

Clinical Competence, Practice Readiness, and Transition-to-Practice Outcomes Among New Graduate Nurses: A Systematic Literature Review

Jericho G. Ferrer¹

¹University of La Salette, Inc., College of Nursing, Public Health, and Midwifery, Santiago City, Philippines

ARTICLE INFORMATION	ABSTRACT
<p>Article history: Published: March 2026</p> <p>Keywords: Clinical competence Practice readiness Transition-to-practice Patient safety Nursing education</p>	<p>This systematic narrative review synthesized recent evidence (2021–2025) on clinical competence, practice readiness, and transition-to-practice outcomes among nursing students and new graduate nurses. Guided by PRISMA guidelines, a comprehensive search of major databases (PubMed/MEDLINE, CINAHL, Scopus, Web of Science, and others) identified 47 eligible peer-reviewed studies from diverse global contexts, including Asia, Africa, Europe, Australia, the Middle East, and the Philippines. Included studies utilized cross-sectional, qualitative, quasi-experimental, mixed-methods, and systematic review designs. Thematic analysis revealed four key themes: (1) clinical competence and its influencing factors, (2) practice readiness and transition shock, (3) transition-to-practice programs and nurse residency outcomes, and (4) links between competence, patient safety, and workforce sustainability. Findings highlight that competence and readiness are multidimensional and context-specific, shaped by educational preparation, clinical exposure, mentorship, and organizational support. Structured transition programs, simulation-based education, and competency-focused curricula consistently improved preparedness, confidence, patient safety, and workforce integration. Continuous support and targeted interventions are essential for fostering resilient, competent nurses who deliver high-quality care. This review supports United Nations Sustainable Development Goal 3 (Good Health and Well-Being) by offering evidence to enhance nursing education, transition support, and global healthcare workforce capacity, ultimately promoting safer patient outcomes and equitable health systems.</p>

1. Introduction

Professional nursing practice demands both clinical competence and practice readiness. The growing complexity of healthcare systems places greater demands on new graduate nurses, who must demonstrate not only technical proficiency but also strong clinical judgment, effective communication, ethical decision-making, and the ability to thrive in fast-paced, high-pressure environments. Recent concept analyses define registered nurse competence as a dynamic, multifaceted construct shaped by education, experience, and workplace demands (Swift et al., 2025). Closely related to competence, practice readiness reflects the extent to which graduates are prepared to transition from academic training to professional clinical roles. Emerging evidence, including scoping reviews, reveals that many new graduates feel inadequately prepared for independent clinical practice despite completing accredited programs (Masso et al., 2022). This persistent mismatch—commonly termed the academic-practice gap—has been documented across diverse international settings.

The transition from student to professional nurse represents a critical phase marked by heightened responsibility, accountability, and exposure to high-acuity patients. Studies indicate that during their early years of employment, new nurses often experience significant stress, reduced confidence, and uncertainty in clinical decision-making (Lee et al., 2023; Sterner et al., 2023). Without sufficient organizational support, mentorship, and structured transition programs, these challenges can undermine job satisfaction, retention rates, and patient safety. Educational strategies such as simulation-based learning, competency-based curricula, and case-based instruction are widely employed to build competence before graduation. Evidence shows that simulation effectively improves clinical knowledge and psychomotor skills among students (Alharbi et al., 2024). However, the long-term impact of these interventions on sustained workplace preparedness remains uncertain.

Competence development is influenced by a range of personal and organizational factors, including clinical exposure, work experience, quality of supervision, leadership support, and organizational culture. Research highlights strong links between patient safety culture and clinical competence, with implications that extend beyond individual performance to broader healthcare outcomes (Zaitoun et al., 2023). These findings emphasize that competence is not merely an educational issue but a systemic concern within healthcare.

Despite numerous primary studies and thematic reviews examining aspects of clinical competence or practice readiness in isolation, the literature remains fragmented. Variations in definitions, measurement tools, populations (students vs. new graduates), and contexts hinder a unified understanding. A comprehensive synthesis is therefore needed to identify patterns, determinants, and transition outcomes across contemporary evidence. A synthesis is required, integrative in nature, which describes patterns, themes, determinants, and transition outcomes in a narrative way across the current studies.

A systematic narrative literature review is particularly appropriate in this context because it allows structured, transparent identification of relevant studies while enabling thematic analysis of heterogeneous designs. By synthesizing findings across quantitative, qualitative, and mixed-methods research, this review aims to provide a comprehensive understanding of clinical competence, practice readiness, and transition-to-practice outcomes among new graduate nurses.

Specifically, this review seeks to:

- Examine how clinical competence and practice readiness are defined and measured;
- Identify common determinants influencing competence development; and
- Synthesize reported outcomes related to transition into professional practice.

Through thematic integration of current evidence (2021–2025), this review intends to inform nursing education reform, transition program development, leadership strategies, and policy initiatives aimed at strengthening the preparedness of the global nursing workforce.

2. Literature Review

Clinical competence and clinical readiness are interrelated constructs that underpin safe, effective, and high-quality nursing practice. While clinical competence refers to the integration of knowledge, psychomotor skills, critical thinking, and ethical judgment in patient care, clinical readiness focuses on the preparedness of newly graduated nurses to transition from academic training to professional practice. Together, these concepts provide a comprehensive framework for understanding how nurses develop the capacity to function effectively in complex healthcare environments.

Clinical competence has consistently been described as a multidimensional and developmental construct. According to Abbaspour (2021), it represents the combined application of knowledge, skills, and professional attitudes necessary for delivering evidence-based and compassionate care. Competence is not static; rather, it evolves through education, clinical exposure, and reflective experience. This dynamic perspective is further supported by Osborn et al. (2025), who emphasized that competence progresses across a nurse's career and is shaped by continuous learning and practice. Their work reinforces the view that competence extends beyond technical proficiency to include adaptability, clinical reasoning, and professional judgment. The theoretical foundation of competence development is strongly influenced by the Novice-to-Expert model proposed by Patricia Benner. Benner conceptualized clinical development as a staged progression from novice, characterized by rule-based performance, to expert, marked by intuitive and holistic understanding of patient situations. This model highlights experiential learning as central to professional growth, a notion supported by empirical findings linking work experience with higher levels of competence (Abbaspour, 2021). In this framework, competence is viewed not merely as a measurable outcome but as an ongoing developmental process shaped by clinical immersion and mentorship.

Closely connected to competence is the concept of clinical readiness, particularly during the early career phase. Clinical readiness refers to the extent to which new graduates possess the cognitive, technical, and affective capacities necessary to assume professional responsibilities. Lee et al. (2023) described readiness as the ability to translate theoretical knowledge into practice, navigate clinical complexities, and adapt to dynamic healthcare environments. This construct encompasses clinical reasoning and psychomotor skills (cognitive preparedness) as well as confidence, communication, and resilience (affective preparedness). Thus, readiness may be understood as an early manifestation or entry-level expression of clinical competence. The transition from student to practicing nurse is widely recognized as a vulnerable period that influences long-term professional outcomes. Masso et al. (2022) identified this transitional phase as critical to nurse retention and job satisfaction. Similarly, Marriott et al. (2024) emphasized that readiness involves psychological and emotional preparedness, not solely technical capability. Within Benner's framework, this stage corresponds to the shift from novice to advanced beginner, during which nurses begin recognizing recurring patterns in clinical situations and gradually assume greater autonomy.

In the Filipino context, both clinical competence and readiness have gained increasing scholarly attention. Pilay et al. (2025) reported that while novice nurses often demonstrate strong theoretical preparation, they may struggle with workload management and independent decision-making, indicating a gap between academic preparation and clinical performance. This observation aligns with findings by Sterner et al. (2023), who noted that many graduates perceive themselves as academically prepared yet insufficiently ready for actual practice—a reflection of the persistent theory–practice divide. The phenomenon of “reality shock,” described by Wynne et al. (2024), further illustrates the emotional and professional strain experienced by new nurses when expectations from training conflict with clinical realities. To address these challenges, the literature highlights the importance of mentorship and structured transition programs. Lindfors et al. (2022) underscored the value of trained preceptors in fostering confidence and reducing anxiety among novice nurses. Additionally, Tawash et al. (2024) argued that readiness and competence are not inherent traits but developmental outcomes strengthened through reflective practice and organizational support. Educational innovations, including simulation-based learning and technology-enhanced instruction, have also been recognized as strategies to bridge the competence–readiness gap. Narvaez et al. (2024) introduced the concept of Technological Caring Competence, emphasizing the integration of digital literacy and caring behaviors in contemporary nursing education, particularly relevant for Generation Z nurses entering the workforce.

Furthermore, the literature demonstrates that clinical competence and clinical readiness are interconnected yet distinct constructs. Clinical readiness represents the preparedness to begin professional practice, while clinical competence reflects the ongoing development of expertise across the nursing career. Both are influenced by educational quality, experiential learning, mentorship, generational characteristics, and organizational support systems. Addressing the gap between readiness and competence requires a comprehensive approach that integrates competency-based curricula, structured clinical exposure, simulation training, and sustained professional mentorship. Strengthening these areas is essential to ensuring safe patient care, supporting novice nurses during transition, and promoting long-term professional excellence in nursing practice.

3. Methodology

This is a systematic narrative review, which utilized a systematic and extensive search to locate scholarly literature on the topic of clinical competence, practice readiness and transition-to-practice outcomes in new graduate nurses. It aimed at synthesizing existing evidence about the determinants, education approaches, and organizational influences that determine professional preparedness in nursing.

3.1 Research Design

This study employed a systematic narrative literature review guided by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). The review systematically identified, screened, and synthesized empirical studies examining clinical competence, professional competence, and practice/work readiness among nursing students, new graduate nurses, and registered nurses. A narrative synthesis approach was utilized due to methodological heterogeneity across included studies.

3.2 Eligibility Screening and Criteria

Studies were eligible for inclusion if they investigated clinical competence, professional competence, clinical judgment, evidence-based competence, or practice/work readiness in the following populations: undergraduate nursing students, nursing interns, new graduate nurses, or registered nurses. Eligible study designs included quantitative, qualitative, mixed-methods, and systematic reviews published in peer-reviewed journals from 2021 to 2025. Additionally, foundational studies on scale or instrument development published before 2021 were considered when they directly related to the measurement of competence. Only English-language publications with full-text access were included. Studies were excluded if they focused on non-nursing professionals, or consisted of editorials, conference abstracts, commentaries, or other works that did not directly assess or measure the constructs of competence or readiness. This structured approach ensured a focused yet comprehensive selection of relevant evidence while maintaining methodological rigor and transparency.

3.3 Information References and Sources

A comprehensive literature search was conducted across major electronic databases, including PubMed/MEDLINE, SAGE, CINAHL, Scopus, and Web of Science. Google Scholar was used to supplement database searches and identify potentially missed articles. Reference lists of included studies were manually screened to capture additional relevant publications. The final search was completed in February 2026 to ensure inclusion of the most recent evidence.

3.4 Search Identification Strategy

A structured search strategy was developed using combinations of keywords and Boolean operators related to clinical competence and readiness constructs. Search terms included “clinical competence,” “professional competence,” “clinical competency,” “practice readiness,” “work readiness,” and “transition to practice,” combined with population-related terms such as “nursing students,” “new graduate nurses,” “registered nurses,” and “novice nurses.” Filters were applied to limit results to peer-reviewed articles published between 2021 and 2025 and written in English. The search strategy was adapted as necessary for each database to optimize retrieval.

3.5 Study Selection Process

All retrieved records were exported to a reference management software, and duplicate entries were removed prior to screening. Titles and abstracts were independently screened by two reviewers against the eligibility criteria. Articles deemed potentially relevant underwent full-text review to determine final inclusion. Discrepancies between reviewers were resolved through discussion and consensus. The selection process was documented using a PRISMA flow diagram detailing the number of records identified, screened, excluded, and included in the final synthesis.

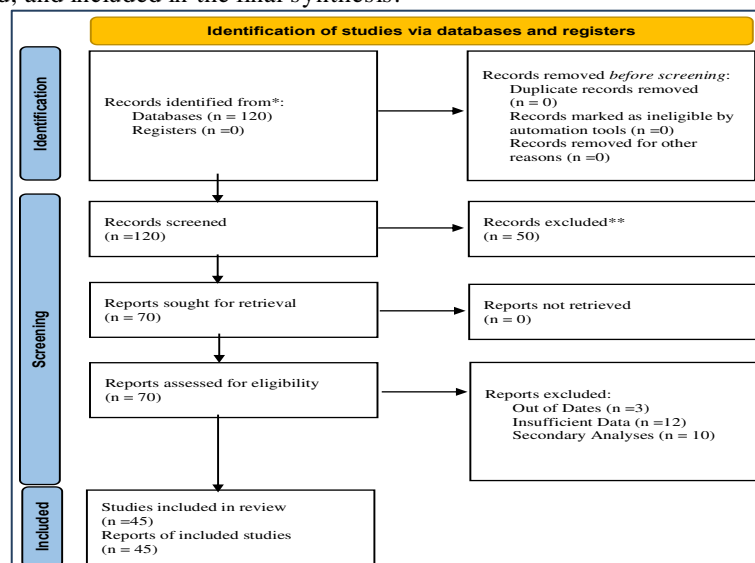


Figure 1: PRISMA 2020 Flow Diagram of Study Selection

3.6 Data Extraction

Data were extracted using a standardized data extraction matrix developed for this review. Extracted information included author and year of publication, country of origin, study design, sample characteristics, measurement instruments used to assess competence or readiness, key findings, and identified influencing factors. Data extraction was performed independently by two reviewers to ensure accuracy and consistency. Any discrepancies were discussed and resolved collaboratively.

3.7 Quality Appraisal

Methodological quality was assessed using appropriate critical appraisal tools based on study design. The Joanna Briggs Institute (JBI) critical appraisal checklists were used for cross-sectional and qualitative studies, the Mixed Methods Appraisal Tool (MMAT) was applied to mixed-methods studies, and AMSTAR-2 was used for systematic reviews. Quality appraisal results were considered during data interpretation; however, no study was excluded solely on the basis of methodological limitations to preserve comprehensiveness of the review.

3.8 Data Synthesis

Due to substantial heterogeneity in research methodologies, populations, outcome measures, and competence assessment tools, quantitative pooling of results was not feasible. Therefore, a narrative synthesis approach was undertaken. Findings were organized into thematic categories reflecting recurring patterns across studies, including conceptual definitions of competence, measurement tool development and validation, factors influencing clinical competence, determinants of practice readiness among new graduates, educational strategies enhancing competence, transition-to-practice and residency programs, and the relationship between competence and patient safety outcomes. Similarities, differences, and emerging trends across studies were analyzed descriptively to generate an integrated understanding of current evidence.

3.9 Ethical Considerations

As this review utilized previously published studies and did not involve human participants, ethical approval was not required. All included articles were properly cited and referenced in accordance with academic and publication standards.

4. Findings

A total of 120 records were identified through database searching and manual reference screening. After duplicate removal and screening of titles and abstracts, full-text articles were assessed for eligibility. Based on the predefined inclusion and exclusion criteria, 45 studies were included in the final narrative synthesis following PRISMA guidelines. The included studies were published between 2021 and 2025 and represented diverse global contexts including Asia, Africa, Europe, Australia, the Middle East, and the Philippines. Study designs included cross-sectional studies, qualitative research, quasi-experimental studies, systematic reviews, mixed-methods investigations, concept analyses, and methodological instrument development studies.

Thematic analysis generated four major themes:

- Clinical competence and influencing factors
- Practice readiness and transition shock
- Transition-to-practice and nurse residency outcomes
- Competence, patient safety, and workforce sustainability

4.1. Clinical Competence and Influencing Factors

Clinical competence was consistently described as a multidimensional construct encompassing theoretical knowledge, psychomotor skills, clinical judgment, communication, leadership, ethical reasoning, and evidence-based practice. Cross-sectional studies reported moderate to high levels of competence among nurses and nursing students (Abbaspour et al., 2021; Ahmedin et al., 2024; Alkhalawi & Alotaibi, 2024; Mohamed et al., 2024; Shibiru et al., 2023; Tura et al., 2024). These studies identified significant predictors of competence including years of work experience (Abbaspour et al., 2021), educational preparation (Ahmedin et al., 2024), organizational support (Mohamed et al., 2024), and clinical exposure (Shibiru et al., 2023).

Systematic reviews and concept analyses further clarified the theoretical foundations of competence and readiness (Konlan et al., 2024; Lee et al., 2023; Swift et al., 2025). Instrument development studies contributed validated measurement tools for assessing competence and readiness among new graduates (Kim & Shin, 2022; Osborn et al., 2025). Evidence-based healthcare competence was specifically examined in regional cross-sectional research (Wang et al., 2025), while qualitative studies highlighted nurses' ongoing efforts to maintain competence through lifelong learning (Rahmah et al., 2021).

Despite generally favorable competence ratings, gaps were consistently reported in independent clinical decision-making, emergency preparedness, delegation, and integration of evidence-based practice (Duan et al., 2025; Falk & Lindström, 2022; Hui et al., 2023). Collectively, these findings indicate that competence is developmental and context-dependent, requiring continued professional support beyond graduation.

4.2. Practice Readiness and Transition Shock

Practice readiness emerged as a distinct but related construct to competence. Cross-sectional and correlational studies demonstrated varying levels of perceived readiness among nursing students and new graduates (Chen & Wang, 2024; Jihye & Kyungmi, 2025; Pilay et al., 2025). Readiness was significantly associated with perceived competence (Alsalamah et al., 2023) and professional preparation factors (Alruwaili et al., 2024). Qualitative studies provided deeper insights into transition shock, describing anxiety, lack of confidence, role ambiguity, and fear of making errors during the first year of practice (Jerpseth &

Jensen, 2025; Serafin et al., 2022; Yang et al., 2024). Newly graduated nurses frequently reported feeling academically prepared but practically overwhelmed, particularly in high-acuity settings (Sterner et al., 2023). Longitudinal research confirmed that readiness evolves over time as graduates integrate into workplace environments (Tawash et al., 2024). Systematic and scoping reviews synthesized global evidence on readiness determinants, emphasizing the influence of resilience, mentorship, academic preparation, and organizational climate (Lee et al., 2023; Masso et al., 2022). These findings suggest that readiness extends beyond technical competence to include psychological confidence, professional identity formation, and contextual adaptation within complex healthcare systems.

4.3. Transition-to-Practice and Nurse Residency Outcomes

Strong evidence supports the effectiveness of structured transition-to-practice programs in enhancing graduate nurse outcomes. Quasi-experimental and longitudinal studies demonstrated significant improvements in competence, work readiness, confidence, and professional authority among nurses participating in structured transition programs (Lindfors et al., 2022; Rogers et al., 2023; Tawash et al., 2024). The impact of nurse residency program completion on readiness and competence was also confirmed (Alsalamah et al., 2023).

Evaluation studies of orientation programs further showed positive effects on competence consolidation and clinical integration (Arroyo, 2024). Systematic reviews highlighted the critical role of nurse manager and preceptor support in facilitating professional development (Jeffery et al., 2023). Conceptual and curriculum-focused reviews emphasized the shift toward competency-based education models to strengthen graduate preparedness (Mani, 2025).

Additionally, simulation-based learning was identified as an effective strategy for enhancing knowledge, clinical skills, and evidence-based practice integration (Alharbi et al., 2024; Leal-Costa et al., 2024; Madayag et al., 2024). These findings collectively demonstrate that structured mentorship, organized orientation, and competency-driven curricula are essential bridging mechanisms between academic preparation and autonomous professional practice.

4.4. Competence, Patient Safety, and Workforce Sustainability

Clinical competence was strongly linked to patient safety and organizational outcomes. A systematic review demonstrated that higher clinical competence positively influences patient safety culture (Zaitoun et al., 2023). Regional cross-sectional research further confirmed that evidence-based healthcare competence is associated with improved clinical practice outcomes (Wang et al., 2025). Comparative and multiphase studies highlighted the importance of caring and professional competencies in specialized settings such as critical care units (Rosete et al., 2024). Workplace readiness and competence were also associated with job satisfaction and retention (Cubelo et al., 2024; Matlhaba & Barnard, 2024). Conversely, inadequate preparedness was linked to burnout, stress, and turnover intention among new graduates (Sterner et al., 2023). Educational readiness to support new graduates was also identified as a determinant of sustainable workforce integration (Zolkefli, 2024).

Table 1. Literature Matrix for Clinical Competence and Influencing Factors

No.	Author(s) & Year	Country	Design	Sample	Main Focus
1	Abbaspour, H., Heydari, A., & Esmaily, H. (2021)	Iran	Cross-sectional	Nurses	Relationship between work experience and clinical competency
2	Ahmedin, L., et al. (2024)	Ethiopia	Cross-sectional	Nursing students	Clinical practice competence and associated factors
3	Alharbi, A., et al. (2024)	Multinational	Systematic review	Nursing programs	Effectiveness of simulation-based learning on knowledge and skills
4	Alkhalawi, W. A., & Alotaibi, R. (2024)	Saudi Arabia	Observational	Nursing students	Assessing competence in clinical practice
5	Alsalamah, Y. S., et al. (2023)	Saudi Arabia	Cross-sectional	New graduates	Work readiness and perceived clinical competence
6	Chen, L., & Wang, Y. (2024)	China	Cross-sectional	Nursing students	Work readiness and influencing factors
7	Eshraghi Arani, N., et al. (2023)	Iran	Cross-sectional	Nurses	Clinical competence and performance
8	Falk, A.-C., & Lindström, V. (2022)	Sweden	Cross-sectional	Registered nurses	Self-reported clinical competence before advanced-level training
9	Hui, T., et al. (2023)	Iran	Cross-sectional	Nurses	Clinical competency before and during COVID-19 outbreak
10	Shibiru, S., et al. (2023)	Ethiopia	Cross-sectional	Nurses	Clinical competence and associated factors
11	Matlhaba, K. L., & Barnard, A. (2024)	South Africa	Operational manager perspective	New graduate nurses	Factors influencing clinical competence
12	Rosete, E. J. T., et al. (2024)	Philippines	Multi-phase study	Gen Z nurses	Clinical, caring, and professional competence
13	Madayag, R. A., et al. (2024)	Philippines	Mixed-methods	Nursing students	Refining clinical judgment

	(2024)				competence with case-based learning
14	Wang, S., et al. (2025)	China	Cross-sectional	Clinical nurses	Evidence-based healthcare competence and associated factors
15	Cubelo, F., et al. (2024)	International	Systematic review	Internationally educated nurses	Factors influencing job satisfaction and professional competencies
16	Mohamed, R. A., et al. (2024)	Egypt	Cross-sectional	Nurses	Perceived clinical competence and related factors
17	Narvaez, R. A., et al. (2024)	Philippines	Descriptive	Nurse educators	Technological caring competence
18	Maravillas, C. B., & Mallorca, P. S. B. (2025)	Philippines	Descriptive	Nurse educators	Theory and clinical skills competencies
19	Swift, L. M., et al. (2025)	Australia	Concept analysis	Registered nurses	Defining registered nurse competence
20	Prendi, E., et al. (2022)	Italy	Cross-sectional comparative	Nurses & students	Measuring professional competencies
21	Rahmah, N. M., et al. (2021)	Malaysia	Qualitative	Nurses	Nurses' efforts to maintain competence
22	Mani, Z. (2025)	International	Scoping review	Nursing programs	Transitioning to competency-based education and curriculum revision strategies

Table 2: Literature Matrix for Practice Readiness and Transition Shock

No.	Author(s) & Year	Country	Design	Sample	Main Focus
1	Zolkefli, Y. (2024)	Malaysia	Descriptive	Nurse educators	Readiness to facilitate learning needs of new graduates
2	Jerpseth, H., & Jensen, K. T. (2025)	Norway	Qualitative	New graduate nurses	Job readiness and professional authority
3	Jihye, K., & Kyungmi, L. (2025)	South Korea	Cross-sectional	New graduates	Readiness for practice
4	Kim, J., & Shin, S. (2022)	South Korea	Methodological	New graduate nurses	Nursing Practice Readiness Scale development
5	Konlan, K. D., et al. (2024)	Ghana	Concept analysis	Nursing students	Clinical readiness for practice
6	Leal-Costa, C., et al. (2024)	Spain	Quasi-experimental	Nursing students	Simulation learning enhancing evidence-based practice
7	Lee, T. W., et al. (2023)	Systematic Review	Multiple countries	Undergraduate students	Factors related to readiness for practice
8	Aybar Crumley, B. (2024)	USA	Qualitative	New graduates	Academic-practice gap perceptions
9	Duan, C., et al. (2025)	China	Cross-sectional	Gen Z nursing interns	Public health emergency preparedness
10	Alruwaili, M., et al. (2024)	Saudi Arabia	Cross-sectional	New graduates	Readiness to enter nursing profession
11	Darryl Ang, W. H., et al. (2024)	Singapore	Qualitative	Nursing students	Readiness toward "new normal" in clinical practice
12	Kim, J., et al. (2023)	South Korea	Longitudinal	New graduates	Stress and competence
13	Yang, H., et al. (2024)	China	Qualitative descriptive	New graduates	Self-perceptions of work readiness

Table 3: Literature Matrix for Transition-to-Practice and Nurse Residency Outcomes

No.	Author(s) & Year	Country	Design	Sample	Main Focus
1	Lindfors, K., et al. (2022)	Finland	Quasi-experimental	New graduates	Competence development after preceptor education
2	Marriott, P. H. M., et al. (2024)	UK	Descriptive qualitative	First clinical placement	Preparedness for first clinical placement
3	Masso, M., et al. (2022)	Scoping Review	Multiple countries	New graduates	Practice readiness and influencing factors
4	Pilay, M. C., et al. (2025)	Philippines	Cross-sectional	Novice nurses	Practice preparedness assessment

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5	Rogers, S., et al. (2023)	Australia	Survey	Graduate nurses	Work readiness development during transition program
6	Sterner, A., et al. (2023)	Sweden	Cross-sectional	New graduates	Preparedness and transition challenges
7	Tawash, E., et al. (2024)	Ireland	Longitudinal mixed-method	New graduates	Readiness, transition, integration into workplace
8	Arroyo, E. (2024)	Philippines	Evaluation study	New graduate nurses	Evaluation of orientation program
9	Jeffery, J., et al. (2023)	International	Systematic review	Nurse managers & new graduates	Support of graduate nurse development

Table 4: Literature Matrix for Competence, patient safety, and workforce sustainability

No.	Author(s) & Year	Country	Design	Sample	Main Focus
1	Zaitoun, R. A., et al. (2023)	Systematic review	Multiple countries	Nurses	Clinical competence effect on patient safety

5. Conclusion and Recommendations

This study revealed that clinical competence and practice readiness among nurses and nursing students are multidimensional and influenced by personal, educational, and organizational factors. While many nurses demonstrate moderate to high competence, gaps remain in areas such as independent decision-making, emergency preparedness, delegation, and integration of evidence-based practice. Transition-to-practice challenges, including transition shock and role ambiguity, affect new graduates' confidence and professional adjustment, but structured programs, mentorship, simulation-based training, and competency-focused curricula were found to enhance competence, readiness, and patient safety. Strengthening these mechanisms ensures safe, effective, and sustainable nursing care, and this study provides insights that can guide educational institutions, healthcare organizations, and policymakers to improve nurse preparedness, ultimately benefiting society by fostering a competent and resilient healthcare workforce.

Based on the findings of this systematic narrative review, nursing education institutions should strengthen competency-based curricula to better align academic preparation with the realities of clinical practice. Greater emphasis should be placed on clinical reasoning, patient safety, ethical decision-making, interprofessional collaboration, and workload management to reduce the persistent theory-practice gap. Expanding high-fidelity simulation, case-based learning, and technology-enhanced instruction—including electronic documentation and telehealth simulations—can further enhance both clinical competence and practice readiness. Structured and progressive clinical exposure, combined with reflective learning strategies, is essential to ensure that graduates are not only knowledgeable but also confident and adaptable in complex healthcare environments.

Healthcare organizations, in turn, should institutionalize structured transition-to-practice programs such as nurse residency models that provide mentorship, gradual workload integration, competency assessment, and reflective debriefing. Strengthening preceptorship systems through formal training and organizational support can ease transition shock and foster professional confidence among new graduates. Creating supportive workplace cultures that prioritize psychological safety, manageable staffing ratios, and ongoing professional development is equally vital to sustain workforce resilience and patient safety. Policymakers and researchers should continue to evaluate and refine these transition initiatives through longitudinal and intervention-based studies to ensure that competence and readiness development translates into improved retention, enhanced quality of care, and long-term healthcare system sustainability.

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