

# **EPIDEMIOLOGICAL SURVEY OF ORAL CAVITY INJURIES AND THEIR IMPORTANCE IN DENTAL PRACTICE**

---

*Diego Anselmi Pires*

Professor Me. da Universidade do Extremo  
Sul Catarinense  
Criciúma - SC  
<http://lattes.cnpq.br/5029644497868646>

*Sylvia Pryska Possamai Della Cambruzzi*

Graduate of the Universidade do Extremo Sul  
Catarinense  
Santa Luzia, Siderópolis  
<http://lattes.cnpq.br/7315520913816942>

*Camila Perlin Scussel*

Graduate of the Universidade do Extremo Sul  
Catarinense  
Criciúma - SC  
<http://lattes.cnpq.br/31989312505508217>

All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).



**Abstract:** Studies on the occurrence and distribution of cancer in Brazil, one of the main public health problems, can support managers, health professionals, researchers, students and society in general, through the appropriation of knowledge about reality. The objective of the present study was to know the incidence of oral cavity lesions most commonly found in public oral health services in the city of Criciúma, Santa Catarina, and by academics from a university, in the Dentistry course. This was a basic scientific research, qualitative, exploratory and field, and was developed through research in databases and virtual forms to be filled out online by Dental Surgeons and academics from the chosen institution. The questions addressed the sociodemographic profile, clinical management, knowledge about the clinical diagnosis, risk factors and conditions of the disease, and the opinion of the dentist and academic in relation to the patient's knowledge about oral cancer. The survey questionnaires were applied with the aim of encouraging a culture of diagnostic improvement in Dentistry. The questionnaire proved to be of paramount importance, exposing that the vast majority of academics and dental surgeons know how to perform complete exams, but still feel insecure to diagnose and deal with the situation, essential for the treatment of these injuries.

**Keywords:** Oral Cavity, Lesions, Mouth Cancer, Dentistry.

## INTRODUCTION

According to the Code of Dental Ethics, in its 5th article, it is the right of the Dental Surgeon to carry out diagnoses, plan and execute treatments, observing the current state of science (BRASIL, 2012). According to Neville et al (2004), benign lesions such as fungal infections or infections caused by trauma, or even malignant lesions such as

benign and malignant neoplastic proliferative processes, are among the most prevalent in the Brazilian population, but were absent in the SB Brazil 2010, national survey on the oral health conditions of the Brazilian population (BRASIL, 2012).

In 2012, the Ministry of Health instituted the PMAQ - AB (Program to Improve Access and Quality in Primary Care), a movement to improve the Unified Health System (SUS), expanding access and improving the quality of health care in all Brazilian Basic Health Units (UBS) (BRASIL, 2012). Among other indicators, the Incidence Rate of Changes in the Oral Mucosa indicator was introduced in a pioneering way in the Brazilian oral health policy, considering the identification of new cases of changes in the oral mucosa (non-neoplastic proliferative processes, neoplasms, infectious diseases, mucocutaneous and oral manifestations of systemic diseases) in the registered population.

Somehow, this movement of insertion and valorization of the area of Oral Diagnosis makes it possible to evaluate the integrality of oral health care in primary care, one of the doctrinal principles of the SUS, in addition to valuing the use of epidemiology in its practices. This happens through the Dental Specialty Centers (CEO), units of medium complexity for oral health care, which have, as one of the minimum required specialties, Stomatology, whose objective is the prevention, diagnosis and treatment of diseases. of the mouth and adjacent structures, oral manifestations of systemic diseases, as well as the prevention of systemic diseases that may influence dental treatment.

From the knowledge of the incidence of these lesions in the clinical practice of Dentistry, it is possible to carry out the prevention, early diagnosis of these pathologies and their treatment, whether in the public or private sector, at any level of oral health care. The

objective of this research was to know the incidence of the most common lesions of the oral cavity identified in oral health services in the public sector of Criciúma, SC, and by academics from UNESC Dentistry clinics, identifying the possible conducts or protocols followed in these situations. resulting in the encouragement of well-performed clinical examinations so that patients can have a correct diagnosis, treatment and prognosis.

## METHODS

The research began with the theoretical approach through research in academic Google databases, using the descriptors: “oral cavity”, “lesions”, “mouth cancer” and “Dentistry, considering their occurrence in the abstract, title or key words. Based on this research, a script was structured, addressing aspects of oral lesions, such as color, texture, palpation, aspiration and consistency, including those related to diagnosis, therapeutic planning, referral, among others.

This structuring allowed the construction of an online questionnaire for Dental Surgeons from the public network of the city of Criciúma and academics of the Undergraduate Course in Dentistry at the Universidade do Extremo Sul Catarinense (UNESC). Based on data available in the National Registry of Health Establishments (CNES) and in the coordination of the course, potential research participants were identified and the consent of the institutions selected to participate in the research was obtained. A Free and Informed Consent Term (ICF) was also prepared for the collection of primary data online with academics and Dental Surgeons. The research project was submitted to the Research Ethics Committee (CEP) of UNESC, according to Resolution No. 466/2012, on research involving human beings, and the data collection procedure was only started after approval by the CEP

UNESC, under the opinion No. 4,055,787.

Next, an exploratory study was carried out in which a questionnaire with objective questions was applied to an initial sample of 35 Dental Surgeons from the city of Criciúma (SC) and 48 students from the last year of the UNESC Dentistry course, in the first half of 2020. For this, as inclusion criteria in the research, the participant must be of legal age, be an academic regularly enrolled in the Dentistry course in the last year of the course, or be a Dental Surgeon in the public network of Criciúma, in addition to signing the TCLE. As a benefit for participating in the research, participants were able to contribute to the production of scientific knowledge and improve the analysis and clinical diagnosis of oral cavity lesions. Regarding the risks, privacy and confidentiality issues were respected, even so, there was a risk of losing data confidentiality with the participation in this research. All care was followed with the biosecurity standards recommended by the educational institution in the prevention of Covid-19 during the execution of the project.

Statistical analysis of online questionnaires was performed by ordering numerical values, identifying maximum and minimum values, as well as outliers among the analyzed data. In addition, the average of some responses and graphs produced by the virtual platform itself showed varying percentages in each response.

## RESULTS

In this research, a questionnaire of 20 (twenty) questions was applied to academics of the last year of the graduation of Dentistry at UNESC and Dental Surgeons from the public network of Criciúma, SC, directly through an online platform. (Google Forms). Despite the expectations of the initial sample, there was a low return from potential participants, limited to seven (07) academics, about 14.6%, and twelve (12) Dental Surgeons, or

34.3% of the initial sample. The instrument used for the research was the adaptation of a questionnaire that initially consisted of the kind: multiple choice questions, plus open questions to identify other aspects of the professional profile and clinical behavior of the participants.

The questions were intended to know the profile of the participants, the incidence of the most common lesions of the oral cavity identified, possible changes in color, shape, texture, consistency and volume of lesions, disease risk conditions, opinions and conducts or protocols to be followed. followed by respondents.

The profile of the students interviewed was mostly female, aged between 20-24 years, regularly enrolled in subjects in the last year of the Undergraduate Dentistry course. All (100%) usually use digital means to find out about lesions of the oral mucosa, always performing extra and intraoral clinical examination, investigating the presence of potential lesions in the oral mucosa as a routine in the disciplines with patient care, although little less than half (43%) feel unprepared for such an investigation (graph 1).

Regarding dentistry professionals, the profile of the interviewees showed the majority of participants being female (67%), aged between 24 and 62 years, many with more than 5 years of profession and at least one postgraduate degree (76 %). They also report digital media as the main source of updates, however, most reported feeling unprepared to carry out investigations into suspected cases of lesions in the oral mucosa in their patients (67%). Regarding questions during the anamnesis, few reported including family background or work occupation as common items in their practices (only 16 and 25%, respectively, as shown in graph 2).

Regarding the investigation of facts that collaborate in the investigation or diagnosis

of suspicious lesions, the anamnesis is an extremely important moment. The anamnesis performed by the students is usually complete, although information about the patients' work activity is rarely questioned (only 10% reported asking such questions).

The type of suspected lesion most reported by participating academics was nodule (86%), followed by erosion (43%); most of the lesions had a hardened surface (57%), with sessile insertion (57%), and most of them were referred to the Dental Specialty Center in their city or to a private Dental Surgeon, under the supervision of the guiding professor of the discipline.

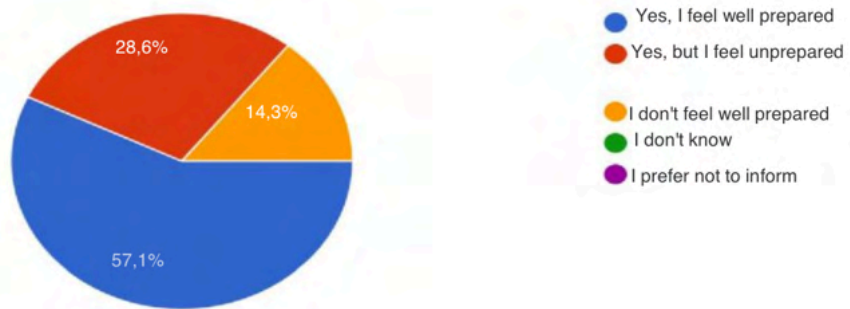
Most cases (57%) had a diagnosis completed and the problem resolved (71%). Although 57% of respondents reported filling out a specific form from UNESC for this type of referral, 43% of reported injury cases did not have any document referring to the case in question made available to academics as feedback or counter-referral, only the report of the patient.

Extra-oral inspection is not performed by most Dental Surgeons (over 58%), who usually refer patients with suspicious lesions to other services. Differently from the reports of academics, the main suspicions of lesions reported by Dental Surgeons were ulcers (83%) and stains (75%), a fact closer to that reported in the literature (NEVILLE, 2004). There were, however, differences regarding the surface of the lesions (hard, soft and floating with the same percentage for Dental Surgeons and different percentages among academics, with a significant predominance of hardened lesions) and similarities regarding the sessile type insertion (75%).

All participating Dental Surgeons reported having already referred the suspicions to the services of the CEO, much higher than the percentage of academics who opted for the same decision, about 71%, filling out specific

7) Do you feel prepared to carry out a detailed investigation of possible injuries or changes in the oral cavity?

7 answers

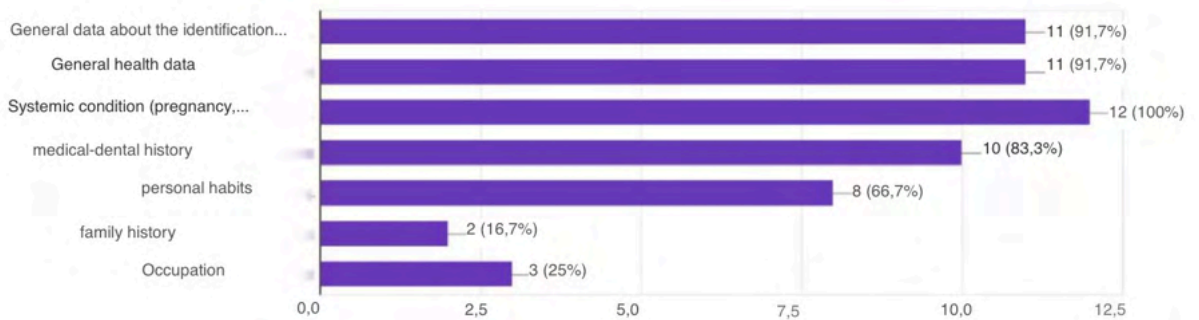


Graph 1: Feeling of security in the investigation of possible injuries or alterations in the oral cavity.

Source: Authors.

8) Do you often question patients about these items during anamnesis? (You can check X on more than one item)

12 answers



Graph 2: Items questioned during the anamnesis performed by Dental Surgeons.

Source: Authors.

forms, allowing an adequate diagnosis and treatment plan to 75% of the patients. cases. But the lack of communication still persists, as about 83% of Dental Surgeons reported not having received any document referring to the case in question as a return, much higher than the report of academics, about 43%.

## DISCUSSION

According to data from the José Alencar Gomes da Silva National Cancer Institute (INCA, 2019), the number of new cases of oral cavity cancer expected in Brazil, for each year of the 2020-2022 triennium, will be 11,180 cases in men and women. 4,010 in women. Still on this estimate, for the year 2020, the state of Santa Catarina would be in fourth place among the incidences of cancer of the oral cavity, with approximately 1050 new cases, behind the states of São Paulo, Rio de Janeiro and Minas Gerais, but they have much larger populations. The oral cavity is an anatomical part that is easy to verify, allowing Dental Surgeons and the patient himself, through self-examination, to suspect changes in the mucosa and seek a specialist professional in the early stages of oral cancer, leading to an early diagnosis. However, in most cases, the diagnosis is delayed, as a result of several factors, such as service agility, availability of resources and lack of professionals trained to diagnose, which reduces the chance of cure and better quality of life, leading to a bad prognosis.

The dentist must play an important role in relation to the early diagnosis of oral cancer, since one of the objectives is to promote health in the Unified Health System (SUS), or even in private institutions. Therefore, he needs to prepare for this role from the beginning of graduation. And, according to the article by RAMOS(2005), which evaluated and discussed the knowledge of undergraduate students in Dentistry in higher education institutions,

including prevention and early detection of oral cancer, the average rate of success is 64.25 %. Comparing this study with the present one, through the questionnaires that were answered by academics and Dental Surgeons, it was found that there is a low percentage of students (57.1%) and Dental Surgeons (33%) who feel prepared for such an investigation. This highlights the importance of such a study and encourages the improvement of protocols for the diagnosis of oral lesions and aspects of oral cancer.

Despite the timid adherence to the proposed research, the evaluation of the instrument, the form of collection and the proximity or distance from the research topic, the results validate its replication, considering this research a pilot test. According to Thomas et al (2018), clarity in the formulation of questions, the structure of the instrument, the form of presentation and data collection, as well as the adaptation of the questionnaire are elements that must be considered for the population to which it is applied, being It is essential to carry out the pilot test to validate the research.

According to the literature (AMORIM, et al, 2015), for the execution of any dental care, the importance of data such as vital signs, chief complaint, history of current illness, medical and dental history (current and past) is emphasized, family and social, duly collected and recorded the anamnesis. Furthermore, reports of drug use, allergies, previous trauma, cardiovascular, respiratory, circulatory, excretory changes and previous treatments, various pathologies (communicable or not) or habits must be investigated, recorded and signed by the patient, collaborating for a correct diagnosis and adequate planning for the treatment of oral lesions.

## CONCLUSION

From the understanding of cancer as one of the main public health problems in Brazil, this work aimed to survey the most incident oral lesions and their importance through an early diagnosis, whose argument was carried out through questionnaires that and their analysis allowed to affirm that, despite the fact that many participants claimed to undergo a complete clinical examination and investigate suspicious lesions, we still had a low level of confidence in their diagnosis.

In the academic environment, it is possible to notice that advances in education and health are constantly growing, with continuing education for professionals and permanent education in health as tools for the improvement of professionals and improvement of the quality of services, paths to be followed. in partnership by health services and educational institutions.

This way, the continuity of this research becomes essential, with the elaboration of a protocol for the identification, referral and return of cases of suspected lesions of the oral mucosa, both in academia and in public and private services, as well as its dissemination to the public. institutions involved in this research. Thus, one of the products of this research work is to encourage Dental Surgeons and Academics to be in constant learning, so that they are ready for future exams, early diagnoses, thus being able to treat the pathology and having an excellent prognosis for the patient.

## REFERENCES

- BRASIL. Conselho Federal de Odontologia. **Resolução CFO nº 118, de 11 de maio de 2012.** Revoga o Código de Ética Odontológica aprovado pela Resolução CFO 42/2003 e aprova outro em substituição. Diário Oficial da União. Brasília, 14 junho 2012; Seção 1, nº 114. p. 118.
- NEVILLE BW, DAMM DD, ALLEN CM, BOUQUOT JE. **Patologia Oral & Maxilofacial.** 2ª ed. Rio de Janeiro: Guanabara Koogan; 2004.
- BRASIL. Ministério da Saúde. Secretaria de Atenção à Saúde. Secretaria de Vigilância em Saúde. **SB Brasil 2010: Pesquisa Nacional de Saúde Bucal: resultados principais /** Ministério da Saúde. Secretaria de Atenção à Saúde. Secretaria de Vigilância em Saúde. – Brasília : Ministério da Saúde, 2012.
- RIBEIRO, B.B. et al. **Importância do reconhecimento das manifestações bucais de doenças e de condições sistêmicas pelos profissionais de saúde com atribuição de diagnóstico.** Odonto 2012; 20(39): 61-70.
- BRASIL. Ministério da Saúde. **Programa Nacional de Melhoria do Acesso e da Qualidade da Atenção Básica-PMAQ/Manual Instrutivo.** Brasília, DF: Ministério da Saúde; 2012.
- BRASIL. Ministério da Saúde. **Diretrizes da política nacional de saúde bucal.** Brasília: Ministério da Saúde; 2004.
- RAMOS, Ana Paula da Silva; EMMERICH, Adauto; ZANDONADE, Eliana. **Conhecimentos dos acadêmicos de Odontologia sobre câncer de boca.** UFES rev. odontol, p. 30-38, 2005.
- Instituto Nacional de Câncer José Alencar Gomes da Silva. **Estimativa 2020: incidência de câncer no Brasil /** Instituto Nacional de Câncer José Alencar Gomes da Silva. – Rio de Janeiro : INCA, 2019.

QUIRINO, Maria Rozeli de Souza et al. **Avaliação do conhecimento sobre o câncer de boca entre participantes de campanha para prevenção e diagnóstico precoce da doença em Taubaté-SP.** Revista de Odontologia da UNESP, v. 35, n. 4, p. 327-333, 2013.

THOMAS DB, OENNING NSX, GOULART BNG. **Coleta de dados em pesquisas de saúde.** Rev. CEFAC. 2018 Set-Out; 20(5):657-664.