

# Intensive nursing care to older adults with delirium: a protocol of scoping review

## Cuidados intensivos de enfermagem ao idoso com delirium: um protocolo de revisão de escopo

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Submission: 04/23/2022

Approved: 10/31/2022

### ABSTRACT

**Objective:** To systematically explore the literature regarding the nursing care provided to the older adult hospitalized with delirium in intensive care units for the prevention or management of delirium. **Method:** scoping review protocol, structured by the recommendations of the Joanna Briggs Institute manual, utilizing the following database: MEDLINE via PubMed, Scopus, Embase, Web of Science, and Google Scholar. We will organize the citations found through the EndNote manager. After the exclusion of duplicated studies, we will transfer the citations to the Rayyan software. Afterward, two independent researchers will begin the screening of titles/abstracts. We will present the selection process of studies in the Checklist PRISMA-ScR adopted flowchart. The authors will extract the data of the studies through a spreadsheet developed in the Microsoft Excel, evaluating and interpreting the information according to the objective of the study. We will organize the data in charts, tables, and flowcharts with a narrative discussion.

**Subject Headings:** Delirium; Elderly; Nursing care.

### RESUMO

**Objetivo:** explorar sistematicamente a literatura quanto aos cuidados de enfermagem prestados aos idosos internados com *delirium*, em unidades de terapia intensiva, sejam eles para prevenção, sejam eles para manejo do *delirium*. **Método:** protocolo de revisão de escopo, estruturado pelas recomendações do Manual do Instituto Joanna Briggs, utilizando as seguintes bases de dados: PubMed via MEDLINE, Scopus, Embase, Web of Science e Google Scholar. A bibliografia encontrada será organizada através do gerenciador EndNote. Após a exclusão dos estudos duplicados, as citações serão transferidas para o *software* Rayyan. Em seguida, será iniciada a triagem das referências por dois pesquisadores independentes. O processo da seleção de estudos será exibido no fluxograma adaptado do Checklist PRISMA-ScR. Os dados serão extraídos dos estudos através de uma planilha desenvolvida no programa Microsoft Excel pelos próprios autores, avaliando e interpretando as informações de acordo com o objetivo proposto. Os dados serão organizados em tabelas, quadros e fluxogramas, com discussão narrativa.

**Descritores:** Delirium; Idoso; Cuidado de Enfermagem.

### INTRODUCTION

Aging became one of the greatest transformations of the present time, with demographic and epidemiological consequences. Great axes of life were affected, such as the economy and health. Consequently, the repercussions of the individual's health state result in a great impact on their social context<sup>(1,2)</sup>.

The increase in life expectancy is something that grows exponentially in Brazil according to IBGE data in 2010, and the life expectancy was 73.83 years old, in 2017 75.99, and there is a projection that in 2030 it will reach 78.64. The quantity of people above 60 years old exceeds 37.7 million people, which is almost 18% of the country's total population<sup>(3)</sup>.

The epidemiological transitions and the strengthening of social demands through laws and action plans promoted a gradual increase in the number of older adults that also caused an increase in the hospitalization demands,

including in intensive care units. The care of older adults at the ICU can be complicated for many reasons, they have low life expectancy associated with a high rate of mortality and high cost of health care, which proportionally increases with age. A national study carried out from 2002 to 2011 evidenced the magnitude of this expense difference that analyzed the hospitalization expenses, showing a value of expenses eight times superior in the male older adults regarding the adult age group<sup>(4-6)</sup>.

Older adults patient care requires specific qualifications from health professionals due to its complexity, many times due to its comorbidities, and the necessity of continuous vigilance<sup>(7)</sup>.

Among the main complications of older adults hospitalization in ICU is *delirium*, which according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-V)<sup>(8)</sup>, is a mental alteration secondary to a general medical condition, drug intoxication, or drug withdrawal characterized by cognition and consciousness disorders that develops in a short time, hours or days, and has a floating course.

Characterized as an acute and floating disturbance of consciousness and cognition, delirium is classified as a neurobehavioral disorder most relevant in hospitalized older adults, undertaking 56 to 72% of those hospitalized in ICU. Delirium is frequent during hospitalizations, having a prevalence in the admission of 14 to 24%. The incidence during hospitalization is 7 to 52%. However, it is a condition mostly mistaken for dementia, depression, and other diseases. The development of delirium has been associated with the highest morbidity, persistent functional decline, long interactions, and cost increase<sup>(9,10)</sup>. The intensive nursing team performs exceptional care to the critical patient, being the professional class that conserves more time closer to the patient and that carries out most of the assistance activities. Thus, in a privileged position to establish preventive measures, carry out periodic monitoring of the delirium and perform actions to reduce clinical picture duration. However, to implement safe nursing assistance for an older adult in intensive care, the team needs to know of the physiological alterations that occur due to the process of aging and its implications facing the disease<sup>(11,12)</sup>.

We did not find a scoping review in the databases and in the Open Science Framework register platform about the management of older adults with delirium in the ICU, revealing the importance of

this study, considering that many cases of delirium remain underdiagnosed given the absence of an astute team that knows about delirium prevention, detection, and treatment strategies based on evidence. Hence, this review aims to amplify the comprehension of the nursing care provided to older adults with delirium hospitalized in intensive care units, contributing to the quality of the nurse assistance provided to the population and amplifying scientific publications in the nursing field.

Given this context, the objective of this review is to systematically explore the literature regarding the nursing care provided to older adults with delirium in hospitalized intensive care units, both for the prevention or management of delirium. We hope that this review substantiates the condition of primary studies regarding this problem.

## METHOD

It is a protocol to carry out a scoping review type study. In the structuring of this protocol, we adopted the recommendations of the Joanna Briggs Institute Manual – JBI Manual for Evidence Synthesis<sup>(13)</sup>, confirming the transparency of every review process. This protocol was registered in the Open Science Framework (<https://osf.io/>) DOI: 10.17605/OSF.IO/9R7MQ.

## Research question

To establish the research question, we utilized the PCC abbreviation (Population, Concept, and Context) to define the eligibility criteria of the research, determining the following guiding question: "What is the role of nursing in older adults care with delirium in ICU."

In Figure 1, we demonstrate the PCC strategy that we will use in the scope revision.

## Inclusion criteria

### Population

We will include primary studies carried out with a nursing team that assists older adults with delirium in intensive care units.

### Concept

The review will consider studies that evaluate the nursing role in front of older adults with delirium through nursing care or strategies formulation of identification of delirium or predisposing factors to this health condition.

## Context

The context of this review will consist in older adults with delirium hospitalized in intensive care units.

## Types of evidence sources

The protocol of scope review suggested will allow the consultation of various scientific studies, thus, we will accept observational, analytic, and descriptive studies. We will not restrict the language or year of publication. We will also include sources derived from gray literature.

## Research strategy

The search strategy aims to find the available literature in the defined database as well as in the gray literature, projecting a higher inclusion in the study selection. We will boost a search test in the PubMed database through the MeSH term test and index terms, analyzing titles, abstracts, and keywords of the articles that may be included in the search strategy. At the end of this step, we will define the PubMed strategy, and we will adjust it for other databases so we can apply it in the review.

In Figure 2 below, we demonstrate the preliminary search strategy for PubMed.

## Information source

We will carry out the gathering of studies through the following databases: PubMed via MEDLINE, Scopus, Embase, and Web of Science.

The search for gray literature will be through Google Scholar, we will utilize the first hundred search results.

## Selection of studies

We will organize the studies utilizing the EndNote Web reference manager (Clarivate Analytics, USA), which will remove the duplicated studies. Next, we will export the studies to Rayyan Software. In this step, we will begin the studies screening in which two independent researchers will proceed with the reading of the titles and abstracts, selecting according to the inclusion and exclusion criteria. Whatever divergences, we will consult a third researcher.

We will expose every study selection process in the final version of the scoping review through an adapted algorithm from Checklist PRISMA-SCR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews)<sup>(14)</sup>.

## Data extraction

The authors will extract the data from studies included in the sample through a spreadsheet developed in the Microsoft Office Excel software evaluating and interpreting the available information according to the guiding question. This spreadsheet will contain the following information: author, title, year, country, language, type of study, objective, instrument utilized, sample size, incidence or prevalence of *delirium*, tracing

Guiding Question	What is the role of nursing in older adult care with delirium in ICU		
	Population	Concept	Context
Extraction	nursing team	Older adults with <i>delirium</i>	Older adults care in ICU
Conversion	"nursing, team"	" <i>delirium</i> " "aged"	"nurses improving care for health system elders" "critical care" "intensive care units"
Combination	"nursing"	"elderly", "elderlies", " <i>delirium</i> assessment", "CAM-ICU"	"nursing care", "critical care nursing"
Construction	"nursing, team" OR "nursing"	"aged" OR "elderly" OR "elderlies"	"nurses improving care for health system elders" "critical care" OR "nursing care"
Strategy use	("nursing, team" OR "nursing") AND (" <i>delirium</i> " OR " <i>delirium</i> assessment" OR "CAM-ICU") AND ("aged" OR "elderly" OR "elderlies") AND "intensive care units" AND ("nurses improving care for health system elders" OR "critical care" OR "nursing care" OR "critical care nursing")		

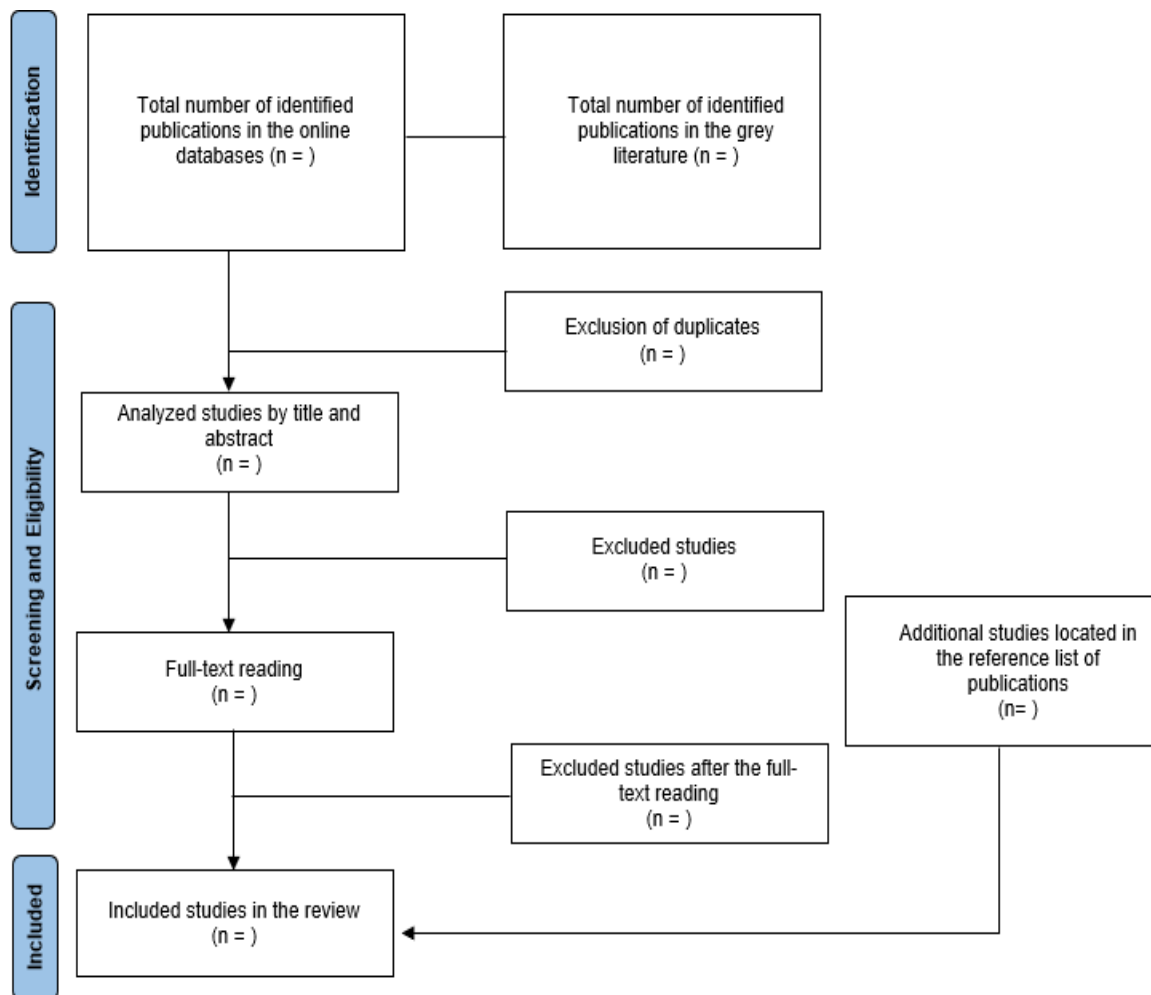
Source: Elaborated by the authors, 2022.

**Figure 1** - PCC strategy. João Pessoa, PB, Brazil, 2022

Database	Research strategy
PubMed	("nursing, team" OR "nursing") AND ("delirium" OR "delirium assessment" OR "CAM-ICU") AND ("aged" OR "elderly" OR "elderlies") AND "intensive care units" AND ("nurses improving care for health system elders" OR "critical care" OR "nursing care" OR "intensive care" OR "critical care nursing")

Source: Elaborated by the authors, 2022.

**Figure 2** - Preliminar search Strategy for PubMed. João Pessoa, PB, Brazil, 2022



Source: Checklist PRISMA Adapted from Page et al., 2021.

**Figure 3** - Flowchart of the search steps and study selection included in the scoping review. João Pessoa, PB, Brazil, 2022

and diagnosis method, approach and therapeutic orientation, and preventive measures.

We will carry out this pilot test with three articles with the objective of ascertaining the agreement between reviewers in the spreadsheet filling. If necessary, we will carry out adjustments and report them in the final version.

### Data presentation

We will organize the extracted data in charts, tables, and flowcharts with a narrative discussion allied with the objective and the guiding question of this scoping review.

### CONFLICT OF INTERESTS

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

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