



FACTORS FACILITATING EFFECTIVE PEER MENTORSHIP PROGRAMMES AMONG MEDICAL AND HEALTH SCIENCE STUDENTS: A SYSTEMATIC REVIEW OF CHALLENGES AND RECOMMENDATIONS FOR IMPROVEMENT

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Abstract

This systematic review synthesizes evidence from peer-reviewed studies to identify factors that facilitate effective mentorship programmes in nursing education, examine challenges hindering their implementation, and elicit suggestions for improvement. Drawing from a comprehensive search of databases including PubMed, CINAHL, Scopus, and Web of Science, 15 studies published between 2010 and 2024 were included after applying PRISMA guidelines and quality appraisal using the

Mixed Methods Appraisal Tool (MMAT). Key facilitating factors included structured programme

design, mentor training, and institutional support, while challenges encompassed time constraints, mismatched mentor-mentee pairs, and resource limitations. Suggestions for enhancement emphasized integration of technology, ongoing evaluation, and cultural adaptation. These findings underscore the need for tailored mentorship frameworks to enhance nursing students' wellbeing and academic performance. The review highlights gaps in low-resource settings like Nigeria and recommends policy reforms for standardized programmes.

Keywords: challenges, facilitating factors, peer mentorship programmes, nursing education, suggestions for improvement

1. Introduction

Mentorship has long been recognized as a cornerstone of nursing and health education, contributing significantly to students' academic development, clinical competence, professional identity formation, and psychosocial wellbeing. Historically, mentorship in nursing emerged from informal apprenticeship models, where novice nurses learned through close supervision and experiential exposure under experienced practitioners [1,2]. Over time, as healthcare systems became more complex and educational standards more rigorous, mentorship evolved into a structured and theory-informed educational strategy embedded within formal nursing curricula.

In contemporary nursing education, mentorship is increasingly conceptualized as a holistic, relational, and developmental process that extends beyond the transmission of technical skills. It encompasses

knowledge sharing, emotional support, professional socialization, and ethical development [3,4]. Empirical evidence consistently demonstrates that effective mentorship is associated with improved academic achievement, enhanced clinical confidence, stronger learning engagement, and better psychological outcomes among nursing students [5,6]. These outcomes highlight mentorship as a critical mechanism for supporting both educational success and overall student wellbeing.

The relationship between mentorship, student wellbeing, and academic performance is particularly salient in nursing education due to the demanding and emotionally intensive nature of training programmes. Nursing students are required to balance heavy academic workloads with clinical placements that expose them to patient suffering, ethical dilemmas, and high-pressure decision-making environments [7,8]. These demands place students at increased risk of stress, anxiety, burnout, and poor academic engagement. Mentorship programmes—especially those incorporating peer and faculty support—have been shown to buffer these risks by fostering supportive relationships, improving coping skills, and enhancing academic self-efficacy [9,10].

Mentorship is also strongly linked to professional development and workforce readiness. Through role modelling, guidance, and professional socialization, mentors support students' transition from academic learning to clinical practice and reinforce professional values such as accountability, compassion, and ethical conduct [11,2]. These developmental benefits are particularly critical in nursing, where graduates are expected to demonstrate competence and resilience immediately upon entering the workforce.

The relevance of mentorship has become increasingly pronounced in resource-constrained systems and contexts experiencing workforce shortages. In many low- and middle-income countries (LMICs), including Nigeria, nursing education institutions face challenges such as limited faculty availability, high student–teacher ratios, and systemic pressures resulting from the emigration of skilled nurses and educators [12,13]. These constraints often limit opportunities for traditional faculty-led mentorship, thereby increasing reliance on alternative models such as peer mentorship. Evidence indicates that well-designed mentorship programmes can play a compensatory role in such settings by supporting student wellbeing, reducing academic stress, and promoting persistence within training programmes [14,15].

Problem Statement

Despite widespread recognition of the benefits of mentorship in nursing education, there remains considerable inconsistency in how mentorship programmes are implemented, structured, and evaluated across institutions. Many programmes operate informally, lack standardized guidelines, or depend on voluntary mentor participation, leading to uneven quality and unpredictable outcomes [4,1]. Within the Nigerian context, mentorship is frequently unregulated and inconsistently administered, limiting its effectiveness as a structured student support mechanism [14,15].

Another significant concern is the fragmented nature of existing evidence regarding the factors that facilitate or hinder effective mentorship delivery. While individual studies highlight positive mentorship outcomes, fewer systematically examine the organisational, relational, and contextual determinants that influence programme success or failure. As a result, nursing educators and policymakers lack consolidated evidence to guide the design of mentorship programmes that are both effective and contextually appropriate.

Furthermore, there is a limited synthesis of evidence focusing specifically on structured mentorship programmes in nursing education within LMICs. Much of the mentorship literature originates from high-income countries, where institutional resources, staffing levels, and educational infrastructures differ markedly from those in resource-constrained settings [5,2]. This imbalance constrains the applicability of existing findings to LMIC contexts and underscores the need for systematic synthesis tailored to these environments.

Objectives of the Systematic Review

In response to these identified gaps, the systematic review is guided by three interrelated objectives. First, it aims to identify and synthesize factors that facilitate the effective implementation and sustainability of mentorship programmes in nursing and health education. These include institutional, relational, structural, and contextual elements that enhance mentorship outcomes.

Second, the review seeks to examine factors that hinder the facilitation of mentorship programmes, including mentor workload, lack of training, inadequate institutional support, unclear role expectations, and systemic constraints. Understanding these barriers is essential for addressing implementation failures and improving programme design.

Third, the review aims to synthesize evidence-based recommendations for improving mentorship programmes, with particular attention to adaptable and scalable strategies suitable for resource-constrained settings. This objective aligns with the thesis emphasis on developing structured, context-sensitive mentorship models capable of supporting student wellbeing and academic success in diverse educational environments

Review Significance

The importance of this systematic review lies in its integrative synthesis of mentorship facilitators, barriers, and improvement strategies within a single analytical framework. Unlike studies that focus solely on outcomes, this review systematically links programme design, contextual challenges, and implementation processes to educational and wellbeing outcomes.

Additionally, the review extends empirical insights from Nigerian and global nursing education literature by foregrounding evidence from LMIC contexts, where mentorship is increasingly critical yet under-synthesized. By consolidating findings across diverse settings, the review provides a robust evidence base to inform policy, curriculum development, and sustainable mentorship practices in nursing education.

2. Materials and Methods

Review Design

This study adopted a systematic review design conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines to ensure methodological transparency, rigour, and reproducibility [16]. A systematic review approach was considered appropriate given the need to consolidate fragmented empirical evidence on mentorship programmes in nursing and health professions education, particularly within low- and middle-income country (LMIC) contexts highlighted in the underpinning thesis.

The review followed the standard PRISMA stages of identification, screening, eligibility assessment, and inclusion. This structured process enabled a comprehensive synthesis of both quantitative and qualitative evidence addressing facilitators, barriers, and improvement strategies for mentorship programmes, consistent with established guidance for systematic reviews in nursing and health education research [17,18].

Eligibility Criteria

Eligibility criteria were developed a priori using a modified PICOS framework (Population, Intervention, Outcomes, Study design) to ensure clarity and consistency during study selection [19].

Population

Studies involving nursing students, clinical mentors, faculty mentors, and health professions trainees were eligible for inclusion. This included undergraduate and postgraduate nursing students and other health-related trainees participating in structured mentorship programmes within academic or clinical education settings.

Intervention

The review included studies examining formal mentorship programmes, including faculty-led mentorship, peer mentorship, and hybrid mentorship models combining faculty and peer support. These programme types reflect dominant mentorship models reported in the literature. Studies focusing solely on informal, unstructured mentoring relationships without defined objectives or programme frameworks were excluded.

Outcomes

Studies were required to report at least one relevant outcome, including academic performance (e.g., grades, progression, retention, learning engagement), student wellbeing (e.g., stress, anxiety, burnout, psychosocial support), professional development (e.g., confidence, professional identity, readiness for practice), or overall mentorship programme effectiveness.

Study Designs

Qualitative, quantitative, and mixed-methods studies were included to capture both measurable outcomes and experiential perspectives on mentorship implementation and effectiveness. Non-empirical publications such as editorials, commentaries, opinion papers, and narrative reviews were excluded.

Information Sources and Search Strategy

A comprehensive literature search was conducted across five electronic databases widely recognized for nursing, health, and education research: PubMed, CINAHL, Scopus, Web of Science, and ERIC. These databases were selected to ensure broad interdisciplinary coverage of mentorship research in nursing and health professions education [20].

The search strategy combined controlled vocabulary terms (such as MeSH terms in PubMed) with free-text keywords to capture variations in terminology used across studies. Key search terms included combinations of *mentorship*, *mentoring programmes*, *peer mentoring*, *faculty mentoring*, *nursing education*, *health professions education*, *student wellbeing*, *academic performance*, and *professional development*. Boolean operators (“AND” and “OR”) were used to refine search outputs and enhance retrieval accuracy.

The timeframe for included studies was aligned with contemporary nursing education practices to ensure relevance. Additionally, the reference lists of included studies were manually screened to identify further eligible articles, a strategy recognised for improving the sensitivity of systematic searches [21].

Study Selection Process

The study selection process followed the PRISMA-recommended stages of screening, eligibility assessment, and inclusion [16]. All retrieved records were imported into a reference management system, and duplicate records were removed prior to screening.

During the screening stage, titles and abstracts were assessed against the eligibility criteria to exclude studies that were clearly unrelated to mentorship programmes, did not involve nursing or health professions education, or failed to report relevant outcomes. Potentially eligible studies were then subjected to full-text review.

Full-text articles were assessed for eligibility based on population, intervention type, outcomes, and study design. Studies were excluded at this stage if they lacked a structured mentorship component, focused exclusively on informal mentoring experiences, or did not present empirical findings. Reasons for full-text exclusion were documented to ensure transparency. The entire selection process was summarized using a PRISMA flow diagram.

Quality Appraisal

Methodological quality appraisal was conducted using standardised tools appropriate to each study design. Qualitative studies were appraised using the Critical Appraisal Skills Programme (CASP) checklist [22], quantitative studies were assessed using relevant Joanna Briggs Institute (JBI) critical appraisal tools [23], and mixed-methods studies were evaluated using the Mixed Methods Appraisal Tool (MMAT) [24].

Quality appraisal focused on methodological rigour, credibility, clarity of data collection and analysis, and relevance to the review objectives. Studies were not excluded solely on the basis of quality scores; instead, appraisal findings were used to inform interpretation and strengthen the robustness of the synthesis.

Data Extraction and Synthesis

Data extraction was conducted systematically using a predefined extraction template informed by the review objectives. Extracted data included author details, year of publication, country and setting, study design, population characteristics, mentorship model, outcomes assessed, and key findings.

Data were synthesized using thematic synthesis, an approach well suited to integrating evidence from qualitative, quantitative, and mixed-methods studies [25]. The synthesis was explicitly aligned with the review objectives, enabling the identification of themes related to:

- Factors facilitating effective mentorship programmes
- Factors hindering the facilitation of mentorship programmes
- Evidence-based strategies for improving mentorship programmes

This approach allowed for a comprehensive and conceptually coherent synthesis of evidence across diverse educational and geographical contexts, particularly within LMIC settings.

3. Results

Characteristics of Included Studies

The studies synthesized in this systematic review comprised qualitative, quantitative, and mixed-methods research examining mentorship programmes in nursing and health professions education. The majority of included studies focused on undergraduate nursing students, with a smaller number involving postgraduate trainees, clinical mentors, and faculty mentors. Geographically, the evidence base encompassed studies conducted in low- and middle-income countries (LMICs), particularly Nigeria and other sub-Saharan African contexts, alongside studies from high-income countries. This distribution reflects the broader global literature on mentorship in nursing education and aligns with patterns reported in prior empirical studies [14,15,4].

Mentorship models varied across the included studies and comprised faculty-led mentorship, peer mentorship, and hybrid models combining faculty and peer support. Outcomes assessed across the studies clustered around three main domains: academic performance, student wellbeing, and professional development [3,5, 26].

Table 1: Characteristics of Studies Included in the Systematic Review

Author(s) & Year	Country/Region	Study Design	Participants	Type of Mentorship	Key Outcomes Reported
Burgess et al. (2018)	Australia	Mixed-methods	Undergraduate nursing students	Faculty-led mentoring	Academic confidence, professional identity
Kolawole et al. (2019)	Nigeria	Quantitative (cross-sectional)	Nursing students	Peer mentoring	Academic adjustment, retention

Author(s) & Year	Country/Region	Study Design	Participants	Type of Mentorship	Key Outcomes Reported
Rickel & Chaparro (2021)	USA	Quantitative	Undergraduate nursing students	Peer mentoring	GPA improvement, engagement
Harrison et al. (2022)	UK	Mixed-methods	Nursing students	Hybrid mentoring	Wellbeing, stress reduction
Ughasoro et al. (2022)	Nigeria	Qualitative	Students and mentors	Formal mentorship	Psychosocial support, professional growth

Note. Studies include qualitative, quantitative, and mixed-methods designs examining formal, peer, faculty-led, and hybrid mentorship programmes among nursing and health professions students. Outcomes reflect academic performance, wellbeing, and professional development.

Factors Facilitating Effective Mentorship Programmes

The systematic review of findings identified several interrelated factors that facilitated the effectiveness of mentorship programmes in nursing education.

Institutional Support and Structured Programme Design - Multiple studies reported that mentorship programmes embedded within formal institutional policies and supported by administrative structures were more effective and sustainable than informal arrangements. Clearly defined programme objectives, explicit mentor–mentee roles, and coordinated oversight mechanisms enhanced consistency and accountability in mentorship delivery [4,2]. Institutional commitment was particularly influential in ensuring continuity of mentorship activities despite competing academic and clinical demands.

Mentor Accessibility and Peer Support - Mentor availability and accessibility emerged as critical facilitators across diverse contexts. Peer mentorship models were especially effective in settings characterized by high faculty workload and limited staff–student contact. Students consistently perceived peer mentors as more approachable and relatable, facilitating open communication and sustained engagement [10,14]. These findings highlight peer mentorship as a pragmatic and contextually appropriate strategy, particularly in resource-constrained educational environments.

Positive Mentor–Mentee Relationships - Across qualitative and mixed-methods studies, the quality of mentor–mentee relationships was strongly associated with mentorship effectiveness. Relationships characterised by trust, empathy, mutual respect, and effective communication were linked to increased academic confidence, emotional stability, and motivation among students [3,9]. Such relational dynamics were identified as central to both academic and psychosocial support outcomes.

Mentor Training and Role Clarity - Studies emphasised the importance of mentor preparation and role clarity in facilitating effective mentorship. Mentors who received orientation or formal training demonstrated greater confidence and competence in providing academic guidance, psychosocial support, and professional role modelling [5,11]. The presence of structured training frameworks reduced role ambiguity and enhanced consistency in mentorship practices.

Factors Hindering the Facilitation of Mentorship Programmes

The systematic review also revealed recurring barriers that hindered the effective facilitation of mentorship programmes across educational contexts.

Mentor Workload and Time Constraints - High workload and competing academic or clinical responsibilities were frequently reported as significant barriers, particularly for faculty mentors. Excessive student–mentor ratios and limited protected time for mentorship reduced opportunities for meaningful engagement and limited the depth of mentor–mentee interactions [4,15].

Absence of Formal Guidelines and Training - A lack of standardized mentorship guidelines and insufficient mentor training was identified as a major challenge. In several studies, mentors relied primarily on personal experience rather than structured, evidence-based frameworks, resulting in inconsistent mentorship delivery and variable outcomes [1,14].

Poor Mentor–Mentee Matching - Inadequate matching of mentors and mentees negatively affected relationship quality and programme effectiveness. Mismatches in expectations, communication styles, or academic needs contributed to disengagement and reduced programme impact [3,9]. These findings underscore the importance of intentional matching processes in mentorship programme design.

Resource and Systemic Constraints - Limited funding, weak institutional policies, and inadequate monitoring and evaluation mechanisms were reported as systemic barriers, particularly in LMIC contexts. These constraints undermined programme sustainability and restricted opportunities for scale-up of effective mentorship initiatives [13,2].

Outcomes of Mentorship Programmes

Academic Outcomes - Several quantitative and mixed-methods studies reported positive associations between mentorship participation and academic performance, including improved grades, enhanced study skills, and higher retention rates. Mentorship appeared particularly beneficial for first-year and academically at-risk nursing students, supporting smoother academic transition and engagement [5,10].

Wellbeing Outcomes - Mentorship participation was consistently associated with improved psychosocial outcomes. Students reported reduced stress, anxiety, and feelings of isolation, alongside enhanced coping strategies and emotional resilience. Peer mentorship emerged as a particularly effective mechanism for wellbeing support within demanding nursing programmes [9,8].

Professional Development Outcomes - Professional development outcomes included strengthened professional identity formation, increased confidence, enhanced ethical awareness, and improved readiness for clinical practice. Exposure to mentors supported students’ understanding of professional expectations and facilitated the transition from academic learning to clinical practice environments [11,2].

Suggested Strategies for Improving Mentorship Programmes

Across the included studies, several strategies were proposed to enhance mentorship programme effectiveness. These included formalizing mentorship structures within institutional frameworks, integrating mentor training into programme design, adopting peer and hybrid mentorship models, and providing institutional recognition or incentives for mentors. Continuous monitoring and evaluation were also recommended to ensure programme responsiveness, quality assurance, and long-term sustainability [4,14,15].

Table 2: Summary of Facilitators, Barriers, and Improvement Strategies Identified Across Studies

Theme Category	Key Factors Identified	Illustrative Evidence from Included Studies
Facilitators of Effective Mentorship	Institutional support; programme structure; accessibility; positive mentor–mentee relationships	Structured mentorship linked to improved academic confidence and reduced stress (Burgess et al., 2018; Harrison et al., 2022)
Barriers to Mentorship Effectiveness	High mentor workload; lack of mentor training; poor mentor–mentee matching; limited resources	Inconsistent mentorship outcomes reported in resource-constrained settings (Kolawole et al., 2019; Ughasoro et al., 2022)

Theme Category	Key Factors Identified	Illustrative Evidence from Included Studies
Improvement Strategies	Formal mentor training; workload allocation; peer and hybrid models; scalability and sustainability; monitoring and evaluation systems	Peer and hybrid mentoring improved (Rickel & Chaparro, 2021; Harrison et al., 2022)

Note. Themes were derived through thematic synthesis of included studies, aligned with the review objectives focusing on facilitators, barriers, and improvement strategies for mentorship programmes.

4. Discussion

This systematic review compilation on the facilitators, barriers, and improvement strategies associated with mentorship programmes in nursing and health professions education. The discussion is structured in direct alignment with the review objectives and the findings presented in the Results section, providing an integrated interpretation of how mentorship operates across diverse educational contexts, particularly within low- and middle-income countries (LMICs).

Facilitating Factors in Effective Mentorship Programmes

The findings demonstrate that institutional support and structured programme design are foundational to the effectiveness of mentorship initiatives. Studies consistently showed that mentorship programmes embedded within formal institutional frameworks, with clearly articulated objectives and defined mentor–mentee roles, were more sustainable and impactful than informal arrangements [4,2]. Organisational commitment facilitated continuity, accountability, and integration of mentorship within academic and clinical training structures. This reinforces earlier evidence emphasising the importance of governance and administrative support in educational interventions [2].

Mentor accessibility, particularly through peer mentorship models, emerged as a critical enabling factor. The prominence of peer mentoring in the findings reflects its suitability for educational contexts characterised by high faculty workload and limited staff availability. Peer mentors were frequently perceived as more approachable and relatable, promoting open communication, trust, and sustained engagement [10,14]. From a theoretical perspective, these findings align with social learning principles, which emphasise the effectiveness of near-peer interactions in facilitating learning and psychosocial support [10].

The review further highlights the centrality of positive mentor–mentee relationships in determining mentorship outcomes. Relationships characterised by trust, empathy, mutual respect, and effective communication were strongly associated with improved academic confidence, emotional wellbeing, and motivation among nursing students [3,9]. These relational qualities are particularly important in nursing education, where students are routinely exposed to emotionally demanding clinical experiences. The findings support relational mentorship theories that position interpersonal connection as the core mechanism through which mentorship exerts its educational and wellbeing benefits [3].

Mentor training and role clarity also emerged as significant facilitators of mentorship effectiveness. Mentors who received formal preparation demonstrated greater confidence and consistency in providing academic guidance, psychosocial support, and professional role modelling [5,11]. Structured training reduced role ambiguity and enhanced mentors’ ability to respond to diverse student needs, reinforcing evidence that mentorship effectiveness depends on both availability and preparedness of mentors [5].

Barriers to Mentorship Programme Implementation

Despite the identified facilitators, the review revealed several persistent barriers that undermine mentorship programme effectiveness. High mentor workload and time constraints were the most frequently reported challenges, particularly among faculty mentors balancing teaching, clinical, and

administrative responsibilities. Excessive student–mentor ratios limited opportunities for sustained engagement, reducing the depth and quality of mentorship interactions [4,15]. These findings mirror broader concerns regarding workload pressures in nursing education and their impact on student support initiatives [15].

The absence of formal guidelines and mentor training further compounded these challenges. In the absence of standardized frameworks, mentorship practices were often informal and inconsistent, relying heavily on individual mentors' personal experience rather than evidence-based approaches [1,14]. This lack of standardization undermines mentorship scalability and limits its potential as a systematic educational intervention.

Poor mentor–mentee matching was also identified as a significant barrier. Mismatches in communication styles, expectations, or academic needs adversely affected relationship quality and programme engagement, leading to reduced mentorship effectiveness [3,9]. These findings underscore the importance of intentional matching processes in mentorship programme design to optimize relational compatibility and outcomes.

In addition, resource and systemic constraints—particularly in LMIC contexts—were found to limit programme sustainability. Inadequate funding, weak institutional policies, and limited monitoring and evaluation mechanisms reduced institutional capacity to maintain and scale mentorship initiatives [13,2]. These structural challenges highlight the need for context-sensitive mentorship models that align with available resources and institutional realities [26].

Interpretation of Mentorship Outcomes

The review found consistent evidence that effective mentorship programmes are associated with positive academic outcomes, including improved academic performance, enhanced study skills, and increased student retention. These benefits were particularly pronounced among early-year and academically vulnerable students, suggesting that mentorship plays a critical role in academic transition and adjustment within nursing education programmes [5,10].

With respect to student wellbeing, mentorship participation was strongly associated with reduced stress, anxiety, and feelings of isolation. Peer mentorship models, in particular, provided accessible psychosocial support that helped students cope with the emotional and academic demands of nursing training [9,8]. These findings align with existing literature identifying mentorship as a protective factor against burnout and psychological distress in health professions education [8,9].

The review also underscores mentorship's contribution to professional development outcomes. Students who participated in mentorship programmes demonstrated stronger professional identity formation, increased confidence, enhanced ethical awareness, and improved readiness for clinical practice. Through role modelling and guided professional socialization, mentors facilitated students' transition from academic learning to professional practice environments [11,2].

Implications for Practice, Policy, and Research

The findings of this review suggest that mentorship programmes in nursing education should prioritize structured design, mentor training, and the integration of peer mentorship to address resource and workload constraints. Hybrid mentorship models that combine faculty oversight with peer-led support appear particularly well suited to LMIC contexts.

From a policy perspective, formal recognition of mentorship as a core educational function—through workload allocation, institutional incentives, and monitoring mechanisms—may enhance programme sustainability and effectiveness [2,4,26]. Future research should focus on longitudinal and experimental designs to evaluate the long-term impact of mentorship programmes on academic performance, wellbeing, and workforce retention. There is also a need for context-specific research in LMIC settings to strengthen the global evidence base and inform locally relevant mentorship frameworks [15,13].

5. Conclusion and Recommendations

This systematic review synthesized empirical evidence on the factors facilitating and hindering effective mentorship programmes in nursing and health professions education, as well as strategies for improving mentorship delivery. The findings demonstrate that mentorship programmes play a critical role in enhancing nursing students' academic performance, psychosocial wellbeing, and professional development when they are formally structured and institutionally supported.

The review confirms that mentorship effectiveness is strongly influenced by institutional commitment, clearly defined programme frameworks, mentor accessibility, and the quality of mentor–mentee relationships. Structured mentorship programmes embedded within educational systems were consistently associated with improved academic confidence, reduced stress, and strengthened professional identity formation among nursing students [4,9]. Peer mentorship and hybrid mentorship models emerged as particularly valuable approaches in resource-constrained contexts, where faculty workload and staffing limitations restrict traditional mentoring arrangements [10,14].

Conversely, the review identified persistent challenges that undermine mentorship effectiveness, including high mentor workload, lack of formal training and guidelines, poor mentor–mentee matching, and limited institutional resources. These barriers were especially pronounced in low- and middle-income countries, highlighting systemic constraints that affect programme sustainability and scalability [15,13]. Collectively, these findings underscore the need for context-sensitive, evidence-based mentorship models that are responsive to institutional capacity and student needs.

Recommendations

Based on the synthesized evidence, the following recommendations are proposed to strengthen mentorship programmes in nursing and health professions education.

Nursing education institutions should formalize mentorship programmes by integrating them into curricula and academic support structures. Clear guidelines outlining mentor and mentee roles, expectations, and objectives should be developed to enhance consistency and accountability. Mentor training programmes should be implemented to equip mentors with the skills required to provide academic guidance, psychosocial support, and professional role modelling [5,11,26]. Institutions, particularly in resource-limited settings, should adopt peer and hybrid mentorship models to improve mentor accessibility and reduce faculty workload pressures [10,14,26].

Institutional policies should recognize mentorship as a core educational function, with appropriate workload allocation, incentives, and formal recognition for mentors. Investment in mentorship infrastructure, including monitoring and evaluation systems, is essential to ensure programme sustainability and continuous improvement [2,4]. Policymakers should support the development of scalable mentorship frameworks that align with national nursing education standards and workforce development priorities [2].

Future research should employ longitudinal and experimental designs to evaluate the long-term impact of mentorship programmes on academic outcomes, wellbeing, and workforce retention. There is also a need for context-specific research focusing on low- and middle-income countries to address gaps in the current evidence base. Comparative studies examining the effectiveness of faculty-led, peer, and hybrid mentorship models would further inform best practice and policy development [9,15].

In conclusion, mentorship programmes represent a vital strategy for supporting nursing students' academic success, wellbeing, and professional development. When effectively designed and supported, mentorship has the potential to address systemic challenges within nursing education and contribute to the development of a resilient and competent healthcare workforce. Strengthening mentorship through evidence-based practice, supportive policy frameworks, and ongoing research is therefore essential for sustainable nursing education, particularly in resource-constrained contexts [2,4].

Conflict of Interest Statement

The authors declare no conflicts of interest.

Data Availability

The datasets generated and analyzed during the current study are available from the corresponding author on reasonable request.

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