INPLASY

DYSPHAGIA AND FRAILTY IN HOSPITALIZED ELDERLY PEOPLE: INTEGRATIVE REVIEW

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ADMINISTRATIVE INFORMATION

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Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 29 October 2024 and was last updated on 29 October 2024.

INTRODUCTION

Review question / Objective To construct the guiding question and search for studies, the PICo strategy was used, in which P corresponds to the population (elderly), I of interest (dysphagia and frailty condition), Co of context (hospitalization). After applying this strategy, the following question was formulated: what is the scientific production on the relationship between dysphagia and frailty in hospitalized elderly people?

Background Dysphagia is an important health problem among the elderly, and is defined as the difficulty in transporting the food bolus safely from the oral cavity to the esophagus, which can have serious consequences, including malnutrition, dehydration, pneumonia and even death (Reber et al. al., 2019). The European Society for Swallowing Disorders - European Union Geriatric Medicine suggests that oropharyngeal dysphagia be accepted as a geriatric syndrome (Baijens et al., 2016). Dysphagia was classified as a digestive

condition in the International Classification of Diseases (ICD-10) (Aslam, 2013), given its high prevalence and association with aging, multiple risk factors, interactions with other geriatric syndromes, complications and prognosis (Almirall et al., 2013). The prevalence of oropharyngeal dysphagia in the elderly was the subject of a systematic review with meta-analysis carried out in Taiwan, which grouped the results according to the dysphagia assessment method. The prevalence of dysphagia in hospitalized elderly people screened by the 10-item Eating Assessment Tool (EAT-10), a self-assessment instrument, was 24.1% (95% CI 16.64% to 32.44%), in studies in which the swallowing assessment with standardized tests was performed, such as the Volume-Viscosity Swallow Test (V-VST) or Gugging Swallowing Test (GUSS) the prevalence was 47.18% (95% CI 38.3% to 56.14%) (Doan et al., 2022). In the hospital context in elderly people with acute illnesses, the presence of dysphagia has important implications as it determines the route of medication administration, directs nutritional interventions and the prevention of dehydration

(Kang et al., 2023). In addition to the negative health effects, dysphagia can affect quality of life (Kim et al., 2020), lead to social isolation (Farri et al., 2007) and frailty. Frail individuals present with "a clinical state in which there is an increase in an individual's vulnerability to developing increased dependence and/or mortality when exposed to a stressor" (Dent et al., 2019, p.773). One of the main components of frailty is the loss of muscle mass and function, which may also include the swallowing muscles (Ruiz et al., 2012).

Rationale Given the lack of systematized reviews on this topic, it is imperative to develop this review, which aimed to identify in the scientific literature the relationship between dysphagia and frailty in hospitalized elderly people.

METHODS

Strategy of data synthesis The search was carried out in October 2024, by applying the search strategy in the electronic databases Embase, Medical Literature Analysis and Retrieval System Online (MEDLINE) (PubMed Portal), Cumulative Index to Nursing And Allied Health Literature (CINAHL), Virtual Health Library (VHL) and Web of Science (WOS), the titles and abstracts of the articles were sent to two reviewers to assess eligibility independently. The article selection tool (Ravvan) was used, an instrument that allows access by multiple researchers, the identification of duplicate articles, reading of titles and abstracts and the organization of studies for references in separate folders. First, duplicates were identified and only one of the titles was retained. In the subsequent stage, articles in full text format were made available to reviewers to finalize the inclusion process.

Eligibility criteria The inclusion criteria for selecting the studies were: observational studies, including prospective and retrospective cohort, case-control and cross-sectional studies; present the variables of frailty and oropharyngeal dysphagia in the theme; appear as a study carried out in the hospital environment; involve elderly people aged ≥ 60 years; be published in any language, without limitation on publication date. Exclusion criteria were: not presenting categorization of patients in the condition of frailty and/or presence of oropharyngeal dysphagia; involve an oncological population (different etiologies of dysphagia); appear as case reports, letters to the editor, abstracts in conference proceedings, dissertations, theses, monographs and review articles.

Source of evidence screening and selection

The article selection tool (Rayyan) was used, an instrument that allows access by multiple researchers, the identification of duplicate articles, reading of titles and abstracts and the organization of studies for references in separate folders. First, duplicates were identified and only one of the titles was retained. In the subsequent stage, articles in full text format were made available to reviewers to finalize the inclusion process. The researchers, reviewers, are professionals with expertise in gerontology and linked to a Multi-professional Research Group on Elderly People.

In the third stage of the review, the articles were read in full, to categorize them and extract the data into a spreadsheet using the Microsoft Excel® Office 365 software. The following data were extracted: author's name, year, sample size, country, study design, age or lower age limit, objectives, diagnostic instrument and/or screening for dysphagia and frailty and level of evidence, objectives and results.

In the fourth stage, a critical reading of the articles was carried out with the aim of synthesizing the available information and the level of evidence was classified.

Data management The data will be organized according to the PRISMA protocol, for analysis of exclusions and inclusions.

Language restriction No language restriction.

Country(ies) involved Brazil.

Keywords Aged; Inpatients; Hospitalization: Dysphagia; Frailty.

Contributions of each author

Author 1 - Larissa Teleginski Wardenski - Creation of the search strategy, comparative analysis of inclusion and exclusion of the studies researched, description of the results.

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