Impact of Nursing Curriculum on Clinical Competence and Nursing Practice: A Cross-Sectional Study of Selected Institutions in Nigeria

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Abstract
This study assessed the impact of the Nigerian nursing curriculum on clinical practice, focusing on its relevance, the integration of theory and practice, and areas requiring reform. Despite recent reforms by the Nursing and Midwifery Council of Nigeria (NMCN) to align nursing education with global standards, concerns persist regarding graduates' preparedness for modern healthcare demands. This survey aimed to evaluate the integration of theoretical knowledge with practical skills, assess the curriculum's effectiveness in clinical practice, and identify existing gaps. A cross-sectional descriptive survey was conducted among 231 registered nurses at the University of Abuja Teaching Hospital, Gwagwalada, using a structured questionnaire. Data were analyzed with descriptive and inferential statistics, alongside a thematic analysis of open-ended responses. Findings revealed that the curriculum received an overall "Very Good" rating (73%). It performed strongly in design and regulatory alignment (80%) but received lower ratings for institutional support and clinical exposure. While evidence-based practice and core nursing skills were adequately emphasized, the integration of modern healthcare technologies (34%) and community/public health nursing (52%) was limited, highlighting a persistent theory-practice gap. Major deficiencies included digital/technological competence (30%), community/public health preparation (25%), and leadership and advocacy training (20%). The study concludes that although the Nigerian nursing curriculum provides a solid theoretical foundation, it inadequately prepares graduates for real-world challenges, thereby slowing their progression along Benner's novice-to-expert continuum. Recommendations include regular curriculum reviews, strengthened clinical training, the incorporation of digital health technology, expanded community-based experiences, and embedded leadership development. Addressing these gaps is essential for producing competent, confident, and practice-ready nurses capable of meeting Nigeria's evolving healthcare needs.

Keywords: Nursing Curriculum; Nursing Practice; Theory-Practice Gaps; Clinical Competence; Cross-Sectional Study

Introduction
Nursing education serves as the very bedrock upon which competent and compassionate healthcare professionals are built. In Nigeria, the journey of nursing formation has been evolving. For decades, the path was dominated by hospital-based diploma programs, but a significant shift is underway. Driven by reforms from the Nursing and Midwifery Council of Nigeria (NMCN, 2020), there is a concerted push towards degree-based education to align with international standards (Okoronkwo et al., 2021). Yet, amidst this transition, a critical question lingers: does the current curriculum truly equip nurses to handle the complex realities of today's clinical environments? The bridge between education and practice is built by the curriculum's relevance. An effective curriculum doesn't just transmit knowledge; it weaves theoretical understanding with hands-on skills, fostering critical thinking, patient-centered care, and cultural sensitivity. When this bridge is weak, the consequences are real. Gaps in these essential areas have been linked to the troubling exodus of skilled nurses seeking better opportunities abroad, a phenomenon that depletes the local workforce and robs new graduates of vital mentors (Nwosu et al., 2022). The voices of those who have recently gone through the system echo these concerns, pointing to poor infrastructure, sporadic mentorship, and a lack of research support

as significant hurdles that leave them feeling unprepared to practice independently (Odetola et al., 2024; Akinmoladun et al., 2025).

Furthermore, the pedagogical shift towards competency-based and student-centered learning, while advocated globally, has been inconsistently adopted across Nigerian nursing schools (Adejoh et al., 2022). This inconsistency fuels the notorious "theory-practice gap," where what is learned in the classroom doesn't match the realities of the ward. For a new nurse, this disconnect can be paralyzing, eroding confidence, compromising the quality of patient care, and seeding early job dissatisfaction (Ezeonwu & Nwaneri, 2023). Therefore, taking a hard look at the curriculum's real-world impact is not just an academic exercise; it is essential to ensure graduates are not only knowledgeable but also clinically effective and resilient. A central issue is the scarcity of local, empirical evidence measuring the effect of these curricular reforms on a nurse's readiness for practice. Without this crucial data, educational institutions and regulatory bodies are left to make changes in the dark. This study aims to turn on the lights by systematically assessing the impact of the nursing curriculum on professional practice in Nigeria, focusing on nurses' own perceptions of their readiness, competence, and ability to meet the nation's healthcare demands.

A modern nursing curriculum must be a living document, integrating emerging health threats, technological advancements, and a steadfast focus on patient-centered care. In Nigeria, the NMCN provides the regulatory framework, but critics argue that the content within that framework has not kept pace with global shifts, particularly in areas like simulation-based learning, health informatics, and interprofessional collaboration (Okoronkwo et al., 2021). A relevant curriculum must also be deeply contextual, addressing national health priorities such as communicable diseases and maternal mortality. However, studies indicate that many programs still emphasize outdated content, failing to incorporate digital competencies and holistic care approaches (Adejoh et al., 2022). This oversight widens the theory-practice divide, leaving new graduates feeling ineffective and unprepared. Clinical preparedness is the ultimate test of any curriculum. When students face inadequate clinical hours, limited exposure to various specialties, and insufficient supervision, they often experience a jarring "transition shock" upon graduation. Research confirms that many Nigerian nurses go through this, citing poor preceptorship and skill deficiencies as key reasons (Ezeonwu & Nwaneri, 2023). For instance, one study starkly found that 66.7% of newly qualified nurses received no formal mentorship a critical failure that has direct implications for both patient safety and the retention of nurses in the system (Ajayi & Ojo, 2024).

To make sense of this journey from student to professional, this study is guided by Patricia Benner's Novice to Expert Theory (1984). Benner wisely proposed that clinical competence is not an instant achievement but a gradual progression through five stages of experiential learning. Her theory underscores a vital truth: expertise cannot be learned from a textbook alone. It requires accumulated clinical experience and the guidance of reflective mentors. In the Nigerian context, where structured clinical exposure can be limited, Benner's framework helps explain why so many nurses remain "advanced beginners" for longer than necessary, highlighting the urgent need for a curriculum that intentionally fosters early and meaningful clinical engagement (Obi, 2023).

Looking beyond Nigeria, the value of robust, experiential learning is clear. In Kenya, competency-based training significantly boosted nurses' confidence in managing maternal and neonatal care (Wambugu et al., 2020). In the Philippines, clinical simulation was shown to dramatically enhance student preparedness (Santos et al., 2022), and in Bangladesh, problem-based learning led to faster and more effective clinical adaptation (Rahman et al., 2021). The Nigerian experience, as documented by local researchers, mirrors these global insights. Adejoh et al. (2022) found that a striking 72% of final-year students felt their curriculum was poorly integrated with clinical practice, pointing to overcrowded wards and outdated learning materials. Ezeonwu and Nwaneri (2023) documented the anxiety and role ambiguity experienced by new nurses, while Ugwoke et al. (2023) highlighted a persistent gap between theoretical knowledge and its practical application, exacerbated by inconsistent mentorship.

In summary, the literature paints a concerning picture of a disconnect between nursing education and clinical practice in Nigeria, characterized by outdated teaching methods and insufficient clinical immersion. This study seeks to move from identifying problems to proposing evidence-based solutions. By providing concrete data on the curriculum's impact, the findings will offer a valuable roadmap for educators, policymakers, and healthcare administrators, ultimately contributing to a stronger nursing workforce and better patient care outcomes for the nation.

Aim of the Study:
The study aims at assessing the impact of nursing curriculum on clinical competence and nursing practice in selected institutions in Nigeria.

Research Objectives:
1. To assess Nigerian nurses' perceptions of the relevance of the current nursing curriculum to their clinical practice.
2. To determine the extent to which theoretical knowledge is integrated with clinical training in Nigerian nursing education.
3. To identify the perceived deficiencies in the current nursing curriculum that negatively impact nursing practice.

Research Questions:

1. How relevant do Nigerian nurses perceive the current nursing curriculum to their clinical practice?

2. To what extent is theoretical knowledge integrated with clinical training in Nigerian nursing education?

3. What are the perceived deficiencies in the current nursing curriculum that impact nursing practice?

Methodology
This study employed a cross-sectional descriptive survey design, which is appropriate for collecting data at a single point in time from a representative sample of the target population to assess perceptions, attitudes, and self-reported behaviors (Creswell & Creswell, 2018). The study was conducted at the University of Abuja Teaching Hospital (UATH), Gwagwalada, Abuja, a tertiary institution with a 520-bed capacity. UATH provides comprehensive healthcare services and also serves as a training ground for student nurses, resident doctors, and other healthcare professionals.

The target population consisted of 547 registered practicing nurses and nurse educators working across various departments and units. The sample size of 231 nurses was determined using Taro Yamane's (1967) formula. A stratified random sampling technique was applied to ensure proportional representation of nurses across different units, with strata randomized to enhance objectivity and minimize bias. The inclusion criteria were full-time registered nurses at UATH who were graduates of accredited nursing schools and had at least three years of post-graduation clinical experience. Exclusion criteria included student or internship nurses, nurses on leave during data collection, and those who obtained their basic nursing qualifications outside Nigeria.

The research instrument was a structured, self-administered questionnaire titled *Nursing Curriculum and Practice Impact Assessment Questionnaire (NCPIAQ)*. This instrument was adapted from a previously validated tool and reviewed by experts in nursing education and curriculum development. To establish reliability, a pilot study was conducted with 23 nurses at the Federal Medical Centre (FMC), Jabi, Abuja. The data were subjected to Cronbach's alpha reliability analysis using SPSS, with a coefficient of 0.70 or above considered acceptable.

Ethical approval was obtained from the hospital management, relevant ethics committees, and institutional review boards. The questionnaire was distributed to selected nurses and educators during their shifts. Respondents were informed about the purpose of the study, assured of confidentiality, and asked to provide written informed consent. Completed questionnaires were retrieved within two weeks of distribution.

Data were analyzed using SPSS version 25. Descriptive statistics such as frequencies, percentages, means, and standard deviations were computed. Inferential statistics included Chi-square tests to assess associations between qualifications and perceived preparedness, and independent t-tests/ANOVA to compare mean differences across demographic groups (e.g., departments and years of practice). Responses to open-ended questions were analyzed thematically to identify common patterns and suggestions for curriculum improvement.

Data Presentation and Analysis
Effectiveness of Nursing Curriculum

Table 1: Perceived Effectiveness of Nursing Curriculum by Domain (n=231)

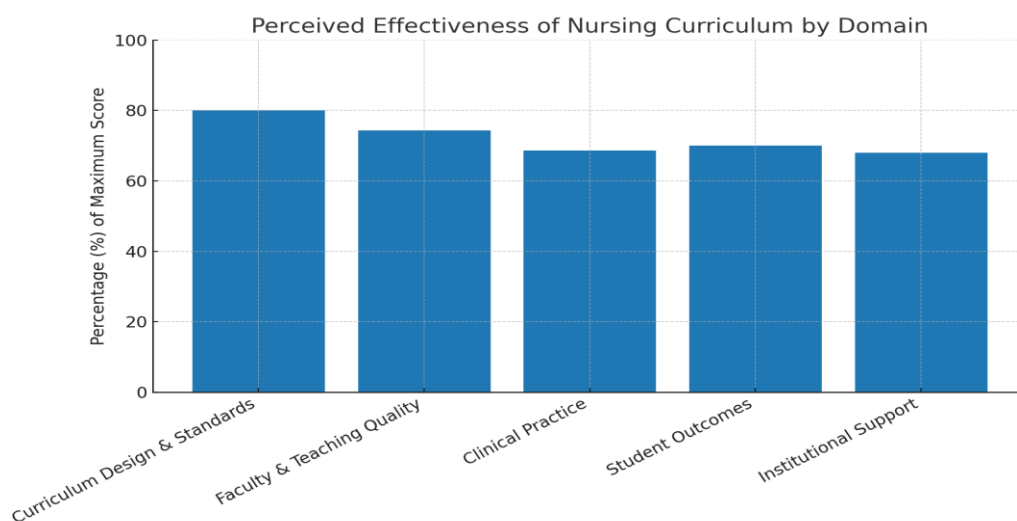| Domain	Max Score	Mean Score	Percentage (%)	Interpretation
Curriculum Design & Standards	45	36	80%	Very Good
Faculty & Teaching Quality	35	26	74%	Good
Clinical Experience & Practice	35	24	69%	Good
Student Outcomes	30	21	70%	Good
Institutional Support	25	17	68%	Fair/Good
Total	170	124	73%	Very Good Overall

Table 1 shows the curriculum scored **124/170 (73%)**, rated *"Very Good."* While design standards aligned with regulatory guidelines, institutional support and clinical exposure scored relatively lower, showing weaknesses in simulation labs, ICT, and mentorship. Curriculum design and standards had the highest percentage of 80% while institutional support recorded the lowest with 68%.

Integration of Theoretical Knowledge and Clinical Skills

Table 2: Extent of Integration of Theory and Practice (n = 231)

Indicator	Positive Responses (%)	Interpretation
Preparedness for hands-on clinical practice	58%	Moderate–High
Coverage of critical skills (assessment, documentation, nursing diagnosis)	62%	Adequate but uneven
Training in modern healthcare technology	34%	Low

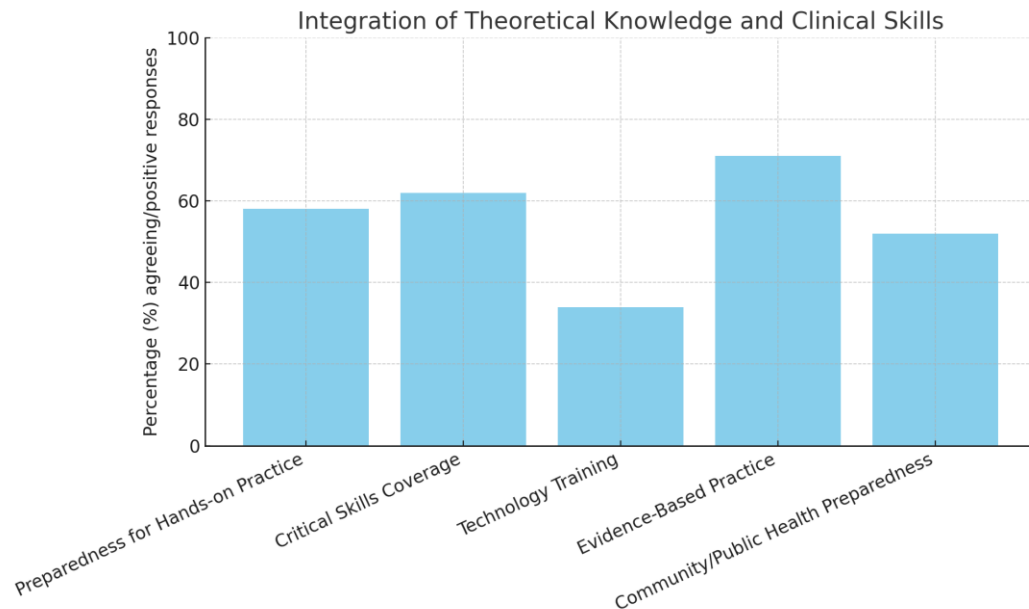| Indicator	Positive Responses (%)	Interpretation
Emphasis on evidence-based practice & decision-making	71%	High
Preparation for community/public health nursing	52%	Moderate

Table 2 above shows the integration of theory into practice is uneven. Respondents agreed that evidence-based practice and clinical skills were emphasized (71%), but preparation for technology use (34%) and community/public health nursing (52%) was limited, highlighting a persistent theory-practice gap.

Identified Gaps in the Nursing Curriculum

Table 3: Major Gaps Identified in the Nursing Curriculum (n=231)

Gap Identified	Frequency (%) of Respondents	Interpretation
Digital/Technological Competence	30%	Major Gap
Community/Public Health Preparation	25%	Major Gap
Leadership, Teamwork, and Advocacy	20%	Significant Gap
Other Gaps (simulation labs, cultural competence, alumni tracking)	25%	Notable but secondary

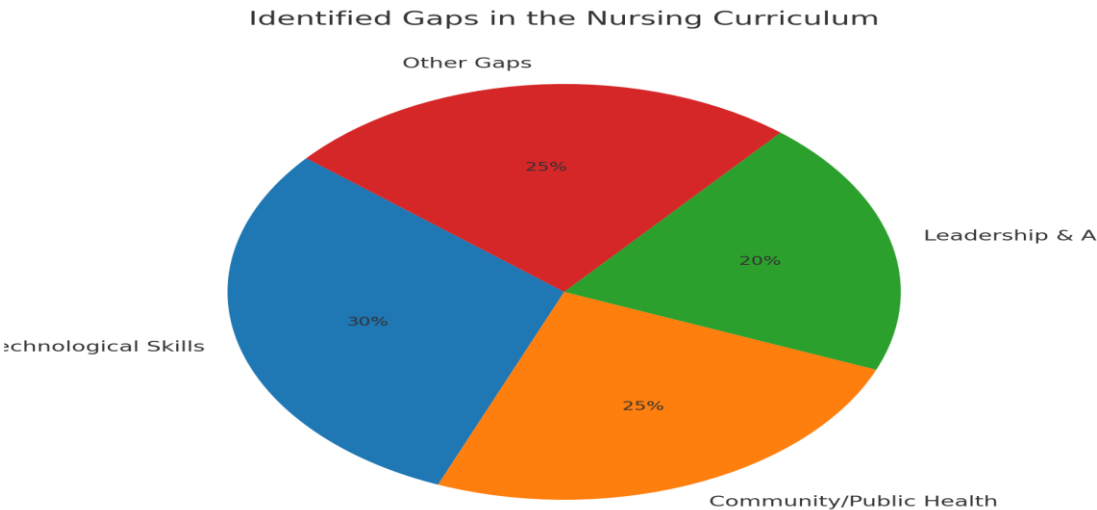### Identified Gaps in the Nursing Curriculum

Table 3 above shows that the most frequently cited gaps were digital/technological competence (30%), followed by limited community/public health training (25%) and weak leadership preparation (20%). These gaps reflect areas requiring curriculum reform to improve workforce readiness and patient care quality.

Discussion

This study assessed the impact of the nursing curriculum on clinical practice among 231 registered nurses at the University of Abuja Teaching Hospital, Gwagwalada. The discussion aligns the findings with the research objectives and existing empirical studies.

Findings revealed that the nursing curriculum was rated "Very Good" overall (73%)**,** particularly in curriculum design and standards (80%). However, faculty-student ratios, clinical exposure, and institutional support were rated lower. This aligns with the work of Adejoh et al. (2022)**,** who found that overcrowding, inadequate teaching resources, and poor supervision undermined the effectiveness of nursing curricula in Lagos. Similarly, Okoronkwo et al. (2021) highlighted that while curricula generally meet minimum standards, outdated content and insufficient reviews limit their responsiveness to emerging health needs. Thus, while the Nigerian curriculum provides a solid foundation, it remains deficient in addressing modern healthcare challenges and practice realities.

The study showed partial integration: 58% felt prepared for hands-on practice**,** 62% believed critical skills were adequately covered**,** and 71% agreed that evidence-based practice was emphasized**.** However, only 34% felt adequately trained in modern healthcare technologies**,** and just 52% were moderately prepared for community health practice. These findings corroborate Ezeonwu & Nwaneri (2023), who reported that newly qualified Nigerian nurses experience a theory-practice gap**,** particularly in technology use and emergency care. Internationally, Mthimunye & Daniels (2021) in South Africa also observed that graduates felt underprepared for real-world demands due to inadequate clinical integration. The results imply that the Nigerian curriculum still emphasizes theory at the expense of experiential learning and technological competence.

Three major gaps were identified:
1. Digital and technological competence (30%)
2. Community/public health preparation (25%)
3. Leadership and advocacy (20%)

These align with Ugwoke et al. (2023), who found Nigerian curricula weak in leadership, informatics, and community-based interventions. Similarly, Rahman et al. (2021) in Bangladesh stressed that problem-based and technology-driven curricula better prepare graduates for modern care environments. The findings suggest that without targeted reforms in these areas, Nigeria risks producing graduates who lag in essential 21st-century nursing competencies.

Conclusion

This study concludes that the Nigerian nursing curriculum, while providing a robust theoretical foundation and meeting regulatory standards, contains significant deficiencies in preparing graduates for the complexities of clinical practice. Specific inadequacies in technology integration, leadership development, and community health nursing perpetuate the theory-practice gap and hinder the transition from novice to expert, as conceptualized by Benner's theory. Therefore, comprehensive curriculum reform is imperative to cultivate competent, confident, and practice-ready nurses capable of meeting contemporary healthcare demands.

Recommendations

1. Curriculum Review and Modernization – Regularly update curricula to reflect technological advancements, emerging diseases, and global health trends.
2. Strengthen Clinical Training – Increase clinical hours, expand simulation labs, and ensure effective preceptorship and mentorship programs.
3. Integrate Digital Health Training – Include electronic medical records, telehealth, and modern equipment handling in training.
4. Enhance Community Health and Public Health Exposure – Expand rural placements and community-based projects to better prepare nurses for underserved areas.
5. Leadership and Professional Development – Embed leadership, teamwork, and advocacy courses within the curriculum.
6. Improve Institutional Support – Provide digital libraries, Wi-Fi, and partnerships with NGOs and international institutions to enrich learning.

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