

ESTRATÉGIAS PARA PREVENÇÃO DE LESÕES POR PRESSÃO EM IDOSOS: PROTOCOLO DE REVISÃO DE ESCOPO**STRATEGIES FOR PREVENTING PRESSURE INJURIES IN THE ELDERLY: SCOPING REVIEW PROTOCOL****ESTRATEGIAS PARA LA PREVENCIÓN DE LESIONES POR PRESIÓN EN ANCIANOS: PROTOCOLO DE REVISIÓN DE ALCANCE****Maria Clara Nascimento Oliveira¹****Esteffany Vaz Pierot²****Ana Larissa Gomes Machado³**

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Submission: 17-06-2024**Approval:** 29-04-2025**RESUMO**

Objetivo: mapear as evidências disponíveis na literatura sobre as estratégias de prevenção de lesões por pressão adotadas pela equipe de enfermagem em pessoas idosas hospitalizadas. **Métodos:** A revisão será conduzida de acordo com a metodologia proposta pelo Instituto Joanna Briggs para o tipo de estudo em questão e seguirá as diretrizes do *Preferred Reporting Items for Systematic Reviews and Meta-Analysis Protocols* - extensão para revisões de âmbito. O protocolo da revisão foi registrado no *Open Science Framework*. Para a formulação da questão de pesquisa utilizou-se o acrônimo PCC: População (Pessoas idosas hospitalizadas), Conceito (Estratégias de prevenção de lesões por pressão) e Contexto (Assistência de enfermagem ao idoso hospitalizado). Para identificar estudos publicados sobre o tema desta revisão, foram utilizadas as bases de dados: PubMed®; Web of Science™; Scopus®; Embase® e Base de Dados em Enfermagem; Literatura Latino-Americana e do Caribe de Informação em Ciências da Saúde; *Índice Bibliográfico Español en Ciencias de la Salud*. Para contemplar os estudos de literatura cinzenta foi utilizada também a Biblioteca Digital Brasileira de Teses e Dissertações da Coordenação de Aperfeiçoamento de Pessoal de Nível Superior. A seleção do material relacionado à temática será realizada inicialmente com o auxílio do sistema de gerenciamento de referências *Rayyan CQRI Systems*. Os resultados serão apresentados por meio de quadros e tabelas, além disso, os principais resultados dos estudos poderão ser transcritos e organizados para formação de um *corpus* textual a ser analisado com o auxílio do *Software* IRaMuTeQ.

Palavras-chave: Saúde do Idoso; Idoso; Úlcera por Pressão; Enfermagem; Cuidados de Enfermagem.

ABSTRACT

Objective: To map the available evidence in the literature on pressure injury prevention strategies adopted by the nursing team in hospitalized elderly individuals. **Methods:** The review will be conducted according to the methodology proposed by the Joanna Briggs Institute for the type of study in question and will follow the guidelines of the *Preferred Reporting Items for Systematic Reviews and Meta-Analysis Protocols* - extension for scoping reviews. The review protocol has been registered with the *Open Science Framework*. The PCC acronym was used to formulate the research question: Population (Hospitalized elderly individuals), Concept (Pressure injury prevention strategies), and Context (Nursing care for hospitalized elderly individuals). To identify studies published on the topic of this review, the following databases were used: PubMed®; Web of Science™; Scopus®; Embase® and Nursing Database; Latin-American and Caribbean Health Sciences Information Literature; *Índice Bibliográfico Español en Ciencias de la Salud*. To include studies from the grey literature, the Brazilian Digital Library of Theses and Dissertations of the Coordination for Higher Education Personnel Improvement was also used. The selection of material related to the theme will initially be carried out with the help of the reference management system *Rayyan CQRI Systems*. The results will be presented through charts and tables; additionally, the main results of the studies may be transcribed and organized to form a textual corpus to be analyzed with the help of *IRaMuTeQ Software*.

Keywords: Health of the Elderly; Aged; Pressure Ulcer; Nursing; Nursing Care.

RESUMEN

Objetivo: Mapear las evidencias disponibles en la literatura sobre las estrategias de prevención de lesiones por presión adoptadas por el equipo de enfermería en personas mayores hospitalizadas. **Métodos:** La revisión se realizará de acuerdo con la metodología propuesta por el Instituto Joanna Briggs para el tipo de estudio en cuestión y seguirá las directrices del *Preferred Reporting Items for Systematic Reviews and Meta-Analysis Protocols* - extensión para revisiones de alcance. El protocolo de revisión ha sido registrado en el *Open Science Framework*. Se utilizó el acrónimo PCC para formular la pregunta de investigación: Población (Personas mayores hospitalizadas), Concepto (Estrategias de prevención de lesiones por presión) y Contexto (Atención de enfermería al anciano hospitalizado). Para identificar estudios publicados sobre el tema de esta revisión, se utilizaron las siguientes bases de datos: PubMed®; Web of Science™; Scopus®; Embase® e Base de Datos em Enfermagem; Literatura Latino-Americana e do Caribe de Informação em Ciências da Saúde; *Índice Bibliográfico Español en Ciencias de la Salud*. Para incluir estudios de literatura gris, también se utilizó la Biblioteca Digital Brasileña de Tesis y Disertaciones de la Coordinación de Perfeccionamiento de Personal de Nivel Superior. La selección del material relacionado con la temática se realizará inicialmente con la ayuda del sistema de gestión de referencias *Rayyan CQRI Systems*. Los resultados se presentarán a través de cuadros y tablas; además, los principales resultados de los estudios podrán ser transcritos y organizados para formar un *corpus* textual que será analizado con la ayuda del *Software* IRaMuTeQ.

Palabras clave: Salud del Anciano; Anciano; Úlcera por Presión; Enfermería; Atención de Enfermería.



INTRODUCTION

According to the 2019 International Guideline for the Prevention and Treatment of Pressure Ulcers/Injuries⁽¹⁾, a Category 1 Pressure Injury (PI) is characterized as localized damage to the skin and/or underlying tissue, caused by isolated pressure or by the pressure in conjunction with shear.

The existence of PI is considered a negative indicator of the quality of care provided and is classified as an adverse event⁽²⁾. These lesions arise due to cellular hypoxia, resulting in tissue necrosis, a common phenomenon, especially among adults and other groups of patients with compromised skin integrity.

Health conditions, need for continuous care and advanced age are a risk factor for developing PI⁽³⁾. As skin aging occurs, there are observed changes such as irregular pigmentation, reduction in skin thickness, increased roughness and wrinkle formation, factors that may contribute to a compromised wound healing in elderly individuals. Consequently, due to demographic aging, there has been a significant increase in the incidence of dermatological diseases among the elderly population⁽⁴⁾.

The elderly often face malnutrition in settings such as hospitals and long-term care. Unfortunately, malnutrition aggravates the condition of the elderly, who are already predisposed to poor functional and quality of life outcomes, as well as extends hospital stay and increases morbidity and mortality rates. The

addition of a PI only amplifies the complexity of care required for these individuals⁽⁵⁾. These factors generate a concern regarding the prevention and control of these lesions, as they have a negative impact on the quality of care provided to hospitalized patients⁽⁶⁾.

The prevention of PI in the elderly requires an approach that takes into account the physiological changes associated with aging and comorbidities, adapting interventions to mitigate the risk associated with each specific factor. For example, skin integrity in the elderly is influenced by internal mechanisms of tissue tolerance and cell function, which interact with external stressors and forces. Preventive interventions should focus on reducing exposure to these stressors and external forces, while maximizing the cofactors that improve the protective function of the skin, such as the use of barrier creams and proactive incontinence care. Moreover, the proper management of comorbidities aims to optimize cell function in the elderly, which in turn enhances the protective function of the skin and underlying tissue, increasing tolerance to external forces⁽⁵⁾.

Although there are several approaches and interventions available to prevent PI, the effectiveness of these strategies may vary. It is crucial, therefore, to map the available evidence in the literature on PI prevention strategies adopted by the nursing team in hospitalized elderly people. This research will provide a comprehensive understanding of current practices, identifying which interventions are



most effective and based on solid scientific evidence. Thus, the objective is to map the evidence available in the literature on the strategies for prevention of pressure injuries adopted by the nursing team in hospitalized elderly people.

METHODS

Type of research

The review will be conducted according to the methodology proposed by the Joanna Briggs Institute (JBI) for the type of study in question⁽⁷⁾ and will follow the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analysis Protocols - extension for scope reviews (PRISMA-ScR)⁽⁸⁾. The review protocol was registered in the Open Science Framework (OSF), with Digital Object Identifier (DOI): 10.17605/OSF.IO/WRVZ5. Any methodological changes made during the development of the protocol will be documented in the final version of the review.

Research site

The review will be held at the Federal University of Piauí, Ministro Petrônio Portela campus, in the city of Teresina, Piauí.

Review research question

For the formulation of the research question, the strategy adopted considers aspects of the population, concept and context of the object to be researched, using the acronym PCC: Population (Hospitalized elderly), Concept (Strategies to prevent pressure injuries) and Context (Nursing care for hospitalized elderly). Thus, the review question was elaborated as follows: "What is the evidence available in the literature on the strategies adopted to prevent pressure injuries during nursing care of hospitalized elderly people?".

Eligibility criteria

Chart 1 presents the schema of inclusion and exclusion criteria, according to the research question (PCC - Population, Concept, Context), for the selection of studies to be considered in the scoping review.

Chart 1 – Eligibility criteria for studies, according to the PCC strategy used. Teresina, PI, Brazil, 2024.

PCC	Inclusion	Exclusion
Population	Studies involving hospitalized elderly people	Studies involving other age groups
Concept	Studies that present aspects related to the prevention of pressure injuries	Studies that do not involve strategies for preventing pressure injuries in the elderly.

Context	Studies involving strategies for preventing pressure injuries by nursing staff in hospitalized elderly people	Studies that do not involve elderly people
Types of evidence sources	Studies with any design, available in full, which may be articles, dissertations or theses. There will be no restrictions regarding the language of the written texts, time frame or country of origin.	Methodological studies for the translation, adaptation or validation of instruments, theoretical and editorial essays.

Source: Created by the authors, 2024.

Research strategy

To develop the search strategy of this scoping review, a preliminary search was conducted in the PubMed® and Web of Science™ databases using the Medline (MeSH) medical subject headings, the Health Sciences (DeCS) descriptors and the Emtree thesaurus. From reading the titles and abstracts of texts found in the preliminary search, other keywords and synonyms were identified, aiming to expand the search results and obtain a more sensitive strategy for the second phase of data selection.

Therefore, the following databases remained to be used: PubMed® (National Library of Medicine, NLM); Web of Science™ - Main Collection (Clarivate Analytics); Scopus®

(Elsevier) and Embase® (Elsevier). The databases Nursing Database (BDENF); Latin American and Caribbean Health Sciences Information Literature (LILACS); and *Índice Bibliográfico Español en Ciencias de la Salud* (IBECS) were accessed through the Virtual Health Library (VHL). To include studies of grey literature, the Brazilian Digital Library of Theses and Dissertations (BDTD) of the Coordination for Higher Level Personnel Improvement (CAPES) was also used.

The terms related to the acronym PCC were adapted for each data platform, considering variations and using the Boolean operators AND and OR to develop the final strategies, which are arranged in Chart 2.

Chart 2 – Search strategy used according to the source of information. Teresina, Piauí, Brazil. 2024.

Database	Search strategy	Results*
PubMed® through NLM	((("health of the elderly"[All Fields]) OR ("aged"[MeSH Terms]) OR ("health services for the aged"[MeSH Terms]) OR ("aged, 80 and over"[MeSH Terms]) OR	1210

	("hospitalization"[MeSH Terms])) AND (("pressure ulcer"[MeSH Terms]) OR ("risk assessment"[MeSH Terms])) AND (("nursing"[MeSH Terms]) OR ("nursing, team"[MeSH Terms]) OR ("nursing care"[MeSH Terms]) OR ("nurses improving care for health system elders"[MeSH Terms]))	
Web of Science™ Main Collection	ALL=((Aged* OR "Health of the Elderly" OR "Health Services for the Aged" OR "Health of the Elderly" OR "Aged, 80 and over" OR Hospitalization*) AND (Pressure Ulcer* OR "Risk Assessment") AND (Nursing* OR Nursing, Team* OR "Nursing Care" OR "Nurses Improving Care for Health System Elders"))	1068
Scopus®	((Aged* OR "Health of the Elderly" OR "Health Services for the Aged" OR "Health of the Elderly" OR "Aged, 80 and over" OR Hospitalization*) AND (Pressure Ulcer* OR "Risk Assessment") AND (Nursing* OR Nursing, Team* OR "Nursing Care" OR "Nurses Improving Care for Health System Elders"))	622
Embase®	(aged* OR 'health services for the aged'/exp OR 'health services for the aged' OR 'health of the elderly' OR 'aged, 80 and over'/exp OR 'aged, 80 and over' OR hospitalization*) AND (('pressure'/exp OR pressure) AND ulcer* OR 'risk assessment'/exp OR 'risk assessment') AND ((nursing* OR 'nursing,'/exp OR nursing,) AND team* OR 'nursing care'/exp OR 'nursing care' OR 'nurses improving care for health system elders'/exp OR 'nurses improving care for health system elders') AND [embase]/lim	1688
BDENF, LILACS and IBECs through VHL	((("Saúde do Idoso") OR (idos*)) OR ("Serviços de Saúde para Idosos") OR ("Saúde do Idoso") OR ("Idoso de 80 Anos ou mais") OR (Hospitalizaç*)) AND (("Úlcera por Pressão") OR ("Medição de Risco")) AND (("Enfermagem") OR ("Equipe de Enfermagem") OR ("Cuidados de Enfermagem") OR ("Cuidado de Enfermagem ao Idoso Hospitalizado"))	278
BDTD of	("Saúde do Idoso" OR idoso OR "Serviços de Saúde para	50



CAPES	Idosos" OR "Saúde do Idoso" OR "Idoso de 80 Anos ou mais" OR Hospitalização) AND ("Úlcera por Pressão" OR "Medição de Risco") AND ("Enfermagem" OR "Equipe de Enfermagem" OR "Cuidados de Enfermagem" OR "Cuidado de Enfermagem ao Idoso Hospitalizado")	
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*Search made on June 17, 2024.

Source: Created by the authors, 2024.

The search was carried out on June 17, 2024, using remote access to databases through the journal portal of the Coordination for Higher Level Personnel Improvement (CAPES), accessed through the Federated Academic Community (CAFe) with the Federal University of Piauí (UFPI) login.

Selection of the evidence source

The selection of the material related to the theme will be carried out initially with the help of the reference management system Rayyan CQRI Systems⁽⁹⁾. After exporting the files containing the literature found in each source of information, two reviewers, independently, will proceed to delete the duplicate material. They will then read the abstracts of the remaining texts, assigning acceptance or rejection concepts according to the defined inclusion and exclusion criteria. The process will be conducted blindly using the blind on feature offered by the system, and any discrepancies between reviewers will be resolved by a third-party reviewer.

After this step, the selected texts will be read in full and analyzed according to the

defined inclusion and exclusion criteria. The accepted texts will then be chosen for data extraction. The results of this flow will be presented in the form of a diagram, showing the phases of identification, screening, eligibility and the texts included for review.

Data extraction

To extract the data to be included in this review, the reference list generated in Rayyan will be exported to a Microsoft Excel spreadsheet. Then, this spreadsheet will be filled out by the three reviewers independently, following a specific form for this step, which has been developed to meet the objectives and the review question.

A draft table or chart form has been developed and will be tested in the protocol phase to record key source information, such as author, reference and results or findings relevant to the review question(s) (Chart 3). This may be further refined in the review phase and the chart will be updated accordingly. If necessary, the data extraction form may be revised and modified to include other information that is not

covered in the initial form. Any changes made

will be detailed later in the scoping review.

Chart 3 – Study information chart. Teresina, PI, Brazil, 2024.

Study number:	
Author(s)	
Journal	
Year of publication	
Origin/country of origin (where the source was published or developed)	
Language	
Objectives/purpose	
Population and sample size in the evidence source (if applicable)	
Methodology/methods	
Type of intervention, comparator and their details (such as length of the intervention) (if applicable). Length of intervention (if applicable)	
Is the intervention validated or not?	
Results and their details (such as how they are measured) (if applicable)	
Difficulties	
Main conclusions related to the scoping review questions.	

Source: Created by the authors, 2024.

Presentation of the results

The results will be presented by means of charts and tables. Furthermore, the main results of the studies can be transcribed and organized to form a textual corpus to be analyzed with the help of the Software *Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires* (IRaMuTeQ)⁽¹⁰⁾. This software allows multidimensional analysis, especially

when the material is centered on a theme, allowing the elucidation of the structure according to the vocabulary used. Therefore, the discussion will be based on the revised literature and on the theoretical-methodological framework adopted by the study.

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Funding and Acknowledgements:

Fundação de Amparo à Pesquisa do Estado do Piauí (FAPEPI).

Authorship criteria (authors' contributions)

All authors (MCNO, EVP, ALGM): 1. contributed substantially to the conception and/or planning of the study; 2. to obtaining, analyzing and/or interpreting the data; 3. as well as to the writing and/or critical review and final approval of the published version.

Declaration of conflict of interests

Nothing to declare.

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