leaders had diverse viewpoints, not just those aligned with faculty or administration. These 12 participants were divided into two Focused

Group Discussions (FGDs) of six participants each, enabling a wide range of interactions and perspectives. The combination of in-depth interviews and FGDs reflects method triangulation, enhancing the credibility and depth of the data by capturing both personal narratives and collective viewpoints.

Data collection instrument: an interview guide consisting of open-ended questions was designed to align with the study objectives and facilitate an in-depth exploration of the clinical learning experiences of higher diploma nursing students. 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 Kenyatta National Hospital Research Department, were invited to review the tool to ensure the content validity of a qualitative data collection instrument. For clarity, they evaluated the questions for linguistic simplicity, precision of expression, avoidance of technical jargon, and the logical organization to support a natural conversational flow. Based on the experts' feedback, the guide was refined to improve the phrasing and structure of the questions, thereby enhancing its effectiveness in generating rich and meaningful qualitative data. This validation process was essential in ensuring that the instrument was both methodologically sound and capable of capturing authentic student experiences, hence contributing to the overall rigor and credibility of the study [13].

Data collection procedure: qualitative data were collected through two modalities: Focused Group Discussions (FGDs) and individual in-depth interviews among student nurses. To minimize potential bias from the researcher's close relationship with participants, two trained research assistants conducted the one-on-one interviews. Approval was sought from the relevant authorities before commencing interviews with purposively selected students. Participants were informed that sessions would be audio-recorded solely for transcription and analysis purposes;

recording only commenced once explicit permission was granted. Interviews and FGDs were conducted in reserved conference rooms within the clinical units at KNH, chosen for their privacy and quiet environment. Rooms were pre-booked, equipped with comfortable seating and a small table for note-taking, and displayed a "Do Not Disturb" sign to prevent interruptions. During each session, one member of the research team facilitated the interview in English following the standardized guide, while another assistant researcher captured nonverbal cues and supplementary observations in field notes. All nonverbal and contextual details were logged in a dedicated study notebook.

Data analysis and presentation: the qualitative data derived from the responses to the interview guide were analyzed thematically. The themes were analysed guided by the six-step process for identifying, interpreting, and reporting themes in data [14]. The original recordings were transcribed verbatim. For example, when a participant stated, "*managing work and studies at the same time is challenging*," this was coded as "*personal challenge*"; the codes were then clustered into broader categories based on shared meaning. To gain a deeper understanding of the data, the researcher thoroughly read through the transcript multiple times, referring to relevant literature to aid in interpreting non-verbal cues and contextual nuances. This process ensured that the data were accurately captured and organized in a manner suitable for meaningful analysis. Deductive coding was utilized, where predetermined codes were established according to the research-specific objectives. Two independent qualitative researchers reviewed the transcripts and generated codes separately. The coding outputs were then compared and discussed in a consensus meeting to resolve discrepancies and ensure consistency 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 identifying and exploring emerging themes easier.

Ethical considerations: ethical approval to conduct the study was obtained from the Amref Ethics and Scientific Review Committee (ESRC), under approval number ESRC P1780/2024, as well as from the National Commission for Science, Technology, and Innovation (NACOSTI). The researcher obtained permission from the Head of the School of Nursing to conduct one-on-one and focus group interviews with student nurses. The study's purpose, goals, and procedures were clearly and respectfully explained to all potential participants, who were assured that participation was entirely voluntary and without consequences for non-participation. Informed written consent was obtained from those who agreed to take part after all questions were addressed. The study adhered to ethical principles of autonomy, beneficence, non-maleficence, and justice. Participants' privacy and confidentiality were upheld, and all collected data were securely stored and accessible only to the research team [15].

Results

This qualitative study at Kenyatta National Hospital explored the clinical learning experiences of higher diploma nursing students. Twelve students participated in individual in-depth interviews, and two focus group discussions were conducted, each comprising six participants.

Demographic characteristics of higher diploma nursing students: Table 1 presents the demographic characteristics, though not part of the study objectives, which were collected to provide contextual understanding of participants. The mean age of the participants was 31.2 ± 3.4 years. Most students were married (62.5%) and identified as Christian (83.3%).

Emerging themes: three main themes emerged from the data, reflecting the diverse aspects of the students' clinical learning experiences. The first was personal challenges and triumphs, with most

participants reporting struggles related to work-life balance, health issues, and financial constraints. The second theme focused on institutional support mechanisms; over half of the students described inconsistent mentorship, unclear policies, and limited access to learning resources. The third theme involved the clinical learning environment, where many students experienced overcrowded settings, emotional insecurity, and stress related to workload. The "weights" refer to how often a theme was mentioned across interviews and focus groups, indicating its relative importance for these themes and their sub-themes. As shown in Table 2, institutional support structures had the highest weight (53), followed by personal challenges and triumphs (42), and holistic learning environment (22). Table 3 further details the themes and their corresponding sub-themes.

Personal factors influencing clinical learning experience for higher diploma nursing students at KNH: personal factors had a notable influence on the clinical learning experiences of students, with three key sub-themes emerging. A concern among the participants was the difficulty in balancing work, study, and family obligations. One participant shared, *"I'm juggling work and study, which often leads to stress. Balancing clinical hours with my work schedule is a constant challenge."* (interview participant 3). Another added, *"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 noted, *"I have family responsibilities, and sometimes my kids get sick, which affects my clinical placement attendance. I have to attend to them before heading to the hospital."* (Interview participant 9).

These challenges were echoed in group discussions, where the adult nature of the learners was emphasized: *"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 other side, and from this other side, you will try to do it so still. So, learning won't be as smooth as much (FGD 1). In addition, some participants spoke about how personal health challenges, both physical and mental, influenced their clinical engagement. One participant remarked, *"health issues like being unwell affect my ability to attend clinical and thus, I miss some experiences"* (interview participant 2). Another shared, *"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). These disruptions often led to missed opportunities for hands-on practice, slowing progress in skill acquisition. Financial strain, among self-sponsored students, was another personal barrier. The burden of tuition fees and other expenses creates anxiety that detracts from learning. One student explained, *"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). Clinical learning, therefore, is influenced by real-life challenges and other limitations students face outside the classroom.

Institutional factors affecting clinical learning experience for higher diploma nursing students at KNH: participants also reflected on how institutional frameworks and practices at Kenyatta National Hospital (KNH) shaped their clinical learning experience. From their narratives, four critical sub-themes emerged: supportive supervision and mentorship, peer learning, policy-related pitfalls, and access to learning resources. Many students underscored the positive impact of guidance from clinical mentors and instructors. One participant noted, *"The supportive supervision by the clinical mentor motivates me. When I perform tasks under their guidance, I gain more confidence and learn faster."* (Interview participant 6). This was echoed in a focus group where a participant shared that, *"KNH School of Nursing is supportive to the students... you come here to school and are taught, and in the wards,*

you are taught again. In addition, practical sessions at KNH have numbers, so it becomes easy to practice" (FGD 1). These sentiments indicate that mentorship, when well-structured, can significantly enrich the clinical learning experience. Peer learning also featured prominently in students' learning. Many participants described learning from senior staff nurses and peers as a valuable addition to formal instruction.

One remarked, *"I usually depend on the primary nurse for the duties, I learn a lot from them"* (interview participant 2), while one of the focus groups affirmed, *"Learning from others has been a key part of my clinical learning."* (FGD 2). However, participants also expressed concern about institutional policies that they felt undermined the primary purpose of clinical experiences. One participant emphasized, *"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). Another added, *"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). On resource availability, one student explained that, *"The technology and access to computers at KNH allow us to research and learn more efficiently."* (interview participant 6). On the contrary, another pointed out, *"There is a good variety of equipment available, but sometimes, not functioning, which hampers patient care and our learning."* (interview participant 3).

Clinical learning environment factors influencing clinical learning experience for higher diploma nursing students at KNH: participants emphasized the influence of the broader clinical learning environment, especially its physical, emotional, and psychological components. The main theme here was the importance of a holistic learning environment, with sub-themes including space and facilities, safety and comfort, emotional support, and stress management. Generally, the students regarded KNH as a well-equipped

institution, but overcrowding sometimes limited access to hands-on opportunities. One student observed, *“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). On emotional and psychological comfort, one participant stated, *“The environment at KNH is very welcoming, which makes it easier to learn.”* (interview participant 5). Where’s another said that, *“There is a lot of emotional support... mistakes, they are used as learning opportunities, not to criticize.”* (Interview participant 5) Finally, participants acknowledged the emotional strain that clinical settings can impose as one student put it that, *“It is important to manage my emotions, especially when dealing with difficult situations, such as a patient’s passing.”* (Interview participant 9).

Discussion

The findings of this study reveal several factors that shape the clinical learning experiences of Higher Diploma Nursing students at Kenyatta National Hospital (KNH). Demographic data added contextual depth and enriched interpretation, though not a primary focus of analysis. One of the significant findings is the difficulty students face in balancing professional duties, family responsibilities, and academic obligations. This balancing act underscores a structural mismatch between the rigid, traditional structure of nursing education programs and the lived realities of adult learners, many of whom return to school while maintaining employment and managing family life. This disconnect between institutional expectations and student realities is not unique to Kenya. Similar findings have been reported elsewhere; for instance, a study in Ghana found that nursing students who were married or had children experienced substantial difficulty managing both family obligations and academic requirements, leading to heightened stress and diminished academic performance [16]. However, the persistence of this issue in KNH can be partially

attributed to the slow adoption of flexible academic structures such as modular scheduling, hybrid learning models, and extended placement options that allow for part-time clinical attendance without academic penalties. The study also revealed that illness and stress significantly hindered students’ ability to attend clinical placements and engage meaningfully in learning.

The absence of integrated wellness programs or mental health services within nursing schools creates a systemic vulnerability, where stress and illness go unaddressed until they escalate to burnout. These health-related challenges, encompassing both physical illness and psychological stress, compound the difficulties of balancing academic and personal responsibilities. These factors often result in absenteeism and reduced ability to focus, interact meaningfully with supervisors, or apply theoretical knowledge in practice. These findings are consistent with research from other low- and middle-income countries (LMICs). For example, a study in Nigeria [17], found that stress related to workload, long clinical hours, and personal obligations led to high levels of burnout among nursing students, significantly impairing their academic performance and clinical engagement. These findings underscore a critical yet often overlooked component of student wellness in nursing education. The absence of integrated mental health and wellness support in many training institutions points to a systemic gap. Nursing education programs must respond by embedding structured mental health services, stress management training, and on-site counseling into the curriculum to ensure that students are holistically supported throughout their clinical education. Financial constraints further complicated the clinical learning experiences of higher diploma nursing students at KNH. While these findings align with much of the existing literature on the detrimental effects of financial hardship on nursing education, a few studies present differing perspectives that highlight context-specific variations or resilience among student populations. For instance, research among

Iranian nursing students by Rafati *et al.* [18] showed that they face various clinical stressors, but coping strategies help reduce their impact and support learning. This suggests that the impact of financial strain can be mitigated by the presence of robust institutional support systems. Institutional factors were also explored, particularly in the supportive supervision and mentorship of students' clinical learning experiences at KNH.

One outstanding finding is that participants frequently described mentorship from clinical instructors as crucial to their skill acquisition. Although peer support helped students cope with stress and navigate clinical tasks, an over-reliance on informal supervision raises concerns. This points to a systemic issue in KNH where mentorship remains underdeveloped, fragmented, and inconsistently implemented, often depending on the goodwill of individual preceptors rather than institutional mandates. Without proper oversight, students may cause errors, develop unsafe practices, or miss critical learning objectives. Some students demonstrated adaptive coping mechanisms and emphasized the importance of supportive mentors and peers in cushioning the effects of stress. Therefore, while much of the existing literature focuses on the negative impacts of stress, this suggests a potential area for leveraging peer support systems within clinical training programs. A study conducted in Iran, Aliakbari *et al.* [19] stated that structured mentorship programs are also necessary to ensure equitable access to personalized learning support, goal-setting, and constructive feedback for every student.

A major strength of this study is its attention to the unique experiences of higher diploma nursing students, a group often underrepresented in nursing education research. The use of qualitative methods in the study captures rich data on the students' lived realities. One key concern is the potential for social desirability bias, given the researcher's professional relationship with participants. This may have influenced participants

to present their experiences more favorably or cautiously. To mitigate this, trained research assistants conducted interviews. Findings were interpreted with awareness that some responses may reflect perceived expectations. These findings suggest an urgent policy makers and institutional need for learner-centered reforms that incorporate flexible academic models, targeted financial and mental health support, and structured mentorship systems. Addressing these areas requires a multi-level response from institutional leadership to the national nursing education regulator. Despite its contributions, the study raises several questions that merit further investigation. For instance, how do financial and psychological support influence student clinical learning outcomes? What elements of peer and mentor support are most beneficial in clinical learning? In the future, research should explore these dynamics through multi-site or mixed-method longitudinal studies to build a more comprehensive understanding of clinical learning outcomes.

Conclusion

The clinical learning experiences of higher diploma nursing students at Kenyatta National Hospital (KNH) are significantly shaped by personal, institutional, and environmental factors. Personal challenges, such as balancing demanding clinical requirements with family and work responsibilities, impede students' ability to remain fully engaged during clinical placements. Institutional factors such as supportive supervision and peer learning enhance skill acquisition; policy-related pitfalls and inconsistent access to functional learning resources hinder optimal clinical learning. The physical and emotional aspects of the clinical environments, including overcrowding and emotional strain, further affect students' learning experiences.

The following recommendations are proposed to improve the clinical learning experiences of Higher Diploma Nursing students at Kenyatta National Hospital (KNH): Develop and implement policy

guidelines that distinguish students' educational activities from routine staffing duties. These policies should explicitly prohibit the use of students as staff substitutes. KNH administration should collaborate with nursing faculty to monitor adherence to these guidelines, establish structured mentorship frameworks with defined responsibilities, including supervision and feedback. Institutions should develop mentorship training programs to motivate experienced nurses to take on supervisory roles and integrate stress management and emotional resilience training into the curriculum. These sessions should be facilitated by trained mental health professionals and aligned with students' clinical rotations, and address financial barriers through institutional and policy-level interventions. The School of Nursing, in partnership with KNH and key stakeholders such as the Ministry of Health and the Higher Education Loans Board (HELB), should advocate for policy changes that expand HELB coverage to postgraduate diploma students. Seek donor or alumni-funded bursaries targeted at clinical placement support, advance future research to inform policy and practice by conducting mixed-method longitudinal studies to examine how students' physical and mental health status influences their clinical learning outcomes, investigate the relationship between financial stress and clinical performance to identify targeted interventions and evaluate the effectiveness of structured mentorship and stress management programs in improving student satisfaction and competence.

What is known about this topic

- *Clinical learning is crucial for bridging theoretical knowledge with practical competencies, preparing nursing students as future professionals;*
- *Students face persistent challenges, such as a lack of confidence, inadequate supervision, limited resources, and emotional strain in clinical settings;*

- *Few studies have specifically focused on the clinical learning experiences of higher diploma nursing students in the Kenyan context.*

What this study adds

- *The study highlights the unique personal, systemic and clinical learning environment challenges faced by higher diploma nursing students;*
- *The study advocates for a student-centered approach in policy reforms to improve clinical learning;*
- *Emphasize the importance of structured mentorship and emotional safety in a clinical setting.*

Competing interests

The authors declare no competing interests.

Authors' contributions

The authors contributed to refining the concept, designing the study, and critically revising the content. All the authors have read and approved the final version of this manuscript.

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Tables

Table 1: demographic characteristics of higher diploma nursing students recruited from Kenyatta National Hospital (Kenya) from February 2025 to March 2025 (N =24)

Table 2: weights of themes and coding details derived from qualitative interviews with higher diploma nursing students (N = 24) at Kenyatta National Hospital, Kenya, conducted between February and March 2025

Table 3: themes and sub-themes emerging from qualitative interviews with higher diploma nursing students at Kenyatta National Hospital (N = 24), conducted from February to March 2025

References

1. Najafi Kalyani M, Jamshidi N, Molazem Z, Torabizadeh C, Sharif F. How do nursing students experience the clinical learning environment and respond to their experiences? A qualitative study. *BMJ Open*. 2019 Jul 26;9(7):e028052. **PubMed** | **Google Scholar**
2. Munangatire T, Tomas N, Asino HM. Nursing students' experiences and expectations of clinical learning: A qualitative study. *Nurse Educ Today*. 2023 May;124:105758. **PubMed** | **Google Scholar**
3. Panda S, Dash M, John J, Rath K, Debata A, Swain D *et al*. Challenges faced by student nurses and midwives in clinical learning environment - A systematic review and meta-synthesis. *Nurse Educ Today*. 2021 Jun;101:104875. **PubMed** | **Google Scholar**
4. Fadana FP, Vember HF. Experiences of undergraduate nursing students during clinical practice at health facilities in Western Cape, South Africa. *Curationis*. 2021 Apr 8;44(1):e1-e10. **PubMed** | **Google Scholar**
5. Amoo SA, Aderoju YB, Sarfo-Walters R, Doe PF, Okantey C, Boso CM *et al*. Nursing Students' Perception of Clinical Teaching and Learning in Ghana: A Descriptive Qualitative Study. *Nurs Res Pract*. 2022 Apr 18;2022:7222196. **PubMed** | **Google Scholar**
6. Otunga C, Kithinji W, Cheptum J. Assessing the supportive role of nurse educators in clinical learning of undergraduate nursing students at Kenyatta National Hospital, Kenya. *OSF Preprints* 2021;7(9):5-9. **Google Scholar**
7. Nursing Council of Kenya (NCK). The nursing Council of Kenya : Manual of Clinical Procedures in Nursing and Midwifery. 4th ed. Nairobi, Kenya. 2019.
8. Munyewende PO, Rispel LC, Chirwa T. Positive practice environments influence job satisfaction of primary health care clinic nursing managers in two South African provinces. *Hum Resour Health*. 2014 May 15;12:27. **PubMed** | **Google Scholar**
9. Owuor RA, Mutungi K, Anyango R, Mwita CC. Prevalence of burnout among nurses in sub Saharan Africa: A systematic review. *JBIEvid Synth*. 2020 Jun;18(6):1189-1207. **PubMed** | **Google Scholar**
10. Robert SN, Mutinda AK, Machira G, Kavulavu BM. An Assessment of Factors Influencing Clinical Learning among Diploma Nursing Students at Moi Teaching and Referral Hospital Eldoret, Kenya. *Open Journal of Nursing*. 2025 Aug 6;15(8):569-91.
11. Ames H, Glenton C, Lewin S. Purposeful sampling in a qualitative evidence synthesis: a worked example from a synthesis on parental perceptions of vaccination communication. *BMC Med Res Methodol*. 2019 Jan 31;19(1):26. **PubMed** | **Google Scholar**
12. Colorafi KJ, Evans B. Qualitative descriptive methods in health science research. *HERD: Health Environments Research & Design Journal*. 2016 Jul;9(4):16-25. **PubMed** | **Google Scholar**

13. Ngozika Ugwu S, Ogbonnaya NP, Chijioke VC, Esievo JN. Causes and effects of theory-practice gap during clinical practice: the lived experiences of baccalaureate nursing students. *Int J Qual Stud Health Well-being*. 2023 Dec;18(1):2164949. **PubMed** | **Google Scholar**
14. Naeem M, Ozuem W, Howell K, Ranfagni S. A Step-by-Step Process of Thematic Analysis to Develop a Conceptual Model in Qualitative Research. *Qual Inq*. 2023;22:1-18. **Google Scholar**
15. Tenopir C, Rice NM, Allard S, Baird L, Borycz J, Christian L *et al*. Data sharing, management, use, and reuse: Practices and perceptions of scientists worldwide. *PLoS One*. 2020 Mar 11;15(3):e0229003. **PubMed** | **Google Scholar**
16. Pwavra JB, Iddrisu M, Poku CA, Yawson AO, Mensah E, Oppong SS *et al*. A qualitative exploration of balancing family, work, and academics among female graduate nursing students in a lower-middle-income country. *Sci Rep*. 2025 Mar 10;15(1):8216. **PubMed** | **Google Scholar**
17. Francis-Edoziuno CC, Abiona MO, Odetola TD. Stress and coping strategies among nursing students in southwest Nigeria: Implications for policy and practice. *Pan Africa Science Journal*. 2024;3(03). **Google Scholar**
18. Rafati F, Nouhi E, Sabzevari S, Dehghan-Nayeri N. Coping strategies of nursing students for dealing with stress in clinical setting: A qualitative study. *Electron Physician*. 2017 Dec 25;9(12): 6120-6128. Aliakbari F, Parvin N, Heidari M, Haghani F. Learning theories application in nursing education. *J Educ Health Promot*. 2015 Feb 23;4:2. **PubMed** | **Google Scholar**
19. Aliakbari F, Parvin N, Heidari M, Haghani F. Learning theories application in nursing education. *J Educ Health Promot*. 2015 Feb 23;4:2. **PubMed** | **Google Scholar**

Table 1: demographic characteristics of higher diploma nursing students recruited from Kenyatta National Hospital (Kenya) from February 2025 to March 2025 (N =24)

Demographic characteristics	Frequency	Percentage
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

Table 2: weights of themes and coding details derived from qualitative interviews with higher diploma nursing students (N = 24) at Kenyatta National Hospital, Kenya, conducted between February and March 2025

Theme/subtheme	Frequency/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
Institutional support mechanism	53	
Supportive supervision	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 managing emotional challenges to stay focused

Table 3: themes and sub-themes emerging from qualitative interviews with higher diploma nursing students at Kenyatta National Hospital (N = 24), conducted from February to March 2025

Objective	Themes	Sub-themes
Personal factors influencing clinical learning	Personal challenges and triumphs	Work-life balance, personal health battles, financial constraints
Institutional factors	Institutional support mechanism structures	Mentorship from clinical instructors peer learning and mentorship policy pitfalls access to resources
Clinical learning environment factors	Holistic learning environment	Adequate space and facilities safety and comfort, supportive atmosphere stress and emotional resilience