



Issue no: 01 | Vol no: 05 | October 2025: 35-53

## Assessment of Entry-Level Nurse Training Adequacy for Preparing Nurses for Leadership Roles: Perspectives from Nurse Managers in Kenya

Annah Towett Chebet <sup>1</sup> Anne C. K. Ng'eno <sup>2</sup> Simon Kangethe <sup>3</sup>

### Article History

Received: 2025.08.16

Accepted: 2025.09.12

Published: 2025.10.15

(1.2.3) Moi University, Kenya.

Main author email: [mrstowett@gmail.com](mailto:mrstowett@gmail.com)

### Cite this article in APA

Chebet, A. T., Ng'eno, A. C. K., & Kangethe, S. (2025). Assessment of entry-level nurse training adequacy for preparing nurses for leadership roles: Perspectives from nurse managers in Kenya. *Editon consortium journal of research in medical and health sciences*, 4(1), 35-53. <https://doi.org/10.51317/ecjrmhs.v5i1.643>

### Abstract

This study assessed perceptions about the adequacy of entry-level nurse training in preparing Mid-Level Nurse Managers (MLNMs) for leadership roles in Kenya's South Rift and South Nyanza regions. Nurses' roles are determined by their education and licensure; therefore, upon completing their training, nurses should be equipped for leadership. However, many nurse managers feel inadequately prepared for their responsibilities. To evaluate nurses' readiness for these roles, a mixed-methods study was conducted in nine hospitals. Multi-level and purposive sampling identified 68 MLNMs and 7 Nursing Directors. Data collection involved self-administered questionnaires, Focus Group Discussions, and Key Informant Interviews. Quantitative data was examined by descriptive statistics, while qualitative data was analysed thematically. Most respondents felt only moderately prepared for leadership roles: 57 per cent were somewhat satisfied, 41 per cent satisfied, and 2 per cent dissatisfied. Training emphasised theory (65% lectures) with a one-month practicum. Bachelor's programs scored highest for leadership preparation ( $M = 4.26$ ), followed by higher diploma ( $M = 4.06$ ) and basic diploma ( $M = 4.03$ ). There is a considerable gap between the intended purpose of nursing practicum assessments and their effectiveness, with many respondents noting inadequacies. The study concluded that entry-level nurse training alone is insufficient due to its emphasis on theory, shift in assessment focus, and limited time for clinical experience in leadership and management. It recommends that nursing training institutions reevaluate their training methods, particularly in terms of the focus of clinical assessments and the assessment processes. These findings offer valuable insights for enhancing nurse leadership training and improving healthcare service delivery in Kenya.

**Key words:** Adequacy, curriculum, leadership, perspectives, training.



This article is distributed under the license of a [Creative Commons Attribution-Non Commercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/). It is permitted to be used, reproduced and distributed in line with Editon Consortium Publishing guidelines.



## INTRODUCTION

Nursing leadership plays a crucial role in ensuring safe and effective healthcare delivery (Stewart et al., 2022). However, global evidence suggests that entry-level nurse training often fails to equip graduates with the essential leadership skills they need. Leadership in nursing includes the ability to influence, guide, and support teams in achieving goals, involving decision-making, priority setting, communication, and role modelling (Joseph & Huber, 2021). Nurses constitute the largest cohort of healthcare practitioners in the world, playing a crucial role in healthcare outcomes. This underscores the need for effective leadership to guide this extensive workforce.

Developing leadership skills among healthcare professionals is vital for improving performance, ensuring succession planning, and meeting organisational goals (Turner, 2019). Studies conducted in both high- and middle-income countries consistently reveal that newly qualified nurses and their managers identify gaps in critical areas, such as decision-making, prioritisation, delegation, and confidence in leadership roles (Baharum et al., 2023). Research further showed that nurse managers often reported feeling unprepared for their demanding and complex roles, as the leadership training provided in entry-level nursing courses did not meet the expectations of nurse leadership (Frasier, 2019). These shortcomings are often linked to nursing curricula that emphasise theory over practical experience and provide few opportunities for clinical leadership exposure or mentorship. In this study, curriculum refers to the structured content and practical experiences in entry-level nursing education designed to develop professional knowledge and leadership skills (Makuch, 2017).

In sub-Saharan Africa, concerns about nursing training are prominent. In Uganda, studies indicate that pre-service nursing curricula often lack essential competencies, leaving graduates unprepared for clinical roles. This has led to calls for a shift from content-based to competency-based curricula, emphasising skills gained through experiential learning (Bvumbwe & Mtshali, 2018). Additionally, a cross-sectional study in Kampala revealed that even nurses in leadership positions displayed inconsistent leadership practices, with their training backgrounds affecting their performance (Nanyonga et al., 2020). Evidence from Kenya also suggests systemic issues; for example, nurse managers at Kenyatta National Hospital reported experiencing insufficient induction, mentorship support, and policy

guidance when transitioning into leadership roles (Mwasi et al., 2024).

Additionally, research in Kenya indicates that MLNMs are appointed based on professional qualifications, including a Bachelor's Degree, a Higher Diploma in a nursing speciality, or a Diploma in Nursing, along with relevant work experience. A study on public health facility managers in the coastal region revealed that mid-level managers faced numerous challenges due to their limited formal preparation for leadership roles (Nyikuri et al., 2015). This supports the assertion that clinical leadership in Low- and Middle-Income Countries (LMIC) has received limited attention. Additionally, there is a lack of preparation for succession in leadership roles among professional leaders in developing countries (Nzinga et al., 2018). Collectively, these findings underscore the compelling need to reassess the adequacy of entry-level nurse training in Kenya, particularly in terms of its ability to prepare graduates for effective leadership.

The range of duties for nurses and midwives, as outlined by the Nursing Council of Kenya (NCK, 2020), defines their roles based on education and licensure. While nursing training ideally prepares nurses for leadership roles, many programs focus more on clinical skills than on developing leadership competencies (Frasier, 2019; Ortega et al., 2018). This highlights the importance of strong leadership and management skills in nursing positions (Daly et al., 2020; Salvage et al., 2019).

Inadequate leadership preparation among mid-level nurse managers (MLNMs) poses significant challenges within the Kenyan healthcare system, adversely impacting various critical aspects of care delivery. As MLNMs are the largest group in nursing leadership who hold a pivotal role in overseeing service delivery units (Johnson et al., 2021), and the fact that their leadership is crucial for adequate health service provision at all levels (Stewart et al., 2022), their lack of preparedness for leadership roles can lead to detrimental consequences on patient safety, staff retention, and overall healthcare costs.

Firstly, insufficient training in leadership and management can compromise patient safety. Mid-level and frontline nurse managers have an important responsibility in maintaining the quality, safety, and efficiency of patient care (Bryant & Stone, 2022). As the healthcare sector evolves, the demand for accountability

and high standards from nursing professionals highlights the need for proper preparation of nurse leaders (Maia et al., 2019). Inadequately prepared nurse managers may struggle to implement protocols, coordinate care, or manage clinical issues effectively, heightening the risk of mistakes and adverse patient outcomes, which ultimately endangers patient health and well-being.

Secondly, Inadequate preparation of nurse managers negatively impacts healthcare staff turnover and retention. A lack of effective leadership fosters a hostile work environment, resulting in employee dissatisfaction and increased attrition among nursing staff. High turnover disrupts team dynamics and care continuity, straining the healthcare system (Al-Yami et al., 2024). Additionally, unprepared nurse leadership has significant financial consequences. Ineffective management leads to higher operational costs, resulting from increased turnover, ongoing training needs, and potential malpractice claims related to patient safety. This can divert essential resources from patient care, diminishing the overall effectiveness of healthcare delivery (Bae, 2022; American Organisation for Nursing Leadership, 2024; Yau et al., 2020).

This study assessed the preparedness of nurse managers for leadership roles in selected hospitals across Bomet, Kericho, Narok, Kisii, and Nyamira counties, addressing the limited research on this topic in Kenya. It examines nurse managers' satisfaction with entry-level training in terms of course content, duration of clinical experience, and the effectiveness of assessments. Understanding the gaps in nursing training and nurse managers' perceptions of their readiness is crucial for developing effective strategies to enhance leadership capabilities, improve patient outcomes, staff satisfaction, and healthcare efficiency.

## LITERATURE REVIEW

### Theoretical Framework for Leadership and Management

This study focuses on the preparedness of nurse managers for leadership roles, which highlights the importance of distinguishing between leadership and management. According to Kerr (2015), leaders are future-oriented and envision possibilities to guide the organisation's direction, while managers focus on evaluating and refining current operations to achieve established goals. For sustained success, organisations require a combination of both leadership and

management skills. Ocho et al. (2020) argue that, despite their theoretical differences, leadership and management are functionally interchangeable and most effective when used together. This underscores the need for integrating both leadership and management theories to enhance our understanding of nurse managers' preparedness for their leadership responsibilities.

The two theories underpinning this study include the Principles of Scientific Management Theory by Frederick Taylor and Transformational Leadership Theory by James MacGregor Burns. In the Principles of Scientific Management Theory, Yimeng (2017), Taylor emphasised the importance of managers and workers' performance through four principles: a scientific work approach, employee selection and training, collaboration, and division of responsibilities. He believed these principles enhance initiative and uniformity, leading to greater organisational efficiency. Success relies on the skills of the workforce. In contrast, Burns' Transformational Leadership Theory emphasises charismatic leadership, focusing on intrinsic motivation and the development of followers. It advocates for collaboration, where leaders engage followers to identify changes, inspire a shared vision, and implement those changes together (Korejan & Shahbazi, 2016).

Transformational leadership theory posits that nurse leaders should be well-prepared to inspire and positively influence their teams, enhancing both staff and patient satisfaction. By creating a tradition of respect and collaboration, these leaders can encourage innovation and shared decision-making (American Nurses Association, 2024). This approach creates a good work environment where nurses feel empowered, resulting in enhanced competence, job satisfaction, and adaptability to change (Perez-Gonzalez et al., 2024). An integrative review by Gebreheat et al. (2023) emphasises the importance of transformational leadership in improving job satisfaction among hospital nurses. These findings suggest healthcare organisations should adopt this leadership style to improve staff retention, as supported by Al-Yami et al. (2024).

As nurse leaders increasingly assume dynamic roles within healthcare, enhanced preparedness is crucial. These leaders are essential for fostering a positive organisational culture, improving team performance, and ensuring high-quality patient care. Effective nurse leadership requires embodying a diverse set of traits and

employing a strategic approach that promotes empowerment, collaboration, and innovation, all of which are vital for improving patient outcomes (Salvage et al., 2019)

### **The Adequacy of Entry-Level Nurse Training in Preparing Nurses for the Mid-Level Nurse Managers' Leadership Role**

Nurse training is a systematic process that equips entry-level nurses with the theoretical knowledge and practical experience necessary to develop professional competencies and readiness for leadership roles. Adequacy measures how well this training prepares nurses with the required knowledge, skills, and competencies for effective leadership (Purabdollah et al., 2023).

Research consistently emphasises the importance of developing leadership skills in newly qualified nurses, as these competencies are closely associated with improved patient outcomes, staff retention, and the overall quality of care. The *AACN Essentials* (2021) establish leadership, quality improvement, and interprofessional collaboration as core competencies for all entry-level nursing graduates, highlighting the expectation that leadership preparation be central to nursing curricula. Researchers further claim that leadership development should be integrated throughout training, rather than confined to a single course, to ensure that graduates are adequately prepared for the demands of practice (Kukkonen et al., 2020; Miles & Scott, 2019). Structured frameworks such as the *Nursing Leadership Development Model* provide pathways to foster leadership in pre-licensure students, equipping them to apply these skills in real-world contexts (Miles & Scott, 2019).

Globally and across diverse contexts, persistent concerns have been raised regarding the adequacy of entry-level nurse training in preparing graduates for leadership roles. Evidence indicates a discrepancy between the competencies emphasised in nursing training and the demands of clinical practice (Abdul-Rahim et al., 2025). Nurse managers frequently perceive significant gaps in the leadership and management skills of new graduates, particularly in their ability to apply current knowledge to practical, real-world scenarios (Kukkonen et al., 2020; Purabdollah et al., 2023). This inadequate preparation is often attributed to entry-level nursing programs prioritising theoretical instruction over essential practical

skill development, leaving graduates ill-equipped for complex managerial responsibilities (Södersved Källestedt et al., 2020). Similar conclusions have been drawn by Nyikuri et al. (2015) and Nzinga et al. (2018), who argue that formal training alone does little to cultivate the leadership attributes necessary for adequate professional competence. Collectively, these studies highlight a consistent global challenge: entry-level nursing education often fails to equip nurses with the leadership skills required to navigate contemporary healthcare systems.

Evidence from multiple studies suggests that entry-level nursing education does not adequately prepare graduates for leadership roles. Hughes' (2018) scoping review highlights persistent deficiencies in foundational preparation, with mid-level nurse managers often seeking additional education and specialised training to compensate for gaps in leadership competence. The transition from student to professional often reveals a significant gap between entry-level training and the leadership readiness expected in practice (Frasier, 2019). Newly qualified nurses and their managers frequently report that graduates feel unprepared for leadership responsibilities, notably struggling with confidence and facing difficulties in prioritising complex ward tasks (Frasier, 2019). These consistent findings suggest that graduates often fail to meet the expected standards in leadership positions. Given the increasing complexity of modern healthcare, researchers advocate for the proactive integration of comprehensive leadership training into nursing curricula to ensure future nurses are adequately equipped to navigate emerging challenges (Frasier, 2019; Salvage et al., 2019).

### **The Adequacy of the Course Content of Entry-Level Nurse Training for Preparing Nurses for Leadership Roles**

The study by Marcellus et al. (2018) on 'The role of education in developing nurse leadership' depicted that nursing students need a strong educational foundation from the start of their training to improve their leadership abilities and acquire practical experience throughout their coursework. This requires a curriculum that strikes a balance between theory, coursework, and clinical practice (Abdul-Rahim et al., 2025). Furthermore, according to WHO (2020), nursing curricula must align with current healthcare issues to prepare nurses for effective teamwork and to maximise their skills in diverse roles within the practice environment.

The study by Scammell et al. (2020) indicated that although BScN programs include instruction on leadership and management in nursing, the evidence suggests that the level of competence nurse leaders require in the practice environment far exceeds the elementary educational backgrounds necessary for practice. Furthermore, the study revealed that leadership and management content were placed towards the end of the nurse training program during the final year. This implies that this disadvantaged the nursing students because they are left with little time for self-development in the leadership aspect.

The findings underscore a fundamental gap between current undergraduate nursing education and the level of leadership competence required in modern clinical practice. There is a consensus that developing effective nurse leaders requires a strong educational foundation and a curriculum that integrates theoretical knowledge, coursework, and practical experience from the onset of training (Marcellus et al., 2018; Abdul-Rahim et al., 2025). Furthermore, this curriculum must align with current healthcare issues to prepare graduates for effective teamwork and diverse practice roles (WHO, 2020).

#### **The Adequacy of Clinical Experience Duration in Entry-Level Nurse Training for Preparing Nurses for Leadership Roles**

In addition to curriculum design, the duration and quality of clinical experience significantly influence leadership readiness. Evidence shows that leadership and management competencies strengthen progressively with increased clinical exposure, particularly during the transition from education to practice (Alilyyani et al., 2024). Longer clinical placements, coupled with effective supervision, provide opportunities for students to practice decision-making, problem-solving, and team coordination—skills central to nursing leadership (Baharum et al., 2023; Hsieh et al., 2021). This suggests that leadership preparation is most effective when curricula integrate both structured theoretical content and adequate clinical experience, enabling graduates to develop personal attributes, team management skills, and systems thinking essential for leading in complex healthcare environments (Hsieh et al., 2021).

Research strongly supports the idea that a longer, structured, and focused clinical experience is essential for developing leadership skills in nurses, particularly for

those transitioning into professional practice. This support is largely based on the positive outcomes linked to formal residency programs and the importance of time spent cultivating core competencies (Abdul-Rahim et al., 2025; Scammell et al., 2020). Nonetheless, research indicates that entry-level nurse training focuses heavily on central clinical skills, while leadership skill development receives minimal emphasis (Ortega et al., 2018). Additionally, the study by Ocho et al (2021) noted that nurses often graduate and are thrust into leadership roles without adequate preparation or having demonstrated leadership competency in complex practice environments. In reality, Ortega et al (2018) suggested that this lack of leadership skills may stem from insufficient field experience or gaps in academic training related to leadership and management.

Previous research highlights the need for future nurse managers to receive additional training beyond entry-level education to effectively navigate the complex healthcare environment. It emphasises inspiring prospective nurse leaders to pursue at least a Bachelor of Science in Nursing (BScN) or advanced practice training to enhance their education and leadership skills (Acob et al., 2018).

#### **Clinical Practicum Assessments' Adequacy for Preparing Entry-Level Nurses for Leadership Roles**

The transition from student to nurse, especially in contexts that necessitate leadership roles, represents a critical area of inquiry within nursing education and workforce development. This shift is essential not only for the individual career trajectories of nursing graduates but also for the overall efficacy and sustainability of health care systems (Abdul-Rahim et al., 2025).

A study by Ahmari Tehran et al. (2021) identified two key themes in clinical evaluation challenges faced by nursing instructors and students: a lack of effective clinical education instructors affecting evaluation, and secondly, shifting the responsibility of supervising students onto the ward, coupled with insufficient direct oversight from instructors, can negatively impact clinical education and discourage effective learning.

A study on final-year nursing students' views regarding clinical assessment identified the following key themes: the need for a valid assessment tool, the importance of skilled preceptors, and the necessity of collaboration between academic and clinical settings to support both

preceptors and students. It also suggested forming academic-clinical partnerships to review clinical education programs and noted that students were often task-oriented and not fully prepared for professional practice (Wu et al., 2017).

Research highlights significant issues with the relevance and replicability of clinical assessment in nursing education. Nurse mentors note a substantial gap between specified learning outcomes and the actual clinical learning environment, arguing that existing outcomes often fail to reflect the unique features of the nursing profession. For instance, home care nursing mentors specifically require more realistic learning outcomes that capture the distinctiveness of their setting to effectively evaluate student competencies (Christiansen et al., 2020).

### METHODOLOGY

This study adopted a pragmatist philosophical worldview, emphasising the 'what' and 'how' of research rather than focusing solely on specific research methods. This perspective justifies the use of mixed methods, as noted by Hall and Roussel (2014). This study used a mixed-methods design with a descriptive, cross-sectional approach. Mixed methods research integrates both qualitative and quantitative methodologies to provide a comprehensive understanding of research questions (Almeida, 2018). Specifically, a convergent-parallel [QUAN + QUAL] approach was utilised, where both quantitative and qualitative data were gathered at the same time, analysed separately, and interpreted together to inform one another (Edmonds & Kennedy, 2017). This concurrent design allowed data collection across all selected sites, with qualitative findings serving to reinforce the conclusions drawn from the primary quantitative data (George, 2021). A mixed-methods approach was the most appropriate because it allowed the collection of both quantitative and qualitative data, which complemented each other and minimised weaknesses while allowing for triangulation to achieve convergent findings (Hall & Roussel, 2014). The quantitative arm described leadership role preparedness among Mid-Level Nurse managers in entry-level training, while the qualitative arm focused on their subjective experiences, exploring individual perceptions and emotions related to their leadership roles (Walekhwa & Suge, 2023). Therefore, this dual approach was suitable for examining the managers' perceptions of their leadership preparedness based on their lived experiences.

This study employed a multi-level sampling procedure, utilising both selected probability and non-probability sampling methods at different sampling levels as guided by Zimano and Chilunjika (2019). Study sites included nine selected hospitals and four nursing training institutions from five counties, namely Bomet, Kericho, Narok, Kisii, and Nyamira Counties in the South Rift and South Nyanza regions, Kenya. These counties were representative of the 47 counties because in Kenya, all counties have analogous health delivery system structures from level 1 to level 5 health facilities (Zeng et al., 2021). The process of selecting the study sites is outlined as follows: First, the five County Referral Hospitals were purposively selected to represent major care and nursing students' clinical rotation sites with service delivery units led by Mid-Level Nurse Managers (MLNMs). Next, a stratified technique was used to select additional facilities, listing and including large private and faith-based hospitals (bed capacity  $\geq 60$ ) at the Sub-County level. Finally, the study purposively selected four nursing training institutions (two public Medical Training Colleges and two private faith-based colleges) to conduct a desk review of their curricula.

The study's population comprised 113 Mid-Level and Frontline Nurse Managers, and 9 Nursing Directors from nine level 4 and 5 hospitals. Purposive sampling was utilised for mid-level nurse managers and nursing directors, as this approach aims to address specific initiatives related to the research question; therefore, the selection of these cases was considered most informative for the study. In this research, mid-level or unit-level nurse managers were chosen based on their leadership positions. The sample size was calculated using Taro Yamane's equation (Uniproject Materials, 2016), which is presented as follows:

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

This yielded 87 MLNMs and 9 Nursing Directors, making a total of 96 participants. The researcher collected quantitative data using self-administered questionnaires for Mid-Level Nurse Managers and a document review checklist for nursing training curricula from four selected institutions. For qualitative data, face-to-face interviews were conducted with Nursing Directors from 7 of the nine hospitals, along with a Focus Group Discussion (FGD) in eight hospitals. The study utilised self-administered questionnaires, Key Informant

Interview (KII) schedules, FGD guides, and a document review checklist for data collection.

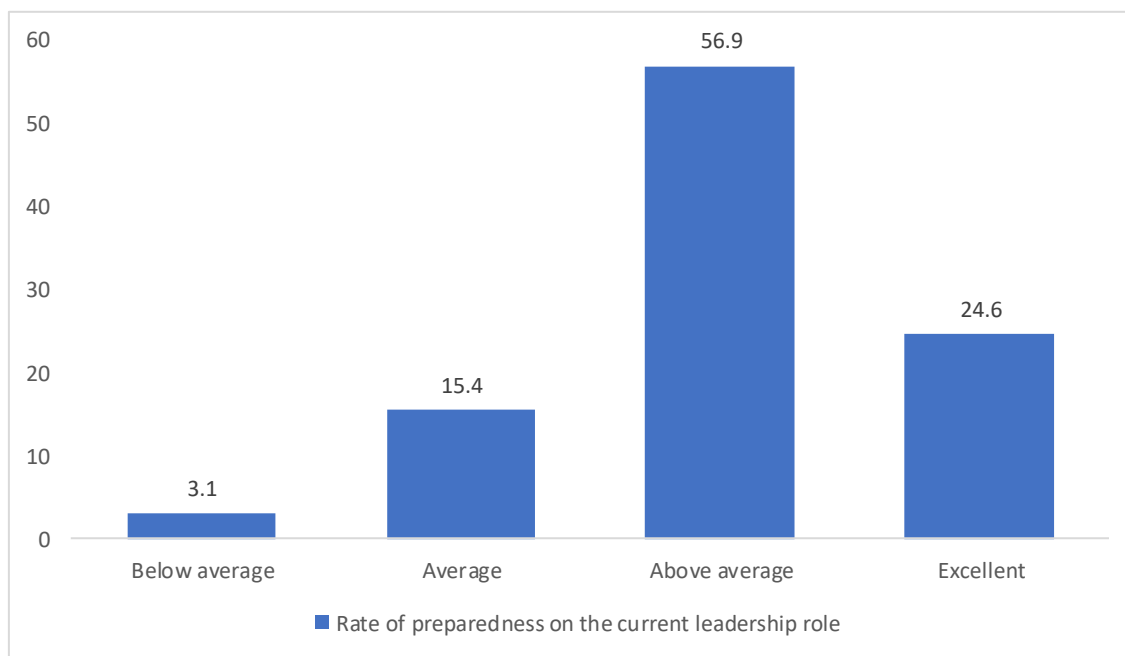
**RESULTS AND DISCUSSION**

The sample included 87 Mid-Level Nurse Managers (MLNMs), with 68 responding, resulting in a response rate of 78.1 per cent. Among 9 Nursing Directors (NDs), seven participated in the Key Informant Interviews (KII), yielding a response rate of 77.7 per cent. Out of 9 planned Focus Group Discussions (FGDs), eight were successfully conducted, representing a response rate of 88.9 per cent. The researcher also reviewed four entry-level nurse training curricula: two from public KMTs and two from faith-based MTCs.

**Perceptions On the Adequacy of Entry-Level Nursing Training in Preparing Nurse Managers for MLNMs' Leadership Roles**

Mid-level nurse managers were asked to rate their preparedness for the current leadership role, and findings revealed that slightly more than half (56.9%) indicated their preparedness was above average, and 24.6 per cent indicated it was excellent. However, 15.4 per cent indicated average and 3.1 per cent as below average, as indicated in Figure 1.

From the qualitative data from key informants, the respondents argued that MLNMs experienced challenges and exhibited deficiencies in the knowledge and skills required for leadership functions, which necessitated constant guidance and support.



**Figure 1. Rate of preparedness on the current leadership role.**

These challenges were attributed to the belief that the entry-level nurse training did not offer maximum opportunities for the development of leadership competencies. Below are excerpts from FGDs:

*Nurse 3: Yeah, so, the basic nurse training e... in preparation for a leadership position, I think it contributes to around fifty per cent... Otherwise, the rest ah really lies on experience as time goes by. (FGD 5 – KMTC graduate)*

*Nurse manager 2: okay you can say the prior training and leadership in school prepare us to some extent but not fully because there is challenges will come across... let's say rating from zero to ten, I can say five, because there is other aspects which come along when you are leading people because we lead people with different background and that has not prepared us in class. (FGD 4)*

*Nurse manager 4: Okay, basically, we acquire the skills of leadership qualities from school that has enabled us to carry out the roles given on leadership. So, I can say, 50 per cent. (FGD 4)*

**The Adequacy of The Course Content of Entry-Level Nurse Training for Preparing Nurses for Leadership Roles**

Respondents indicated that while entry-level nurse training establishes a foundation for leadership, additional specialised training is crucial for effective performance in formal roles. A significant majority of

nurses (91.0%) either agreed (11.9%) or strongly agreed (79.1%) that supplementary leadership training is necessary for nurse managers. In evaluating pre-licensure education, perceptions of preparedness were generally positive across all training levels: Bachelor's degree (84.7%), Higher Diploma Registered level (81.5%), and Diploma Registered level (75.3%). However, the overall adequacy of this education in preparing nurses for leadership roles received the lowest cumulative agreement (74.6%), indicating that entry-level training is seen as just a starting point for leadership responsibilities, as presented in Table 1.

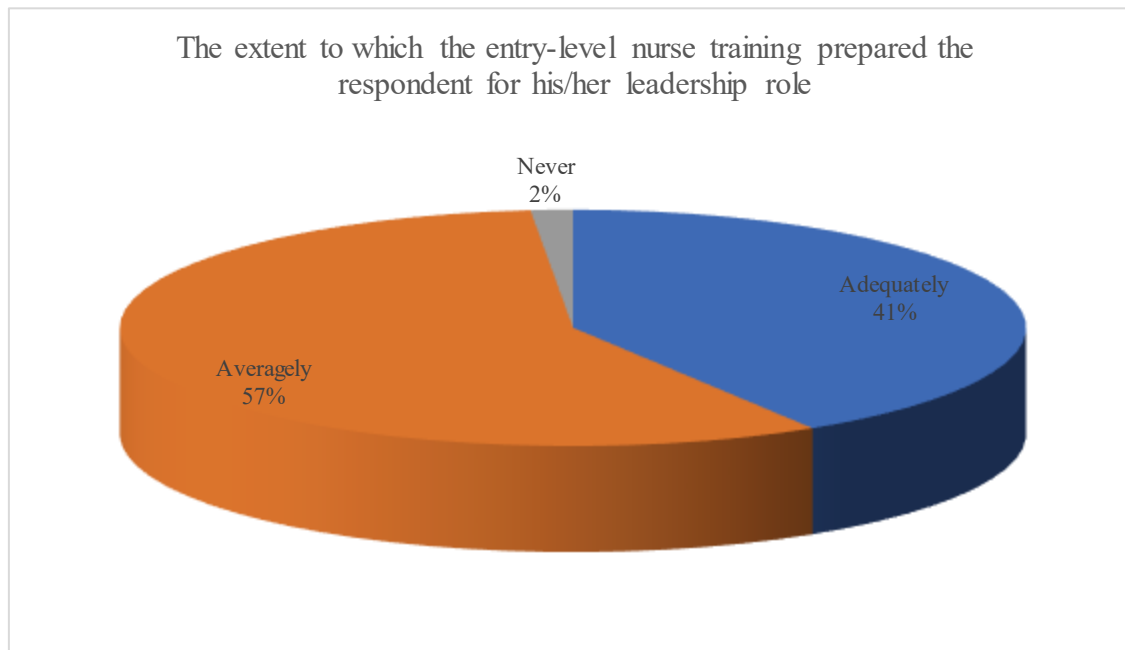
**Table 1: Percentage of adequacy of course content for entry-level nurse training in preparing nurses for leadership roles**

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
The course content for the Diploma Registered level nurse adequately prepares nurses for a leadership role.		6.2	18.5	41.5	33.8
The course content for the Higher Diploma Registered level nurse adequately prepares nurses for a leadership role	1.5	6.2	10.8	47.7	33.8
The course content for the bachelor's degree-level nurse adequately prepares nurses for a leadership role.		4.6	10.8	38.5	46.2
Overall, entry-level nurse training adequately prepares nurses for leadership roles.		12.7	12.7	31.7	42.9
For a nurse manager to function effectively in the leadership role, there is a need for additional leadership courses in addition to the entry-level nursing training	1.5	3	4.5	11.9	79.1

According to the data presented in Table 1 above, the item with the highest level of undecided responses was ‘diploma registered,’ at 18.5 per cent. Both the ‘higher diploma’ and ‘bachelor’s degree’ levels had an equal undecided rate of 10.8 per cent. Overall, a quarter (25.4%) of the nurses felt that the entry-level nurse training was inadequate in preparing them for leadership roles, with 12.7 per cent expressing disagreement and another 12.7 per cent being undecided. This highlights the need for nurses to receive additional education in

leadership, despite holding formal professional certifications.

When asked to rate how well the course content for entry-level nurse training prepared them for their leadership role, 41 per cent of respondents indicated they felt adequately prepared and expressed satisfaction. Meanwhile, 57 per cent reported feeling somewhat prepared, indicating they were moderately satisfied. Only 2 per cent felt unprepared and expressed dissatisfaction with their training, as indicated in Figure 2.



**Figure 2. The rate of adequacy preparation by entry-level nurse training in the leadership role.**

To understand the adequacy of entry-level nurse training, FGDs and interviews were conducted. Respondents indicated that the training provided was average to inadequate preparation for leadership roles. Three main themes emerged: The curriculum content, students' focus on examinations and assessments, and students' supervision.

**The Curriculum:**

Respondents felt that the leadership section of the entry-level nurse training was overly theoretical, with a lot of information to learn within a short period of one block for medical training colleges or one semester for the universities, although a few universities teach theory for two semesters. This notwithstanding, the respondents felt that the content was a lot compared to the time of delivery.

*Nurse Manager 2: Like, there is a lot of content in the training that this student needs to have. So by the time they are finishing, they don't even have the content itself. So, how about the management bit now? So like everything has been compressed in a sense that they are not able to come out as managers because even the other theory bit they don't already have it. (FGD 3)*

*Nurse Manager 3: I think the curriculum is rarely changing. There before, it used to be done in three and a half years...we changed to three years...Yet the content did not change...just compressed...So it is not very adequate for now. (FGD 3)*

Students in entry-level nurse training often prioritise passing exams over truly internalising leadership skills. The extensive curriculum forces them to focus on certifications, leading to a neglect of real opportunities for future leadership roles. Consequently, important management and leadership concepts are viewed merely as academic obstacles, hindering their development as foundational skills for their careers.

*Nurse manager 3: Training is not sufficient because when you come to the ground or maybe when you're in school, you are there to pass exams... What you wanted is to pass exams, you have never taken it seriously, maybe one day you will become a leader and when you come to the ground, you are chosen as a leader, and you don't know where to start. (FGD 7)*

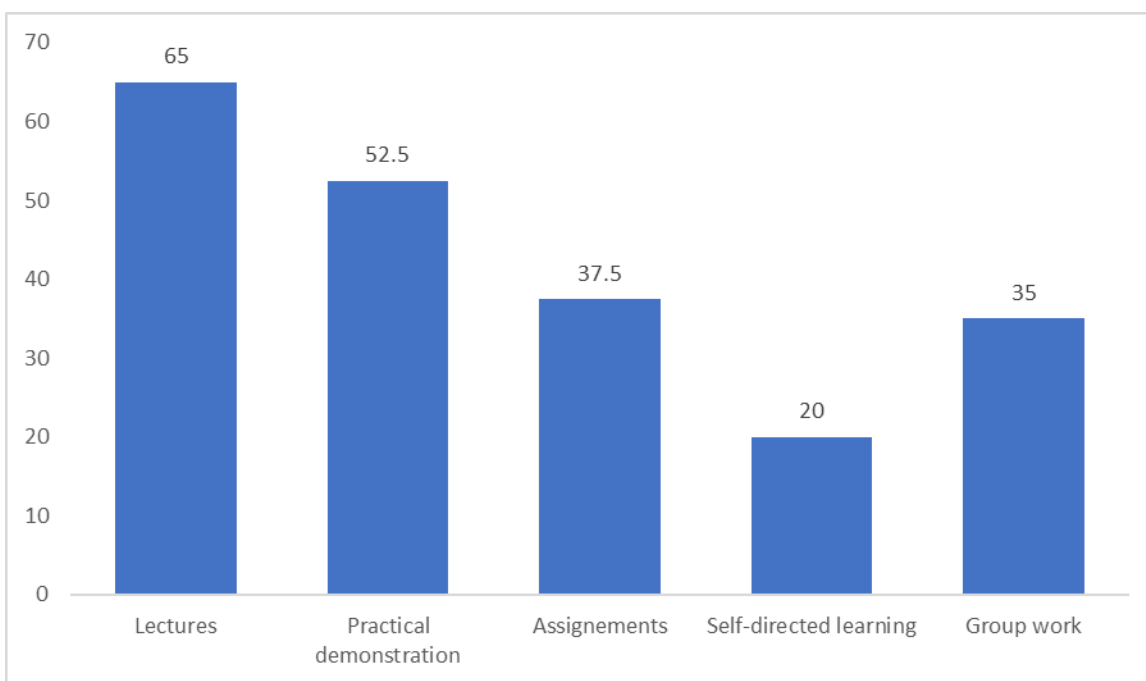
The respondents expressed concerns about the sequencing of the leadership course content in the curriculum. They noted that for diploma nurse training,

the leadership course is taught in the third year, which is the final year of the program. Similarly, for the bachelor's degree, students encounter this course in the fourth year, which is also their final year.

*Nurse manager 1: Yeah, I think they can move that unit to the third year, so that as they continue. So that if they are rotating for other placements, they are also doing rotation for nurse manager, going all the way to fourth year, so it will be just congested. It is about the*

*curriculum; review of the curriculum on the sequencing. Okay (FGD 2)*

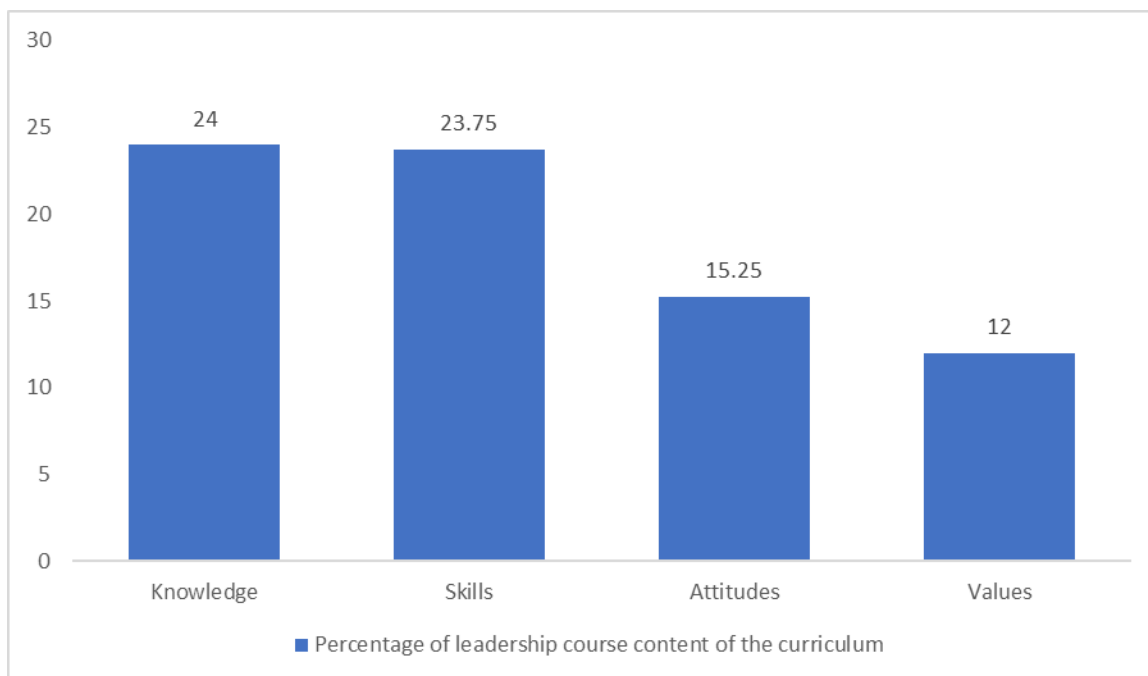
The researcher also reviewed the curriculum pedagogy used and the content of the curriculum of four institutions to determine the relevance of the content in preparing nurses for the leadership role. The key pedagogy used was lecture, practical demonstration, assignments, self-directed learning, and group work, as indicated in Figure 3.



**Figure 3. The pedagogy of the curriculum used in training nursing professionals in leadership roles.**

According to Figure 3 above, the analysis of the curriculum content reveals that lectures account for the highest percentage of the curriculum at 65 per cent, closely followed by practical demonstrations at 52.5 per cent. Other components are distributed as follows: assignments at an average of 37.5 per cent, group work at 20.0 per cent, and self-directed learning also at 20.0 per cent. These findings align with qualitative data indicating that the training contains a substantial amount of theoretical content, while the time allocated for the clinical rotation period in leadership is too short to facilitate adequate interactions.

In terms of the pedagogy used for curriculum delivery, in the training, the percentages were as follows: lectures at (65%), practical demonstrations at (52.5%), assignments at (37.5%), group work at (20.0%), and self-directed learning at (20.0%). Additionally, the average scores for leadership content revealed that knowledge in leadership had an average score of (24%), leadership skills scored (23.75%), attitude scored (15.25%), and the lowest score was for values in leadership at only (12.0%), as demonstrated in Figure 4.



**Figure 4. The percentage of leadership course content in the curriculum for nurses' training.**

### The Adequacy of Clinical Experience Duration in Entry-Level Nurse Training for Preparing Nurses for Leadership Roles

The respondents had concerns regarding the duration of the clinical experience period, as well as the level of supervision from the clinical instructors and the nursing staff from the clinical placement sites. They indicated that a one-month clinical experience was not sufficient to allow for adequate interaction for the development of leadership competencies.

*Nurse 1: Yeah, the entry-level nurse training prepares you, but not that much. At least you encounter, fourth year, you will take nursing management for one month, you do the hospital coverage for one day, yes, and then you are done. It's not adequate. (FGD 1 – university graduate)*

*Nurse manager 3: You find when it comes to leadership, you are given a very short span of time to do the leadership when you are still a student...Yes, suppose the students were given more time, more space to exercise their leadership when they are still in school, I think that could help promote much when it comes to being in charge later on or managing departments or units...Okay, is like when it*

*comes to management, we used to taste only for a month. (FGD 6)*

*Nurse manager 1: I think the rotation itself at least should be done in two months...I think we go back to even the basic nursing. We can increase the clinical rotation for the management section, yeah.*

Other nurse managers noted that the supervision provided to students by clinical instructors was often inadequate due to erratic, inconsistent, and minimal supervision sessions. This issue was largely attributed to the absence of a full-time instructor from KMTC or a university who could follow up and oversee students in the clinical setting. Although some hospitals have effective training programs for management skills, staff shortages and the many duties of unit nurse managers limit the time available for student support and supervision.

*Nurse Managers: There is no follow-up...They don't understand the night shifts, I think preparation of these students in class is inadequate... In other words... There is no full-time instructor from KMTC who makes a follow-up to see the student in the clinical. (FGD 5)*

*Nurse Manager 6: They don't do a follow-up on their students; They will appear in the morning of their assessment.*

*Nurse Manager 7: It is left to the nurses, more likely the in-charges in the wards, and you know, as we have said earlier, we have a shortage in the wards. And because of this shortage and there is so much that you are supposed to do, until you don't have time for these students. (FGD 7).*

### **Clinical Practicum Assessments' Adequacy for Preparing Entry-Level Nurses for Leadership Roles**

Respondents emphasised that two main factors influence the practicum assessments. First, students tend to focus solely on passing the assessment without fully internalising the concept of leadership. Second, there is inconsistency among supervisors regarding the assessment process. For instance, during practical sessions, supervisors often prioritise evaluating students based on patient assessments rather than considering management aspects. One nurse manager reported that the practicum assessments are adequate for leadership role preparation, while the majority cited inadequacies.

*Nurse Manager 1: The training is adequate because you are assigned some duties every day so that you develop some accountability and responsibility, and also they train you on management and leadership...There is also a written assessment on the same; Daily allocation of nursing modalities (responsibilities). (FGD 1)*

*Nurse 1: Assessment, they focus on patients, they want to say the name and history, and you have around 50 patients in a ward and cram all of them... they need you to take this report and cram it in your head, and you know. Ukiwa kwa hiyo (when in that process), you just concentrate on patients. You want to take history before assessment, ukuwe na hizo records zote (when you have all the records), so you don't concentrate on the leadership part of it...hata hizo vitu zingine (even those other things) you tend to overlook, you just want to finish assessment, and that is it. (FGD 2)*

*Nurse manager 3. Before, we used to have assessments that were being done over management issues that were so intensive... Cause we used to do it for three hours... But currently, the way it has changed, it is like an assessment that is being done to satisfy the nursing council that it was done. So it is not very adequate for now. (FGD 3)*

In summary, the research findings reveal that the practicum assessment process for entry-level nurse training is largely inadequate for effectively developing and evaluating leadership competence in graduating students, despite the formal existence of management-related duties. The challenges stem from a misalignment between student priorities and supervisory focus, coupled with a perceived decline in assessment consistency.

### **DISCUSSION**

This study examined the adequacy of entry-level nurse training in preparing mid-level nurse managers (MLNMs) for leadership roles. The study achieved a strong participation rate, with 68 MLNMs (78.1%), seven nursing directors (77.7%), and 8 of 9 planned focus group discussions (88.9%) completed. Additionally, four entry-level nurse training curricula were reviewed, two from public Kenya Medical Training Colleges (KMTCs) and two from faith-based Medical Training Colleges (MTCs). This depicted triangulated insights into the adequacy of current nurse preparation for leadership. This argument analyses the adequacy of nurse preparation for leadership roles, focusing on three key themes: the adequacy of course content for bachelor's, higher diploma, and diploma programs, including the design of the curriculum and teaching methods; the duration and supervision of leadership clinical experiences, along with the structure and process of clinical practicum assessments.

Regarding perceived preparedness for leadership roles, given the entry-level nurse training, findings revealed that slightly more than half (56.9%) of MLNMs rated their preparedness for leadership roles as above average, and 24.6 per cent rated it excellent. However, nearly one-fifth reported only average or below-average readiness, reflecting persistent gaps between training and leadership demands. This pattern echoes findings by Kukkonen et al. (2020), who noted that nurse managers across various contexts identify a disconnection between educational preparation and leadership expectations in practice.

Similarly, Södersved Källestedt et al. (2020) and Tetui et al. (2016) found that new nurses often lack confidence in leadership and decision-making, requiring ongoing guidance from senior managers. Study findings also corroborate a study in Kampala found that nurses in leadership roles exhibited inconsistent practices influenced by their training backgrounds, affecting their performance (Nanyonga et al., 2020). Findings also align with evidence from Kenya that depicts systemic challenges in healthcare leadership where nurse managers at Kenyatta National Hospital reported insufficient induction, limited mentorship support, and a lack of clear policy guidance, all of which hinder their preparedness and effectiveness in leadership roles (Mwasi et al., 2024). Qualitative findings supported these findings, with respondents indicating average to inadequate preparation for leadership. These results are consistent with other studies that indicate that nurses often feel unprepared in leadership and management competencies despite their training. (Ocho et al., 2021; Frasier, 2019; Marcellus et al., 2018)

The current study's results suggest that while entry-level programs establish foundational knowledge, many graduates still depend on post-training mentorship and in-service programs to attain effective leadership performance. The findings imply that entry-level nursing programs are insufficient for developing leadership competence, necessitating a systemic shift towards strong, structured mentorship and ongoing professional development to bridge the theory-practice gap. The persistent self-reported gaps in leadership preparedness among new nurses, corroborated by prior research, lead to a critical implication: current pre-licensure nursing education must be critically evaluated and augmented. Simply providing foundational knowledge is not enough to meet the complex leadership demands of clinical practice. Therefore, healthcare organisations and educational institutions share a joint responsibility. They must collaboratively design and implement mandatory, structured post-graduate mentorship programs and in-service leadership training to translate foundational knowledge into confident leadership performance and decision-making at the point of care.

The adequacy of the course content for entry-level nurse training emerged as a crucial factor in leadership preparation. Most respondents (91%) agreed that additional formal leadership training beyond entry-level education is essential for effective performance. While

the bachelor's degree program produced the highest sense of preparedness (84.7%), followed by higher diploma (81.5%) and diploma (75.3%) levels, the overall adequacy of leadership training was rated lowest at 74.6 per cent. This indicates that even with increasing academic qualifications, nurses perceive entry-level preparation as only a partial foundation. Similar evidence by Hughes (2018) confirms that many mid-level managers pursue supplementary education to bridge the gap between theoretical understanding and leadership practice. Moreover, international studies demonstrate that leadership competence at the practice level often surpasses what entry-level programs deliver (Cummings et al., 2021). According to the study by Ocho et al. (2020), they further found that while nurses acknowledge the inclusion of leadership topics in curricula, the content lacks sufficient depth to meet the demands of real-world leadership challenges. Thus, the present findings reinforce the global concern that entry-level curricula inadequately prepare nurses for managerial responsibilities despite growing leadership expectations in health systems.

The course content alone cannot inform the body of knowledge without considering the curriculum design and pedagogical methods for its delivery. The review of curricula revealed that leadership content is typically taught late in training (third year for diploma programs and fourth year for degree programs), limiting opportunities for practical application before graduation. These findings are similar to a scoping review on undergraduate nurse education regarding 'learning to lead', which found that newly registered nurses are often poorly prepared for leadership roles owing to leadership instruction late in the program. It recommends earlier and repeated leadership theory and clinical role modelling in curricula to enhance course content and address the inadequacies in leadership training (Scammell et al., 2020).

Participants also noted that leadership courses are densely theoretical, covered over short instructional periods (one block in colleges or one semester in universities). However, previous studies suggest that leadership development should be embedded throughout nurse training rather than confined to a course unit (AACN Essentials, 2021; Cummings et al., 2021; Mohammadpourhodki et al., 2025). This supports sustained and structured leadership development as key to producing effective nurse leaders. Addressing these

gaps requires curriculum reform to emphasise experiential learning, competency-based assessment, and structured mentorship.

Pedagogical review showed that lectures dominate (65%), followed by practical demonstrations (52.5%), assignments (37.5%), group work (20%), and self-directed learning (20%). This heavy reliance on structured teacher-centred instruction corresponds with Nzinga et al. (2018) and Jones (2018), who observed that overly theoretical pedagogy and insufficient experiential learning hinder skill acquisition in health leadership education.

The findings also indicated that nurses often prioritise passing examinations rather than developing leadership understanding, echoing Frasier (2019), who emphasised that exam-oriented systems restrict reflective learning and leadership growth. Similarly, Cummings et al. (2021) and Hsieh et al. (2021) advocate for competency-based and experiential pedagogies that integrate leadership into practical and interdisciplinary settings rather than treating it as a standalone theoretical subject.

Regarding clinical experience duration and supervision, respondents expressed concern that the one-month clinical leadership rotation is insufficient for cultivating leadership competencies. Many described limited interaction with mentors and inconsistent supervision, restricting experiential leadership learning. They further stressed that it would help if the leadership clinical experience duration were increased, and also enhanced instructors' mentorship contact periods. Alilyyani et al. (2024) corroborate that the duration and quality of clinical experience strongly influence leadership development, as longer placements enhance decision-making confidence and team coordination. The current study's findings, therefore, emphasise that leadership learning should be embedded longitudinally throughout clinical practice rather than condensed into a brief clinical placement.

Moreover, the inconsistency in supervision reported by participants aligns with Ocho et al. (2020), who found that structured mentorship and role modelling are critical in translating classroom leadership theory into practice. Effective leadership learning requires that clinical instructors explicitly model leadership behaviours, delegate responsibilities, and provide structured

feedback, yet these are elements that were largely absent in this study's context.

In the clinical practicum assessment, qualitative findings indicated that students tend to prioritise cramming leadership content mainly for exam preparation, largely due to the strong emphasis on theory. Over time, the focus of assessments has shifted from leadership skills to clinical skills, necessitating that the students plan care for a specific number of patients instead of demonstrating their managerial abilities. As a result, supervisors often mentor students with a heavy focus on patient care rather than on management competencies. This trend has led learners to concentrate more on clinical practice and passing their assessments, rather than developing their leadership skills. These observations mirror findings from Miles and Scott (2019), who identified a lack of standardised leadership assessment frameworks in pre-licensure nursing education. This limits students' ability to link leadership theory to clinical practice. In the present study, only a small proportion of respondents believed that current practicum assessments adequately evaluate leadership competence, further highlighting the disconnect between leadership learning objectives and evaluation criteria.

In summary, this study found that entry-level nurse training provides only moderate preparation for leadership roles, with less than half of respondents feeling fully ready for managerial responsibilities. While bachelor-level programs yielded better outcomes than diploma programs, both levels demonstrated gaps in leadership readiness. These shortcomings are attributed to overly theoretical curricula, brief and inadequately supervised clinical leadership experiences, and limited integration of leadership competencies across the learning continuum.

Integrating formal leadership content into early training years, extending clinical leadership rotations, restructuring, and standardising assessment tools will enhance preparedness for the increasingly complex leadership demands in modern healthcare. As health systems evolve, nurse training institutions must reorient curricula from theory-heavy instruction toward practice-based, reflective, and competency-driven leadership education.

## CONCLUSION AND RECOMMENDATIONS

**Conclusion:** This study concluded that while entry-level nurse training in Kenya provides a foundational understanding of leadership, it remains insufficient for preparing nurses for the complex realities of managerial roles. The persistent theory-practice gap, limited clinical exposure to leadership, and lack of consistent standardised mentorship emphasise the need for comprehensive curriculum reform. Nurse training programs should integrate leadership competencies throughout all training years, entrench experiential and problem-based learning approaches, and extend clinical leadership placements with structured supervision. Policymakers and regulatory bodies such as the Nursing Council of Kenya (NCK) should mandate competency-based leadership units and assessment frameworks to ensure consistent preparation of future nurse leaders. Strengthening partnerships between training institutions and healthcare facilities can help bridge the transition from student to nurse leader. Developing strong, practice-oriented leadership training will enhance the effectiveness of managerial competencies, improve nursing workforce performance, and contribute to stronger health system leadership across Kenya.

**Recommendations:** The study recommends that for practice and education, nurse training institutions should evaluate the leadership and management component of their entry-level programs. This reassessment must prioritise increasing both the content depth and the duration of clinical experience for leadership training, shifting away from primarily theoretical models. Furthermore, institutions should revise their current pedagogical approaches, specifically by improving clinical assessment preparation and reviewing existing assessment processes to ensure they measure actual competency and internalisation of management skills, rather than just knowledge recall. Regarding the recommendation for future research, to support evidence-based curriculum revision, further comparative research on entry-level nursing curricula is strongly recommended. This research should focus on a detailed analysis of the theoretical content and clinical objectives across diploma, higher diploma, and bachelor's degree programs to identify best practices and standardise effective leadership preparation across all training levels.

## REFERENCES

- Abdul-Rahim, H. Z., Sharbini, S. H., & Ali, M. (2025). Leadership and management skills for student nurses: A scoping review. *BMC Nursing*, 24, Article 111. <https://doi.org/10.1186/s12912-024-02603-7>
- Acob, J. R. U., Nugroho, H. S. W., & Martiningsih, W. (2018). Nurse managers' utilisation of Fayol's theory in nursing. *Journal of Health Science and Prevention*, 2(2), 64–65. <https://doi.org/10.5958/0976-5506.2018.01490.0>
- Ahmari Tehran, H., Gaeni, M., Rezaei, M., Khoramirad, A., & Parizad, A. (2021). The challenges of clinical education in nursing: A qualitative analysis of nursing students and clinical instructors' perspectives. *Journal of Nursing and Midwifery Sciences*, 8(4), 260–267. [https://doi.org/10.4103/jnms.jnms\\_151\\_20](https://doi.org/10.4103/jnms.jnms_151_20)
- Alilyyani, B., Althobaiti, E., Al-Talhi, M., Almalki, T., Alharthy, T., Alnefaie, M., Talbi, H., & Abuzaid, A. (2024). Nursing experience and leadership skills among staff nurses and intern nursing students in Saudi Arabia: A mixed methods study. *BMC Nursing*, 23, Article 87. <https://doi.org/10.1186/s12912-024-02387-9>
- Almeida, F. (2018). Strategies to perform a mixed methods study. *European Journal of Education Studies*, 5(1), 144–147. <https://doi.org/10.5281/zenodo.1406214>
- Al-Yami, M. S., Al-Mansour, S. A., Al-Fayyad, I., Al-Khathami, A. M., & Al-Balawi, M. M. (2024). The relationship of perceived nurse manager competence with job satisfaction and turnover intention among clinical nurses: An analytical cross-sectional study. *BMC Nursing*, 23(1), 35. <https://doi.org/10.1186/s12912-024-02203-5>
- American Association of Colleges of Nursing (AACN). (2021). *The essentials: Core competencies for professional nursing education*. <https://www.aacnnursing.org/Portals/0/PDFs/Publications/Essentials2021.pdf>

- American Nurses Association. (2024). *What is transformational leadership in nursing?* Nursing World. <https://www.nursingworld.org/content-hub/resources/nursing-leadership/transformational-leadership-in-nursing/>
- American Organization for Nursing Leadership. (2024). *Nurse manager succession planning: An essential workforce strategy to retain and attract current and future leaders* (Workforce Committee White Paper). [https://www.aonl.org/system/files/media/file/2024/02/AONL\\_WF\\_WhitePaper3\\_Succession\\_Planning.pdf](https://www.aonl.org/system/files/media/file/2024/02/AONL_WF_WhitePaper3_Succession_Planning.pdf)
- Bae, S.-H. (2022). Noneconomic and economic impacts of nurse turnover in hospitals: A systematic review. *International Nursing Review*, 69(3), 392–404. <https://doi.org/10.1111/inr.12769>
- Baharum, H., Ismail, A., McKenna, L., Mohamed, Z., Ibrahim, R., & Hassan, N. H. (2023). Success factors in adaptation of newly graduated nurses: A scoping review. *BMC Nursing*, 22, Article 125. <https://doi.org/10.1186/s12912-023-01300-1>
- Bryant, N., & Stone, R. (2022). *Enhancing frontline nurse management in long-term services and supports: Research brief*. LTSS Center. <https://ltsscenter.org/reports>
- Bvumbwe, T., & Mtshali, N. (2018). Nursing education challenges and solutions in Sub-Saharan Africa: An integrative review. *BMC Nursing*, 17(1), 3. <https://doi.org/10.1186/s12912-018-0272-4>
- Christiansen, B., Averlid, G., Baluyot, C., Blomberg, K., Eikeland, A., Finstad, I. R. S., Larsen, M. H., & Lindeflaten, K. (2020). Challenges in the assessment of nursing students in clinical placements: Exploring perceptions among nurse mentors. *Nursing Open*, 7(2), 356–367. <https://doi.org/10.1002/nop2.717>
- Cummings, G. G., Lee, S., Tate, K., Penconek, T., Micaroni, S. P. M., Paananen, T., & Chatterjee, G. E. (2021). The essentials of nursing leadership: A systematic review of factors and educational interventions influencing nursing leadership. *International Journal of Nursing Studies*, 115, 103842. <https://doi.org/10.1016/j.ijnurstu.2020.103842>
- Daly, J., Jackson, D., Anders, R., & Davidson, P. M. (2020). Who speaks for nursing? COVID-19 highlighting gaps in leadership. *Journal of Clinical Nursing*, 29(15–16), 2751–2752. <https://doi.org/10.1111/jocn.15305>
- Edmonds, W., & Kennedy, T. (2017). Convergent-parallel approach. In *An applied guide to research designs* (pp. 181–188). SAGE Publications. <https://doi.org/10.4135/9781071802779.n15>
- Frasier, N. (2019). Preparing nurse managers for authentic leadership: A pilot leadership development program. *JONA: The Journal of Nursing Administration*, 49(2), 79–85. <https://doi.org/10.1097/NNA.0000000000000714>
- Gebreheat, G., Teame, H., & Costa, E. I. (2023). The impact of transformational leadership style on nurses' job satisfaction: An integrative review. *SAGE Open Nursing*, 9, Article 23779608231197428. <https://doi.org/10.1177/23779608231197428>
- George, T. (2021). *Mixed methods research: Definition, guide & examples*. <https://www.scribbr.com/methodology/mixed-methods-research/>
- Hall, H. R., & Roussel, L. (Eds.). (2014). *Evidence-based practice: An integrative approach to research, administration, and practice*. Jones & Bartlett Learning.
- Hsieh, L.-W., Chang, Y.-C., & Yen, M. (2021). Improving leadership competence among undergraduate nursing students: Innovative objectives development, implementation, and evaluation. *Nursing Education Perspectives*. <https://doi.org/10.1097/01.NEP.0000000000000866>
- Hughes, V. (2018). What are the barriers to effective nurse leadership? *Athens Journal of Health*, 5(1), 7–20. <https://doi.org/10.30958/ajh.5-1-1>

- Johnson, O., Begg, K., Kelly, A. H., & Sevdalis, N. (2021). Interventions to strengthen the leadership capabilities of health professionals in Sub-Saharan Africa: A scoping review. *Health Policy and Planning, 36*(1), 117–133. <https://doi.org/10.1093/heapol/czaa078>
- Jones, D. (2018). *Nurse managers and hospital nurse educators' views related to the knowledge, skill and attitude requirements of newly licensed nurses in the Las Vegas and Salt Lake Valleys* [Doctor of Nursing Practice final project, George Washington University]. Health Sciences Research Commons (Himmelfarb Library). [https://hsrc.himmelfarb.gwu.edu/son\\_dnp/22](https://hsrc.himmelfarb.gwu.edu/son_dnp/22)
- Joseph, M. L., & Huber, D. L. (2021). *Leadership & nursing care management* (7th ed.). Saunders.
- Kerr, J. (2015, August 10). Leader or manager? These 10 important distinctions can help you out. *Inc.* <https://www.inc.com/james-kerr/leading-v-managing-ten-important-distinctions-that-can-help-you-to-become-better.html>
- Korejan, M. M., & Shahbazi, H. (2016). An analysis of the transformational leadership theory. *Journal of Fundamental and Applied Sciences, 8*(3), 452–460. <https://doi.org/10.4314/jfas.v8i3s.192>
- Kukkonen, P., Leino-Kilpi, H., Koskinen, S., Salminen, L., & Strandell-Laine, C. (2020). Nurse managers' perceptions of the competence of newly graduated nurses: A scoping review. *Journal of Nursing Management, 28*(1), 4–16. <https://doi.org/10.1111/jonm.12891>
- Maia, M. A., Paiva, A. C. O., Moretão, D. I. C., Batista, R. C. R., & Alves, M. (2019). The daily work in nursing: A reflection on professional practices. *Ciência, Cuidado e Saúde, 18*(4), e43349. <https://doi.org/10.4025/ciencucidsaude.v18i4.43349>
- Makuch, D. M. V. (2017). Pedagogical approach in the implementation of curriculum programs in nurse training. *Escola Anna Nery, 21*(4). <https://doi.org/10.1590/2177-9465-EAN-2017-0025>
- Marcellus, L., Duncan, S., MacKinnon, K., Jantzen, D., Siemens, J., Brennan, J., & Kassam, S. (2018). The role of education in developing leadership in nurses. *Nursing Leadership, 31*(4), 26–35. <https://doi.org/10.12927/cjnl.2019.25758>
- Miles, J. M., & Scott, E. S. (2019). A new leadership development model for nursing education. *Journal of Professional Nursing, 35*(1), 5–11. <https://doi.org/10.1016/j.profnurs.2018.09.009>
- Mohammadpourhodki, R., Hajizadeh, S., & Shams, S. (2025). A systematic review of interventions aiming to promote leadership skills among nursing students: From in-class strategies to curriculum revisions. *Journal of Advances in Medical Education & Professionalism, 13*(2), 85–94. <https://doi.org/10.30476/jamp.2024.103763.2022>
- Mwasi, J. T., Njuguna, S., & Mulu, M. (2024). Policy factors associated with nurse managers' preparedness in mentorship role at Kenyatta National Hospital, Kenya. *Journal of Medicine, Nursing and Public Health, 4*(3), 1–22. <http://41.89.31.5:8080/xmlui/bitstream/handle/123456789/1985/Julita.pdf>
- Nursing Council of Kenya (NCK). (2020). *Scope of practice for entry-level nurses and midwives in Kenya*. [http://nckkenya.com/wpcontent/uploads/2020/08/Scope\\_ofPractice\\_For\\_Entry\\_Level\\_Programmes\\_17.08.2020.pdf](http://nckkenya.com/wpcontent/uploads/2020/08/Scope_ofPractice_For_Entry_Level_Programmes_17.08.2020.pdf)
- Nyikuri, M., Tsofa, B., Barasa, E., Okoth, P., & Molyneux, S. (2015). Crises and resilience at the frontline—Public health facility managers under devolution in a sub-county on the Kenyan coast. *PLoS ONE, 10*(12), e0144768. <https://doi.org/10.1371/journal.pone.0144768>
- Nzinga, J., McGivern, G., & English, M. (2018). Examining clinical leadership in Kenyan public hospitals through the distributed leadership lens. *BMC Health Services Research, 18*, Article 756. <https://doi.org/10.1093/heapol/czx167>
- Ocho, O. N., Wheeler, E., Rigby, J., & Murphy, G. T. (2021). Core competencies and challenges among nurses transitioning into positions of leadership: A Caribbean perspective. *Journal of Nursing Management, 29*(8), 2458–2469. <https://doi.org/10.1108/LHS-03-2021-0014>

- Ortega, J., Hooshmand, M., Foronda, C., Padron, M., Simon, D., Waters, M., & Peragallo, M. N. (2018). Developing nurse leaders across the Americas: Evaluation of an online nursing leadership course. *Revista Panamericana de Salud Pública*, 42, e152. <https://doi.org/10.26633/RPSP.2018.152>
- Perez-Gonzalez, S., Marques-Sanchez, P., Pinto-Carral, A., Gonzalez-Garcia, A., Liebana-Presa, C., & Benavides, C. (2024). Characteristics of leadership competency in nurse managers: A scoping review. *Journal of Nursing Management*, 2024, Article 5594154. <https://doi.org/10.1155/2024/5594154>
- Purabdollah, M., Zamanzadeh, V., Ghahramanian, A., & Lotfi, M. (2024). Competency gap among graduating nursing students: What they have achieved and what is expected of them. *BMC Medical Education*, 24(1), 546. <https://doi.org/10.1186/s12909-024-05532-w>
- Salvage, J. R. G. N., Hon, L. L. D., & White, J. A. M. (2019). Nursing and health policy perspectives: Everybody's business. *Nursing Leadership and Health Policy*. <https://doi.org/10.1111/inr.12523>
- Scammell, J. M. E., Apostolo, J. L. A., Bianchi, M., Costa, R. D. P., Jack, K., Luiking, M.-L., & Nilsson, S. (2020). Learning to lead: A scoping review of undergraduate nurse education. *Journal of Nursing Management*, 28(3), 756–765. <https://doi.org/10.1111/jonm.12951>
- Södersved Källestedt, M.-L., Asp, M., Letterstål, A., & Widarsson, M. (2020). Perceptions of managers regarding prerequisites for the development of professional competence of newly graduated nurses: A qualitative study. *Journal of Clinical Nursing*, 29(23–24), 4784–4794. <https://doi.org/10.1111/jocn.15522>
- Stewart, D., Catton, H., Acorn, M., Burton, E., Fokeladeh, H. S., Parish, C., & Williamson, L. (2022). *Global standards for professional nursing education*. International Council of Nurses. <https://www.icn.ch/sites/default/files/inline->
- Tetui, M., Hurtig, A. K., Lembani, M., Akuffo, A., & Kiwanuka, S. N. (2016). Building a competent health manager at district level: A grounded theory study from Eastern Uganda. *BMC Health Services Research*, 16, 665. <https://doi.org/10.1186/s12913-016-1918-0>
- Turner, P. (2019). Assessing health professionals for succession and leadership roles. In Y. F. K. (Ed.), *Leadership in healthcare* (pp. 197–222). Palgrave Macmillan. [https://link.springer.com/chapter/10.1007/978-3-030-04387-2\\_10](https://link.springer.com/chapter/10.1007/978-3-030-04387-2_10)
- Uniproject Materials. (2016). *How to calculate a reliable sample size using Taro Yamane method*. <https://uniprojectmaterials.com/view>
- Walekhwa, N. M., & Suge, V. (2023). *Research methods: Essential tools and techniques* (pp. 91–104). Utafiti Foundation.
- World Health Organisation. (2020). *State of the world's nursing 2020: Investing in education, jobs and leadership*. <https://www.who.int/publications/i/item/9789240003279>
- Wu, X. V., Enskär, K., Pua, L. H., Heng, D. G. N., & Wang. (2017). Clinical nurse leaders' and academics' perspectives in clinical assessment of final-year nursing students: A qualitative study. *Nursing and Health Sciences*, 19, 287–293. <https://doi.org/10.1111/nhs.12342>
- Yau, C. W. H., Leigh, B., Liberati, E., Punch, D., Dixon-Woods, M., & Draycott, T. (2020). Clinical negligence costs: Taking action to safeguard NHS sustainability. *BMJ*, 368, m552. <https://doi.org/10.1136/bmj.m552>
- Yimeng, S. (2017). Taylor scientific management theory carding and significance of organisation management. *Social Sciences*, 6(4), 102–107. <https://doi.org/10.11648/j.ss.20170604.12>
- Zeng, W., Musiega, A., Oyasi, J., Giorgio, L. D., Chuma, J., Lu, R., & Ahn, H. (2021). Understanding the performance of county health service delivery in Kenya: A mixed-method analysis. *Health Policy and Planning*, 37(2), 189–199. <https://doi.org/10.1093/heapol/czab129>

Zimano, F. R., & Chilunjika, A. (2019). Mixed methods in multi-level sampling: A research paradigms teaching and learning case to spur downstream innovation. *International Journal of Innovation in Education*, 5(4), 323–339. <https://doi.org/10.1504/IJIE.2019.102625>