


Palliative care in dentistry: Literature review

 <https://doi.org/10.56238/sevened2024.010-070>

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ABSTRACT

Palliative care seeks to provide quality of life through an interdisciplinary team capable of providing effective and comprehensive assistance to the patient in their final moments, and their family. In this sense, this work aims to address palliative care in dentistry. Several conditions act as a supporting or main factor in the development of oral problems in palliative patients. Among the main causes are nutritional deficiency, difficulty in oral hygiene, pharmacological and collateral therapies and dehydration, with xerostomia being the most frequent problem, followed by oral candidiasis, dysphagia, mucositis, orofacial pain, changes in taste and ulcers. However, the initiation of dental intervention is difficult, as many patients believe that oral manifestations are typical and inherent to diseases or because they lose the ability to communicate about their

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discomforts. Thus, the importance of including the dentist in the care of the palliative patient is verified to alleviate pain and the occurrence of complications, as well as to guarantee care for this individual.

Keywords: Palliative care, Dentistry, Oral health, Quality of life.



INTRODUCTION

Brazil has faced a process of changes in the demographic and epidemiological profile over the years, resulting in the formation of a population with specific health conditions mainly linked to aging (Pereira, Alves-Souza, Vale, 2015). In addition, there is also a change in the profile of illness, which estimates that a large part of the population may contract oncological or chronic-degenerative diseases that lead to long periods of suffering, and some of these conditions are often little benefited by existing scientific and technological resources (Gomes, Othero, 2016; Pineli *et al.*, 2016). In this sense, patients who do not have the possibility of cure are considered fragile and limited physically, psychologically, socially and spiritually, which motivates the need for a new form of care.

As a result of the changes imposed by the disease, palliative care emerged with the objective of providing quality of life through an interdisciplinary team able to provide effective and comprehensive care to the patient and his family in their final moments (Hermes, Lamarca, 2013; Silva, Sudigursky, 2008). The term palliative care was used with the beginning of the modern *hospice movement*, an action created with the objective of changing the strategy to deal with these patients, bringing the focus to care, instead of the traditional emphasis on the disease, in addition to bringing innovative proposals for the approach and care of patients, as well as their surroundings. during the phase of illness and mourning (Floriani, 2009). In this sense, the structure of the movement was established in 1967, with the inauguration of the *Saint Christopher's Hospice Foundation*, being the first service to offer care for patients with advanced disease, under the direction of Dame Cicely Saunders, a nurse who dedicated her efforts to carrying out such care (Pineli *et al.*, 2016).

Over the years, the concept of palliative care has been consolidated, being defined, in 2002, according to the World Health Organization (WHO), as an approach that aims to improve the quality of life of adults and children facing life-threatening diseases and their families (Oliva, Miranda, 2015). The WHO also reports that this intervention is done with the prevention and relief of suffering, through early identification, correct assessment, treatment of pain and physical, psychosocial or spiritual problems. In 2014, the *Worldwide Palliative Care Alliance* (WPCA) added to the concept of palliative care the information that there is no life span or prognosis that determines the indication of this conduct, but rather the patient's need (Pineli *et al.*, 2016).

In effective palliative care, the understanding of the individual goes beyond the disease, and it is essential to consider them in their totality, preserving their right to autonomy in decision-making and access to information about their treatment (Oliva, Miranda, 2015). Palliative medicine is based on some principles, which aims to ensure the quality of life of patients in a humanized way, in addition to emphasizing the importance of a team able to help the patient and his family understand that death is a natural process, and although painful, it can happen in an environment of peace and



serenity. However, before the moment of mourning occurs, professionals should assist in valuing and affirming life, and offer support so that the patient is able to live as actively as possible until the moment of death (Silva, Sudigursky, 2008; Pineli *et al.*, 2016).

Palliative care is not related to the length of life, the hastening or anticipation of death, but rather focusing on ensuring a higher quality of life that can have a positive impact on the treatment of the disease (Oliva, Miranda, 2015). Therefore, it is possible to affirm that each case is individualized and the conducts are appropriate according to the therapy and the needs of the patient and his family (Silva, Sudigursky, 2008; Pineli *et al.*, 2016).

Hospitalized patients are usually dependent on care and often unable to maintain satisfactory oral hygiene, thus requiring the support of professionals who perform this and other interventions (Rabelo, De Queiroz, Santos, 2018; Oliveira, Montenegro, Lima, 2019). In this sense, Dentistry should be included in the palliative care team, in the care of individuals with active, progressive or advanced diseases, which may present oral manifestations, due to direct or not involvement of the oral cavity, caused by the disease or from its treatment (Sarri, Augusco, 2020), since the oral cavity can host numerous microorganisms, in addition to presenting side effects from drug therapy of the underlying disease (Rabelo, De Queiroz, Santos, 2018; Oliveira, Montenegro, Lima, 2019).

Because it is related to nutrition and speech functions, care for the oral cavity is even more necessary, since the impairment of these functions causes a decrease in quality of life (Rabelo, De Queiroz, Santos, 2018; Oliveira, Montenegro, Lima, 2019). In this sense, care for terminally ill patients must be based on respect for their integrality, in order to meet their needs and guarantee the right to a dignified death (Sarri, Augusco, 2020).

Based on the above, this study was developed with the objective of discussing palliative care in Dentistry, analyzing the importance of including the dental surgeon in the multidisciplinary team, as well as the appropriate approach in the treatment of these patients and the associated factors, with the main oral manifestations Presented.

METHODOLOGY

The theme of this narrative literature review is the practice of palliative care in the field of Dentistry. The search for scientific articles was carried out from August to November 2023, in the bibliographic databases Pubmed and Google Scholar (Scholar Google), using the following descriptors: palliative care and dentistry. The inclusion criteria were: original works, written in Portuguese or English. The exclusion criteria were incomplete articles or articles that did not adequately address the study theme. After the data collection stage, the references were analyzed by reading the title and the abstract, taking into account the defined inclusion and exclusion criteria.



Subsequently, the selected articles were read in full. In total, 29 articles met the inclusion criteria for this literature review.

LITERATURE REVIEW

Palliative care encompasses active and comprehensive care for the sick patient and also for their family, in order to assess, prevent, and alleviate physical, psychosocial, or religious suffering, aiming at a higher quality of life (Soares *et al.*, 2022). In this sense, some essential components of this care were identified, namely, the need for teamwork, management of pain and physical symptoms, holistic care, the existence of qualified, compassionate and responsive professionals, and the preparation of the patient and family. In addition, in order to carry out an efficient approach, it is important to identify the need for care early and have adequate dialogue with patients and their families (Singh *et al.*, 2021).

Considering that the need for care is concentrated in patients who have progressive and incurable diseases, or highly complex problems that do not have adequate treatment options, it is essential to work with a multidisciplinary team, one of which is the dental surgeon. As for palliative care in Dentistry, patients are submitted to procedures for the oral cavity directly compromised by the disease, or indirectly due to the treatments received. The approach dedicated to these patients should be based on respect, integrity, and ethics, paying attention to the uniqueness of each individual, with the objective of allowing them to carry out their daily activities and obtain quality of life (Soares *et al.*, 2022; Serra *et al.*, 2023; Yadav *et al.*, 2020).

Several conditions act as an adjuvant or main factor in the development of oral problems in patients with minimum survival expectancy. Among the main causes are nutritional deficiency, difficulty in oral hygiene, pharmacological and collateral therapies and dehydration (Magnani *et al.*, 2019). It is customary that dental care should pay attention to the maintenance of all soft tissues, collaborating with pain relief, prevention, and treatment, thus providing comprehensive quality of life or minimizing the clinical manifestations and symptoms of the disease (Dias *et al.*, 2021).

The bacterial plaque in the oral cavity can interfere with the systemic status of the patient due to the virulence of these microorganisms, in addition to the presence of other conditions can intensify the damage caused by these bacteria (Rabelo, De Queiroz, Santos, 2018). Thus, the stomatognathic system can be impacted by the presence of oral manifestations, such as ulcers, xerostomia, halitosis, dental caries, endodontic or periodontal abscess, with implications that affect people's physical, as well as emotional and social health. From this perspective, the lack of oral health care associated with difficulty in swallowing can result in a pulmonary infection due to aspiration or even death. In addition, compromised periodontal health can increase the chance of osteoradionecrosis in patients undergoing radiotherapy who have oral cancer (Yadav *et al.*, 2020).



In view of the severity of the other complaints, oral discomfort is usually less important to patients and consequently left aside, so that physicians are not informed about it (Dhaliwal *et al.*, 2022). In this sense, it is necessary for a dental surgeon to remain in the hospital environment in order to contribute to the diagnosis of oral alterations and assist in medical therapy. This professional will perform emergency, restorative and oral environment adaptation procedures, in order to prevent the worsening of the systemic disease and the appearance of hospital infection, in addition to ensuring comfort for the patient (Rabelo, De Queiroz, Santos, 2018).

Early diagnosis and treatment minimize pain and suffering, however, the beginning of the intervention is difficult, because patients in this situation lose the ability to communicate about the discomforts related to the oral cavity, or believe that these problems are not possible.

Demonstrations are inevitable. In addition, the appearance of oral abnormalities is variable, as well as the moment of the patient's admission to palliative care units.

Thus, treatable oral problems can occur for a long period of time, contributing to underreporting, failure of health professionals to intervene in these complications, and lack of knowledge about the ideal time to perform these interventions. Thus, it is essential that patients are asked about oral problems and that they are examined periodically to maximize the treatment of signs of oral pathologies (Venkatasalu *et al.*, 2020; Matsuo *et al.*, 2016).

Therefore, the extraoral inspection examination should be followed, which will investigate skin lesions, edema, lymphatic chains and their possible alterations, temporomandibular joint, masticatory muscles, asymmetries and other signs that characterize pathologies. Therefore, the follow-up for the intraoral examination will highlight the conditions of the soft tissues, salivary glands and aspects associated with saliva (Soares *et al.*, 2022).

The presence of oral problems can cause an emotional burden in palliative patients, reflecting on their coexistence. As a result, he tends to withdraw due to discomfort when coming into contact with other people, which generates anxiety, embarrassment, and worries. In addition, it has functional impacts by compromising their communication and contributing to the development of eating disorders (Venkatasalu *et al.*, 2020). Thus, in order to cope with the fear and anxiety of this patient, the dental surgeon's care should be based on humanization, seeking to demonstrate interest in their speech and allowing them to share their experiences and feelings. From this dialogue, it is possible to carry out a detailed anamnesis that enables a discussion about the causes of suffering and the search for ways to alleviate it (Soares *et al.*, 2022).

Palliative treatment consists of oral health care, clinical examinations, complementary exams, diagnosis and intervention. Thus, it is active in the treatment of glandular diseases present in the oral cavity, head and neck cancer, temporomandibular disorders, myofascial pain, mucocutaneous diseases, autoimmune diseases, odontogenic infections, manifestations associated with systemic



conditions and drugs, edentulism and problems of periodontal or cariogenic origin. Concomitant with aging, the difficulty of ingestion, radiotherapy or interventional chemotherapy treatments, in addition to the association of drugs for systemic treatment causes a reduction in quality of life, thus reducing eating, fluid intake, and communication due to the discomfort generated in the oral cavity (Majeed *et al.*, 2021).

The study by Venkatasalu *et al.* (2020) pointed out the main oral conditions most present in palliative patients. These conditions were classified in descending order, according to the evidence of greater appearance, with xerostomia being the most frequent problem, followed by oral candidiasis, dysphagia, mucositis, orofacial pain, changes in taste and ulcers. In this bias, professional care and oral hygiene become important for a better quality of life (Funahara *et al.*, 2022), therefore, the dentist is essential for symptom relief (Tacianel *et al.*, 2020).

The dentist should collaborate responsibly in the treatment of clinical manifestations, improving nutritional quality and contributing to the reduction of the risk of infection. Oral hygiene instructions should be given in detail to avoid aggression to the periodontium and reduce bacterial plaque in order to keep the mouth healthy and disease-free (Tacianel *et al.*, 2020). In addition, the professional in his care should be concerned with welcoming the patient and family members, paying attention to their doubts and anxieties, since their unresolved complaints can trigger other complications, such as longer time in the hospital and a greater risk of infections, thus increasing the vulnerability of this patient (Ghazali *et al.*, 2011).

DISCUSSION

Currently, studies on preventive and therapeutic care in patients at the end of life, provided by dentists, are still few. According to the World Health Organization (WHO) manual, Medicine, Nursing, and Physical Therapy courses have a greater role in this area. However, dental professionals' knowledge and understanding of oral health care for terminal patients are also of paramount importance in ensuring improvements in the quality of life of people with this condition, and multidisciplinary work is fundamental in the development of a treatment action plan (Silva *et al.*, 2023).

Oral diseases such as xerostomia, caries and stomatitis are prevalent in adults who have severe systemic alterations, which can cause fatal complications, thus interfering with the individual's quality of life. Xerostomia is the most common oral condition, being responsible for impairing speech, taste, chewing and swallowing, worsening at each stage of death, due to kidney failure, dehydration and the use of anticholinergic medications. In this sense, caries disease can also prevent the intake of nutrients in an adequate way, due to odontogenic pain, as well as the presence of ill-fitting prostheses, which can also interfere with the well-being of patients. Other conditions that



can affect palliative patients are related to candidiasis, cold sores, tongue coating and inflammation, halitosis, mucositis, periodontitis, mucosal erythema, and orofacial pain (Santana, 2020; Venkatasalu *et al.*, 2020).

In the initial dental consultation of patients in palliative care, such as the oncological examinations, priority should be given to the creation of a professional bond, the realization of a complete anamnesis and extra and intraoral examinations, so that the best approach can be determined to act on the necessary oral conditions. Although dental treatment is elementary in the patient's well-being, there is still a blockage on the part of some individuals who cannot understand the value of this care, because they believe that oral manifestations are typical and inherent to diseases. In this sense, the professional can act by informing the risks resulting from the therapies and explaining the treatment options to the patient, in order to provide a better reaction to complications. From then on, the dentist will be able to perform procedures according to the patient's needs, such as extractions, restorations, scaling and prophylaxis (Soares *et al.*, 2022).

In palliative patients, oral care should be performed in a focused on the patient's real needs, as opposed to standard procedures. In the hygiene of the oral mucosa, attention should be paid to the removal of coatings, adoption of preventive measures against infections, consequently to the reduction of pain (Kvalheim, Strand, 2022). Thus, another function of the oral health team is related to helping patients with tracheostomy or intubated patients. The dentist should intervene by brushing the teeth and tongue, and applying 0.12% chlorhexidine gluconate in the oral cavity, since this care, when well performed, reduces the appearance of pneumonia due to acting on the primary focus of the infection (Santana, 2020).

Xerostomia was a nuisance perceived by most of the participants. interfering socially and functionally. The reduction of salivary flow brings with it a decrease in the capacity for self-cleaning, tamponade and antimicrobial effects, providing the oral cavity with microbial demineralization processes. This patient, in turn, is more predisposed to potentially aggressive infections and complications, such as pneumonia and septicemia. However, the study points out that the participants tend to accept xerostomia once they understand it to be a manifestation of their pathological process, making it a worrying issue regarding the health of the oral cavity, systemic and the search for it (Chen *et al.*, 2021).

Among the management options available for the treatment of xerostomia in palliative patients, the use of lubricants for lips and mucous membranes, acupuncture, oral care, as well as medications and medical treatments improved in 80% or more of the patients. In the case of candidiasis, another frequent manifestation of these patients, fluconazole 150mg, oral in a single dose, showed a significant reduction in symptoms in 78.1% of the patients, with $p < 0.001$. Other alterations, such as dysphagia, improved after the fifth acupuncture treatment, however, it is worth



noting the worsening of swallowing and pain in the mouth when the pharmacological approach of topical action was chosen. Regarding mucositis, improvement results were observed when indomethacin oral spray was used, with pain relief after 25 minutes, with no improvement through the association of topical drugs (Venkatasalu *et al.*, 2020).

The study by Hong *et al.*, 2019 evaluates the efficiency of laser therapy for patients with oral mucositis, and it is notorious that laser has shown evident efficacy in minimizing oral mucositis in cancer patients, since, based on photophysical and biochemical effects, they act as an analgesic, anti-inflammatory, and scarring agent for lesions in the oral mucosa. Its mechanism of action acts on the photostimulation of chromophores, which compels to increase adenosine in mucosal cells, potentiating cellular metabolism, and consequently, maximizing fibroblast production and reducing healing time (Florentino *et al.*, 2015). Therefore, it is essential to evaluate laser therapy treatment as an important option, since it has a low cost and does not have side effects.

The oral cavity holds significant importance in personal well-being, due to the connection with nutritional health, guaranteed through the preservation of patients' ability to feed by mouth and the pleasure generated by tasting a food of their choice. In addition, it is possible to observe the impact of oral alterations on communication, since hyposalivation, presence of lesions, infections or poor adaptation of prostheses makes pronunciation impossible (Oliva, Miranda, 2015). Finally, systemic complications resulting from microorganisms in the oral cavity are well described in the literature. Therefore, it is essential to carry out procedures that promote the improvement of oral hygiene and follow-up of patients undergoing palliative care, thus reducing the development or progression of complications (Santana, 2020).

CONCLUSION

The end of life may be associated with specific challenges in relation to increased illness, physical limitations, and psychological distress. These difficulties overwhelm the patient and their families, causing oral care to be often neglected. Therefore, the palliative care performed by the dentist is of fundamental importance to alleviate pain and the occurrence of complications, as well as to welcome and transmit confidence to the patient dominated by emotions.



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