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ORAL HEALTH OF DEPENDENT ELDERLY AND THE CAREGIVER'S KNOWLEDGE: INTEGRATIVE REVIEW

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ABSTRACT

Objective: to identify caregivers' knowledge about the oral health of dependent elderly people.

Methods: A research about this thematic was performed in the Medline databases through PubMed, Cinahl, PsycINFO, Web of Science and Scopus, using the indexed descriptors "frail elderly", "oral hygiene", "oral health" and caregivers. 85 articles were found and 4 of them composed the sample.

Results: Caregivers presented deficits in knowledge regarding the most adequate oral care for the elderly, especially the functionally dependent ones. They also showed difficulties in implementing learning, due to the complexity of care demands and the lack of continuous training.

Conclusions: The caregiver is often faced with complex care demands that lead him to prioritize other actions at the expense of oral health care. Actions that address their activity are required, since their training, with the offer of knowledge on oral health, as well as public policies for care, in which their work process is considered as an influencer of care.

Keywords: Fragile elderly; oral hygiene; oral health; caregivers.

INTRODUCTION

The increase in the elderly population has been a phenomenon experienced by several countries, initially occurred in developed countries, and more recently in developing countries. In Brazil, the demographic transition has promoted changes in the age structure very quickly and progressively, being necessary the appropriate coping in all segments those involve the process of population aging⁽¹⁾.

Among the main challenges, there are the provision of health services for the growing demand of the elderly; who, due to the pattern of chronic diseases and multiple, constitute the age range that most demand hospitalizations, constant care, medicines and examinations⁽²⁾.

Considers that the non-transmissible chronic diseases became an issue of public health, brought about by the changes in the pattern of morbidity and mortality imposed by longevity. Associated with physical limitations, functional and cognitive symptoms of aging, this scenario may culminate in functional disability and a greater degree of dependence of the elderly person⁽³⁾.

In this context arises the figure of caregivers of elderly people. From goals established by specialized institutions or directly responsible, they have the task of ensuring the welfare, health, nutrition, personal hygiene, education, culture, recreation and leisure to the assisted person, should stimulate self-care, self-empowerment and autonomy, in accordance with the functional capacity of the elderly or take the integral care when needed⁽⁴⁻⁵⁾.

The oral health care is part of the basic activities of the caregiver and a poor oral hygiene has been related to the occurrence of local and systemic diseases, with consequent loss of the general condition and deterioration in the quality of life of the elderly⁽⁶⁾.

The literature has pointed out that caregivers show difficulties in performing the oral hygiene of dependent elderly. Several factors those include refusal of the elderly to the procedure, lack of time before other care, fear of harming the elderly, lack of training for the task and even disgust in implementing hygiene are marked as stops to perform the procedure⁽⁷⁻⁸⁾.

From the foregoing, this study aims to identify the studies about knowledge of caregivers about the oral health of dependent elderly. The learning acquired will enable the adoption of improvements in training/qualification of caregivers, minimizing the deficiency of adequate formal training for the conduction of this care.

METHOD

For the conduction of the study, we used the integrative review of the scientific production, which allows a better systematization of knowledge to be investigated and uses different designs in the same research, combining the findings to the opinion of the author himself⁽⁹⁾.

The process of construction of the integrative review is outlined in the literature with some conceptual differences and description between authors. As recommended steps for its elaboration, there are suggested the following stages, which were implemented in this study: 1 - Preparation of guiding question; 2 - Search of articles in the databases of indexed; 3 - Data Collection; 4 - Reading and appreciation of selected studies; 5 - Discussion of results; 6 - Summary of the knowledge and exposure of the integrative review.

The definition of the theme and selection of the guiding question were based on the following perspective: "What is the knowledge of caregivers about the oral health of elderly dependents in the last ten years?"

For research in literature, there were defined five databases: MEDLINE via PubMed, CINAHL (Cumulative Index to Nursing and Allied Health Literature), PsycINFO, Web of Science, Scopus and those performed digital searches, using the descriptors indexed on Mesh terms: “frail elderly”, “oral hygiene”, “oral health” and “caregivers”. The search strategy was performed in accordance with the specificities of each database, always in compliance to the guiding question.

Then, there were determined the inclusion criteria those considered: (a) articles published in English, Portuguese and Spanish; (b) primary studies; (c) articles with caregivers of elderly as subjects, regardless of age, sex, length or location of the activity; (d) articles indexed in at least one database; (e) articles published between 2007 and 2017. As exclusion criteria, there were considered as case studies, theses, dissertations, papers presented at conferences, editorials, and texts of handouts, opinion articles and other articles of revision.

The selection of the initial sample was composed of 85 documents. The process of selection of sample for the study was based on the checklist PRISMA (Main Items for Reporting Systematic Reviews and Meta-Analyzes).

After the removal of duplicated articles (N=4), the quantum was reduced to (N=81). Continuous act to this first cut, there were read the title of articles in search to the guiding question, being 69 excluded, because they did not meet the question. From these filters, remained 12 full articles and possibly eligible. After reading the abstracts and with the application of other criteria, there were excluded more eight, leaving the final sample four articles in the review.

In order to represent didactically the sample selection of this research and make the methodology conducted by researchers, the more easily understood; we chose to use a diagram, as shown in Figure 1.

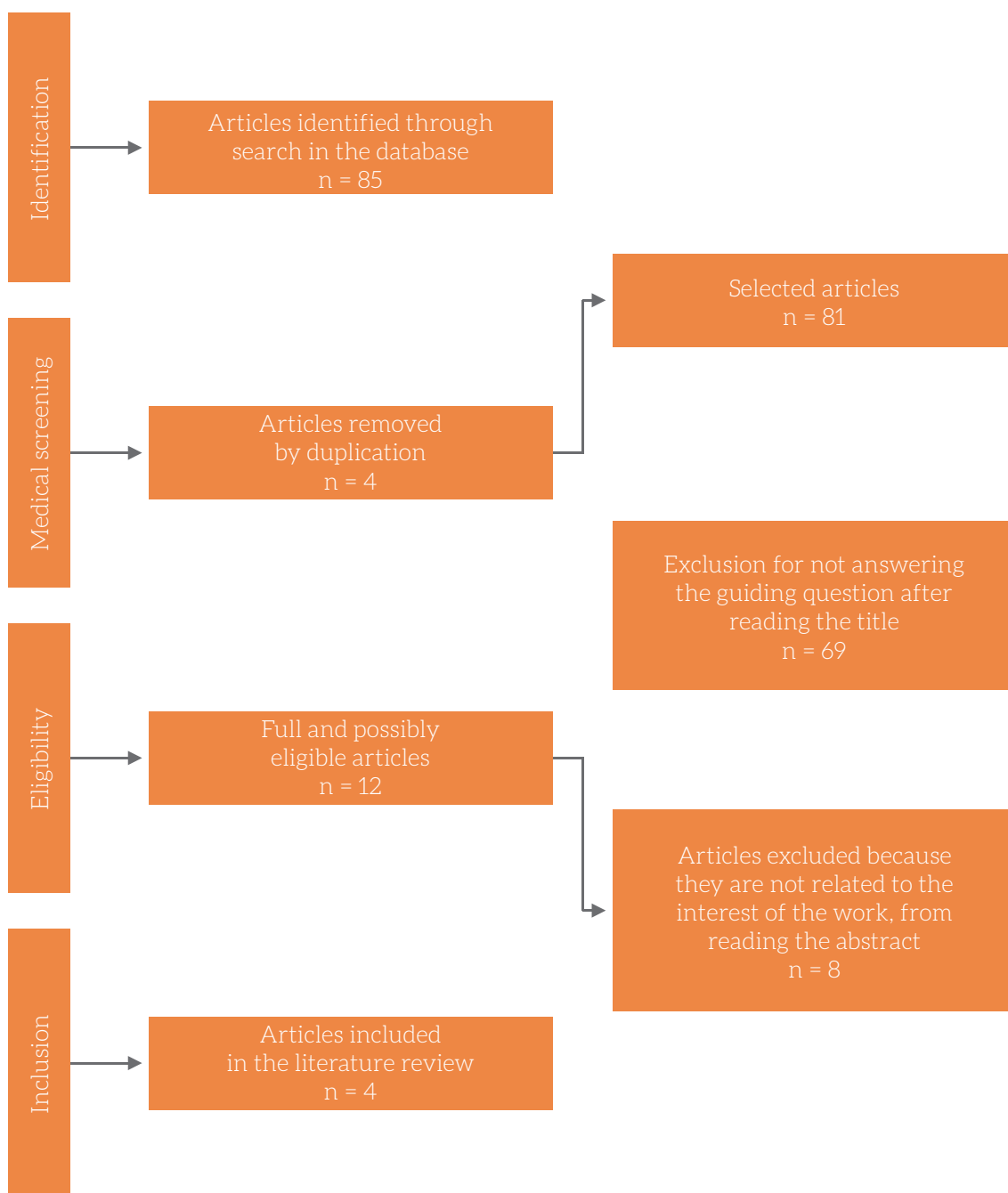


Figure 1 - Sample selection process of articles identified about the knowledge of caregivers on the oral health of dependent elderly. João Pessoa, PB, 2007-2017.

RESULTS

Although we adopt the perspective of evaluating the knowledge of oral health of caregivers of dependent elderly, in the present study we stress the lack of research in the area. We verified the scarcity of scientific work in four, from the five selected databases: Medline (PubMed): 9; CINAHL: 3; PsycINFO: 00; Web of Science: 2. Only the database Scopus presented a significant amount of works, totaling 71 articles.

In the stage of summarization of scientific evidence, there was used an instrument (Table 1) for recording of information, with the formation of the database of the research, according to the available evidence in the articles. The items included in the summary table were: a) title, (b) author/year/country, c) type of study/objective, d) sample and (d) main results.

Table 1 – Characterization of the sample articles on the knowledge of caregivers about the oral health of dependent seniors, according to title, author/year/country, type of study/objective, sample and main results. João Pessoa, PB, 2007-2017.

Title	Author/Year/Country	Type of study/objective	Sample	Main results
<i>Culturally and linguistically diverse (CALD) carers' perceptions of oral care in residential aged care settings in Perth, Western Australia</i>	Bola Adebayo, Angela Durey and Linda M. Slack-Smith 2016 Australia.	Exploratory qualitative research. To explore the perceptions of caregivers of African oral health migrants working in child day-care centers and to investigate their view for oral care for older residents.	15 caregivers 10 F 5 M	Participants related good oral health to general health and well-being, high esteem, disease prevention and healthy nutrition. The majority do not perform oral prevention; have mentioned barriers to oral care and insufficient training for caregivers.
<i>Caregivers' attitudes regarding oral health in a long-term care institution in Brazil</i>	Roger Junges, Fernando Freitas Portella, Fernando Neves Hugo, Dalva Maria Pereira Padilha and Susana Maria Werner Samuel 2012 Brazil.	Cross-sectional study. Evaluate attitudes and considerations of caregivers about oral health and oral health practices in an ILP.	24 caregivers F 18 M 6	Most caregivers received training for oral hygiene care, received ILP inputs for this care, but mentioned barriers in the practice of oral care, especially the lack of cooperation of the elderly and lack of time.
<i>Oral health practices and beliefs among caregivers of the dependent elderly</i>	Constanza Garrido Urrutia, Fernando RomoOrmaza' bal, Iris Espinoza Santander and Darinka MedicsSalvo 2011 Chile.	Cross-sectional study to compare the oral care practices of formal and informal caregivers of dependent older adults and their beliefs about oral health.	21 formal caregivers and 18 informal F 38 M 1	Formal caregivers were more trained; but showed less frequent oral hygiene knowledge when compared to informal caregivers. In oral care practices as well as oral health beliefs there were no significant differences between the two groups. The conduct with dental prostheses was better developed among informal caregivers.
<i>Oral care for frail elders: Knowledge, attitudes, and practices of long-term care staff</i>	ShafikDharamsi, B.Ed., B.S.D.H., M.Sc., Ph.D.; KhairunJivani, M.Sc.; Charmaine Dean, Ph.D.; Chris Wyatt, D.M.D., M.Sc., FRCD(C) 2009 England.	Cross-sectional study. To examine the impact of educational activity on caregiver practices in providing oral care, to identify facilitators and barriers, and to assess caregivers' self-perception of their oral health.	26 caregivers	Caregivers recognize daily mouth care as part of their duty, but indicated workload and older people's resistance to oral care due to physical and cognitive disability, which undermines the daily provision of oral care.

DISCUSSION

The literature has pointed out the complications arising from a poor oral health in the elderly. Oral problems, such as pain, infection, inability to eat or to communicate, in addition to general problems such as malnutrition, dehydration, brain abscesses, articular infections, cardiovascular disease, changes through diabetes mellitus and pulmonary infections may be related to poor oral health, causing a negative impact on the quality of life of the elderly and their families^(6,10).

It is supposed that two important factors contribute to a greater chance of deterioration of the state of oral health in frail elderly and disabled. Firstly, the advances in oral health care and treatment resulted in a reduced number of individuals toothless and the proportion of those who retain their teeth until the end of life has increased substantially. Secondly, self-care neglected and/or the professional care have led to a reduction of the use of oral health care. However, cognitive and functional impaired abilities, hyposalivation induced by medications, reduced ability of saliva cap and high acidity salivate, diabetes mellitus, number of radicular surfaces exposed due to gum recession, poor oral hygiene, high frequency of consumption of sugar and unfavorable socioeconomic conditions are the main predisposing conditions for the outbreak of caries in older population groups. Although in recent years there has been an ever-greater attention to the improvement of oral health care for frail elderly, there is ample evidence showing that the oral health of these people, in particular of residing in nursing homes, is (still) poor. The poor state of oral health can be considered as a new geriatric problem in frail elderly, which deserves urgent attention of scientists, health providers and policy makers⁽¹¹⁾.

The included studies aimed at evaluating the knowledge about oral health of caregivers of dependent elderly concerning the practices implemented in oral care, implemented routine activities, instrumental resources and materials used. Their perception on the importance of oral health in the dependent elderly group, the existence of difficulties in providing care, as well as the existence of specific training for the care.

Oral health has often been related to general health from a perspective that maintaining both under satisfactory conditions promotes reciprocal benefits, while an imbalance in oral health can lead to local problems and systemic, especially in bedridden patients^(6,12).

Problems arising from poor oral hygiene of the elderly are usually reported.

In Egypt, this study aimed to evaluate the effect of an educational program on the quality of life of the elderly in oral health. It was a quasi-experimental research with pre-test and post-test performed in a geriatric social club. A purposeful sample with 75 elderly patients who met the inclusion criteria of the study. Five instruments were used for data collection and it was evident that the participants' age ranged between 60 and 82 years old, with an average of 69.25 ± 7.53 years, with more women. Furthermore, the results showed statistically significant improvements in post-program knowledge about oral health, oral self-care practices and evaluation of oral health. The program of education in oral health has been shown to be effective in improving the quality of life of the elderly⁽¹³⁾.

A study conducted in countries such as the Netherlands, Greece, Italy, Belgium, and Switzerland, and Austria, and others, showed that in relation to the role of physicians, particularly those of primary care, geriatricians and doctors of elderly in communities and institutions for long term care, they should look to the assessment and oral health promotion in critical frail elderly, as has been emphasized in recent European recommendations.

All physicians must understand the importance of oral health and make an initial medical screening of the health of the mouth in the evaluation and routine medical care. A brief interview with patients and caregivers about the current practices of oral health can help to assess the risk of quick deterioration of oral health. The advice on this health should include guidance on oral hygiene and mucous membranes every day; maintenance of dentures; dietary counseling; recommendations to stop smoking; limitation of harmful alcohol consumption; management of xerostomia and frequent dental revision. Physicians should receive appropriate education at undergraduate and graduate students, as well as the provision of appropriate courses of continuing education⁽¹⁴⁾.

In Brazil, research conducted in Minas Gerais described the oral health of elderly living in long-term care institutions. A sample of 335 elderly people over 60 were randomly selected. The data were collected from the records of the institutions, through interviews and clinical examination of the oral cavity. There was evaluated the oral hygiene, caries coronary and radicular and periodontal disease. Plaque was observed in 76% of the tooth surfaces and 57% of elderly users of complete upper dentures showed a plaque in at least one of the surfaces; 57.1% had radicular caries experience. The majority (78.2%) presented as worse periodontal state null sextant and 64.5% of the sextants valid presented periodontal from 4mm to 5mm and 47% loss insertion of 4mm to 5mm (47%). There was found that the oral health of the elderly was precarious, represented by poor oral hygiene, high caries experience, sharp tooth loss and the presence of periodontal⁽¹⁵⁾.

The caregiver assumes partially or in full the burden of care actions in cases of functional dependence and these are performed with different degree of complexity. In this context, the care activities may require physical and mental effort from the caregiver even for the achievement of a toothbrushing, basic procedure of oral health care⁽¹⁶⁾.

Studies suggest that caregivers present difficulties in the implementation of the activities of dental care in the elderly dependent, due to several factors, such as cognitive deficit in the elderly, difficulty of buccal opening, refusing the procedure and the lack of ability in the provision of care. It is understood that the achievement of oral hygiene in functionally dependent elderly requires skills and abilities of the person responsible⁽¹⁷⁻¹⁸⁾.

Among the articles analyzed in the present study, we observed that the practices and routine of care implemented by caregivers, there was significant variability of behavior, which included since the lack of oral hygiene activities to practice any care. Even before the existence of protocols intended for the execution of the oral health care, these modifications suffered by the caregiver regarding the frequency of activities, being alleged lack of time before other care.

Concerning the availability of materials and instrumental to the oral hygiene of the elderly, there were mentioned the existence of resources for the provision of care in the ILP. More significantly, the use of materials of basic hygiene: toothbrush, toothpaste and toothbrush dentures were used; there is no record of the use of interdental hygiene by caregivers. Among the alternative inputs: mouthwash, gauze, cotton and towel were used, especially in patients toothless or when the caregiver claimed lack of time, showing the search for oral hygiene behaviors of quick implementation.

In one of the studies that addressed the procedure of oral hygiene between formal and informal caregivers, we found that the use of the material resources were best used by formal caregivers, except the nocturnal behavior with removable dentures for elderly, which were removed and wrapped, in their majority, by informal carers. Another inadequate practice that draws attention is the use of hard dental brush for oral hygiene of dependent elderly.

Caregivers deprived of adequate knowledge about the oral health in the elderly can practice the same hygiene activities practiced in themselves, which can negatively interfere in care. Thus, it emphasizes the importance of specific and continuous training of persons, in respect of the implementation of oral hygiene, especially in the elderly dependents. It is important to consider the prior knowledge, experience and life experience of the caregiver, associating their cultural practices to the guidelines of the dental surgeon⁽⁵⁾.

The inappropriate use of inputs for oral hygiene can cause traumas in the mucosa of the weakened elderly, due to the presence of hyposalivation associated to the use of medications of continuous usage, making the periodontal tissues more susceptible to injuries and diseases. Also deserves special attention to oral hygiene of elderly patients with swallowing disorder, in which the caregivers should perform the procedure with utmost attention, in order not to promote in the elderly, the pulmonary aspiration of content coming out of the mouth. Thus, it is understood that the use of these resources by caregivers, especially in dependent patients, must be preceded by a professional guidance of dental surgeons, since the complexity of actions, as well as the local and general risks arising from this care^(8,19).

The difficulties pointed out by caregivers in the present study are comprehensive and understand various aspects of the provision of care. The issues were identified from an organizational order of service, such as: shortages of staff, pay issues, lack of time to perform oral hygiene. In addition to issues on the schedule of care, such as: lack of specific training, limited cooperation of the elderly to the procedure and also cultural issues, in which caregivers mentioned dislike in performing oral hygiene and the use of prostheses.

It is known that the use of resources and appropriate techniques, as well as the systematization of procedures, facilitates the implementation of dental care, especially in patients less cooperative, making the proceeding safer for the elderly and less tiring and stressful for the caregiver⁽²⁰⁾.

In relation to the perception of caregivers about the importance of oral health for the health of the elderly, we observed that, among those who claimed to be fundamental relationship between oral health and generally mentioned the benefits for nutrition and well-being of the elderly. However, when questioned regarding their oral health, the majority only sought the dentist in dental pain, which denotes the low perception regarding the need for preventive care.

The existence of training for the oral care of the elderly showed conflicting situations in the present study: the majority of caregivers had received instructions on how to proceed to the care of the mouth; however, similar difficulties were pointed to the continuity of actions on a day-to-day basis. There was identified that formal caregivers received more instructions than the informal ones and that there was a regular program of continuing education for them, which made the little knowledge applicable in cases of elderly less cooperative, and with sequels.

The knowledge, attitudes and actions of the caregiver in relation to his own oral health influence in the provision of care for the elderly. In addition, fear (fear of being bitten, spit, hit or kicked, etc.) as well as beliefs and negative attitudes of caregivers can become an obstacle to good oral health of those assisted⁽¹⁶⁾.

The deficit of knowledge and skills of caregivers is already well known in the literature. Authors point out the need for training of the caregiver allied to a program of continuous education in oral health. It is essential for this professional the understanding of the harmful effects of a poor oral hygiene in the health of the elderly, in addition to other specific demands of the public geriatric group^(10,21-22).

The discordant behavior presented among caregivers considers that oral health is important and the errors presented in the implementation of the procedures of oral care was identified in other studies⁽¹⁸⁻²³⁾. In addition, this behavior was confirmed by identifying inadequate oral care practices and difficulties in the management of the elderly functionally dependent, being mentioned the difficulty to access to the oral cavity and the cognitive constraints of the elderly⁽⁸⁾.

Several challenges are present in the routine care of the caregivers, regarding the implementation of the oral care. These difficulties are related to their working conditions, the conditions of health of the elderly and the sociocultural context they are inserted. These challenges should be addressed through actions that include all persons involved in the process of taking care of elderly people, as well as through public policies and intersectoral collaboration for the training and improvement of the actions of the caregiver⁽²⁴⁾.

The lack of studies about the actions of oral health care by caregivers in the elderly, associated to the different approaches adopted in the articles of research, constituted the main limitations of this study. Before a place of great demand for medical care, the caregiver may not elect the actions of oral care as a priority, taking the elderly health complications. From the foregoing, this study promotes improvements in the understanding of the universe of care of the caregiver, in the perspective of oral health, allowing the adoption of possible interventions in the fields of education and employment.

CONCLUSION

The study provided diagnose the knowledge of caregivers of elderly dependent on oral health. It was identified that the majority of caregivers, even having received previous guidance or when an oral care protocol had could not implement the knowledge learned by several factors: workload, lack of specialized knowledge and continued management of elderly with cognitive limitations, limited perception about preventive actions and unfavorable beliefs. We found that the use of basic features of oral hygiene and auxiliary inputs, as well as the adoption of practices of quick implementation by the caregiver, in a context of high demand for medical care.

From the foregoing, actions are needed to address this professional activity in a comprehensive way, since its formation, with the offer of knowledge on oral health, as well as through public policies for the care, in which the working process of the caregiver is considered as influencer of assistance. It is understood that continuing education programs in oral health must be present in the environments of the caregiver, as a way to facilitate the overcoming of difficulties experienced in daily life and promote the shift of unfavorable beliefs. Such measures, together, will allow you to better condition for the performance of the actions, among them those of oral health.

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