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**FACTORS INFLUENCING NURSES' DECISION-MAKING IN THE
INTERVENTION WITH CRITICALLY ILL PATIENTS WITH TRAUMA:
SCOPING REVIEW**

**FATORES QUE INFLUENCIAM A TOMADA DE DECISÃO
DO ENFERMEIRO NA INTERVENÇÃO À PESSOA
EM SITUAÇÃO CRÍTICA COM TRAUMA:
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DEL ENFERMERO EN LA INTERVENCIÓN A LA PERSONA
EN SITUACIÓN CRÍTICA CON TRAUMA:
SCOPING REVIEW**

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Abstract

Background: Nurses' decision-making in trauma contexts represents a complex process influenced by multiple individual, organizational, and contextual factors that directly affect the quality and safety of care. **Objective:** To map the factors that influence nurses' decision-making in the intervention with critically ill persons experiencing trauma. **Methods:** A scoping review was conducted according to the Joanna Briggs Institute (JBI) framework and reported following the PRISMA-ScR guidelines. The search was carried out between November 2024 and February 2025 in Complementary Index, Supplemental Index, CINAHL Ultimate, and MEDLINE Ultimate (EBSCO), as well as MEDLINE (via BVS). Inclusion criteria comprised studies published between 2020 and 2025, in Portuguese, English, or Spanish, with full-text availability. A total of 70 records were screened, and four studies met the eligibility criteria. **Results:** Four categories of factors influencing nurses' decision-making were identified: (i) factors related to the nurse (experience, education, competencies, and clinical judgment); (ii) factors related to the person (injury severity, age, and level of consciousness); (iii) organizational factors (resource limitations, institutional support, leadership, team dynamics, and adherence to protocols); and (iv) contextual factors (workload, care demand pressure, shift duration, and practice setting). Interprofessional collaboration, compliance with institutional protocols, and continuous training were associated with faster, more accurate, and safer decisions. **Conclusion:** Nurses' decision-making when caring for critically ill persons with trauma is multifactorial and requires technical, cognitive, and emotional competencies, as well as supportive organizational conditions. Investing in continuous education and structured protocols can optimize responses in complex clinical settings.

Keywords: Critical Care Nursing; Decision Making; Nursing; Patient Safety; Wounds and Injuries.

Resumo

Introdução: A tomada de decisão do enfermeiro em contextos de trauma representa um processo complexo, determinado por múltiplos fatores individuais, organizacionais e contextuais, que influenciam diretamente a qualidade e a segurança dos cuidados. **Objetivo:** Mapear os fatores que influenciam a tomada de decisão do enfermeiro na intervenção à pessoa em situação crítica com trauma. **Métodos:** Foi realizada uma *scoping review* de acordo com a metodologia Joanna Briggs Institute (JBI) e seguindo as diretrizes PRISMA-ScR. A pesquisa foi realizada entre novembro de 2024 e fevereiro de 2025 no Índice Complementar, Índice Suplementar, CINAHL Ultimate e MEDLINE Ultimate (EBSCO), bem como no MEDLINE (via BVS). Os critérios de inclusão incluíram estudos publicados entre 2020 e 2025, em português, inglês ou espanhol, com disponibilidade de texto completo. Foram analisados um total de 70 registros e quatro estudos cumpriram os critérios de elegibilidade. **Resultados:** Foram identificadas quatro categorias de fatores que influenciam a tomada de decisão: (i) fatores relacionados com o enfermeiro (experiência, formação, competências e julgamento clínico); (ii) fatores relacionados com a pessoa (gravidade das lesões, idade e nível de consciência); (iii) fatores organizacionais (escassez de recursos, apoio institucional, liderança, dinâmica das equipas e cumprimento de protocolos); e (iv) fatores contextuais (sobrecarga de trabalho, pressão assistencial, duração dos turnos e contexto de atuação). A integração multiprofissional, a adesão a protocolos institucionais e a formação contínua associaram-se a decisões mais rápidas, precisas e seguras. **Conclusão:** A tomada de decisão do enfermeiro perante a pessoa em situação crítica com trauma é multifatorial e exige competências técnicas, cognitivas e emocionais, além de condições organizacionais favoráveis. Investir em formação e em protocolos estruturados pode otimizar a resposta em contextos de elevada complexidade.

Palavras-chave: Enfermagem; Enfermagem de Cuidados Críticos; Ferimentos e Lesões; Segurança do Paciente; Tomada de Decisão.

Resumen

Introducción: La toma de decisiones de los enfermeros en contextos de trauma constituye un proceso complejo, influido por múltiples factores individuales, organizativos y contextuales que afectan directamente la calidad y la seguridad de la atención. **Objetivo:** Mapear los factores que influyen en la toma de decisiones del enfermero en la intervención con la persona en situación crítica con trauma. **Metodología:** Se realizó una *scoping review* de acuerdo con el marco metodológico del Joanna Briggs Institute (JBI) y reportada según las directrices PRISMA-ScR. La búsqueda se efectuó entre noviembre de 2024 y febrero de 2025 en las bases de datos Complementary Index, Supplemental Index, CINAHL Ultimate y MEDLINE Ultimate (EBSCO), además de MEDLINE (vía BVS). Se incluyeron estudios publicados entre 2020 y 2025, en portugués, inglés o español, con texto completo disponible. De los 70 registros examinados, cuatro estudios cumplieron los criterios de elegibilidad. **Resultados:** Se identificaron cuatro categorías de factores que influyen en la toma de decisiones: (i) factores relacionados con el enfermero (experiencia, formación, competencias y juicio clínico); (ii) factores relacionados con la persona (gravidad de las lesiones, edad y nivel de conciencia); (iii) factores organizativos (escasez de recursos, apoyo institucional, liderazgo, dinámica de los equipos y cumplimiento de protocolos); y (iv) factores contextuales (sobrecarga de trabajo, presión asistencial, duración de los turnos y contexto de actuación). La colaboración interprofesional, la adhesión a los protocolos institucionales y la formación continua se asociaron con decisiones más rápidas, precisas y seguras. **Conclusión:** La toma de decisiones del enfermero ante la persona en situación crítica con trauma es multifactorial y requiere competencias técnicas, cognitivas y emocionales, además de condiciones organizativas favorables. Invertir en formación y protocolos estructurados puede optimizar la respuesta en contextos de alta complejidad.

Descriptores: Enfermería; Enfermería de Cuidados Críticos; Heridas y Lesiones; Seguridad del Paciente; Toma de Decisiones.

Introduction

Over recent decades, society has witnessed profound socioeconomic transformations, associated with changes in relational and political systems, increasing urbanisation, and the development of the automobile. These changes have contributed to the emergence of significant Public Health issues, among which road traffic accidents and episodes of physical violence stand out⁽¹⁾.

Following cardiovascular diseases and cancer, trauma represents the leading cause of death among young adults. When it does not result in death, it is frequently responsible for permanent disabilities that compromise a person's life, both at an individual and social level⁽²⁾. Thus, it is essential to ensure qualified emergency care for individuals with trauma, in order to reduce both the risk and the degree of disability resulting from the traumatic event⁽³⁾.

In the European Union, road traffic accidents constitute a frequent cause of premature death, with estimates suggesting that for every life lost, five other individuals suffer severe injuries with disabling consequences⁽⁴⁾. In Portugal, the rate of accidents and mortality associated with trauma remains among the highest in Europe⁽⁵⁾. According to the National Road Safety Authority, in 2024 there were 141,193 accidents involving victims, resulting in 475 deaths⁽⁶⁾.

Trauma teams are responsible for implementing organised response systems aimed at reducing trauma-related mortality and morbidity, recognising that outcomes depend both on the structure of care and on the processes through which it is delivered⁽⁵⁾. Nurses play a key role in this context due to their continuous presence alongside the person with trauma and the need to develop complex clinical reasoning and make rapid, well-founded decisions based on the person's needs. As part of a multidisciplinary team, nurses contribute to specialised support for individuals in critical situations within emergency settings⁽⁷⁾. Their role is therefore decisive, acting as advocates for the person and continuously adjusting their interventions to changing clinical conditions, ensuring coordinated care and more favourable outcomes⁽²⁾.

Decision-making in nursing constitutes a complex cognitive process that integrates clinical, rational, emotional, and intuitive thinking in problem-solving. This process is influenced by multiple factors, namely individual factors related to the nurse's knowledge, experience, commitment, and values; factors related to the person receiving care, such as their clinical characteristics and needs; and environmental and contextual factors inherent to the care setting, the complexity of the situation, and organisational conditions⁽⁸⁾.

Although decision-making is a key competency in the provision of care to critically ill patients, the available literature demonstrates limited exploration of the factors that specifically influence decision-making in trauma care.

The studies identified predominantly address decision-making in emergency and intensive care settings in a general manner, with limited attention given to the specificities inherent to the care of trauma patients. To date, no evidence mapping has been identified that comprehensively examines the factors influencing nurses' decision-making in the care of critically ill trauma patients, nor how these factors have been investigated within the scientific literature. Furthermore, the existing evidence is characterized by considerable contextual and methodological heterogeneity, making it difficult to achieve a clear understanding of the elements under study.

Therefore, there is a need to map the available literature, identify the factors that influence nurses' decision-making in trauma care, and recognize existing knowledge gaps that may guide future research in the field of trauma while also contributing to improvements in clinical practice.

Within this framework, the following research question emerged: "What factors determine nurses' decision-making in the care of individuals in critical situations with trauma?"

The present study aims to map the existing literature on the factors that influence nurses' decision-making in the care of individuals in critical situations with trauma.

Methods

A scoping review was conducted in accordance with the methodological guidelines of the Joanna Briggs Institute (JBI), ensuring the quality and rigour of the process^(9,10). The review was reported following the PRISMA-ScR checklist (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews)⁽¹¹⁾.

The formulation of the research question was based on the PCC strategy proposed by the JBI, which integrates three fundamental elements: Population, Concept, and Context. Thus, the population was defined as nurses providing care to individuals in critical situations with trauma; the concept as nurses' decision-making; and the context as hospital care settings for individuals in critical situations. This approach ensures a clear and focused structure for the identification, selection, and critical analysis of relevant literature, allowing the synthesis of the best available evidence applicable to clinical practice⁽¹⁰⁾.

The bibliographic search was conducted between November 2024 and February 2025 in the databases Complementary Index, Supplemental Index, CINAHL Ultimate, and MEDLINE Ultimate (via EBSCO), as well as MEDLINE (via BVS), and PubMed. No studies meeting the scope of the review were identified in PubMed.

The search strategies were adapted to the specific characteristics of each database, and the eligibility criteria established for this review were applied (Table 1).

The inclusion criteria comprised primary and secondary studies published between 2020 and 2025, including quantitative, qualitative, mixed-methods, observational, experimental studies, and literature reviews that provided direct or indirect information on factors influencing nurses' decision-making or the decision-making of trauma teams that included nurses, within hospital settings, were considered. Studies developed in intensive care units, urgent/emergency services, trauma centers or hospitals inserted in the context of exceptional and catastrophe situations were included. Only studies with full text available, written in Portuguese, English or Spanish, were considered.

Table 1: Search strategy and number of studies identified.

Database	Search Strategy	No. of Studies Identified
CINAHL Ultimate (EBSCO)	("nursing role" OR "nursing care") AND ("decision making" OR "decision-making process") AND ("critical care" OR "intensive care") AND ("trauma" OR "trauma nursing" OR "trauma care") NOT child NOT pregnancy	26
MEDLINE Ultimate (EBSCO)		23
Complementary Index (EBSCO)		11
Supplemental Index (EBSCO)		6
MEDLINE (BVS)		4
Total		70

Studies conducted with pediatric populations (< 18 years), pregnant women, or women in maternal and obstetric health situations were excluded. After analyzing the titles and abstracts, studies that did not address factors inherent to nurses' decision-making in the context of trauma, that referred exclusively to the decision-making of other health professionals, or that were not directed to the person in critical situation were also eliminated.

Following the implementation of the search strategies across the aforementioned databases, together with the application of filters restricting results to full-text publications within the predefined time frame, a total of 70 studies were identified. Of these, 28 duplicate records were identified and manually removed. For title and abstract screening, 42 studies were selected, distributed as follows: 9 in Complementary Index, 16 in CINAHL Ultimate, 11 in MEDLINE Ultimate, 3 in Supplemental Index, and 3 in BVS. Of these, 29 were excluded for not meeting the previously established inclusion and exclusion criteria.

After the eligibility assessment, 13 studies were selected for full-text review; however, 9 did not meet the defined criteria, resulting in four studies being included in the final review. The selection and evaluation of the studies were carried out by two independent reviewers, ensuring the reliability and rigour of the screening process.

The process of identification, screening, eligibility, and inclusion of studies is presented in the flow diagram in Figure 1, adapted from the PRISMA Statement⁽¹¹⁾.

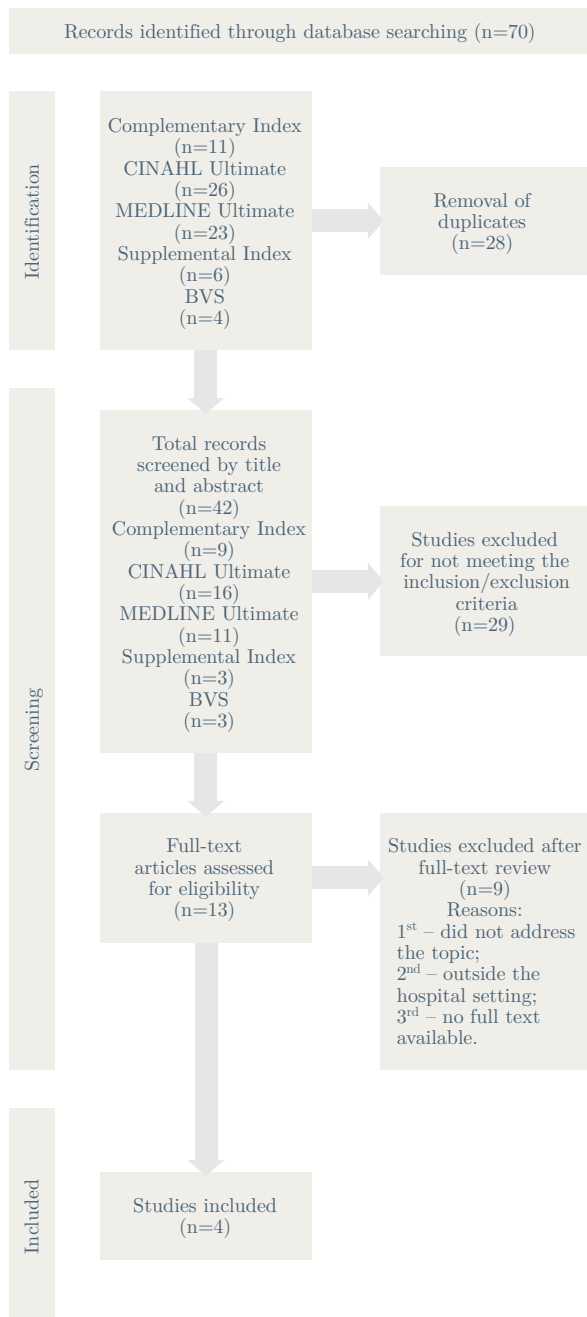


Figure 1: Flow diagram (adapted from the PRISMA Statement).

Results

Following the application of the inclusion criteria and the analysis of the selected studies, each included article was coded with the letter “E” (for Study), followed by sequential numbering (E1, E2, E3, etc.), to facilitate the organisation of the results. Table 2 presents a synthesis of the main methodological characteristics and the most relevant findings of the studies included in this scoping review.

Discussion

The analysis of the included studies revealed that the factors influencing nurses’ decision-making in the care of critically ill trauma patients can be grouped into four main dimensions: individual factors, patient-related factors, organizational factors, and contextual factors. Overall, the findings highlight the importance of nurses’ technical and emotional competence, as well as the impact of the work environment and resource availability in emergency departments and intensive care settings.

With regard to individual factors, the studies highlighted professional experience and the continuous development of competencies as key determinants of decision-making in trauma care settings. Nurses with experience in highly complex environments, such as armed conflict scenarios, demonstrate greater adaptability and clinical judgment, particularly when they benefit from regular training and professional development opportunities⁽¹²⁾. Similarly, academic education, years of professional experience, and specialized knowledge in trauma care contribute to more effective and accurate decision-making within trauma teams⁽¹³⁾. Consistent with these findings, the studies highlight that clinical judgment and triage capabilities are closely linked to the specialized training and preparedness of healthcare professionals^(14,15). Furthermore, the implementation of updated protocols and the presence of trauma teams with clearly defined roles help reduce uncertainty and minimize the risk of errors in high-pressure clinical settings^(14,15). The continuous professional development of nurses should

Table 2: Methodological characteristics and relevant findings of the included studies.

Study	Identification (Title, Authors, Year, Country)	Type of Study	Objective	Identified Factors	Conclusions
E1	<i>Emergency Nurse Roles, Challenges, and Preparedness in Hospitals in the Context of Armed Conflict.</i> Mani et al (2024) ⁽¹²⁾ . India.	Descriptive/qualitative.	To explore the roles, challenges, and preparedness of emergency nurses in armed conflict settings.	Experience and continuous training enhance adaptability and performance in trauma care. Communication barriers, overcrowding, and limited resources constrain safe decision-making.	Leadership, clear role definition, and psychological support promote more assertive decision-making and improved team coordination in critical contexts.
E2	<i>Restrição do Movimento da Coluna: Uma Análise do Conhecimento dos Profissionais de Enfermagem.</i> Brigolini & Ciconet (2023) ⁽¹³⁾ . Brazil.	Exploratory/descriptive (mixed methods).	To analyse nurses' knowledge of spinal motion restriction in individuals with trauma.	Training, experience, and shift duration influence clinical decision-making. Communication between intra- and pre-hospital teams improves patient outcomes.	Technical knowledge and inter-team coordination are key determinants of safe decision-making and continuity of care.
E3	<i>Triage Accuracy of Emergency Nurses: An Evidence-Based Review.</i> Suamchaiyaphum et al (2024) ⁽¹⁴⁾ . Thailand.	Systematic literature review.	To identify factors associated with triage accuracy in emergency settings.	Decision-making depends on nurse-related factors (training, judgement, and experience), person-related factors (severity and clinical signs), and environmental factors (workload).	The standardisation of protocols and the reinforcement of triage training contribute to more accurate decision-making and a reduction in errors.
E4	<i>Utilization of Trauma Nurse Screening Procedure for Triage of the Injured Patient.</i> Gupta et al (2022) ⁽¹⁵⁾ . India.	Qualitative and quantitative.	To evaluate the effectiveness of a triage procedure conducted by trauma nurses.	Continuous training and adherence to protocols improve triage accuracy and the timeliness of decision-making.	Professional experience and teamwork support safe decision-making; age and the Glasgow Coma Scale influence clinical prioritisation.

not focus solely on the replication of algorithms and protocols, but rather on fostering the flexibility of clinical reasoning required for prioritization and decision-making in the care of trauma patients.

The findings may also be interpreted in light of Benner's model of clinical competence development⁽¹⁶⁾. According to Benner, clinical competence evolves progressively through practical experience, enabling nurses to move from a practice predominantly guided by rules and protocols toward a more intuitive approach to decision-making, grounded in the recognition of clinical patterns. This perspective helps explain why professional experience and exposure to complex clinical environments emerged as key determinants of decision-making among the nurses represented in the studies included in this review⁽¹⁶⁾.

At the same time, these findings are consistent with the literature describing nursing decision-making as a process that integrates analytical reasoning, clinical judgment, and intuition, which are dynamically mobilized according to the complexity of the clinical situation⁽⁸⁾. In trauma care settings, characterized by high levels of complexity and significant time pressure, the interaction between these processes is particularly important for the prioritization and management of care⁽¹⁹⁾.

A consistent finding across the included studies was the influence of professional experience and continuing education on nurses' decision-making, regard-

less of the context examined. However, although all studies acknowledged the importance of these factors, they differed in the way they operationalized them, emphasizing different indicators such as years of professional experience, participation in educational and training programs, or previous exposure to complex clinical scenarios. This heterogeneity makes it difficult to determine which elements exert the greatest influence on the decision-making process and highlights the need for further research in this area.

Regarding patient-related factors, the clinical characteristics of critically ill trauma patients emerge as important determinants of nurses' decision-making, directly influencing the prioritization of care and the timely selection of appropriate interventions. Studies have reported that certain patient characteristics, such as injury severity, the presence of visible bleeding, and the patient's level of consciousness, influence the speed of assessment, classification, and subsequent prioritization of care, potentially leading to overtriage. These findings highlight that the prominence of specific clinical signs may act as cognitive biases during the triage nurse's assessment and decision-making process⁽¹⁴⁾. The decision to implement spinal motion restriction should be guided by the mechanism of injury and the patient's risk of spinal trauma, while age and level of consciousness emerge as critical factors influencing the prioritization and promptness of clinical interventions^(13,15).

Although overtriage may be interpreted as a defensive safety measure aimed at ensuring the immediate provision of care, from the perspective of team and service management it can lead to unnecessary saturation of hospital resources and consequent delays in the treatment of other non-trauma patients. These findings underscore the need to develop more precise and objective triage tools.

While the included studies consistently acknowledge the influence of patients' clinical characteristics on nurses' decision-making, there is limited exploration of the potential cognitive biases associated with this process. The tendency to place greater emphasis on highly salient clinical signs, such as the apparent severity of injuries or the presence of visible bleeding, raises important questions regarding the balance between the speed and accuracy of decision-making. This remains an underexplored aspect within the literature analyzed.

With regard to organizational factors, the studies highlight the pivotal role of structural conditions and institutional support mechanisms in nurses' decision-making processes. Shortages of material resources, limitations in multidisciplinary team availability, and the presence of organizational structures capable of supporting nurses directly influence both responsiveness and the safety of care delivery⁽¹²⁾. The establishment of integrated multiprofessional teams with clearly defined roles, together with the implementation and adherence to institutional protocols, emerged as key strategies for promoting safer, more coordinated, and more effective decision-making in trauma care settings^(12,13,15).

With regard to contextual factors, situational and environmental characteristics were found to significantly influence nurses' decision-making processes in real-time clinical settings. Emergency department overcrowding, increased workload, extended shift duration, high patient volumes, and highly demanding clinical environments were identified as factors that affect both the timeliness and accuracy of clinical decisions during triage and care delivery⁽¹²⁻¹⁴⁾. These contextual pressures increase the complexity of the decision-making process and may compromise nurses' ability to respond effectively to the needs of

critically ill trauma patients. Furthermore, the dynamic and often unpredictable nature of trauma care settings requires nurses to continuously adapt their clinical reasoning and prioritization strategies, placing additional demands on their cognitive and professional capabilities.

In these settings, the quality of institutional support emerges as a key determinant of nurses' resilience and performance⁽¹²⁾. The establishment of integrated multiprofessional teams, with clearly defined roles and leadership approaches tailored to clinical demands, has been identified as a protective factor that enhances interprofessional collaboration and communication across hospital services and units. Such organizational structures facilitate effective and seamless transitions of care, contributing to improved care coordination and more favorable outcomes for trauma patients^(12,13,15).

Similarly, the literature highlights stress management and interprofessional collaboration as essential factors contributing to the quality of care. Nurses working in high-pressure environments, such as conflict-affected settings, demonstrate greater resilience and improved performance when supported by institutional resources and appropriate organizational structures⁽¹²⁾. Consistently, multiprofessional integration and adherence to institutional protocols constitute fundamental strategies for optimizing decision-making processes, promoting coordinated and safe responses within emergency departments and intensive care units^(12,13,15).

Consistent with the findings of this scoping review, other investigations conducted in critical care settings have identified similar patterns among the factors influencing nurses' decision-making processes. Previous studies highlight that organizational management, teamwork, and structural conditions are key determinants of safe and effective clinical decision-making⁽¹⁷⁾.

Other authors have further highlighted that emergency department overcrowding and resource constraints contribute to frustration among healthcare teams, potentially increasing risks to the safety of critically ill patients. Moreover, the role of professional experience and intuitive decision-making processes

has been emphasized, as more experienced nurses tend to interpret patients' clinical conditions from a holistic perspective, supporting safer, more accurate, and more effective clinical practice⁽⁸⁾. Ongoing professional development remains essential for maintaining up-to-date competencies and consolidating clinical reasoning skills. In parallel, the digitalization of knowledge has become an important resource, facilitating rapid access to up-to-date information and supporting both the enhancement of care quality and ongoing professional development⁽¹⁸⁾.

Nurses' decision-making is intrinsically related to patient safety and the quality of care. In Portugal, the Directorate-General of Health emphasizes this relationship within the National Plan for Patient Safety 2021–2026, highlighting healthcare professionals' training as a strategic pillar for improving clinical safety. The plan also reinforces the need to promote health literacy and the active participation of patients, families, and communities through awareness-raising initiatives led by healthcare professionals, including nurses, as a means of overcoming barriers within the decision-making process.

Within the specific context of trauma care, the management of trauma patients is described in Guideline No. 012/2022 of the Portuguese Directorate-General of Health, which regulates the Adult Trauma Fast Track pathway. This guideline standardizes decision-making processes from the pre-hospital phase through to definitive admission in hospital units. However, considering the organizational factors identified in this review, such as resource shortages and weaknesses in multidisciplinary team dynamics, it becomes evident that the implementation of this guideline is strongly influenced by healthcare institutions' ability to mitigate these structural barriers, which may constrain nurses' performance in trauma care⁽⁵⁾. Moreover, the use of digital resources and clinical decision-support tools, including protocols, clinical guidelines, and standardized procedures, represents an essential component in supporting safe, evidence-based decision-making, particularly within highly complex care settings⁽¹⁹⁾.

Despite the relevance of the findings obtained, it is important to acknowledge as a methodological limitation of this review the fact that the conclusions presented are based on only four studies, which restricts their generalizability. This limited body of literature may be attributed to the fact that most research in the field of critical care addresses clinical reasoning and decision-making in a broad manner, without specifically focusing on trauma patients within hospital-based critical care settings, such as emergency departments and intensive care units. It was observed that many of the studies initially identified explored decision-making and clinical reasoning within critical care settings; however, they did not specifically focus on critically ill trauma patients. The included studies demonstrated considerable heterogeneity.

Additionally, a predominance of studies focusing on specific components of trauma care interventions, such as triage or spinal motion restriction, was observed, rather than providing a comprehensive approach to nurses' decision-making throughout the entire continuum of trauma care. This gap limits the integrated understanding of the phenomenon and hinders the development of explanatory models capable of clarifying the interaction between individual, organizational, contextual, and patient-related factors.

Considering these limitations, the need to develop further research that examines the impact of each factor individually and across different clinical practice contexts adapted to local realities and existing healthcare systems becomes evident. At the same time, it is important to promote the development of institutional strategies and protocols that guide nurses' practice in trauma situations. Strengthening and consolidating the scientific evidence in this area may significantly contribute to improving the quality of care and enhancing patient safety in the provision of care to critically ill trauma patients in Portugal.

Conclusion

The factors influencing nurses' decision-making in the care of critically ill trauma patients can be organized into four fundamental dimensions: individual factors, related to nurses' competencies and professional experience; patient-related factors, involving clinical characteristics and severity level; organizational factors, associated with structure, resources, leadership, and institutional protocols; and contextual factors, related to the environmental and situational conditions in which the decision-making process takes place.

The findings of this scoping review demonstrate that nurses' decision-making is a complex and multifactorial process, determined by the dynamic interaction between personal, structural, and contextual factors, which manifest particularly in scenarios of high demand and unpredictability.

Despite the limitations arising from the limited number of included studies and the heterogeneity of their practice contexts, this conceptual mapping reinforces the importance of defining and improving nurses' decision-making processes in response to the complexity of caring for critically ill trauma patients. Understanding these factors is essential for strengthening professional autonomy, requiring that the interpretation and application of protocols and algorithms extend beyond simple memorization and be complemented by ongoing education, specialized training, and the development of nurses' clinical reasoning skills.

To ensure a more effective and evidence-based response in emergency and intensive care settings, the restructuring of hospital services providing care to critically ill trauma patients is recommended. This should include the implementation of work models with clearly defined roles that support clinical decision-making, as well as the effective operationalization of institutional trauma pathways across all hospital units receiving trauma patients.

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