Review

A Systematic Review of Training Programmes on Clinical Mentorship for Nurse and Midwife Educators

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Abstract

Background: Mentorship is a potent strategy for improving the training of nursing and midwifery students, which is essential for both quality healthcare delivery and upholding the integrity of the nursing profession. However, the absence of structured and standardised training for mentors may hinder the effectiveness of mentorship programmes. This review aimed to systematically identify and describe existing training programmes on clinical mentorship for nurse and midwife educators.

Methods: A PEO-based strategy guided the development of the research question and search terms. A comprehensive search of four databases was conducted for peer-reviewed articles published from 2015 onwards. Eligible studies were appraised using the Mixed Methods Appraisal Tool, and data were synthesised using content analysis.

Results: Seven studies met the inclusion criteria, comprising two quantitative, two qualitative, and three mixed methods designs. A total of 47 codes were extracted and categorised into eight training content domains, including foundational concepts, interpersonal skills, and programme design. No study reported formal scientific validation of the training programmes, although two conducted pilot testing. Only five studies provided information on delivery mode and duration, which ranged from 3 hours to 10 weeks. Delivery modes included physical workshops, online modules, and hybrid formats, with facilitator-led, self-paced, and blended learning approaches.

Conclusion: Training programmes on clinical mentorship for nurse and midwife educators vary widely in content, duration, and delivery methods, with limited evidence of validation. There is a need for the development and evaluation of standardised, context-appropriate mentorship training programmes, particularly in underrepresented and low-resource settings.

Keywords: Clinical Mentorship; Mentorship Training; Nursing and Midwifery; Student Mentorship; Nurse Educators; Midwife Educators

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Introduction

Mentorship has been recognised across industries as a strategy for improving learning outcomes, confidence, and professional development. It is a two-way professional and interpersonal relationship between an experienced individual (the mentor) and a less experienced one (the mentee) in which the former provides the latter with direction and advise.[1,2] In learning environments, it provides a way to improve students' engagement and performance, foster their learning opportunities, and even support their overall wellbeing.[2]

According to the World Health Organization,[3] a professional, knowledgeable, and motivated health workforce is an essential driver for achieving the universal health coverage. This workforce is first groomed and trained as students, with their eventual input being determined by the competencies acquired during their training stage. Unfortunately, a wide theory-practice gap has continued to exist in clinical practice of nurses and midwives especially in low- and middle-income countries where the burden of disease is high and human resources for health are limited.[4–6] Nurse and midwife educators are essential in developing the clinical competencies of future healthcare providers, facilitating the effective translation of theoretical knowledge into practical application.[5] Evidence has suggested that one of the strategies to improve this training is mentorship.[1,2] Health professionals and students alike have reported a number of benefits associated with mentoring, including the acquisition of new skills, a better knowledge of the professional position, an easier transition into the culture of the health profession, and both personal and professional growth.[7,8]

While the benefits of mentorship are widely recognised, the implementation of clinical mentorship within nursing and midwifery education frequently encounters challenges such as inconsistency, a lack of standardisation, and insufficient capacity among educators to fulfil the role of effective mentors.[7] Unfortunately, it appears that some nurse and midwife educators assume their positions without receiving formal mentorship training, often depending on their personal experiences or informal institutional support.[2,7] Such absence of adequate preparedness may impede the effectiveness of clinical instruction and mentorship, thereby influencing student outcomes and the overall health system.

Furthermore, while various mentorship programmes had developed their inherent training for clinical mentors, these programmes exhibit considerable diversity in terms of content, duration, delivery modalities, and contextual emphasis. Additionally, there exists a paucity of comprehensive synthesis of the scope and structure of these training programmes, which complicates the ability of institutions, policymakers, and educators to implement best practices or to develop mentorship interventions that are contextually relevant. Hence, the aim of this study is to identify and describe the various training programmes on clinical mentorship for nurse and midwife educators.

Method

This study employed a systematic review to consolidate and present scientific knowledge from prior research. The protocol of the review was not registered with PROSPERO because only protocols for systematic reviews of studies related to health conditions and health-related outcomes are currently eligible for registration. The review was reported following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement.[9] The review question was developed using the Population, Exposure, and Outcome (PEO) strategy which respectively corresponds to nurse and midwife educators, clinical mentorship, and training programmes. The eventual review question was, "What is the nature of the training programmes on clinical mentorship for nurse and midwife educators?"

Eligibility Criteria

The review strategy (PEO) equally guided the definition of the eligibility criteria alongside other relevant factors that are necessary for recruiting the relevant papers to contribute to this review.

To maintain the scope of the review, the population was limited to training delivered to nurse and midwife educators while clinicians and other allied health professions were excluded. Similarly, the exposure of the included studies must have been a mentorship programme addressing at least one of the three domains of clinical mentorship including knowledge, attitude, and practice/skills defined based on the three learning domains of Bloom's taxonomy (cognitive, affective, and psychomotor).[10] Furthermore, the mentorship must have been implemented on undergraduate nursing/midwifery students only and not on

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postgraduates. Based on outcome, the included papers must have described in their mentorship programme a training content tailored for mentors.

Beyond the criteria defined based on the review strategy, other eligibility criteria included studies published within the past ten years (2015-2025) to ensure that only contemporary studies are reviewed. Additionally, only peer-reviewed articles were included as the researchers believed that any pertinent publication contributing to the review should be properly published in a journal article since the subject matter is not typically a public health topic usually found in grey literature. Likewise, the included articles must have been published in English language, and the full text available for methodological appraisal.

Search Strategy

The search strategy comprised keywords generated using the PEO paradigm. Since this review explored training programmes for educators, that implies that the included studies must have considered the mentorship programme to be for students and not for clinicians; hence, the keyword was adjusted to include students, to retrieve studies that may not explicitly mention the mentors as nurse/midwife educators. Regarding the keywords for the outcome, alternative words that are often interchanged with training of mentors were also considered. The eventual search term used for searching for potentially relevant papers in databases was: ("nurse educator*" OR "midwife educator*" OR "student nurse*" OR "student midwi*" OR "nursing student*" OR "midwife* student*" OR "nurs* lecturer*" OR "midwi* lecturer" OR "nurs* program" OR "midwi* program") AND mentor* AND (train* OR prepar* OR onboard* OR orientat* OR "capacity building" OR "skill building" OR guid* OR facilitat*))

A comprehensive literature search was conducted across four databases. Regarding the relevant subject matter, the researchers considered this topic to span health, education, and social sciences; hence, databases that index these categories were considered, including Medline, Scopus, Web of Science, and Cumulative Index to Nursing and Allied Health Literature (CINAHL). Limiters pertaining to year, language, and type of publication were implemented within the databases to align with the eligibility criteria and to streamline the screening process. The detailed step-by-step search result per database is presented in the Supplementary file. Furthermore, the citations of prior reviews on mentorship programmes for nursing/midwifery students were examined for additional relevant studies.

Screening and Selection of Studies

The search results from the databases were all exported and imported into Mendeley®, a reference management system; these were combined with the papers from the citation search. Duplicates were identified and removed using the Mendeley® software.

The title and abstract of the non-duplicates were then screened for relevance, and the full texts of the screened titles were sought for retrieval. Using Microsoft Excel®, the retrieved full texts were screened (according to the eligibility criteria) and documented. Additional overlooked duplicates, including works published many times under different titles, were detected during the abstract and full-text screening and subsequently eliminated. Papers deemed eligible after the full-text screening were subsequently appraised for methodological quality. The detailed step-by-step screening process was documented and presented in the supplementary file.

Methodological Appraisal

The studies included in this review were appraised with Mixed Methods Appraisal Tool (MMAT).[11] This was chosen for this review because of the diversity of study types declared eligible to be included in the review. The MMAT has five sections designed to appraise five unique group of studies including qualitative, randomised controlled trials, non-randomised, quantitative descriptive, and mixed-method studies. As guided by the tool, no paper was excluded because of its appraisal rating rather findings from papers which were considered suboptimal were treated with caution.[11]

Data Extraction

The data extraction in this review was performed following the framework of Woodward and Webb[12] with the following components extracted to suit the purpose of this review: study type, aim, country, sample characteristics, and the findings of each study. With respect to the findings of the studies, only findings relevant to addressing the aim of this review were extracted and documented.

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Data Synthesis

Sequel to the aim of this review and the type of data extracted from the included studies, content analysis was used to condense and summarise the findings from the studies. The training content extracted from each study were counted and grouped into similar frames.

Results

Results of the Search and Screening Process

Seven studies[13–19] were considered eligible and included in this review. Studies that describe the same mentoring programme implemented within the same population but published in different papers based on different aims were considered as duplicates and only the most recent study or the study with adequate details of the desired data retained, such as the mentoring programme implemented among midwifery students in Poland.[19,20] Furthermore, studies that simply mentioned the presence of a training session for mentors without giving full or partial details of the training content were excluded as they do not contain the desired data required for this review. One study[21] was excluded because the actual exposure described in the study was supervision and not mentorship as asserted. The full details of the eligibility screening process are presented in the Supplementary file while the PRISMA flowchart of the screening process for this review is presented in Figure 1 below.

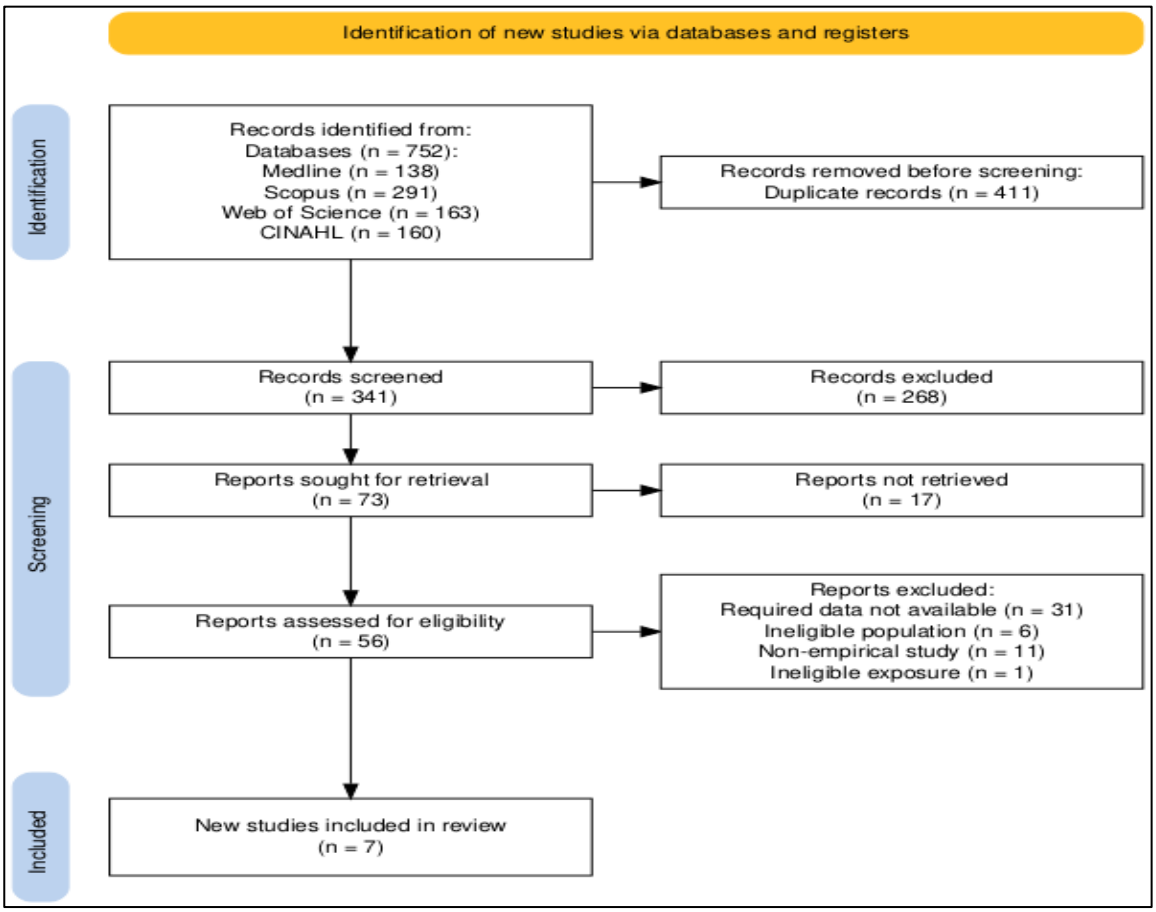

Figure 1: PRISMA flowchart of the study selection process in this review

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Methodological Quality of Included Studies

Based on the type of studies included in this review, only three out of the five components of the MMAT were employed for the appraisal of the studies included in this review. These components include the qualitative, quantitative non-randomised, and mixed methods appraising sections. On appraisal, the two qualitative studies[14,19] showed optimal methodological quality for qualitative studies. In contrast, the quantitative non-randomised and mixed-methods studies had some concerns regarding their methodological quality. The full details of the methodological appraisal findings are presented in Table 1 below.

Table 1: Methodological appraisal findings of the studies included in this review

Study	Study type	MMAT component used	.1	.2	.3	.4	.5	Comments
Harding and Mawson, 2017	Qualitative	Qualitative (**1.1 – 1.5)**	**Y**	**Y**	**Y**	**Y**	**Y**	
Stefaniak &Dmoch -Gajzlerska 2021	Qualitative	Qualitative (**1.1 – 1.5)**	**Y**	**Y**	**Y**	**Y**	**Y**	
Gibbs and Culleiton, 2016	Pretest–posttest design	Quantitative nonrandomised **(3.1 – 3.5)**	**Y**	**Y**	**Y**	C	**Y**	
Oikarainen et al., 2022	Quasi-experimental	Quantitative nonrandomised **(3.1 – 3.5)**	**Y**	**Y**	N	**Y**	**Y**	Over 75% of the controls were not included in the analysis.
Kung et al., 2023	Mixed methods	Mixed methods **(5.1 – 5.5)**	C	C	**Y**	C	**Y**	No rationale was provided for the choice of a mixed method design. Multiple research questions were addressed in the paper and each question was answered with a single research design instead of the mixed method; hence, divergencies nor integration could not be assessed.
Lavoie-Tremblay et al., 2019	Mixed methods	Mixed methods **(5.1 – 5.5)**	C	C	**Y**	C	**Y**	No rationale was provided for the choice of a mixed method design. Multiple aims were addressed in the paper, and each was addressed with a single research design instead of the mixed method; hence, divergencies nor integration could not be assessed.
Sheehan et al., 2023	Mixed methods	Mixed methods **(5.1 – 5.5)**	C	**Y**	**Y**	**Y**	**Y**	No rationale was provided for the choice of a mixed method design.

1.1 = Is the qualitative approach appropriate to answer the research question?
1.2 = Are the qualitative data collection methods adequate to address the research question?
1.3 = Are the findings adequately derived from the data?
1.4 = Is the interpretation of results sufficiently substantiated by data?
1.5 = Is there coherence between qualitative data sources, collection, analysis and interpretation?
3.1 = Are the participants representative of the target population?
3.2 = Are measurements appropriate regarding both the outcome and intervention (or exposure)?
3.3 = Are there complete outcome data?
3.4 = Are the confounders accounted for in the design and analysis?
3.5 = During the study period, is the intervention administered (or exposure occurred) as intended?
5.1 = Is there an adequate rationale for using a mixed methods design to address the research question?
5.2 = Are the different components of the study effectively integrated to answer the research question?
5.3 = Are the outputs of the integration of qualitative and quantitative components adequately interpreted?
5.4 = Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?

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5.5 = Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?
MMAT = Mixed Methods Appraisal Tool; Y = Yes; C = Can't tell; N = No

Characteristics of Included Studies

Two qualitative,[14,19] two quantitative,[13,17] and three mixed-methods studies[15,16,18] were included in this review and all published between 2016 and 2023. All the studies were implemented in high-income countries including the United States of America,[13] Australia,[14,18] Finland,[17] Taiwan,[15] Poland,[19] and Canada,[16] and none was in Africa. The primary aims of the studies were to either mentor students (or evaluate them)[14–16,18] or to train the mentors wholly or in a particular domain.[13,17,19] The total participants from the studies was 320 comprising varying population including students, nurses/midwives, and other academic experts. The detailed data extracted from the studies is presented in Table 2.

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Table 2: Data extracted from studies included in this review

Study	Study type	Aim and Country	Sample	Findings (Details of the training) Content	Validation	Duration	Delivery mode
Gibbs and Culleiton, 2016	Quantitative	To enhance faculty cultural competency in mentoring diverse students United States of America	Sample size = 16 Sampling method = convenience Sample characteristics = associate degree nursing nurse educators	Module 1: Strategies to increase cultural competence Module 2: Identifying the at-risk student and strategies to promote academic success Module 3: English as a Second Language students' barriers and bridges to success Module 4: Strategies to increase student success.	N/S	6 weeks	Self-paced virtual learning
Harding and Mawson, 2017	Qualitative	To explore the value of the implemented mentoring programme for the student mentee and the mentor. Australia	Sample size = 18 (11 mentees and 7 mentors) Sampling method = Self-selection Sample characteristics = mentees were second year nursing students while mentors were registered nurses.	Similarities and distinguishing features of clinical and academic mentors	N/S	N/S	N/S
Lavoie-Tremblay et al., 2019	Mixed methods	To describe and evaluate a group mentorship programme for graduating nursing students. Canada	Sample size = 30 (18 mentees and 12 mentors) Sampling method = Convenience sampling Sample characteristics = clinical nurses as mentors and graduating nursing students as mentees.	What mentoring is, the different models and associated benefits of mentorship.	N/S	90 minutes	N/S
Kung et al., 2023	Mixed methods	To clarify clinical mentors' roles and competencies and assess the effectiveness of a mentorship programme for improving students' professional commitment and self-efficacy in long-term aged care. Taiwan	Sample size = 74 (12 experts, 14 mentors, and 48 students) Sampling method = Purposive for the qualitative component and quasi-experimental for the quantitative component. Sample characteristics = advanced grade nurses with at least three years' experience in long-term care and first year students.	Mentoring Methodology and Effectiveness Discussion (Mentorship strategies included assessing learning needs, setting mentorship goals, providing psychological support and resources, evaluating the effectiveness of mentorship, sharing one's experiences of clinical practice, and directing and structured interactions with mentees). Clinical Mentoring Manual (including concept of caring, professional ability, interpersonal	N/S	3 hours	Guided physical workshop

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Study	Study type	Aim and Country	Sample	Findings (Details of the training) Content	Validation	Duration	Delivery mode
				communication, career development, and stress management).			
Stefaniak and Dmoch-Gajzlerska 2021	Qualitative	To evaluate a Mentor Training Programme for midwives. Poland	Sample size = 21 Sampling method = Purposive Sample characteristics = midwives in the obstetrics and gynaecology teams of two hospitals; all had at least 2 years full time work experience, a master's degree in midwifery, a teaching qualification or a completed specialty training and prior experience of teaching midwifery students on clinical placements.	The concept of mentoring in the context of clinical placement. Key principles of mentoring programme design. Identification of mentees' needs and setting measurable learning objectives. Creating a safe and supportive learning environment. Effective methods of mentor-led clinical instruction. Principles of mentee appraisal. Benefits of mentoring in midwifery training and opportunities for actual implementation.	Yes; pilot testing.	3 days	Guided physical workshop
Oikarainen et al., 2022	Quantitative	To evaluate the effects of an educational intervention on mentors' competence in mentoring culturally and linguistically diverse nursing students during clinical placement. Finland	Sample size = 75 Sampling method = N/S Sample characteristics = nurses currently employed in any professional nursing role on any unit.	Content themes: foundation of mentoring, assessment of students' learning and cultural competence in mentoring	Yes; pilot and feasibility testing.	7-10 weeks	Hybrid (online and physical AND self-paced and guided)
Sheehan et al., 2023	Mixed methods	To describe the implementation and evaluation of a midwife/midwifery student-mentoring programme in one Local Health District in Sydney NSW Australia. Australia	Sample size = 86 Sampling method = N/S Sampling characteristics = midwife mentors, students, midwifery managers and non-mentor midwives	The roles and responsibilities of the mentor Frequently asked questions The mentoring code of conduct The key stages of a successful mentoring relationship A proforma for keeping mentor/student meeting and communication notes. Content for workshops 1 and 2: developing	N/S	3 days	Guided physical workshop

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Study	Study type	Aim and Country	Sample	Findings (Details of the training) Content	Validation	Duration	Delivery mode
			who worked in the participating LHD	mentoring skills including the role and power of mentoring, communication styles, creating and sustaining a 'constructive work culture' and communication skills such as coaching rather than telling. Workshop 3: sustaining the mentoring programme.			

N/S = Not specified

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Content of the mentorship training modules.

The content analysis of the mentorship training programmes for nurse and midwife educators in the included studies revealed a total of 47 codes were categorised into eight domains, each reflecting a core aspect of mentorship training; Table 3 below shows the number of codes that formed each category and the number of studies contributing to each category. This chart infers that while some domains may appear so popular due to the number of codes, the contributing number of studies may contrast this pattern. The detailed content analysis documentation is presented in Table 3 while these categories are further reported.

Table 3: Content analysis findings from the included studies in this review

Study	Codes	Category	No of studies	No of studies
Kung et al., 2023	Assessing learning needs			
Kung et al., 2023	Setting mentorship goals			
Kung et al., 2023	Evaluating the effectiveness of mentorship			
Oikarainen et al., 2022	Assessment of students' learning	Assessment, planning, and evaluation	7	3
Stefaniak and Dmoch-Gajzlerska 2021	Identification of mentees' needs			
Stefaniak and Dmoch-Gajzlerska 2021	Setting measurable learning objectives			
Stefaniak and Dmoch-Gajzlerska 2021	Principles of mentee appraisal.			
Kung et al., 2023	Sharing one's experiences of clinical practice	Clinical practice and instruction methods	2	2
Stefaniak and Dmoch-Gajzlerska 2021	Effective methods of mentor-led clinical instruction.			
Kung et al., 2023	Directing and structured interactions with mentees	Communication and interpersonal skills	4	2
Kung et al., 2023	Interpersonal communication			
Sheehan et al., 2023	Communication styles			
Sheehan et al., 2023	Communication skills			
Gibbs and Culleiton, 2016	Strategies to increase cultural competence	Contextual and cultural competence	4	2
Gibbs and Culleiton, 2016	Identifying the at-risk student			
Gibbs and Culleiton, 2016	English as a Second Language students' barriers			
Oikarainen et al., 2022	Cultural competence in mentoring			
Harding and Mawson, 2017	Similarities and distinguishing features of clinical and academic mentors			
Lavoie-Tremblay et al., 2019	What mentoring is	Foundation and roles of mentorship	10	5
Lavoie-Tremblay et al., 2019	Associated benefits of mentorship			
Oikarainen et al., 2022	Foundation of mentoring			
Sheehan et al., 2023	roles and responsibilities of the mentor			
Sheehan et al., 2023	mentoring code of conduct			
Sheehan et al., 2023	Developing mentoring skills			
Sheehan et al., 2023	role and power of mentoring			

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Study	Codes	Category	No of studies	No of studies
Stefaniak and Dmoch-Gajzlerska 2021	The concept of mentoring in the context of clinical placement.			
Stefaniak and Dmoch-Gajzlerska 2021	Benefits of mentoring in midwifery training			
Kung et al., 2023	Mentorship strategies			
Lavoie-Tremblay et al., 2019	different models			
Sheehan et al., 2023	key stages of a successful mentoring relationship			
Sheehan et al., 2023	Creating and sustaining a 'constructive work culture'	Mentorship models and programme design	7	4
Sheehan et al., 2023	Coaching rather than telling			
Sheehan et al., 2023	Sustaining the mentoring programme			
Stefaniak and Dmoch-Gajzlerska 2021	Key principles of mentoring programme design.			
Gibbs and Culleiton, 2016	Strategies to promote academic success			
Gibbs and Culleiton, 2016	Strategies to increase student success			
Gibbs and Culleiton, 2016	Bridges to success			
Sheehan et al., 2023	Frequently asked questions	Practical tools and resources	6	3
Sheehan et al., 2023	A proforma for keeping mentor/student meeting and communication notes.			
Stefaniak and Dmoch-Gajzlerska 2021	Opportunities for actual implementation.			
Kung et al., 2023	Providing psychological support and resources			
Kung et al., 2023	Concept of caring			
Kung et al., 2023	Professional ability	Psychosocial support and safe learning environment	6	2
Kung et al., 2023	Career development			
Kung et al., 2023	Stress management			
Stefaniak and Dmoch-Gajzlerska 2021	Creating a safe and supportive learning environment.			

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Foundations and roles of mentorship

Formed by ten codes from five studies,[14,16–19] this category emerged as the most addressed area, highlighting the orientation of participants to the basic principles and philosophy of mentorship. Programmes typically began with clarifying what mentoring is, followed by discussions on the roles and responsibilities of the mentor, associated benefits, and the power dynamics inherent in mentoring relationships.

Assessment, planning, and evaluation

With seven codes derived from three studies,[15,17,19] this category focused on enabling mentors to assess and support mentee development through structured planning and evaluation. Codes under this domain included assessing learning needs, setting measurable objectives, and principles of mentee appraisal. These components are crucial for ensuring that mentorship is not only supportive but also outcomes driven.

Mentorship model and programmes design

Four training programmes included in this review[15,16,18,19] addressed structural components of mentorship, covering different mentorship models, key principles of programme design, and strategies to sustain mentorship efforts. Content in this category highlighted pedagogical approaches such as coaching rather than telling and also emphasised cultivating a positive mentoring culture through creating and sustaining a constructive work environment.

Psychosocial support and safe learning environment

As demonstrated with six codes from two studies,[15,19] programmes also included training on the softer dimensions of mentorship such as how to provide psychological support, care, and stress management. Also covered were strategies for creating a safe and supportive learning environment, highlighting the mentor's role in fostering emotional safety and professional growth.

Practical tools and resources

The six codes that formed this category were reported by three studies.[13,18,19] The training programmes in these studies included tangible aids and resources to facilitate mentorship practice comprising frequently asked questions, proformas for documenting meetings, and content on bridges to success. These tools support the operationalization of mentorship activities and improve structure and consistency.

Communication and interpersonal skills

Similarly, with four codes from two studies,[15,18] effective communication emerged as a cross-cutting skillset, covered in the training programmes. Training elements included interpersonal communication, structured interaction with mentees, and communication styles. These skills are essential for building trust, facilitating dialogue, and creating collaborative learning environments.

Contextual and cultural competence

Recognizing the diversity in learning contexts, two programmes[13,17] included targeted content on cultural competence, support for English-as-a-second-language students, and identifying at-risk students. This category reflects an effort to equip mentors with skills for inclusive and context-sensitive mentorship.

Clinical practice and instruction methods

Although less frequently reported, two programmes[15,19] also provided content directly related to clinical teaching strategies, such as mentor-led instruction methods and sharing clinical practice experiences. This reflects the practical dimension of mentorship as applied in real clinical settings.

Validation of the training programmes

Out of the included studies, two[17,19] reported conducting pilot testing of the mentorship training programmes. However, none of the studies described formal scientific validation processes such as content validation through expert panels, construct validation, or psychometric testing of assessment tools.

Delivery mode and duration of the training

Only five studies[13,15,17–19] provided some information regarding the delivery of the training programmes. With respect to the deliver mode, two descriptions were noted including place of learning and the administrator of the training. With respect to the place of training, the programmes were mostly delivered as physical workshops[15,18,19]; one was an online programme,[13] and the remaining one[17] was hybrid, comprising of both physical workshops and online content. In a similar pattern, all the physical workshops were administered by a designated facilitator while the virtual content were self-paced, implying that three programmes [15,18,19] were

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facilitator-led, one wad self-paced, [13] and the remaining one,[17] blended.

Regarding the duration of the training implementation, only six out of the seven studies [13,15–19] provided some information and this ranged from 3 hours to 10 weeks. However, for training programmes beyond one day, the active training times are simply limited to the period of learning, for instance, the stated duration of the overall programme in Stefaniak and Dmoch-Gajzlerska[19] was three days while the total active learning time was only 24 hours corresponding to eight hours per day. Similarly, for self-paced and blended learning programmes the active learning duration differed since the trainees were given varying long time to complete their modules, such as 7-10 weeks in Oikarainen et al.,[17] and the learning pace of individuals vary.

Discussion

This review provides a synthesised understanding of existing mentorship training programmes for nurse and midwife educators, with a particular focus on the training content, delivery modes, duration, and validation processes. The findings reveal notable variations and, in some cases, critical gaps in the design and implementation of these programmes.

Firstly, the content of the training programmes was comprehensive yet inconsistently covered across studies. While foundational concepts such as the definition and roles of mentoring were commonly addressed, areas like cultural competence, psychosocial support, and clinical teaching techniques were less frequently included. This uneven distribution of content may limit the extent to which mentors are fully equipped to address the diverse and evolving needs of mentees, particularly in multicultural or resource-limited settings. Similar concerns have been noted in previous literature calling for standardisation in mentorship training.[7,22]

Secondly, although most studies did not report formal validation, two studies[17,19] conducted pilot testing, which represents an important first step in establishing the feasibility and contextual appropriateness of the training content. Pilot testing, while not equivalent to full scientific validation, offers critical feedback on the structure, delivery, and perceived utility of a programme.[23] However, no study included in this review described processes such as expert content validation, construct testing, or assessment of learning outcomes using validated instruments. The absence of more rigorous validation efforts limits the confidence with which these programmes can be adopted or scaled and highlights the need for structured development pathways that include both formative and summative evaluation phases.

Thirdly, the findings show that only a minority of studies provided clear information about the delivery and duration of the programmes. Among those that did, delivery formats ranged from facilitator-led physical workshops to self-paced online modules and blended approaches. These delivery modes reflect an adaptation to both in-person and digital learning preferences, aligning with global trends in health professional education.[24] However, the limited reporting on training duration, and the variability in what was considered "active learning time," suggests a need for clearer reporting standards and structured curricula that define expected learning hours and outcomes.

Furthermore, the concentration of evidence in high-income countries also has implications for how mentorship training is conceptualised and delivered. Programmes in these high-income contexts often assume certain baseline resources, such as access to digital infrastructure, availability of trained facilitators, and protected time for training, that may not be feasible in under-resourced settings. For instance, mentorship programmes in low- and middle-income countries (LMICs) may require greater emphasis on scalability, task-shifting, and adaptation to workforce shortages. This highlights the importance of context-sensitive adaptation and the need for developing mentorship frameworks that are both culturally and operationally suited to the realities of LMIC health systems.

Taken together, these findings point to an urgent need for more rigorous and standardised development, validation, and reporting of clinical mentorship training programmes. The lack of scientific validation and inconsistency in content and delivery could compromise the quality of mentorship in nursing and midwifery education, especially in contexts where mentorship plays a critical role in professional formation and retention.

A strength of this review lies in its structured synthesis of mentorship training programmes specifically tailored to nurse and midwife educators, a niche and critical area of health workforce. The review drew on evidence from

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multiple study designs and employed a systematic, transparent approach to screening, appraisal, and content analysis. However, the findings should be interpreted within certain limitations. Although a range of countries was represented, all the included studies were conducted in high-income countries, limiting the geographic and economic diversity of the evidence base. This may reduce the generalisability of the findings to LMICs, where mentorship challenges and resources differ substantially. Additionally, despite efforts to conduct a comprehensive search, the exclusion of non-English literature and unpublished training programmes may have led to the omission of relevant interventions, especially those implemented in global south contexts.

CONCLUSION

This review identified and described existing mentorship training programmes for nurse and midwife educators. While programmes commonly addressed foundational mentorship concepts and interpersonal skills, there was variability in the inclusion of content on psychosocial support, cultural competence, and clinical teaching. Only two studies reported pilot testing, and none undertook formal validation. Delivery methods and durations were inconsistently reported. Importantly, all studies were from high-income countries, limiting the generalisability of findings to lower-resource settings. Future work should focus on developing and validating context-appropriate mentorship training programmes, particularly for low- and middle-income countries.

Declarations

Ethical Consideration: Ethical approval for this study was obtained from the Research Ethics Committee of the University of Port Harcourt with Registration number: UPH/CEREMAD/REC/MM94/041

Authors' Contribution: AUC conceived the paper, prepared the study protocol, designed the study, drafted the manuscript, and contributed to the literature search and interpretation of the data; PCU participated in review of literature, supervision of data interpretation and discussion. Both authors critically reviewed the manuscript for important intellectual content and approved the final manuscript.

Conflict of interest: The authors have none to declare

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SUPPLEMENTARY FILE

APPENDIX 1. SEARCH RECORD FOR EACH DATABASE

S/N	SEARCH STRING	HITS
MEDLINE		
S1	XB (“nurse educator*” OR “midwife educator*” OR “student nurse*” OR “student midwi*” OR “nursing student*” OR “midwife* student*” OR “nurs* lecturer*” OR “midwi* lecturer” OR “nurs* program” OR “midwi* program”) AND TI mentor* AND (train* OR prepar* OR onboard* OR orientat* OR "capacity building" OR "skill building" OR guid* OR facilitat*)	232
S2	XB (“nurse educator*” OR “midwife educator*” OR “student nurse*” OR “student midwi*” OR “nursing student*” OR “midwife* student*” OR “nurs* lecturer*” OR “midwi* lecturer” OR “nurs* program” OR “midwi* program”) AND TI mentor* AND (train* OR prepar* OR onboard* OR orientat* OR "capacity building" OR "skill building" OR guid* OR facilitat*) Publication Date: 20150101-20251231	139
S3	XB (“nurse educator*” OR “midwife educator*” OR “student nurse*” OR “student midwi*” OR “nursing student*” OR “midwife* student*” OR “nurs* lecturer*” OR “midwi* lecturer” OR “nurs* program” OR “midwi* program”) AND TI mentor* AND (train* OR prepar* OR onboard* OR orientat* OR "capacity building" OR "skill building" OR guid* OR facilitat*) Publication Date: 20150101-20251231 Language: - english	138
SCOPUS		
S1	(TITLE-ABS-KEY ("nurse educator*" OR "midwife educator*" OR "student nurse*" OR "student midwi*" OR "nursing student*" OR "midwife* student*" OR "nurs* lecturer*" OR "midwi* lecturer" OR "nurs* program" OR "midwi* program") AND TITLE (mentor*) AND ALL (train* OR prepar* OR onboard* OR orientat* OR "capacity building" OR "skill building" OR guid* OR facilitat*))	531
S2	(TITLE-ABS-KEY ("nurse educator*" OR "midwife educator*" OR "student nurse*" OR "student midwi*" OR "nursing student*" OR "midwife* student*" OR "nurs* lecturer*" OR "midwi* lecturer" OR "nurs* program" OR "midwi* program") AND TITLE (mentor*) AND ALL (train* OR prepar* OR onboard* OR orientat* OR "capacity building" OR "skill building" OR guid* OR facilitat*)) AND PUBYEAR > 2014 AND PUBYEAR < 2026	336
S3	(TITLE-ABS-KEY ("nurse educator*" OR "midwife educator*" OR "student nurse*" OR "student midwi*" OR "nursing student*" OR "midwife* student*" OR "nurs* lecturer*" OR "midwi* lecturer" OR "nurs* program" OR "midwi* program") AND TITLE (mentor*) AND ALL (train* OR prepar* OR onboard* OR orientat* OR "capacity building" OR "skill building" OR guid* OR facilitat*)) AND PUBYEAR > 2014 AND PUBYEAR < 2026 AND (LIMIT-TO (LANGUAGE , "English"))	331
S4	(TITLE-ABS-KEY ("nurse educator*" OR "midwife educator*" OR "student nurse*" OR "student midwi*" OR "nursing student*" OR "midwife* student*" OR "nurs* lecturer*" OR "midwi* lecturer" OR "nurs* program" OR "midwi* program") AND TITLE (mentor*) AND ALL (train* OR prepar* OR onboard* OR orientat* OR "capacity building" OR "skill building" OR guid* OR facilitat*)) AND PUBYEAR > 2014 AND PUBYEAR < 2026 AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (DOCTYPE , "ar"))	291
WEB OF SCIENCE		
#1	“nurse educator*” OR “midwife educator*” OR “student nurse*” OR “student midwi*” OR “nursing student*” OR “midwife* student*” OR “nurs* lecturer*” OR “midwi* lecturer” OR “nurs* program” OR “midwi* program” (Topic) and mentor* (Title) and train* OR prepar* OR onboard* OR orientat* OR "capacity building" OR "skill building" OR guid* OR facilitat* (All Fields)	213

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S/N	SEARCH STRING	HITS
#2	"nurse educator*" OR "midwife educator*" OR "student nurse*" OR "student midwi*" OR "nursing student*" OR "midwife* student*" OR "nurs* lecturer*" OR "midwi* lecturer" OR "nurs* program" OR "midwi* program" (Topic) and mentor* (Title) and train* OR prepar* OR onboard* OR orientat* OR "capacity building" OR "skill building" OR guid* OR facilitat* (All Fields) and 2020 or 2016 or 2021 or 2024 or 2023 or 2018 or 2019 or 2022 or 2017 or 2015 or 2025 (Publication Years)	165
#3	"nurse educator*" OR "midwife educator*" OR "student nurse*" OR "student midwi*" OR "nursing student*" OR "midwife* student*" OR "nurs* lecturer*" OR "midwi* lecturer" OR "nurs* program" OR "midwi* program" (Topic) and mentor* (Title) and train* OR prepar* OR onboard* OR orientat* OR "capacity building" OR "skill building" OR guid* OR facilitat* (All Fields) and 2020 or 2016 or 2021 or 2024 or 2023 or 2018 or 2019 or 2022 or 2017 or 2015 or 2025 (Publication Years) and English (Languages)	163
CINAHL		
S1	XB ("nurse educator*" OR "midwife educator*" OR "student nurse*" OR "student midwi*" OR "nursing student*" OR "midwife* student*" OR "nurs* lecturer*" OR "midwi* lecturer" OR "nurs* program" OR "midwi* program") AND TI mentor* AND (train* OR prepar* OR onboard* OR orientat* OR "capacity building" OR "skill building" OR guid* OR facilitat*)	310
S2	XB ("nurse educator*" OR "midwife educator*" OR "student nurse*" OR "student midwi*" OR "nursing student*" OR "midwife* student*" OR "nurs* lecturer*" OR "midwi* lecturer" OR "nurs* program" OR "midwi* program") AND TI mentor* AND (train* OR prepar* OR onboard* OR orientat* OR "capacity building" OR "skill building" OR guid* OR facilitat*) Publication Date: 20150101-20251231	173
S3	XB ("nurse educator*" OR "midwife educator*" OR "student nurse*" OR "student midwi*" OR "nursing student*" OR "midwife* student*" OR "nurs* lecturer*" OR "midwi* lecturer" OR "nurs* program" OR "midwi* program") AND TI mentor* AND (train* OR prepar* OR onboard* OR orientat* OR "capacity building" OR "skill building" OR guid* OR facilitat*) Publication Date: 20150101-20251231 Language: - english	170
S4	XB ("nurse educator*" OR "midwife educator*" OR "student nurse*" OR "student midwi*" OR "nursing student*" OR "midwife* student*" OR "nurs* lecturer*" OR "midwi* lecturer" OR "nurs* program" OR "midwi* program") AND TI mentor* AND (train* OR prepar* OR onboard* OR orientat* OR "capacity building" OR "skill building" OR guid* OR facilitat*) Publication Date: 20150101-20251231 Language: - english Source Type: Academic journal	160

APPENDIX 2. DETAILED ELIGIBILITY SCREENING

Study	Title	P	E	O	DD	Decision	Comments	Documented reason for exclusion
Almeida et al., 2024	Game4NurseSupervisor: Development of a board game for nursing mentoring	N	Y	N	Y	Exclude	Population was not specified. No content on training modules for mentors	Ineligible population
Amod et al., 2024	Clinical mentorship of midwifery students: The perceptions of registered midwives	N	Y	N	Y	Exclude	Population was trained midwives. No content on training modules for mentors	Ineligible population
Barry et al., 2016	Evidence-based practice: developing mentors to support students	N	N	N	N	Exclude	Non-empirical study	Non-empirical study

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Study	Title	P	E	O	DD	Decision	Comments	Documented reason for exclusion
Bolatturk & Uslusoy, 2022	The effect of clinical mentor in developing caring behaviors of nursing students: A mixed method	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Brown et al., 2020	Shall I tell my mentor? Exploring the mentor-student relationship and its impact on students' raising concerns on clinical placement	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Burden et al., 2018	Mentor judgements and decision-making in the assessment of student nurse competence in practice: A mixed-methods study	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Carter et al., 2016	Development and psychometric testing of the Carter Assessment of Critical Thinking in Midwifery (Preceptor/Mentor version)	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Cervera-Gasch et al., 2017	Questionnaire to measure the participation of nursing professionals in mentoring students	N	Y	Y	Y	Exclude	Population was professional nurses	Ineligible population
Chen et al., 2016	An exploration of the structure of mentors' behavior in nursing education using exploratory factor analysis and Mokken scale analysis	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Chen et al., 2018	The structure of mentors' behaviour in clinical nursing education: Confirmatory factor analysis	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Dhakal & Long, 2017	Enhancing EBP Skills of RN-BSN Students Through Academic Mentoring in Independent Study	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Dunlap et al., 2023	External Scholarship Mentors for DNP-Prepared Faculty: A Practice-Oriented Exemplar	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Durham et al., 2023	Strategies for developing faculty confidence and competencies to mentor quality improvement DNP projects	Y	Y	Y	N	Exclude	Non-empirical study	Non-empirical study
Ephraim, 2021	Mentoring in nursing education: An essential element in the retention of new nurse faculty	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Erlandsson et al., 2018	Capacity building of midwifery faculty to implement a 3-years midwifery diploma curriculum in Bangladesh: A process evaluation of a mentorship programme	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available

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Study	Title	P	E	O	DD	Decision	Comments	Documented reason for exclusion
Fokuo et al., 2017	Decreasing the Stigma of Mental Illness Through a Student-Nurse Mentoring Program: A Qualitative Study	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Frøiland et al., 2022	Exploring mentorship practices in clinical education in nursing homes: A qualitative mixed-methods study	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Gazaway et al., 2019	Impact of mentoring relationships on nursing professional socialization	N	Y	N	Y	Exclude	Population was professional nurses	Ineligible population
Gibbs & Culleiton, 20216	A project to increase educator cultural competence in mentoring at-risk nursing students	Y	Y	Y	Y	Include		
Harding & Mawson, 2017	Richness and reciprocity: Undergraduate student nurse mentoring in mental health	Y	Y	Y	Y	Include		
Harrington et al., n.d.	Mentoring: Planning and Implementing a Program in Nursing Education.	Y	Y	N	N	Exclude	Non-empirical study	Non-empirical study
Harvey & Uren, 2019	Collaborative learning: Application of the mentorship model for adult nursing students in the acute placement setting	Y	Y	N	N	Exclude	Non-empirical study	Non-empirical study
Hauge et al., 2019	Are Norwegian mentors failing to fail nursing students?	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Hockin & Pattison, n.d.	The Personal Faculty Mentor (PFM) Role: Advanced Support for Individualized Student Care.	Y	Y	N	N	Exclude	Non-empirical study	Non-empirical study
Huggins, 2016	Enhancing nursing students' education by coaching mentors	Y	Y	Y	N	Exclude	Non-empirical study	Non-empirical study
Jobst et al., 2022	Competencies and needs of nurse educators and clinical mentors for teaching in the digital age – a multi-institutional, cross-sectional study	N	N	N	Y	Exclude	Population was professional nurses	Ineligible population
Joubert & de Villiers, 2015	The learning experiences of mentees and mentors in a nursing school's mentoring programme	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Kemp et al., 2018	Developing a model of midwifery mentorship for Uganda: The MOMENTUM project 2015–2017	Y	Y	N	N	Exclude	Non-empirical study	Non-empirical study
Kung et al., 2023	Effectiveness of clinical mentorship program for students of long-term aged care: A mixed-methods study	Y	Y	Y	Y	Include		
Lavoie-Tremblay et al., 2019	Group mentorship programme for graduating nursing students to facilitate their transition: A pilot study	Y	Y	Y	Y	Include		

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Study	Title	P	E	O	DD	Decision	Comments	Documented reason for exclusion
Lea et al., 2017	Using action research to build mentor capacity to improve orientation and quality of nursing students' aged care placements: what to do when the phone rings	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Lewinski et al., 2016	Student-faculty lunch program to increase mentoring and facilitate cross-program relationships in school of nursing	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Luukkonen et al., 2023	Mentors' cultural competence at mentoring culturally and linguistically diverse nursing students in clinical practice: An international cross-sectional study	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
MacLaren, 2018	Supporting nurse mentor development: An exploration of developmental constellations in nursing mentorship practice	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
McGuinness et al., 2016	Preparing registrants for mentor roles: The chicken or egg conundrum	Y	Y	N	N	Exclude	Non-empirical study	Non-empirical study
McQueen et al., 2017	Imogene King's Theory of Goal Attainment and the Millennial Nurse: An Important Mentoring Tool for Nurse Educators	Y	Y	N	N	Exclude	Non-empirical study	Non-empirical study
Mikkonen et al., 2020	Development and testing of an evidence-based model of mentoring nursing students in clinical practice	Y	Y	N	N	Exclude	Non-empirical study	Non-empirical study
Mikkonen et al., 2022	Mentors' competence in mentoring nursing students in clinical practice: Detecting profiles to enhance mentoring practices	Y	Y	N	N	Exclude	Non-empirical study	Non-empirical study
Moked & Drach-Zahavy, 2016	Clinical supervision and nursing students' professional competence: Support-seeking behaviour and the attachment styles of students and mentors	Y	N	N	Y	Exclude	Exposure is supervision and not mentorship	Ineligible exposure
Mubeezi & Gidman, 2017	Mentoring student nurses in Uganda: A phenomenological study of mentors' perceptions of their own knowledge and skills	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Nastran et al., n.d.	Interpersonal relationship between the mentor and mentee in clinical nursing practice: A qualitative study.	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available

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Study	Title	P	E	O	DD	Decision	Comments	Documented reason for exclusion
Newton et al., 2017	A mixed-methods study exploring sign-off mentorship practices in relation to the Nursing and Midwifery Council standards	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Nouri et al., 2020	Design and psychometrics of the mentoring questionnaire among bachelor's degree students in nursing	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Oikarainen et al., 2022	Educational intervention to support development of mentors' competence in mentoring culturally and linguistically diverse nursing students: A quasi-experimental study	Y	Y	Y	Y	Include		
Opsahl & Townsend, 2021	Mentoring to engage diverse undergraduate nursing students in honors research	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Piamjariyakul et al., 2021	Mentoring undergraduate nursing students in palliative home care research	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Poorman & Mastorovich, 2017	Promoting Faculty Competence, Satisfaction and Retention: Faculty Stories Supporting the Crucial Need for Mentoring When Evaluating Nursing Students	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Rupsiene & Paulikiene, 2016	Influence of learning mentoring on mentor effectiveness: Case of nursing studies	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Sheehan et al., 2023	The implementation and evaluation of a mentoring program for Bachelor of Midwifery students in the clinical practice environment	Y	Y	Y	Y	Include		
Sodidi & Jardien-Baboo, 2020	Experiences and mentoring needs of novice nurse educators at a public nursing college in the Eastern Cape	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Stefaniak & Dmoch-Gajzlerska, 2021	Evaluation of a mentor training program for midwives in two hospitals in Warsaw, Poland - A qualitative descriptive study	Y	Y	Y	Y	Include		
Tuomikoski et al., 2018a	Development and psychometric testing of the nursing student mentors' competence instrument (MCI): A cross-sectional study	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Tuomikoski et al., 2018b	The competence of nurse mentors in mentoring students in clinical practice – A cross-sectional study	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available

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Study	Title	P	E	O	DD	Decision	Comments	Documented reason for exclusion
Welk et al., 2021	Capacity building in nurse educators in a Global Leadership Mentoring Community	N	Y	N	Y	Exclude	Population was professional nurses	Ineligible population
Zhao et al., 2018	Validation of Mentors' Behavior Scale among mentors	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available
Čukljek et al., 2024	Development and validation of satisfaction with clinical practice questionnaire for mentors and students	Y	Y	N	Y	Exclude	No content on training modules for mentors	Required data not available

P = Population; E = Exposure; O = Outcome; DD = Desired data; Y = Yes; N = No

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