



# **Performance of the Dental Surgeon in the Multiprofessional Team: A Systematic Review**

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## **Authors' contributions**

*This work was carried out in collaboration among all authors. Authors AVMD, CLP and GGCO designed the study, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript. Authors HMA and IPCA managed the analyses of the study. Authors KFSL and WHRSA managed the literature. Author SKDS reviewed the article before the submission. All authors read and approved the final manuscript.*

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## ABSTRACT

**Background:** Dentistry is the health area responsible for the care of the stomatognathic system, with preventive, curative and rehabilitative actions, aiming at the promotion and protection of the patient's health in its entirety. In this regard, multidisciplinary action is essential for implementing health policies at all levels of care. This article aims to carry out a systematic literature review to analyze the relevant aspects of the role of dentistry professionals in multidisciplinary teams.

**Methods:** Review of the qualitative literature in the PubMed, Scielo and LILACS databases, using the health descriptors "Dentistry" and "Multidisciplinary Team" and selected publications between 2018 and 2022 with thematic relevance.

**Results and Discussion:** After the research, considering the inclusion and exclusion criteria and thematic relevance, 11 articles were selected. The performance of the dental surgeon in a multidisciplinary team is essential in the care of patients affected by neoplastic disease, heart disease, hospitalized patients and those in Intensive Care Units (ICU). Academic and professional training in multiprofessional residency programs is also a point of interest in achieving a multidisciplinary approach to health care.

**Conclusion:** After the analysis, it was verified that the analyzed literature exposes relevant aspects of the performance of the dentistry professional in a multidisciplinary team, in particular, in the follow-up, evaluation and dental treatment aimed at the benefit of the patient and for the integration with the different specialties of the team of health.

*Keywords: Dentistry; family health strategy; health unic system; multiprofessional team.*

## 1. INTRODUCTION

Since the 1970s, the structuring of work in health services in Brazil has been guided by the formation of multidisciplinary teams, meaning the organization of services with the presence of professionals from the most diverse backgrounds and levels of education. However, it was with the creation of the Unified Health System (SUS) and, above all, after the promotion of the Family Health Strategy (ESF) that took place in the last decade, that the multidisciplinary team went from being a simple formatting of teams with professionals from different training, for a structuring point of teamwork in public health services [1].

"The multidisciplinary approach, especially in the ESF, has its importance highlighted by the aspect of integrality in health care. Integrality, one of the doctrinal principles of the SUS, is of strategic importance for the consolidation of a new model of health care in Brazil. The Organic Law of SUS (Law nº 8080/1990), defines this principle as an articulated and continuous set of preventive and curative actions and services, individual and collective, required for each case at all levels of complexity of the system" [2].

Integrality assumes the function of the organizational principle of the work process in health services, especially in a multidisciplinary team, marked by the perspective of dialogue

between subjects and between their different ways of perceiving needs. In this aspect of integrality and the multidisciplinary dimension of health, the Dentistry professional should not isolate himself from other health professions, but should share his responsibility with the others. At first, professional practice in the health area aimed to diagnose and promote the treatment of illnesses. Currently, health professions, including dentists, routinely seek to promote health as a whole, which requires a multidisciplinary approach [3].

"Multidisciplinary care is strongly necessary for effective treatment. The dental procedure is inserted in this perspective due to the need, before being carried out, for the patient to have a general condition suitable for treatment, provided by the other professionals involved in this care. This general state encompasses physical, nutritional, emotional, spiritual and physiological aspects of the patient, which determine the type of dental treatment to be performed" [4].

"Dentistry is understood as one of the health areas responsible for the stomatognathic system, carrying out preventive, curative and rehabilitative practices, aiming at the promotion and protection of human health in its entirety. Under this aspect of analysis, for the promotion of integral health care, multidisciplinary care, as well as interdisciplinarity, is an essential

condition for the implementation of health policies at all levels of care” [5].

In Brazil, dentistry has been undergoing a paradigm shift in the way it works with health services and patient care, where patients are currently evaluated systemically and not only in relation to the pathologies present in the oral cavity. The dental surgeon has the duty to provide care to the patient as a whole, as the presence of systemic diseases can be a risk factor for the aggravation and/or installation of oral disease, or even, in the opposite way, oral disease can be risk factor for aggravation and/or installation of a systemic complication [5].

In view of the aforementioned aspects, the study aims to carry out a systematic literature review in order to analyze the relevant aspects of the dentistry professional's performance in multidisciplinary teams.

## 2. METHODS

This is a systematic review of the qualitative literature, which is a type of research that enables the search and knowledge on related subjects and the relationship of opinions of different authors to find answers about the intended objective [6]. This study was based on the following guiding question: What are the relevant aspects of the role of dentistry professionals in multidisciplinary teams?

The systematic review was conducted in accordance with the guidelines established by the methodological tool Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) for the stages of search, identification, selection, analysis, evaluation and synthesis of studies [7].

The search was carried out in Medline (via PubMed), Scientific Electronic Library Online (SciELO) and Latin American and Caribbean Literature in Health Sciences (LILACS) databases using the health descriptors “Dentistry” and “Multiprofessional Team”, with the help of the Boolean operator and being used as follows: Dentistry and Multiprofessional Team. “The databases gather and organize bibliographic references in a structured way that allow their recovery by interested users” [6]. This was carried out from May to June 2023.

Inclusion criteria were a study published in the last 5 years (2018-2022), available free of charge, in Portuguese, English and Spanish.

Articles that did not follow the eligibility criteria and that did not address relevant data for the present study were excluded. Those that presented only the abstract were also excluded.

## 3. RESULTS AND DISCUSSION

Initially, from the search by combining the descriptors “Dentistry” and “Multiprofessional Team”, 33 articles were obtained in the Medline database (via PubMed), 8 articles in the Scielo database and 61 articles in the LILACS database. These articles were analyzed by reading the titles and abstracts, thus selecting 11 articles (Fig. 1).

To facilitate understanding, the articles in question were placed in Chart containing the author, title, year of publication, journal and purpose of the study.

Initially, the study reports “the importance of the performance of the dentistry professional in a multidisciplinary team in the follow-up, evaluation and dental treatment in a case of acute neoplastic disease. While the severity of the systemic disease sometimes implies carelessness with oral health on the part of the patient, oral manifestations present intense symptoms and can be debilitating, leading to risks during treatment. The multidisciplinary dental practice contributes to better nutrition and patient comfort, enabling well-being and convenience, resulting in positive impacts for the patient, team and health service” [8].

Multidisciplinary constitutes social practices carried out by a group of professionals, who direct treatment towards a better perspective, treating the patient in need of care in a global and humane way [9]. Integrality seeks to ensure that the individual is assessed in their entirety, fully meeting their needs and is considered a set of practices and knowledge focused on human beings, which supports, helps and values people in the process of health promotion [10]. Health care networks must make sure that there is intersectoral action between the various levels of care that affects people's health and quality of life [11].

This integration process aims to broaden the coverage of health-care needs through the interplay of various health-care professions and the collaboration of multidisciplinary teams [11]. This search for integral patient care gives rise to a new dynamic of care, which encourages the sharing of knowledge from each profession,

mutual respect of the health professionals involved and new ways of integrating the specificities of each profession [12].

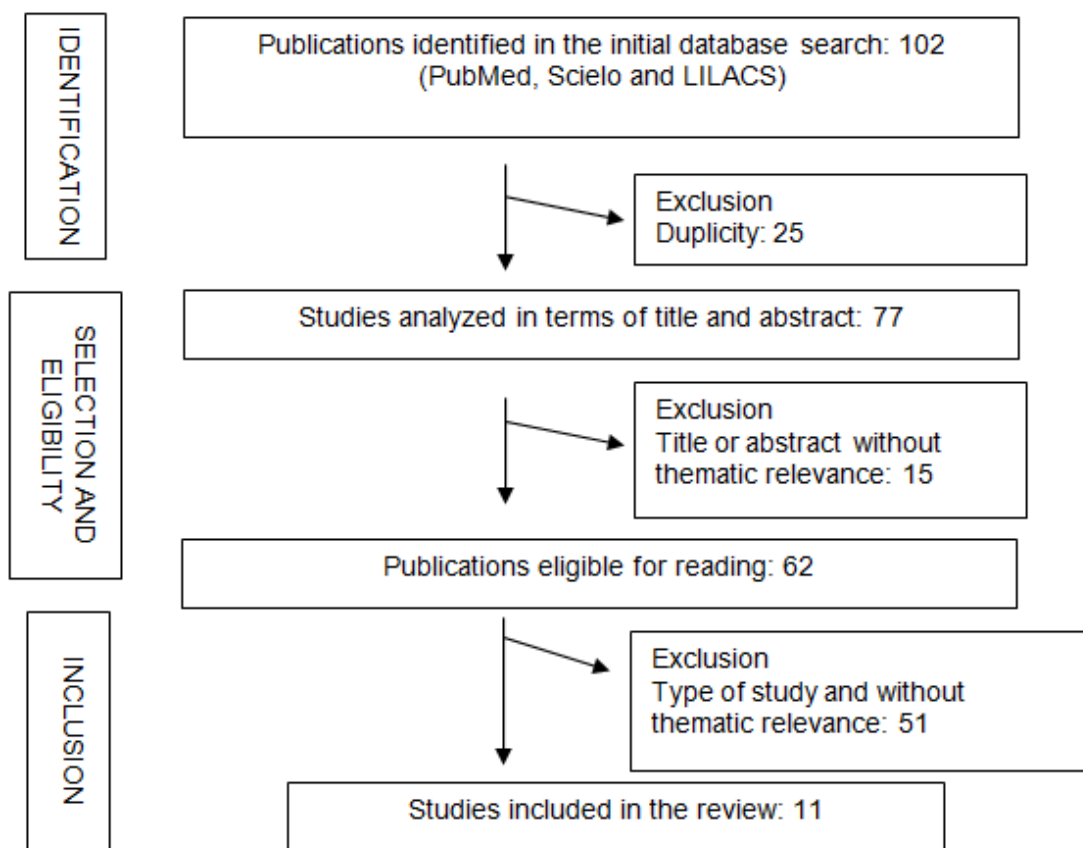
Multidisciplinary care is necessary for effective treatment, since every dental procedure previously requires an adequate general condition of the patient, provided by the other professionals involved in this care. This encompasses the physical, nutritional, emotional, spiritual, and physiological states of the patient, defining the type of dental treatment to be recommended, as well as its application or not [4].

Another study highlighted the multidisciplinary role of the dentistry professional in monitoring patients with heart disease, reporting the importance of a multidisciplinary team approach for the benefit of the patient and the integration of the different specialties of the team. This contributes to one of the core ideas of the

Universal Health System, which is an integrated approach to health care delivery [13].

In hospitalized patients, oral alterations are frequent due to the low frequency of good oral hygiene, demonstrating that the performance of the dentistry team in the multidisciplinary team is fundamental for characterizing this population and relating it to the clinical variables, attending to the cases that are necessary and informing the importance of maintaining good oral health [14].

In this sense, a study evaluated the prevalence of oral toxicities resulting from oncological treatment in children and adolescents treated at Hospital Estadual da Criança and identified almost 50% of oral toxicities and a number of patients had their antineoplastic treatment interrupted for this reason, reinforcing the importance and necessity of the performance of the dental surgeon in the multidisciplinary team in oncology [15].



**Fig. 1. Flowchart of the article selection process for review (PRISMA)**

Source: The authors (2023)

**Table 1. Summary table of the analyzed publications**

<b>Nº</b>	<b>Author/Year</b>	<b>Title</b>	<b>Journal</b>	<b>Aim</b>
1	Oliveira <i>et al.</i> (2022)	Dental intervention prior to and subsequent to the diagnosis of acute myeloid leukemia: case report.	Gaúcha Journal of Dentistry (RGO).	To highlight the performance of the dental surgeon in different stages of treatment, highlighting the importance of maintaining oral health in cancer patients.
2	Chandler; Silva-Junior (2022)	Dental care of hospitalized pediatric patient with tetralogy of Fallot: a case report.	Gaúcha Journal of Dentistry (RGO).	To describe a clinical case of dental care of a child patient with tetralogy of Fallot in a hospital environment.
3	Lima <i>et al.</i> (2022)	Analysis of the case series of the oral condition of patients in the surgical clinic of a university hospital	CES Dentistry	To identify the dental aspects of patients, determine the oral condition and the most prevalent lesions in the oral cavity of patients admitted to the Surgical Clinic of the University Hospital of UFMA, Presidente Dutra Unit.
4	Alves <i>et al.</i> (2021)	Oral toxicities of cancer therapy in children and adolescents: a descriptive study.	CES Dentistry	To evaluate the prevalence of oral toxicities resulting from cancer treatment in children and adolescents treated at the State Children's Hospital, from 2016 to 2017.
5	Macêdo; Melo; Vidal (2019)	Hospital and oncological dental care: a series of cases.	Gaúcha Journal of Dentistry (RGO).	To report a series of cases of patients assisted at the Dental Service of the Oncology Center of the Oswaldo Cruz University Hospital of the University of Pernambuco, which exemplify possibilities for the dental surgeon to work in a hospital environment, participating as an active member of a multidisciplinary team in oncology.
6	Mestriner <i>et al.</i> (2022)	Dentistry in the Multidisciplinary Health Residency: experience of training in the health care network	ABENO Magazine	To report the experience of in-service training in Dentistry in a Multiprofessional Residency Program in Integral Health Care in the Oral Health Care Network.
7	Orcina; Jaccottet; Savian (2021)	Prevalence of Oral Manifestations in Cancer Patients Assisted in a Home Care Program in the City of Pelotas-RS	Brazilian Journal of Cancerology	To evaluate the prevalence of the main oral manifestations in patients with cancer in CP admitted to the PIDI of HE/UFPel; describe the characteristics of the population according to sex and age; and to verify the possible association between the presence of oral alterations and the type of cancer and between the presentation of oral manifestations and the antineoplastic treatment received.

<b>Nº</b>	<b>Author/Year</b>	<b>Title</b>	<b>Journal</b>	<b>Aim</b>
8	Humerez-Sigala <i>et al.</i> (2020)	Multidisciplinary management of the oral cavity in COVID-19 patients under invasive mechanical ventilation. Role of the dental team.	International Journal of Odontostomatology	To present some dental considerations and a maintenance protocol for the management and care of the oral cavity in patients on invasive mechanical ventilation (IMV) in hospital intensive care units.
9	Albuquerque <i>et al.</i> (2019)	The implementation of oral health in the street clinic program in Curitiba-PR	Tempus – Public Health Minutes	To report the experience of including oral health in the Street Office Program (PCR) in Curitiba-PR.
10	Araújo <i>et al.</i> (2018)	Promotion of oral health in growth and development consultations in primary care: A report of interprofessional collaboration	Plural Science Magazine	To evidence the integrality of care aimed at children, reporting an experience of the partnership of the Multiprofessional Residency Program in Primary Care of the Multicampi School of Medical Sciences of the Federal University of Rio Grande do Norte with a unit of the Family Health Strategy.
11	Peruzzo <i>et al.</i> (2018)	The challenges of teamwork in the family health strategy.	Anna Nery School – Journal of Nursing	To apprehend the perceptions and experiences of primary care professionals as teamwork in the Family Health Strategy (ESF) in a medium-sized municipality in southern Brazil.

Source: The authors (2023)

“Hospitalized patients may have side effects in the oral cavity, in general, resulting from the disease, immunosuppression and/or treatments to which they are submitted. Because of the local and systemic involvement, these oral symptoms are becoming increasingly important, particularly in patients undergoing antineoplastic therapy. Thus, it is the responsibility of the dental surgeon within the multidisciplinary oncology team to participate in health promotion activities, diagnose oral lesions, control and treat oral and dental repercussions, and maintain long-term follow-up, thereby contributing to the improvement of patients' oral and systemic conditions and quality of life by providing integral and humanized treatment” [16].

“Regarding multidisciplinary training in a residency program, a study highlights that this type of training has been shown to be important for the development of skills and collaborative skills of dentists and qualification of the Unified Health System. collaborative practices and the organization of the work process in primary care. The integration with different areas of health and the reflection and problematization of practices has enhanced teamwork, aiming at integral health care” [17].

In a study carried out in the Interdisciplinary Home Hospitalization Program (PIDI), which assists cancer patients in palliative care, implemented in the Teaching Hospital of the Federal University with the presence of dental surgeons on its team, the high prevalence of oral manifestations in the studied population was demonstrated, reaffirming the importance of the dental surgeon in the multidisciplinary palliative care team [18].

“Hospital centers usually have dental services, which, working together, can provide tools and educate the multidisciplinary team. It is up to the dentist to assess the different clinical situations and provide guidance for the prevention and treatment of oral cavity pathology, and it is important that intensive care units (ICU) are aware of the role of the dental surgeon and that team actions can contribute to the care of hospitalized patients to reduce the risks associated with prolonged ventilation, based mainly on the management of oral hygiene and associated injuries” [19].

In a study carried out on the inclusion of oral health in the Street Office Program (PCR) in Curitiba-PR, it was established that the inclusion

of oral health professionals in the multidisciplinary team of the Street Office Program has been of fundamental importance, as it allows for a closer bond and greater adherence to treatment by the homeless population. The experience in Curitiba-PR has revealed that bringing oral health closer to the homeless population is an important factor in rescuing self-esteem and social reintegration of this population [20].

Regarding the integrality of care aimed at children, in a study that evaluated the partnership between a Multiprofessional Residency Program and a Family Health Strategy (ESF) unit, it was evidenced that the interaction between the professions, within each expertise, could promote aspects of prevention and promotion of Oral Health, enhancing the field of Dentistry and strengthening Interprofessional work [21].

In addition, FHS professionals face several challenges in developing teamwork, especially in interpersonal relationships. Added to this are the changes that occurred in Primary Health Care, such as the incorporation of the oral health team. In general, ESF professionals perceive the importance of teamwork in the current model of primary care, however, the oral health team experiences feelings of exclusion and lack of recognition by the team of the importance of their work in the ESF. In light of this, managers and team members must pay closer attention to the inclusion of oral health in the ESF, as well as the development of mechanisms that support engagement and integration among its members [22].

#### 4. CONCLUSION

For all the above, the analyzed literature exposes relevant aspects of the performance of the dentistry professional in a multidisciplinary team, in particular, in the follow-up, evaluation and dental treatment aimed at the benefit of the patient and for the integration with the different specialties of the health team.

The performance of the dental surgeon in a multidisciplinary team is essential in the care of patients affected by neoplastic disease, heart disease, hospitalized patients and those in Intensive Care Units (ICU). Academic and professional training in multiprofessional residency programs is also a point of interest in achieving a multidisciplinary approach to health care.

Finally, the inclusion of the oral health team in the Family Health Strategy (ESF), despite the challenges faced, is important in the current model of primary care.

## CONSENT

It is not applicable.

## ETHICAL APPROVAL

It is not applicable.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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