



EFFECTIVENESS OF EXPERIENTIAL LEARNING–BASED CLINICAL EDUCATION ON NURSES' CLINICAL DECISION-MAKING: A SYSTEMATIC REVIEW

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ABSTRACT

Clinical decision-making is a core competency for nurses that directly impacts patient safety. However, the development of this skill is often not automatic and faces barriers such as service complexity and lack of confidence. Experiential learning through a cycle of concrete experiences and reflection offers an approach to bridge this competency gap. This study aims to synthesize scientific evidence regarding the types of experiential learning interventions in clinical education and assess their impact on nurses' clinical decision-making or judgment. The study design was a systematic review following the PRISMA 2020 guidelines. A literature search was conducted in PubMed/MEDLINE, Scopus, and CINAHL databases for articles published between 2011 and 2025. Inclusion criteria included RCTs or quasi-experimental studies involving nurses or nursing students in clinical settings with experience-based interventions. Nine studies met the inclusion criteria and were analyzed narratively. Data synthesis identified two main themes. First, intervention modalities included realistic clinical simulations, in-situ simulations in the ICU, scenario-based triage training, interactive cognitive techniques (such as critical thinking cards), and structured reflection methods such as Debriefing for Meaningful Learning (DML). Second, these interventions consistently improved clinical decision accuracy, reasoning, knowledge, and service time efficiency. The use of DML was shown to be more effective in improving clinical reasoning than traditional debriefing. However, some studies have shown a decline in retention of the effect after three months, emphasizing the need for ongoing training. Experiential learning-based clinical education is effective in improving the quality of nurses' clinical decisions. The success of this intervention depends heavily on the integration of structured exposure to clinical experiences with systematic reflection mechanisms. Hospital management is advised to implement regular scenario-based training and strengthen the capacity of facilitators in conducting debriefings to ensure patient safety and the quality of nursing care.

Keywords: clinical decision making; experiential learning; nurses; simulation

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INTRODUCTION

Nurses' clinical decision-making is a core competency that directly impacts patient safety and the quality of care in hospitals. In daily practice, nurses are closest to patients, conducting ongoing monitoring, recognizing changes in their condition, communicating important findings, and playing a role in preventing errors and near-misses through front-line clinical vigilance (Kouravand et al., 2021). This role, which is very close to the dynamics of the patient's condition, places the quality of clinical reasoning and the accuracy of nurses' decisions as crucial factors in preventing delayed intervention, failed escalation, or unexpected outcomes (Aliakbari et al., 2022).

The concept of clinical decision-making is often discussed in conjunction with the term clinical judgment, which is the ability to think and act appropriately based on data, context, and the patient's priority needs. The NCSBN defines clinical judgment as the observable outcome of critical thinking and decision-making; an iterative process that utilizes nursing knowledge to observe and assess situations, identify prioritized client problems, and generate evidence-based solutions for safe care (Betz et al., 2022). In line with this, NCSBN also developed the Clinical Judgment Measurement Model (NCJMM) as an evidence-based framework to measure the cognitive aspects of clinical

decisions in a more structured manner, emphasizing that this ability is not just “knowledge,” but rather a competency that can be mapped, trained, and assessed (Blair et al., 2023; Corns & Thomas, 2022).

From the perspective of nursing theory and research, clinical reasoning is determined not only by objective data, but also by what the nurse brings to the situation (experience, knowledge, and preparedness), familiarity with patient response patterns, and the cultural context of the unit and practice environment (Jungo et al., 2023). Reflection on practice is a crucial element because often the development of clinical reasoning is triggered by “failures” or inaccuracies in clinical reasoning that then encourage learning and improvement (Kim et al., 2023). Thus, effective clinical education needs to design learning experiences that enable nurses to practice integrating data, context, and priorities, while building habits of reflection as a mechanism for professional learning (Shin et al., 2024a).

However, developing clinical decision-making skills, especially among novice nurses or those facing high burdens and complexities of care is not an automatic process. Barriers to early recognition of changes in patient condition, hesitation to act quickly, and a mismatch between clinical demands and competencies can lead to delays in action and undermine nurses' confidence (Ishizuka et al., 2023). The literature on responses to patient deterioration highlights that managing deterioration requires rapid recognition and appropriate response by nurses at the bedside; conversely, inadequate preparation for competencies and the work context can worsen outcomes and undermine nurses' confidences (Saban & Dubovi, 2024). This situation highlights the need for clinical education interventions that not only “teach procedures,” but also foster clinical reasoning, prioritization, and decision-making in real-world situations (Qiu et al., 2024).

One relevant approach is experiential learning-based clinical instruction. Experiential Learning theory positions experience as the primary source of learning through a cycle: concretely experiencing, reflecting, constructing concepts/explanations, and then retesting through action (Dimitri et al., 2024). In the context of clinical nursing education, this approach is typically implemented through guided clinical practice, simulations (e.g., deteriorating patient scenarios), preceptorship/coaching in the practice setting, case-based learning, and structured debriefing and reflection to link experiences to concepts and action plans (Shin et al., 2024b). Furthermore, strengthening the reflection phase (e.g., debriefing in simulations) is often considered a key component in helping students extract clinical meaning from experiences, rather than simply “repeating the activity” (Scott et al., 2024).

Although various experience-based interventions have been used to improve nurses' clinical decision-making skills, the empirical evidence is often scattered across diverse study designs, intervention formats (simulation, reflection, preceptorship, and combinations), different service contexts, and diverse measurement instruments (e.g., clinical decision-making, clinical judgment, or clinical reasoning). This diversity can make it difficult to formulate consistent recommendations for clinical educators, nursing managers, and clinical training policymakers. Therefore, this systematic review was prepared to synthesize scientific evidence regarding the effectiveness of experiential learning-based clinical education on nurses' clinical decision-making. This review aims to (1) identify the types of experiential learning interventions used in nurses' clinical education, and (2) assess their impact on clinical decision-making/judgment outcomes.

METHOD

Study Design

This study used a systematic review design to identify and synthesize scientific evidence regarding the effectiveness of experiential learning-based clinical education on clinical decision-making in

nurses. The reporting process followed the PRISMA 2020 guidelines to ensure a transparent and systematic study search, selection, and reporting process (Page, 2021).

Search Strategy

A systematic literature search was conducted in the PubMed/MEDLINE, Scopus, and CINAHL databases. Articles searched were limited to publications published between 2011 and 2025, in English or Indonesian. The search strategy was developed from the research question by combining keywords and synonyms related to the nursing population, experiential clinical education, and clinical decision-making outcomes. The Boolean operators “AND” and “OR” were used to broaden the scope without compromising relevance. Search terms included keywords representing nurses (e.g., nurse, registered nurse, clinical nurse, new graduate nurse), experiential learning interventions in clinical education (e.g., experiential learning, clinical education, simulation-based learning, preceptorship, mentorship, coaching, reflective practice, debriefing, case-based learning, problem-based learning, concept mapping), and outcomes related to clinical decisions (e.g., clinical decision making, clinical judgment, clinical reasoning, triage decision, decision accuracy, critical thinking). The strategy was adapted to the format of each database. In addition to the database search, additional searches were conducted by examining the bibliographies of articles that met the criteria to identify other relevant studies.

Inclusion and Exclusion Criteria

Inclusion criteria were established using the PICOS framework. The population included nurses working in clinical settings, such as inpatient care, emergency departments, intensive care units, operating rooms, or other specialized care units. Interventions included experiential learning-based clinical education or instruction, an approach that emphasizes learning through clinical experiences (real or simulated) combined with reflection, debriefing, clinical guidance, or active learning activities that facilitate clinical reasoning. Comparators could be standard practice, conventional education, or control groups, including pre-post designs with comparators without randomization. The primary outcome was clinical decision-making or a closely related, quantitatively measurable construct, such as clinical decision-making, clinical judgment, clinical reasoning, appropriate prioritization/triage, or critical thinking when used to represent clinical decision-making ability. Accepted study designs were randomized controlled trials and quasi-experimental. Studies were excluded if they were not experience-based clinical education interventions, did not involve clinical nurses, did not report quantitative outcomes related to decisions/judgments/reasoning, or were purely qualitative, descriptive studies without interventions, protocols, editorials, opinion pieces, conference abstracts without full texts, or case reports.

Study Selection and Data Extraction

All search results were compiled and duplicates removed using a reference management tool. Study selection was conducted in two stages by two independent reviewers. The first stage involved screening titles and abstracts to assess initial compliance with the inclusion criteria. The second stage involved assessing full-text manuscripts to ensure appropriateness of the population, type of experiential learning intervention, study design, and availability of outcome data. Disagreements between reviewers were resolved through discussion until consensus was reached. Data from eligible studies were extracted using a standardized extraction form that included study identification (authors, year, country), setting and service unit, study design, sample characteristics, intervention details and duration, comparator type, outcome instrument and timing of measurement, and a summary of key results.

Data Synthesis

The synthesis was conducted descriptively using a narrative synthesis approach due to variations in intervention types, program durations, unit contexts, and differences in instruments and outcome indicators that contributed to heterogeneity across studies. Results are presented by summarizing

study characteristics and key findings per intervention group, such as simulation with debriefing, preceptorship/mentorship or clinical coaching, and structured reflection or case-based learning.

RESULT

Search and Selection Process

A total of 678 initial records were identified from three electronic databases: PubMed, Scopus, and CINAHL. After deduplication, 100 records were identified as duplicates and removed, leaving 578 records for the title and abstract screening stage. At this stage, 498 records were eliminated for not meeting the inclusion criteria, primarily because the studies did not focus on experiential learning-based clinical education, did not involve nurses in a clinical setting, or did not use a quantitative intervention design (RCT or quasi-experimental).

Next, 80 articles were selected for full-text search and review. Of these, 65 were excluded because they were not available in full text, did not report quantitative results related to clinical decision-making, or the intervention could not be classified as experiential learning in clinical education. This left 15 articles accessible in full text and further assessed for eligibility. During the full-text evaluation phase based on the PICOS framework, 6 articles were again excluded because they did not meet eligibility criteria. Reasons for exclusion included study designs that were not RCTs or quasi-experimental, interventions that were not experiential-based clinical education (e.g., pure lectures without experiential and reflection components), study contexts that were not within clinical education/services, and outcomes that did not quantitatively measure clinical decision-making or closely overlapping constructs (clinical judgment/clinical reasoning). Ultimately, 9 studies met all inclusion criteria and were included in this systematic review (Table 1). The complete selection process is presented in the PRISMA chart (Figure 1).

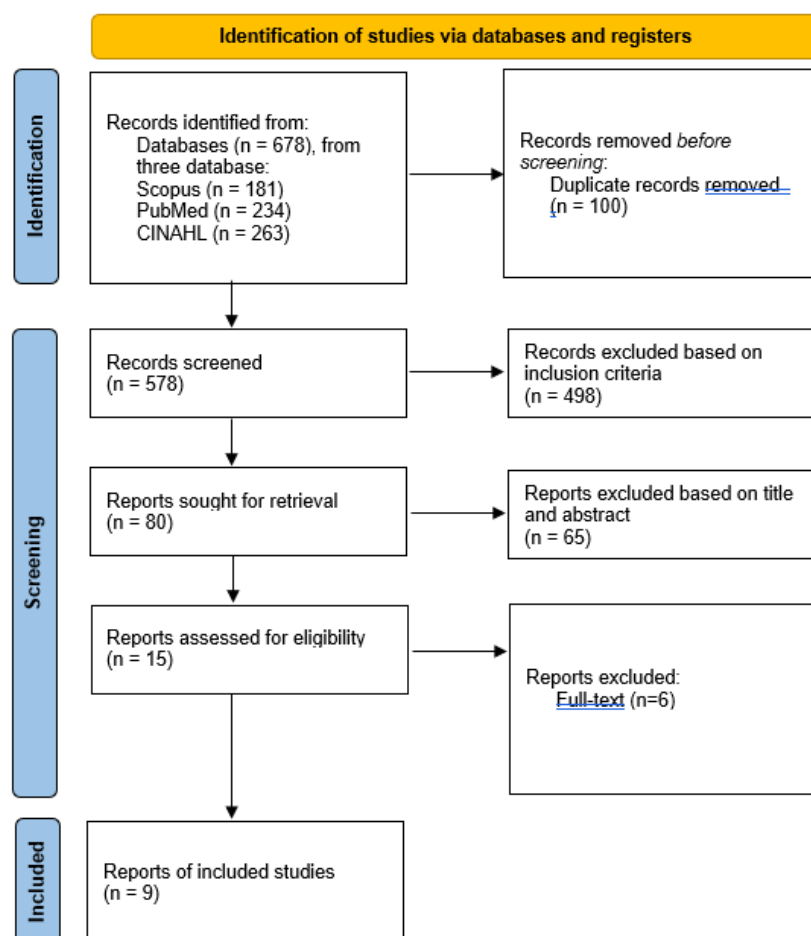


Figure 1. PRISMA Flow Diagram

Table 1.
Data Extraction

No	Authors, Year	Purpose	Design	Sample	Interventions	Key Results
1	(Costa et al., 2020)	Evaluating the effectiveness of clinical simulation on the cognitive performance of nursing students in adult immunization.	Randomized controlled clinical trial (RCT) with pre-test and post-test.	34 undergraduate nursing students.	40-hour course. Control group: active classroom + skills training. Intervention group: active classroom + realistic simulation (3 scenarios: trauma accident, scheduling, contraindications). 50-minute scenario + 30-minute debriefing. By 3 nursing professors.	The simulation group had significantly better cognitive performance at both the immediate (p=0.031) and follow-up assessments 20 days later (p=0.031).
2	(Pontisidis et al., 2024)	Evaluating the effectiveness of a triage training program on nurses' accuracy, knowledge, and skills.	Quasi-experimental study (pre, post, 3-month follow-up).	117 nurses in the 4th Health Region of Greece.	5-hour academic training via Zoom. 3 hours of theory (definitions, ESI & ATS scales), 2 hours of practical application through 40 simulation scenarios (20 ATS, 20 ESI). Participants actively participate in the scenarios.	Significant improvement in triage skills, knowledge, and accuracy immediately after training (p < 0.001), but decreased after 3 months.
3	(Faheim et al., 2019)	Evaluating the effects of triage education on emergency nurses' knowledge, practice, and attitudes.	Quasi-experimental (pre, post, follow-up).	150 emergency nurses (pediatric, obstetric, adult).	5 sessions (30-45 minutes/session). 3 theory sessions (lecture/discussion) and 2 practical sessions (demonstration & re-demonstration using role-play, simulator, and brainstorming). By researchers.	Significant increases in knowledge, practice, and positive attitudes after the program and sustained at one-month follow-up.
4	(Jalalpour et al., 2021)	Evaluating critical thinking training using cards on clinical decision making of CCU nurses.	Quasi-experimental, pre-post-test study.	74 CCU nurses (33 intervention groups analyzed).	6 group sessions (1.5 hours per session) over 3 days. Using 104 critical thinking question cards on MI, AF, HF, CPR, and VT cases. Methods: Q&A, coaching, and think-aloud.	The total clinical decision-making score increased significantly in the intervention group compared to the control (p < 0.001).
5	(Alreshedi et al., 2025)	Assessing the impact of structured CTAS training on nurses' knowledge and time efficiency in an emergency care center.	Quasi-experimental pre-test/post-test.	15 nurses in a high-volume urgent care center.	A 1-day (8-hour) CTAS proficiency course. Includes theoretical and practical components (lecture, case discussions, scenario video analysis, and triage drill simulations). By a certified nurse educator.	Knowledge scores increased significantly (p = 0.015). All time indicators (registration-to-triage, etc.) decreased significantly (p < 0.001).
6	(Dreifuerst, 2012)	Testing the relationship of Debriefing for Meaningful Learning (DML) to the	Quasi-experimental study, pre-test-post-test.	238 undergraduate nursing students.	4-hour simulation. Control: regular debriefing. Experiment: DML (6 components: engage, explore, explain, elaborate, evaluate,	Students with DML had better clinical reasoning scores on the post-test and

No	Authors, Year	Purpose	Design	Sample	Interventions	Key Results
		development of students' clinical reasoning.			extend). 30-minute simulation + 30-minute debriefing. By researchers.	higher perceptions of debriefing quality ($p < 0.05$).
7	(Forneris et al., 2015)	Replicating Dreifuerst's (2012) findings regarding the impact of DML on clinical reasoning across multiple sites (multisite).	Quasi-experimental, pre-test-post-test, repeated measures.	153 final year nursing students (78 intervention, 75 control).	3 unexpected geriatric scenarios (20 minutes per scenario). Control: 20-minute standard debriefing. Intervention: 40-minute DML. Conducted by research team members trained in DML methodology.	Students in the DML group scored significantly higher on the clinical reasoning test (HSRT) than the control group ($p = 0.03$).
8	(Ghazali et al., 2020)	Identifying the effects of triage training on decision skills and accuracy in adult trauma patients.	Randomized Controlled Trial.	143 nurses and medical officer assistants (RN & MOA).	One 140-minute session. Format: lecture, discussion, and triage using scenario-based questions in groups. Content is based on the needs of the initial survey.	Training improved triage decision-making skills ($p < 0.001$) and accuracy ($p < 0.001$) in weeks 2 and 4.
9	(Lien et al., 2023)	Improving nurses' knowledge, skills, and attitudes through in situ simulation training in the ICU.	Cross-sectional survey, pre-test and post-test of one group.	86 nurses who participated in intensive care training.	3-week training. Stages: explanation, first patient simulation drill, feedback/reflection, second drill. Topics: ET/NG tube fixation, EKG, etc. By the assistant head nurse and senior team leader.	Statistically significant improvement in knowledge, skills, attitudes, and empathy in nursing care ($p < 0.001$).

Overall, the analyzed literature demonstrates a strong transition from traditional educational methods to experiential learning approaches to improve nurses' clinical readiness. The analysis grouped the findings into two broad themes: identification of intervention modalities used and evaluation of their impact on decision-making skills and clinical judgment.

First Theme: Types of Experiential Learning Interventions in Clinical Education

The experiential learning interventions implemented encompass a broad spectrum of modalities, from physical simulations to interactive cognitive strategies. One prominent method is realistic clinical simulation, which utilizes standardized patients or trained actors to act out adult immunization scenarios and complex patient interactions (Costa et al., 2020). Furthermore, in situ simulation, conducted directly in real-world settings such as the Intensive Care Unit (ICU), allows nurses to practice using authentic technical equipment in the context of their daily work (Lien et al., 2023). Another significant modality is structured triage training through simulated scenarios, implemented either through interactive e-learning platforms (Pontisidis et al., 2024) or through intensive one-day training sessions that include triage drills, case discussions, and video analysis (Alreshedi et al., 2025; Ghazali et al., 2020). Another innovative strategy involves critical thinking cards, which combine debriefing, coaching, and think-aloud techniques to train decision-making in cardiovascular cases (Jalalpour et al., 2021). A reflective component is also a key intervention, particularly through the ***Debriefing for Meaningful Learning (DML)*** method, a systematic process to unpack the thinking behind actions taken during simulations (Dreifuerst, 2012; Forneris et al., 2015). Finally, interventions based on demonstrations, re-demonstrations, and role-plays have been used to improve nurse performance in various emergency departments (Faheim et al., 2019).

Theme Two: Impact on Decision-Making Outcomes and Clinical Judgments

The impact of these various experience-based interventions consistently demonstrates significant improvements in nurses' ability to formulate accurate clinical decisions. The use of the DML debriefing method has been empirically proven to improve students' clinical reasoning scores more effectively than traditional debriefing methods because it helps participants establish inferential links between theoretical knowledge and practical actions (Dreifuerst, 2012; Forneris et al., 2015). In the emergency department, simulation interventions and triage training have a direct impact on patient classification accuracy, drastically reducing triage errors (over-triage and under-triage) and accelerating the time from registration to clinical decision-making (Alreshedi et al., 2025; Ghazali et al., 2020; Pontisidis et al., 2024). Interventions using critical thinking cards have also been reported to significantly improve ICU nurses' overall clinical decision-making scores, particularly in the areas of seeking alternative solutions and evaluating the consequences of actions (Jalalpour et al., 2021). In addition to cognitive enhancement, this intervention also impacts nurses' self-confidence (self-efficacy), positive attitudes, and empathy when facing critical situations or sudden changes in patient conditions (Faheim et al., 2019; Lien et al., 2023). In the long term, this simulation intervention helps nurses maintain knowledge retention longer and prepares them for safer and higher-quality professional practice (Costa et al., 2020; Faheim et al., 2019).

DISCUSSION

This systematic review synthesized nine studies evaluating experiential learning-based clinical education and its impact on clinical decision-making or closely intersecting constructs, such as clinical reasoning, clinical judgment, and triage decision accuracy. Overall, findings across studies point to a consistent direction: learning approaches that incorporate experiences (through simulations, scenarios, role-plays, in-situ exercises, and interactive cognitive strategies) coupled with feedback/reflection tend to improve the quality of clinical decisions, both in cognitive aspects (knowledge, reasoning, accuracy) and performance aspects (triage skills and time efficiency in the service process).

In terms of design strength, the strongest evidence comes from RCTs evaluating scenario-based training. A study of realistic simulations of immunization instruction demonstrated significant improvements in cognitive performance that persisted at follow-up, suggesting that experiential learning may support knowledge retention and conceptual application more consistently than more conventional approaches (Veenema et al., 2017). A consistent pattern was also observed in an RCT of adult trauma triage training, which demonstrated improvements in triage decision-making skills and accuracy at the 2- and 4-week follow-up (Brown et al., 2022). These two studies strengthen the argument that clinical decisions particularly in contexts demanding rapid prioritization are more responsive to interventions that simulate real-life clinical pressures and force participants to integrate data, weigh alternatives, and then choose the appropriate course of action (Ahmed, 2018).

Beyond RCTs, the quasi-experimental studies in this review extend the evidence that experiential learning remains effective across service contexts and with varying program intensities. Triage training programs based on theory and scenario practice, whether through short sessions or a series of multiple sessions, consistently improved nurses' knowledge, practice, and attitudes in the ED, and improved triage skills, knowledge, and accuracy after training (Hara et al., 2025). A one-day CTAS training study also demonstrated increased knowledge scores and improved service process time indicators (Brown et al., 2022). These findings suggest that in a "standardized" clinical decision domain like triage, experiential learning is effective because participants practice making decisions on representative cases, receive immediate correction of misclassifications, and develop more consistent prioritization patterns (Veenema et al., 2017).

However, this review also raises important issues regarding the sustainability of intervention effects. In one study, highly significant improvements immediately following triage training declined at the

three-month evaluation (Ahmed, 2018). This phenomenon confirms that clinical decision-making is not simply declarative knowledge that can be “taught once,” but rather a competency that requires repeated reinforcement through case exposure, repeated practice, and opportunities to apply reasoning in clinical situations (Asadzandi et al., 2022). In other words, the effects of experiential learning tend to be strongest when the experience-reflection-application cycle occurs repeatedly, rather than as a one-time intervention (Brown et al., 2022).

The reflective component appears to be a key mechanism that differentiates the quality of outcomes, particularly in studies using Debriefing for Meaningful Learning (DML). Two studies demonstrated that DML resulted in greater improvements in clinical reasoning than traditional debriefing (Asadzandi et al., 2022; Shorey et al., 2023). This is important because many “simulation” interventions fail to achieve their full impact if the experience is not translated into meaningful learning. DML, with its structure of reasoning exploration, concept clarification, and action evaluation, helps participants map “why I chose that action” and “what were the consequences,” thus establishing inferential relationships between patient data, priority issues, and decisions (Mazanec et al., 2021). This mechanism aligns with a core requirement for clinical decision-making: not just knowing the procedure, but being able to justify decisions based on data and context (Sampson et al., 2021).

Another study showed that strengthening clinical decision-making can also be achieved through interactive cognitive strategies that do not always require expensive simulation facilities. Critical thinking training using cards with question-and-answer techniques, coaching, and think-aloud significantly improved clinical decision-making scores in CCU nurses (Needham & van de Mortel, 2020). This finding has practical implications: hospitals with limited simulation resources can still improve clinical decision-making through an “externalization of reasoning” approach, exercises in weighing alternatives, and evaluation of clinical consequences (Haruta & Yamamoto, 2020). Thus, experiential learning can be viewed as a spectrum of strategies, from complex in-situ simulations to relatively simple structured cognitive exercises, as long as they adhere to the principles of active experience and guided reflection (Ahmady & Shahbazi, 2020).

Interventions based in real-world settings have also demonstrated added value in learning transfer. In-situ training in the ICU conducted over several weeks and involving drills, feedback, and repetition of exercises demonstrated improvements in knowledge, skills, attitudes, and empathy (Farzaneh et al., 2023; Juma et al., 2023; Pazar et al., 2024). While the primary outcome was not strictly “clinical decision-making,” improvements in attitude, preparedness, and empathy remain relevant because clinical decisions in real-world practice are often influenced by affective factors such as confidence to act, comfort with escalating, and readiness to work under pressure (van Iersel et al., 2022). In ICU and ED settings, improving these factors can strengthen nurses’ ability to respond quickly and appropriately to changes in patient conditions (Alluhaybi et al., 2023).

However, it is important to note that the characteristics of the studies included in this review were heterogeneous, particularly in terms of population and outcome measures. Some studies were conducted with nursing students (e.g., the DML study and the immunization simulation study), while the review's objective emphasized nurses' clinical decision-making. This requires careful interpretation of the findings: evidence in students suggests that experiential learning effectively builds the foundation of reasoning, but direct transfer to clinical nurses must be understood in the context of differences in experience, work pressure, and the complexity of the clinical environment. Furthermore, the outcomes used varied, ranging from clinical reasoning scores (e.g., HSRT in the DML study) to triage accuracy, knowledge, practice, and time efficiency indicators. This variation makes the best synthesis for this review a synthesis of patterns of effects and mechanisms of change, rather than a uniform quantitative comparison across studies.

The practical implication for nursing management is the need for realistic and adaptive clinical training designs. Emergency departments (EDs) can prioritize scenario-based triage training with regular evaluations to ensure retention, while ICU/CCU units can incorporate in-situ simulations and cognitive exercises such as think-alouds to strengthen reasoning in complex cases. From a clinical education perspective, the DML study suggests that the quality of debriefing is not an optional component, but rather the core learning experience, determining whether the experience translates into improved reasoning. Therefore, developing the capacity of debriefing facilitators and providing time for reflection within the training schedule are crucial implementation issues.

For future research, more intervention studies in clinical nurses (not just students) are needed, with more consistent outcome measures and longer follow-up to assess the stability of effects. Furthermore, reporting of intervention components should be more detailed, particularly regarding duration, intensity, frequency of repetition, debriefing structure, and the unit implementation context, to identify which components are most determinant of the success of improving clinical decision-making in nurses. By strengthening these aspects, the resulting evidence will be more easily translated into effective and sustainable clinical training policies.

CONCLUSION

This systematic review indicates that experiential learning-based clinical education tends to be effective in improving nurses' clinical decision-making and closely related constructs, such as clinical reasoning, clinical judgment, and triage decision accuracy. Evidence from the nine studies analyzed demonstrates a consistent direction: interventions that immerse participants in structured clinical experiences through realistic simulations, scenario-based training, in-situ exercises, or interactive cognitive strategies lead to improvements in knowledge, skills, and decision accuracy, particularly in contexts requiring rapid prioritization such as triage. Furthermore, the reflective and feedback components appear to be important reinforcements that help the learning experience translate into improved reasoning and decision-making skills. Studies using structured debriefing have shown superior outcomes compared to conventional debriefing, but some follow-up findings also indicate that the effects may diminish without regular reinforcement. Therefore, it is recommended that experiential learning be implemented not as a one-time event but rather as a continuous process with repeated exercises and structured reflection to ensure stronger retention and transfer to clinical practice.

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