

Risk for falls versus safe mobility in older adults: a scoping review protocol

Risco de queda versus mobilidade segura em pessoas idosas: protocolo de revisão de escopo

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ABSTRACT

Objective: To map, in scientific productions, the constituent elements of the concept of safe mobility in older adult hospital care. **Method:** A scoping review protocol was developed based on the methodology proposed by the Joanna Briggs Institute (JBI), which highlights the stages of search strategy, study selection, data extraction, and summarization based on criteria outlined to answer the research question. Studies that include individuals over 60 years of age, regardless of gender and associated conditions, will be considered, and those that have not been published in full format or whose access has not been possible will be excluded. The evidence that expresses the constitutive elements of the concept of safe mobility applied to the context of older adult hospital care can help in the decision-making in health care and the dissemination of appropriate nursing interventions, as well as contributing to teaching, extension, and research.

Descriptors: Accidental Falls; Nurses Improving Care for Health System Elders; Mobility Limitation.

RESUMO

Objetivo: Mapear, por meio de produções científicas, os elementos constitutivos do conceito de mobilidade segura presentes na assistência hospitalar a pessoas idosas. **Método:** Elaborou-se protocolo de *scoping review* fundamentado na metodologia proposta pelo Joanna Briggs Institute (JBI), que evidencia as etapas de estratégia de busca, seleção dos estudos, extração e sumarização dos dados, a partir de critérios delineados, de forma a responder à pergunta de pesquisa. Serão considerados os estudos que incluem indivíduos a partir de 60 anos, independente do sexo e das condições associadas, e excluídos os que não foram publicados na íntegra, ou cujo acesso não tenha sido possível. As evidências que expressam os elementos constitutivos do conceito de mobilidade segura aplicado ao contexto da assistência hospitalar a pessoas idosas podem auxiliar na tomada de decisão em saúde e na difusão de intervenções de enfermagem adequadas, bem como contribuir para o ensino, a extensão e a pesquisa.

Descritores: Acidentes por Quedas; Cuidado de Enfermagem ao Idoso Hospitalizado; Limitação da Mobilidade.

INTRODUCTION

Falls in aged people are a problem that, despite the recurrent efforts by the nursing team to mitigate it, still represents one of the most relevant adverse events in hospitals, considering their frequency, economic impacts, and outcomes⁽¹⁾.

This fact is due, in short, to the instituted fall prevention programs and protocols, which tend to simplify it and emphasize the prevention of the event itself, to the detriment of the assessment of the risk for falls in a care plan, which culminates in an appreciation of the sum and documentation of scores obtained through specific scales, and less nursing time devoted to interventions proposed for modifiable risk factors⁽²⁾. Over the last 40 years, there has been no significant change in nursing practices regarding fall prevention⁽³⁾. In general, fall prevention protocols limit the patient's mobility or improve the environment's safety without considering that the intrinsic factors are, in fact, the greatest precursors⁽²⁾. However, interventions that limit mobility,

such as bracelets identifying the risk for falls, bed rest recommendations, or timed bathroom, in addition to not exactly preventing the occurrence of falls, contribute to functional decline, increase the length of stay, the risk of re-hospitalization, and predisposes to the occurrence of complications, which increase the risk of future falls⁽⁴⁾. A recent meta-analysis showed that patients spend 87 to 100% of their hospital stay sitting or lying in bed⁽⁵⁾. Another study revealed that healthy-aged people resting in bed for 10 days had a reduction of 12% in aerobic capacity and almost 16% in knee extensor strength, contributing to a significant decline in functional capacity⁽²⁾.

Therefore, the term "safe mobility" appears with the proposal of transitioning perspective, evaluation, and recognition of risk factors for falls, highlighting the intrinsic ones as is usual in other comorbidities and pathologies, without, in turn, disregarding protocols, scales, and extrinsic factors, which are also relevant, integrating these concerns into the care plan and interprofessional approach⁽²⁾. Such an approach implies more critical thinking but not more time spending: constraint guidelines restrictions should be weighed and justified or eliminated, and it should be understood that preserving mobility involves some risk of falling. However, a realistic mobility plan may be more beneficial. It is ethical for the well-being of older adults that falls be prevented at any cost⁽²⁾.

Nurses, the main ones responsible for managing hospital care, including fall prevention, should be influential in introducing and disseminating improvements to the quality of care, prioritizing what is important for each patient through appropriate interventions.

For this purpose, a preliminary search was carried out in the health databases Medline (via PubMed), CINAHL (via EBSCO), and JBI Database of Systematic Reviews and Implementation Reports, resulting in a scarcity of studies on the subject, which motivated the proposal of conducting a scoping review due to the possibility of mapping the literature on the field of interest, especially considering that reviews on the subject have not yet been published⁽⁶⁾. This perception motivated the proposal of writing a scoping review due to the possibility of examining the extent, reach, and nature of the evidence, clarifying concepts, summarizing discoveries, and identifying gaps in the literature, in addition to systematizing and disseminating findings that can contribute to practices, policies, and research⁽⁷⁾.

Scoping reviews can, in addition to showing how research in an area is conducted, support decision-makers regarding the origin of a concept and how it has been studied over time⁽⁸⁾.

Therefore, the objective of this scoping review will be to map, in scientific productions, the constituent elements of the concept of safe mobility in older adult hospital care.

METHOD

This review will be conducted using the scoping review methodology proposed by the Joanna Briggs Institute (JBI) in six stages: 1) identification of the research question and objective; 2) identification of relevant studies that enable the breadth and scope of the review's purposes; 3) selection of studies according to predefined criteria; 4) data mapping; 5) summarization of the results, through a qualitative thematic analysis concerning the objective and question; and 6) presentation of results, identifying implications for policy, practice or research.

The recommendations of the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist, composed of 22 items⁽⁷⁾, will also be considered.

The scoping review protocol was registered with the Open Science Framework (OSF) under DOI: 10.17605/OSF.IO/EDHF6.

Research strategy and identification of studies

The elaboration of the research question will be guided by the JBI guide, in which the elements of the PCC mnemonic will be considered - P (population/participant), C (concept), and C (context)⁽⁹⁾. The population/participant will include aged persons - individuals aged 60 years or older, according to the classification of the World Health Organization (WHO) for developing countries, the National Policy for Senior Citizens (Law 8.842, of 1994), and the Statute of the Elderly (Law 14.423 of 2022) -, of both sexes. The concept will consist of definitions or reports of safe mobility - relevant approaches that help or encourage aged people to move daily, safely, and aiming at preserving their functional capacity - and the factors associated with its promotion (pain management, strength, balance, or gait impairments, and medications). The context will consist of assistance to hospitalized older adults in different circumstances (clinical, surgical, among others), covering public or private, small,

medium, or large hospitals, including teaching, general, specialized, urban, or rural hospitals. This strategy will answer the following question: What is the national and international scientific evidence about the definition and characteristics listed in the concept of safe mobility of hospitalized older adults at risk of falling?

The search strategy was developed to identify studies published in English, Spanish and Portuguese, in various sources of evidence, covering quantitative and qualitative research designs, primary studies, systematic reviews or meta-synthesis, books and guidelines published in indexed sources, or the grey literature, available online in the consulted databases. Additionally, opinion documents, reports, case reports, and institutional texts relevant to geriatrics/gerontology will be considered.

No publication date restrictions will be imposed on the searches. Studies that include individuals aged 60 years or older, regardless of gender, and with associated conditions, and studies including a definition/report of safe mobility will be considered. In turn, articles not fully published in the selected languages described above published only as an abstract, those whose full content is impossible to be accessed after contacting the authors, letters to the editor, and commentary papers will be excluded.

Following JBI guidelines, a three-step search strategy will be used. Initially, to identify the search terms, the controlled DeCs (Descriptors in Health Sciences), MeSH (Medical Subject Headings), and Emtree (Embase Subject Headings) terms were consulted, and a preliminary strategy was run in the PUBMED and CINAHL bases in January 2022, as shown in Figure 1.

The initial search was followed by an analysis of the text words contained in the title and abstract of the articles and the indexing terms used to describe the studies.

In the second stage, a literature review will be

carried out in Medline (via Pubmed), CINAHL (via EBSCO), Embase, Web of Science, LILACS, and Scopus databases. The search strategy will be adapted to each database and will include the following keywords:

P (population/participant) – middle aged / aged / aged people / aged person / elderly / elder / senior / geriatric / gerontologic / older adult / older person / fall risk / fall / fall reduction / fall prevention. It is important to note that the term “elderly” generally refers to people aged 65 to 79 years old, so index terms covering individuals aged 80 years and older will also be included in order not to limit searches to younger seniors. Still aiming to find studies with individuals between 60 and 65 years old, the term “middle-aged person” will be included, referring to individuals between 45 and 64 years old.

C (concept) – Safe mobility.

C (context) - Hospital Care / Hospitals.

This search aims to find scientific evidence to answer the research question proposed in this scoping review. Language, date, and study design filters will not be applied.

In the third stage, tertiary research will be carried out to identify additional studies by examining the reference lists of the materials studied. If extraction is impossible or there are doubts regarding any full text of interest, the reviewers will contact the authors of the primary studies to obtain more information. The following information sources will be used: Medline (via Pubmed), CINAHL (via EBSCO), Embase, Web of Science, LILACS, and Scopus. The search for unpublished grey literature will include websites of societies and institutions involved in older adult care and fall prevention, in addition to the CAPES Digital Library Network of Theses and Dissertations.

Selection of studies

The Rayaan QCRI free access software will be used to manage the research results. All studies

| Search strategy | Database | Result |
|--|------------------|--------------------------|
| ((aged OR elderly OR old people) AND (fall risk)) AND (safe mobility) AND (hospital) | PubMed (Medline) | Filters:- Results: 18 |
| (aged OR elderly OR senior OR older people) AND (safe mobility) AND (hospital) | CINAHL | Filters:- Results: 9 |

Figure 1 – Initial database search strategy. Rio de Janeiro, RJ, Brazil, 2022

Source: Prepared by the author, 2022.

retrieved from the databases will be imported into the software, and duplicates will be grouped and excluded. Two independent reviewers will select titles and abstracts, blinded through the same software, and assess the studies' relevance according to the inclusion criteria of this scoping review. Disagreements will be resolved by consensus between them or by a third researcher, who will resolve conflicts. In case of persistent doubt, the reference will be forwarded for full text screening. The results will be described and represented using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) flow diagram⁽⁷⁾.

Data extraction and presentation

Data will be extracted by two reviewers, who will complete an electronic form containing the characteristics of each study (title, year of publication, database, authors, country of origin, objectives, study design, and excerpts describing the main results of interest in this review), prepared based on previous references, as shown in Figure 2. The data will be organized and stored in an Excel spreadsheet and presented in a narrative form, with the resources of charts and tables through the consensus of the reviewers, with any disagreements being resolved by the third reviewer.

Data summary

An analytical-descriptive structure will be used to analyze the text of each article and for the

summarization stage of the essential elements of each study. To this end, a qualitative analysis of the content and the extraction of key characteristics present in the concepts of safe mobility will be carried out to identify similarities, differences, and complementarities.

Presentation and interpretation

The mapping of the constitutive elements of the concept of safe mobility in hospital care for older adults at risk of falling will make it possible to elucidate this concept and use it, contributing to the management of care and gerontological health policies, meeting the objectives of a scoping review.

Expected results

The evidence that expresses the constitutive elements of the concept of safe mobility applied to the context of older adult hospital care can help in decision-making in health and in the dissemination of nursing interventions aimed at preventing falls, considering the maintenance of the functionality of aged persons and the promotion of the quality of life, as well as the provision of adequate and qualified assistance, using collaborative care.

Contributions may also cover the area of teaching and extension, considering innovative subsidies for the discussion and incorporation of nursing care for older adults, generating thematic references for new research, and expanding the number of studies with impact and scientific relevance.

| Risk for falls versus safe mobility in older adults: a scoping review protocol | |
|---|--|
| Data extraction instrument | |
| Title | |
| Publication year | |
| Database | |
| Country of origin | |
| Objectives | |
| Study design | |
| Population | |
| Country of origin | |
| Mobility concepts | |
| Results found | |
| References found | |

Figure 2 – Data extraction instrument. Rio de Janeiro, RJ, Brazil, 2022

Source: Prepared by the authors, 2022.

CONFLICT OF INTERESTS

The authors have declared that there is no conflict of interests.

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Data collection: Nicoli EM

Data analysis and interpretation: Nicoli EM

Writing and/or critical review of the intellectual content: Nicoli EM, Assad LG, Silva FVC

Final approval of the version to be published: Assad LG, Silva FVC

Responsibility for the text in ensuring the accuracy and completeness of any part of the paper: Nicoli EM



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