Self-care for oral hygiene in adults and older adults in the field of nursing: a scoping review protocol

Autocuidado para higiene oral em adultos e idosos no campo da enfermagem: protocolo de revisão de escopo

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Submission: 03/04/2022
Approved: 01/17/2023

ABSTRACT

Objective: To map available evidence on the antecedents, attributes, and consequences of self-care for oral hygiene in adults and older adults in the nursing field. **Method:** The study will be conducted according to the Joanna Briggs Institute's methodology. As eligibility criteria, the population of adults and older adults, the concept of self-care for oral hygiene, and the context of nursing care environments will be used. In the search strategy, relevant words will be searched in the titles and abstracts, initially in two databases, which will help achieve the final search strategy for all databases, and, finally, the references of the included studies will be consulted. The databases consulted will be Medline/Pubmed, CINAHL, Scopus, LILACS, Web of Science (WOS), and IBECS. The grey literature search will include the CAPES thesis, dissertation bank, and OpenGrey database. The results will be reported according to the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.
Descriptors: Self Care; Oral Hygiene; Nursing.

RESUMO

Objetivo: Mapear evidências disponíveis sobre os antecedentes, atributos e consequentes do autocuidado para higiene oral de adultos e idosos, no campo da enfermagem. **Método:** Conduzido conforme a metodologia do *Joanna Briggs Institute*. Como critério de elegibilidade, serão utilizados a população de adultos e idosos, o conceito de autocuidado para a higiene oral e o contexto dos ambientes de cuidado de enfermagem. Na estratégia de busca, serão pesquisadas palavras relevantes em título e resumo, inicialmente em duas bases, que auxiliará na estratégia final de busca para todas as bases e, por fim, serão consultadas as referências dos estudos incluídos. As bases consultadas serão: Medline/Pubmed, CINAHL, Scopus, LILACS, Web of Science (WOS) e IBECS. Para busca de literatura cinzenta, serão utilizados os Catálogos de Teses e Dissertações da CAPES e a base OpenGrey. Os resultados serão redigidos de acordo com o *Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews Checklist*.
Descritores: Autocuidado; Higiene Bucal; Enfermagem.

INTRODUCTION

Oral health is one of the determinants of a population's psychosocial well--being, directly influencing individuals' quality of life[1]. However, several external and internal factors, such as physical, psychological, social, economic, and cultural issues, influence the achievement of good oral health.

Health professionals in different contexts face greater demands in oral hygiene care and greater complexity in this type of assistance[2]. The challenge is to carry out daily control in maintaining individuals' oral hygiene and stimulating, whenever possible, self-care.

Self-care is a concept of the human being's regulatory function, in which actions are taken to ensure the supply of materials necessary for the continuity of life, growth and development, and the maintenance of human integrity[3]. Daily oral hygiene can become more difficult with the impairment of general health and the reduction in self-care ability that often occurs with aging[4].

Self-care and oral health are correlated and, when impaired, can cause pain and suffering to individuals. In older adults, some aspects are more influential, such as limitations in cognitive function and executive dysfunctions, which restrict generic tasks, compromising the ability to perform oral self-care[5].

There are also conditioning factors for self-care, such as the individual's level of maturity, culture, health knowledge, placement in the family constellation and participation in social groups, health disorders, lack of self-care skills, and inappropriate habits[3].

Nurses have a scientific, servant, and assistant role in observing the oral hygiene self-care deficit. Anchored in the Self-Care Deficit Theory by nurse Dorothea Orem, nursing care can occur based on interpersonal relationships with actions, knowledge, and help, based on therapeutic needs, regulating the development and exercise of self-care[6].

The central idea of this study is to identify the concept of self-care for oral hygiene, considering that the person is the agent of his own care. This conception is in line with the evidenced theory when it states that self-care has a double connotation of care - of oneself and by oneself – as the individual initiates and acts on his own behalf to maintain life, health, and well-being[3]. Thus, this human response can be identified from a nursing diagnosis.

When faced with the phenomenon of oral hygiene self-care deficit, nursing actions range from encouraging self-management in tasks and educational actions to the functional performance of hygiene care while the individual is disabled. It is also possible to identify an individual at risk for the deficit early to prevent it, identifying characteristics and factors related to oral hygiene.

When considering the perspective of self-care, highlighted in Orem's theory, nursing attitudes can foster the individual's autonomy, placing him at the forefront of his own health decisions, emphasizing that situations of self-care deficits can result in diseases with mild or severe manifestations[7].

When reflecting on the current COVID-19 pandemic, for example, it is possible to understand the importance of effective nursing action in the face of oral hygiene self-care deficit through partially or fully compensatory actions for the individual. This is because, in the face of a COVID-19 infection, oral hygiene can reduce the bacterial load in the mouth and the risk of bacterial superinfection[8].

In professional activity, nurses develop clinical reasoning and decision-making skills, represented by the Nursing Process (NP), a potential instrument composed of diagnoses, interventions, and results. The NP is a care technology primarily focused on understanding the integrality of the human being, supported by reflection on practice, building through a body of knowledge specific to nursing expertise[9].

Concerning the expertise in maintaining oral health, nurses can reflect on the care of individuals' oral hygiene and the encouragement of self-care. One way to discuss this phenomenon and the NP is by analyzing the NANDA-International (NANDA-I) taxonomy, which offers standardized terminology for nursing diagnoses and presents a classification scheme.

NANDA-I is a benchmark in standardized language systems. Currently, the taxonomy has four diagnoses focused on self-care deficit: bathing, toileting, dressing, and feeding self-care deficit[8]. Therefore, there is a gap regarding the existence of a nursing diagnosis addressing the "oral hygiene self-care deficit".

Proposing this diagnosis is relevant, as it encourages reflections in the NP to offer a planned activity, frequently reassessed, documented, and anchored in evidence-based professional practice.

This scoping review is part of a research agenda, the initial phase for building a proposal for a nursing diagnosis. This review method was chosen because it allows mapping concepts more broadly, with various studies, regardless of quality. Thus, it offers a representation of the existing evidence, clarifying the concept of oral hygiene self-care, demonstrating the fields that study this theme and the respective gaps, and pointing out the countries of origin and the year of publication of these studies, among other reflections. As a starting point, this review asks: What is the concept of oral hygiene self-care in adults and older adults in nursing care settings? To formulate this question, we employed the Population, Concept, and Context (PCC) framework, which guided the material's search, reading, evaluation, and discussion.

Thus, this study aims to map available evidence on the antecedents, attributes, and consequences of self-care for oral hygiene in adults and older adults in the nursing field.

METHOD

This is a scoping review protocol registered on the INPLASY platform (202220034), available in full at inplasy.com (https://doi.org/10.37766/inplasy2022.2.0034).

The protocol development followed the JBI methodology, as provided in Chapter 11[11]. For this purpose, the PCC strategy was applied, as shown in Figure 1.

The following questions were elaborated on to achieve the research objectives: What is oral hygiene self-care? What does oral hygiene self-care require? What results from the oral hygiene self-care deficit?

Type of sources

The scoping review allows an overview, including the most varied evidence, allowing the construction of concepts from heterogeneous sources. Experimental and quasi-experimental study designs will be used, including randomized and non-randomized controlled studies, before and after studies, and interrupted time series studies. Analytical observational, prospective, and retrospective cohort, case-control, and cross-sectional studies will also be considered. In addition, descriptive observational study designs will be considered, including case series, individual case reports, qualitative research, and clinical practice guidelines. Systematic reviews and meta-analyses will also be included. Information from relevant organizations, including government reports, such as clinical practice manuals and guidelines related to this scoping review, will be considered, as well as theses, dissertations, and opinion articles.

As the intention of carrying out this study is to allow the first stage of construction of a nursing diagnosis concept, these search strategies will allow the collection of different materials and databases which corroborate the diagnostic construction steps.

Information sources

The following databases will be used for the review: MEDLINE/Pubmed, CINAHL, Scopus, Web of Science (WOS), LILACS, and IBECS. Additionally, the thesis and dissertation bank of the Coordination of Improvement of Higher Education Personnel (CAPES) and the OpenGrey platform will be searched.

Search strategies

The search and selection of studies will be carried out in three phases. Access to the content will be provided through the Federal University of Bahia, via the Federated Academic Community, and through the CAPES portal, in which the documents are available in full format via this platform. Initially, the Medline/Pubmed and CINAHL databases will be used to test the keywords and search strategies (Figure 2).

The first search phase points to words from the text in the title and abstract and the index terms that describe the articles. In the second phase, a complete search will be carried out in the other databases using the keywords and index terms identified in the initial search. The need to adapt the search strategies for each database will be considered, and this step will be built with the help of a librarian.

In the third search phase, the reference lists of all literature that meet the eligibility criteria of this review will be examined. If necessary, the studies' authors will be contacted to obtain more information.

Selection of studies

The data collection in the databases will be carried out by two reviewers who will select studies individually, in different machines, and simultaneously. At the end of each search step, the studies found through title and abstract screening will be organized in Excel spreadsheets.

Population	The participants will be adults and older adults aged from 18 years old and above.
Concept	This review will consider studies that report on self-care, specifically the lack of it. It presents the intention of extracting, from the bibliographies found, the consequences of the self-care deficit in individuals (outcomes), what this self-care requires (related factors), and how this phenomenon occurs (defining characteristics).
Context	Aspects involving oral hygiene self-care in various nursing settings, such as hospitals, long-stay institutions for older adults, homes, and primary health care centers.

Source: Elaborated by the authors, 2022.
Figure 1 - PCC strategy to be used in the scoping review. Salvador, BA, Brazil, 2022

Medline/Pubmed
(“Aged”[MeSH Terms] OR “Aged”[All Fields] OR (“aged 80”[Title/Abstract] AND “over”[Title/Abstract]) OR “frail elderly”[Title/Abstract] OR “Elderly”[Title/Abstract] OR (“Adult”[MeSH Terms] OR “Adult”[All Fields] OR “adults”[All Fields] OR “adult s”[All Fields]) OR “young adult”[Title/Abstract] OR “middle aged”[Title/Abstract]) AND (“Self-Care”[MeSH Terms] OR (“Self”[All Fields] AND “care”[All Fields]) OR “Self-Care”[All Fields] OR ((“Self-Care”[MeSH Terms] OR (“Self”[All Fields] AND “care”[All Fields]) OR “Self-Care”[All Fields]) AND (“deficit”[All Fields] OR “deficits”[All Fields])) OR “self management”[Title/Abstract] OR “Habits”[Title/Abstract] OR “health behaviour”[Title/Abstract] OR ((“model”[All Fields] OR “model s”[All Fields] OR “modeled”[All Fields] OR “modeler”[All Fields] OR “modeler s”[All Fields] OR “modelers”[All Fields] OR “modeling”[All Fields] OR “modelings”[All Fields] OR “modelization”[All Fields] OR “modelizations”[All Fields] OR “modelize”[All Fields] OR “modelized”[All Fields] OR “modelled”[All Fields] OR “modeller”[All Fields] OR “modellers”[All Fields] OR “modelling”[All Fields] OR “modellings”[All Fields] OR “models”[All Fields]) AND “orem self care”[Title/Abstract])) AND (“oral hygiene”[MeSH Terms] OR (“Oral”[All Fields] AND “hygiene”[All Fields]) OR “oral hygiene”[All Fields] OR “oral health”[Title/Abstract] OR “Toothbrushing”[Title/Abstract] OR “Tooth”[Title/Abstract] OR “dental prosthesis”[Title/Abstract] OR “Dentures”[Title/Abstract]) AND (“nursing”[MeSH Terms] OR “nursing”[All Fields] OR “nursings”[All Fields] OR “nursing”[MeSH Subheading] OR “breast feeding”[MeSH Terms] OR (“breast”[All Fields] AND “feeding”[All Fields]) OR “breast feeding”[All Fields] OR “nursing s”[All Fields] OR (“nursing”[MeSH Subheading] OR “nursing”[All Fields] OR (“nursing”[All Fields] AND “care”[All Fields]) OR “nursing care”[All Fields] OR “nursing care”[MeSH Terms] OR (“nursing”[All Fields] AND “care”[All Fields])) OR “Nurses”[Title/Abstract])

CINAHL	
S1	(aged or elderly or senior or older people or geriatric) OR (aged, 80 and over) OR aged: 65+ years OR (frail elderly or aged or older or elder) OR (adults or adult or middle aged or young adult or older adult)
S2	(self care or self-care or self-management or self management) OR self care deficit theory orem OR self care deficit OR habits OR oral health behaviour
S3	(oral hygiene or oral care or mouth care or oral health) OR (toothbrushing or tooth brushing or brushing teeth) OR dental prosthesis OR (dentures or denture care)
S4	(nurse or nurses or nursing) OR nursing care
S1 AND S2 AND S3 AND S4	(aged or elderly or senior or older people or geriatric) OR (aged, 80 and over) OR aged: 65+ years OR (frail elderly or aged or older or elder) OR (adults or adult or middle aged or young adult or older adult) AND (self care or self-care or self-management or self management) OR self care deficit theory orem OR self care deficit OR habits OR oral health behaviour AND (oral hygiene or oral care or mouth care or oral health) OR (toothbrushing or tooth brushing or brushing teeth) OR dental prosthesis OR (dentures or denture care) AND (nurse or nurses or nursing) OR nursing care

Source: Elaborated by the authors, 2022.

Figure 2 - Strategies used in Medline/Pubmed and CINAHL. Salvador, BA, Brazil, 2022

The search will consider materials published after 1985 since this year is a milestone in Nursing with the publication of the General Theory of Nursing by the American nurse Dorothea Orem. The elaboration of studies for the development of the theory began in the 1950s. In 1971, nursing conceptions were published, and other improved versions came along[6]. The theory was developed when, in 1985, the Self-Care Deficit Theory was presented, based on the nursing model, one of the first Nursing Theories[12].

Furthermore, this scoping review will include studies published in English, Spanish and Portuguese. Texts not meeting the eligibility criteria will be excluded, recorded, and reported in the final report.

After the initial selection, as an eligibility criterion for full-text screening, studies on adults over 18 years of age that report on oral hygiene self-care in nursing contexts will be considered. For this, an independent and dynamic title and abstract screening will be conducted by the pair of reviewers, looking for the material that presents elements according to the inclusion criteria. Subsequently, there will be a new reading of the full texts, applying the inclusion criteria.

Duplicates will be manually excluded and counted only once. Disagreements that arise in the process will be resolved by a third reviewer with expertise in the subject, who will give the final opinion.

Title	Year	Design/ Participants	Antecedents	Attributes	Consequences

Source: Elaborated by the authors, 2022.

Figure 3 - Data to be extracted from the literature included in the review. Salvador, BA, Brazil, 2022

Search for in-progress reviews

A preliminary search for systematic reviews was conducted in the Cochrane Register of Control Trials and the JBI database of systematic reviews to propose this review and confirm its distinctive character. No current or pending systematic review related to the object of study was found. In the review protocol databases, such as IOS and Fighshare, it was possible to find a Norwegian review number 10.17605/OSF.IO/K6P8R[13], which is being developed in the field of Dentistry and does not present the same questions as the proposed review protocol. It is understood that this is a different field of approach and that the study uses different inclusion criteria and languages of our proposal. The present study proposes searches in Portuguese, Spanish, and English, while the ongoing review uses English, Norwegian, Danish and Swedish, which impacts the results. This impact is based on social, cultural, and economic determinants for the object of study in question.

Data extraction

Eligible articles will be retrieved in full and undergo full-text review by a pair of independent reviewers. A spreadsheet will be used for data extraction, which will contain detailed information on the selected material, such as year, study design, participants, results, discoveries about the antecedents and attributes of oral hygiene self-care, and the consequences of the absence of this phenomenon in adults and older adults. Through a pilot test, the reviewers will evaluate a data collection plan (Figure 3) in advance. It is noteworthy that this instrument may be reformulated during the study based on the readings, as new elements of the defining characteristics and related factors will probably be identified.

Data presentation

Figures, tables, and graphs may be used to represent the data directly toward the review's objectives. Accordingly, descriptive and reflective writing will correlate with the review question. Upon reaching the results, to guarantee the transparency and quality of the report, the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) will be used[14].

Ethical considerations

As this review will present the results of published research studies, an ethics committee analysis is not required. It should be noted that the credits of all material found will be properly cited.

CONFLICT OF INTEREST

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

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