Pain Management by emergency room nurses: A scoping review protocol

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ARTICLE INFO

ABSTRACT

Introduction: Pain is a major public health problem, indicative of tissue damage or multi-organ dysfunction, and is the symptom most commonly reported by patients who go to the emergency room.

Objectives: to map and summarize the scientific evidence on pain management by emergency room nurses.

Methodology: scoping review methodology proposed by the Joanna Briggs Institute. The protocol was defined taking into account the criteria defined and the suitability of the proposed databases/repositories (Joanna Briggs Institute Database of Systematic Reviews and Implementation Reports; the Cochrane Database of Systematic Reviews; MEDLINE via PubMed; CINHAL via EBSCO). The process of data analysis, extraction and synthesis will be carried out by independent reviewers. Registered with Open Science Framework with DOI:10.17605/OSF.IO/RWN5U.

Results: will be presented in descriptive form, using tables, taking into account the objective and focus of the scoping review.

Conclusion: It is hoped that this scoping review will provide an analysis and overview of pain management strategies used by emergency room nurses, highlighting current practices, barriers and facilitating factors, as well as gaps in the scientific evidence.

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RESUMO

Introdução: A dor é um importante problema de saúde pública, indicativo de lesão tecidular ou disfunção multiorgânica, constituindo o sintoma mais comumente relatado pelos doentes que recorrem ao serviço de urgência.

Objetivos: mapear e resumir a evidência científica sobre a gestão da dor pelos enfermeiros do serviço de urgência.

Metodologia: metodologia de scoping review proposta pelo Joanna Briggs Institute. O protocolo foi definido tendo em conta os critérios definidos e a adequação das bases de dados/repositórios propostos (Joanna Briggs Institute Database of Systematic Reviews and Implementation Reports; Cochrane Database of Systematic Reviews; MEDLINE via PubMed; CINHAL via EBSCO). O processo de análise, extração e síntese de dados será realizado por revisores independentes. Registado na Open Science Framework com o DOI:10.17605/OSF.IO/RWN5U.

Resultados: serão apresentados de forma descritiva, com recurso a tabelas, tendo em conta o objetivo e o foco da scoping review.

Conclusões: É esperado que esta scoping review permita a análise e uma visão geral das estratégias de gestão da dor pelos enfermeiros do serviço de urgência, destacando as práticas atuais, barreiras e fatores facilitadores, bem como as lacunas na evidencia científica.

Introduction

Pain is the symptom most commonly reported by patients who visit the Emergency Room (ER) (70-85%), with more than 50% classifying their pain as moderate or severe.[1,2,3] Despite these statistics, pain is not always adequately treated and is often underestimated, leading to the phenomenon of oligoanalgesia.[4,3] Many patients develop pain in the context of acute illness or injury, turning to the ER for diagnosis and treatment.[3]

Oligoanalgesia in the ER, resulting from inadequate pain management by nurses, can have serious clinical consequences, such as increased suffering, prolonged recovery, risk of cardiovascular and respiratory complications such as tachycardia and hyperventilation, and a negative impact on patients' psychological well-being. Recent studies indicate that inadequate pain management compromises the quality of care and the patient experience.[3]

According to the International Association for the Study of Pain (2020),[5] pain is defined as an "unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage". Its quantification and perception is multidimensional and varies according to individual experience. As it is considered a subjective and personal event, its assessment and monitoring can be difficult.[6]

Successful pain management depends on the knowledge, behavior, attitude and decision-making skills of the members of the healthcare team who carry out the pain assessment. The nurse therefore plays an indispensable role in pain control. They assess pain, monitor it, administer analgesic therapy (according to a doctor's prescription), monitor the adverse effects of the drugs administered to the patient and make decisions arising from these complications, as well as applying non-pharmacological interventions for pain control.[7]

However, studies agree that pain management by nurses in the ER is inadequate, due to poor pain assessment and documentation,[7,8] the mismatch between the pain described by the patient and that perceived by the nurse, as well as the lack of human resources and analgesic drugs.[7]

Other factors and/or barriers described in the literature that contribute to inadequate pain management by ER nurses are the fear of developing adverse effects from some medications, the risk of concealing signs and symptoms that can lead to misdiagnosis and, finally, not valuing the expression of pain felt by the patient.[1,6] The fear of developing dependence and respiratory depression with the use of opioids comes from the scarce knowledge of professionals about the real incidence of these possible side effects and their treatment.[3,8,9]

Frequent overcrowding in the ER can also lead to long waiting times, preventing nurses from carrying out a proper/precise pain assessment and monitoring in good time, due to the typically disorderly ER environment. In this way, nurses will rely on objective symptoms rather than pain, which is a highly subjective symptom. All this leads to an underestimation of pain, delay and/or non-administration of analgesic medication.[1]

Pain, when inadequately assessed and treated early, can have adverse physiological and psychological repercussions (distress and suffering), prolong hospitalization time, as well as contribute to patient dissatisfaction.[7]

A preliminary search was carried out in the Joanna Briggs Institute (JBI) Database of Systematic Reviews and Implementation Reports, the Cochrane Database of Systematic

Reviews, CINAHL (via EBSCO) and MEDLINE (via Pub-Med), and no literature reviews (published or to be carried out) on pain management by ER nurses were found. The following review aims to answer the following research question: What is the published scientific evidence on pain management by emergency department nurses?

Based on the defined review question, this scoping review will also be able to answer the following questions:
– What is the published scientific evidence on current pain management practices by emergency department nurses?
– What is the published scientific evidence on facilitating factors and barriers in pain management by emergency department nurses?
– What are the types of interventions developed by emergency department nurses in pain management?
– What is the gap in published scientific evidence on pain management by emergency department nurses?

The aim of this scoping review is to map and summarize the scientific evidence on pain management by ER nurses.

Methodology

It was decided to carry out a scoping review, since the aim is to map the available evidence on the subject under study and identify existing knowledge gaps.[10] This review will be carried out according to the methodology proposed by JBI, complying with all the steps recommended by it, and the results will be presented using the PRISMA Extension for Scoping Reviews (PRISMA-SCR) diagram.[11] This scoping review protocol is registered with the Open Science Framework (OSF) under DOI 10.17605/OSF.IO/RWN5U.

The eligibility criteria will be defined according to the JBI methodology, using the participants, concept and context (PCC) strategy. Thus, this review will include all studies which: a) with regard to the participants, include nurses; b) with regard to the concept, address pain management; c) with regard to the context, studies carried out in the ER will be considered. With regard to the type of studies, primary, quantitative and qualitative studies, literature reviews and gray literature will be considered, excluding papers published in congresses in the form of oral communication and/or posters, editorials and letters to the editors. This review will include studies whose samples are over 18 years old, published in Portuguese, English and Spanish, with no time limitation. The gray literature will be evaluated for its methodological quality, relevance to the topic of pain management by nurses in the ER and contribution to broadening the understanding of the problem.

The research will be conducted following the three stages of research strategy recommended by the JBI: 1) in the first stage, the researchers will carry out a limited search in the MEDLINE (via PubMed) and CINHAL (via EBSCO) databases in order to identify the most commonly used words in the titles and abstracts of the articles, as well as the indexing terms; 2) in the second stage, using the words and indexing terms identified, a search strategy adapted to the databases/reports included will be drawn up; 3) and finally, the bibliographical references of the selected articles will be examined in order to identify additional studies relevant to this review. It is important to emphasize that the researchers intend to contact the authors of the primary sources or reviews in order to obtain more information, if necessary.

The following is an example of a search strategy to be used by researchers in a database such as MEDLINE (via PubMed), using the keywords identified in the preliminary search:

((((("pain management"[Title/Abstract] OR "pain measurement"[Title/Abstract] OR "pain assessment"[Title/Abstract]) OR ("pain management"[MeSH Terms]) OR ("pain measurement"[MeSH Terms])) AND (((nurs*[Title/Abstract]) OR (Nurses[MeSH Terms])) OR (Nursing[MeSH Terms]))) AND (("emergency service"[Title/Abstract] OR "Emergency Room"[Title/Abstract]) OR ("Emergency Service, Hospital"[MeSH Terms]).

The search strategy, including all identified keywords and indexing terms, will be adapted for each database and included in the full published manuscript.

The results of the search will be exported to the Rayyan - Intelligent Systematic Review Reference Manager, where an initial screening will be carried out and duplicate articles removed. Subsequently, two independent reviewers will confirm the eligibility of the studies by reading the title and abstract, based on the inclusion criteria previously described. If any disagreements arise, they will be resolved by consensus or by decision of a third reviewer. Subsequently, the articles that meet the inclusion criteria will be subjected to a full-text reading. Methodological quality will not be assessed as this is a scoping review. The results will be presented according to the PRISMA Extension for Scoping Review (PRISMA - SCR) guidelines.

The information extracted from the articles included in this review will be presented in a descriptive way, using tables, according to the objective, focus and question of this scoping review, in accordance with the methodology adopted.[10]

The results will be summarized and presented by independent reviewers, using a third reviewer whenever necessary to reach a consensus on any differences. In order to answer the research question defined above, a table will be drawn up which may include the data presented in table 1.

Table 1. Tool developed by the researchers to extract data

Code	Title	Author/Year of Publication	Objective	Type of study /Article	Results	Conclusion	Gaps identified
E1							
E2							

Conclusion

Pain, whether acute or chronic, is one of the main reasons why patients go to the ER in developed and developing countries, contributing to around 70% of all admissions. Pain is not always treated properly and is often underestimated, leading to the phenomenon of oligoanalgesia. Uncontrolled pain can have numerous consequences for the patient, family, health professionals and society. For the patient, it increases the length of hospital stay, delays recovery and increases the risk of developing chronic pain. Our aim with this review is to understand the practices and challenges associated with pain management by ER nurses, as it is fundamental to improving interventions and patient care. This review will contribute to the dissemination of available evidence on the subject under study, thus allowing us to identify gaps in the literature.

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