

## Manifestation of Anxiety during Dental Treatment: Integrative Literature Review

### Manifestação da Ansiedade Durante o Tratamento Odontológico: Revisão Integrativa da Literatura

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#### Abstract

Even with the technical-scientific advance in Dentistry, it is still seen as a profession that causes anxiety in children and adults. Therefore, in addition to the technical knowledge, the dental surgeon must have different strategies in the management and conduct of this situation once anxiety if aggravated can become pathological and interfere in the patient's oral health and his or her quality of life. Thus, the present study was conducted in order to realize the main aspects of dental anxiety, aiming to improve patient-dentist relationship, avoiding the onset of phobic disorders. This is an integrative review of the literature, using the Lilacs and SciELO databases with the descriptors anxiety, phobia and dentist verified individually and later they were crossed with AND operator with search period from 2000 to 2019, articles in Portuguese and in fulltext. The exclusion criteria were: thesis, books, final paper and dissertations. 20 articles were identified which showed that anxiety directly interferes with the effectiveness of treatment in different age groups. Priority should be given to communication between the dental surgeon and his or her patient, to recognize possible causes of discomfort. In addition, it is necessary to carry out more studies because there are differences in the literature concerning the interference of social and economic factors and schooling levels in the anxiety development.

**Keywords:** Anxiety. Dentist. Phobia.

#### Resumo

*Mesmo com o avanço técnico-científico na Odontologia, esta ainda é vista como uma profissão que provoca ansiedade em crianças e adultos. Dessa forma, além do conhecimento técnico, o cirurgião-dentista deve possuir estratégias diferenciadas no manejo e na conduta perante esta situação, uma vez que, se agravada, a ansiedade pode torna-se patológica e interferir na saúde bucal do paciente, afetando diretamente sua qualidade de vida. Assim, o presente estudo foi conduzido com intuito de perceber os principais aspectos da ansiedade odontológica, visando aperfeiçoar as relações paciente-dentista, evitando o desencadeamento de transtornos fóbicos. Trata-se de uma revisão integrativa da literatura, utilizando as bases de dados Lilacs e Scielo com os descritores: medo, fobia e dentista, verificados individualmente e posteriormente feito cruzamento com AND, com período de busca de 2000 a 2019, artigos em português e na íntegra. Os critérios de exclusão foram: teses, livros, trabalhos de conclusão de cursos e dissertações. Foram identificados 20 artigos que evidenciaram que a ansiedade interfere diretamente na efetividade do tratamento em diferentes faixas etárias, devendo-se priorizar a comunicação entre o cirurgião-dentista e seu paciente, para reconhecer possíveis causas de desconforto. Porém, é necessário realizar mais estudos devido as divergências na literatura referente a interferência de fatores sociais, econômicos e níveis de escolaridade, no desenvolvimento da ansiedade.*

**Palavras-chave:** Ansiedade. Dentista. Fobia.

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#### 1 Introduction

The fear and anxiety caused during dental care are in fact, very common, being that the Brazilian population has a higher average of these phenomena than the world average<sup>1</sup>. It is worth noting that, to a certain extent, Anxiety is considered healthy, since it prepares the body for future events during a natural reaction to a stimulus<sup>1,2</sup>. When the yearning exceeds the physiological reactions in the body, this is considered pathological, causing physical signs and symptoms that interfere with the life quality of the individual<sup>2</sup>. According to Duarte et al.<sup>3</sup>, anxiety is not considered a pathological phenomenon, but rather, a characteristic of the eminent human condition, fulfilling a biological role useful because it allows

to trigger adaptive behaviors of several types. However, anxiety can be conveyed into a deregulated phenomenon itself, becoming a disease.

In a general way, the stressful events in adulthood are related to the development of anxiety disorders, causing negative character changes, both physical and mental, contributing to the emergence of these pathologies<sup>4</sup>. In dentistry, this phenomenon is quite frequent, because a large proportion of patients who undergo some kind of dental treatment present anxiety, being that the signs may be evident or not<sup>5,6</sup>. The state of anxiety decreases the pain threshold of the patient, making it more sensitive to physical stimuli, constituting a barrier for the oral health maintainance<sup>2</sup>.

Thus, the surgeon-dentist, aware of the emotional

significance must understand that the hostility shown by the patient refers to a situation which is developed during the dental treatment and that can affect his or her life quality<sup>7</sup>. Therefore, in spite of the great challenge, the professional must have a prior knowledge of the patient, his or her family and the specific data of the region in which the patient lives, so that the surgeon dentist can understand it as a whole. Bottan et al.<sup>8</sup> discussed the need of dental surgeons to be aware that the patient should not be assessed considering only the oral cavity and, when he or she is under dental intervention, is a subject that brings a number of fears and hopes. Therefore, it is up to the clinician to possess differentiated strategies in the management and conduct in this situation.

Another important step that can transmit greater security to the patient is to clarify the sequence of the procedure that will be conducted, determining factors for the patient to give continuity to the treatment<sup>9</sup>, since most of the times they refuse to be subjected to routine consultations, thus not performing procedures of fundamental importance for his or her health in general, causing immeasurable consequences, either in oral health and in the patient's social life. It is essential, therefore, that in more extreme cases, the surgeon dentist instruct the patient to seek help from specialized professionals. In many situations, the work of a multidisciplinary team is fundamental, starting therapies and, if necessary, even the indication of medicines, aiming to improve the relationship patient-dentist, preventing the triggering of phobic disorders.

Thus, it is important to emphasize that the surgeon dentist needs to be attentive also to the patient's behavior, the caretakers and of himself or herself<sup>10</sup>. Since the majority of dental surgeons do not have knowledge about this issue, and that this can affect the patient's life quality, this integrative review was drawn up in order to address the key aspects of anxiety in dental care service, aiming to improve the relationship patient-dentist, preventing the onset of phobic disorders in these individuals.

## 2 Development

### 2.1 Methodology

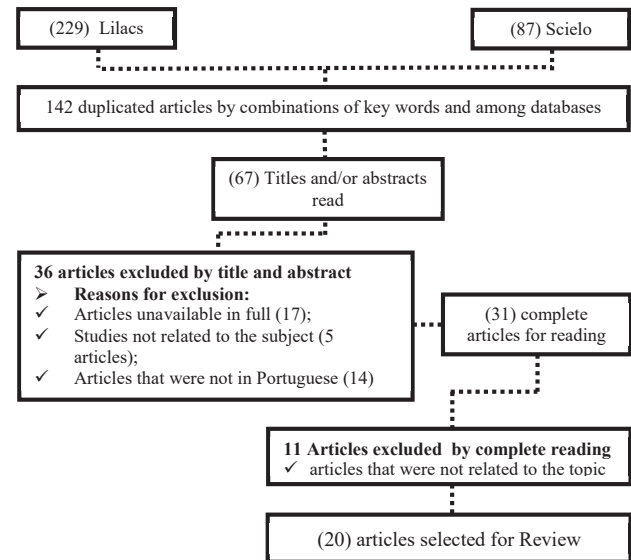
This research is an integrative literature review<sup>11</sup>. With the objective to make a search of data to develop a more precise explanation on the topic, the following question was guided on the theme: What are the main aspects of dental anxiety, that the surgeon dentist needs to know to improve relationship patient-dentist and consequently suppressing the evolution of cases of phobic disorders in dental clinics?

The following databases were used: Latin American and Caribbean Literature in Health Sciences (Lilacs) and Scielo - Scientific Electronic Library. For the development of research, the following descriptors were applied: fear, phobia and dentist. Relevant articles were searched in full between the years of 2000 and 2019.

Initially, the articles were searched individually and then

a search strategy was defined, grouping the descriptors using the Boolean operator AND. Regarding the exclusion criteria, thesis, books, final paper of courses and dissertation were not chosen for this study. The search was conducted in May 2019. The search method can be observed in Figure 1.

**Figure 1** - Flow diagram of the study selection



Source: The authors.

The articles analysis was initially made by 2 researchers independently and subsequently, the synthesis of information was then carried out, so as to expose the main results obtained during the research, with researchers coming in consensus about the articles included. After the search in the literature, the selection of studies was started by organizing and separating the articles per year, together with the design, outcome, subject and authors' names. The data extraction was performed, and, after analysis, they had their results interpreted.

### 2.2 Discussion

Table 1 sets out the 20 articles found in the literature about dental anxiety. In general, the studies show the incidence of this type of anxiety in society, and also discuss the best form of treatment for these patients. It was possible to observe that differences between social classes, genders, ages and socio-economic factors in which the individuals with anxiety are inserted do not directly influence the onset of this disorder.

**Table 1** - Presentation of the characteristics of the 18 articles included in the integrative review.

| Title   | Authors                             | Year | Type of Study                                | Methodology  | Place of Study   | Age Patients   | Outcome   |
|---|-------------------------------------|------|--|--|--|----------------|---|
| Pain, anxiety and life quality related to oral health of patients seen at the dental emergency service  | Queiroz et al. <sup>7</sup>         | 2019 | A cross-sectional study                      | Analysis of medical records was performed with three instruments: (1) Evaluation of the preoperative pain, according to the scale Heft-Parker Visual Analogue Scale (VAS HP)-; (2) Evaluation of the preoperative anxiety, according to dental anxiety scale Corah's Detail Anxiety Scale (CDAS) and (3) Oral Health Impact Profile (OHIP-14). | Emergency Service from the Federal University of the Vales Jequitinhonha e Mucuri - MG                     | 18 to 65 years | There was a significant association between pain and worse life quality with impact in the areas of discomfort Psychological, physical, psychological and social discomfort, as well as the influence of anxiety. |
| Anxiety between children and their guardians before the dental care.  | Ferreira and Oliveira <sup>12</sup> | 2017 | Qualitative study                            | It was used the Visual Anxiety Scale (FIS) for children, identifying the initial and final anxiety by means of 5 smileys ranging from very happy to very sad, evaluated in the first and last consultation, and the questionnaire with Dental anxiety scale of Corah's (DAS).  | Faculdade São Leopoldo Mandic- Campinas- SP  | 4 to 11 years  | The parents' anxiety does not interfere with the child's behavior in dental treatment. However, a good communication between the dental surgeon and patient are fundamental to lessen the degree of anxiety.      |
| Influence of the attire of the dental surgeon and the environment of the dental office in the anxiety of preschool children during dental consultations: results of a pilot study | Hass et al. <sup>13</sup>           | 2016 | Crossed randomized controlled clinical study | Each child constituted her own control, once received the two care services, conventional (control) and with a change of clothes and the environment (intervention)  | Basic Health Unit and in the dentist's office of School Hospital of the Federal University of Pelotas - RS | 3 to 6 years   | There was no influence on child's dental anxiety when the office environment and the SD's clothing were modified.   |
| The guardian's anxiety in relation to the odontopediatric care.   | Moreira et al. <sup>14</sup>        | 2015 | Qualitative study                            | Structured interviews and the Dental Anxiety Scale (DAS) were used, before the child's care. Data were registered in the program SPSS, version 17.0.   | UAPS Jardim América/Serrinha of Várzea da Palma-MG.  | 6 to 13 years  | In general, the most anxious guardians believe that their children are anxious to go to the surgeon-dentist.  |
| The dental anxiety in children and associated factors: a literature review  | Soares et al. <sup>15</sup>         | 2015 | Bibliographical research                     | The literature review was performed through the active search for information on the Virtual Health Library. The process of analysis for evaluation and selection of the articles was conducted by two researchers, independently.   | Brazil   | Until 12 years | Pediatric dentists must understand the factors that interfere in the levels of anxiety in children, aiming at a better integration and treatment.   |

| Title   | Authors                      | Year | Type of Study   | Methodology  | Place of Study  | Age Patients                    | Outcome  |
|---|------------------------------|------|---|--|---|---------------------------------|--|
| Anxiety to dental treatment in schoolchildren of high school in the city of Alfenas - MG.                                 | Costa et al. <sup>16</sup>   | 2014 | Cross-sectional descriptive study with a quantitative approach. | To evaluate the presence of anxiety to dental treatment it was used the Dental Anxiety Scale (DAS) of Corah. A questionnaire was applied.  | State High School and College of Alfenas- MG.                 | 15 to 18 years                  | In general, for the students, The permanence in the waiting room of the dentist-surgeon promotes a feeling of tranquility.                               |
| Prevalence of dental anxiety and its relationship with socioeconomic factors among pregnant women in João Pessoa, Brazil. | Meneses et al. <sup>17</sup> | 2014 | An observational cross-sectional study.                         | <i>Dental anxiety scale</i> and a structured questionnaire were applied, through which socioeconomic factors were investigated . In the statistical analysis, the test of c was used <sup>2</sup> . The level of significance adopted was 5 %.   | Family Health Units in the city of João Pessoa - Paraíba      | Average age of 23 years.        | Although the body is physiologically prepared for motherhood, events of anxiety may predispose to the development of emotional disorders.                |
| Assessment of the levels of anxiety in patients Subjected to dental treatment.  | Pereira et al. <sup>7</sup>  | 2013 | A cross-sectional study   | The data collection was performed through a form where contained issues of identification and data inherent to the patient as well as specific issues in the identification of the degree of anxiety to dental treatment, using the scale DAS  | Federal University of Paraíba-PB                              | Between 25 and 65 years of age. | It is important that the surgeon dentist know minimally the psychism of patients, acquire In-depth knowledge concerning the signals of Anxiety and fear. |
| Anxiety before the dental treatment: Prevalence and predicting factor in Brazilians.                                      | Carvalho et al. <sup>1</sup> | 2012 | A cross-sectional study   | A cross-sectional study was conducted, using the scale of anxiety of Corah to evaluate 3000 patients.  | University centers of the city of Aracaju- SE                 | Average age of 24.8 years.      | The fear and anxiety exist in fact in the Brazilian population. Therefore, it was sought to highlight the prevalence of anxiety and its causes.          |
| Level of anxiety in patients undergoing Dental surgical procedures.   | Lisboa et al. <sup>18</sup>  | 2012 | A cross-sectional study   | The anxiety was determined by Dental Anxiety Scale (DAS) of Corah, applied before the completion of the surgical procedures. The data were submitted to the Mann Whitney test, adopting a significance level of 5%.  | Dentistry School of CESCAGE- Ponta Grossa-PR                  | Over 18 years.                  | Very important the emotional studies of the patientes and required the use of measures that provide the patient's comfort.                               |
| Dental anxiety in an Oral Health Service of Primary care.   | Macedo et al. <sup>19</sup>  | 2011 | A cross-sectional study   | Patients who attended the research responded to a form of structured interviews through which the interviewers asked the questions and waited for a response. The MDAS assessment allow to measure two dependent variables: the level of anxiety related to dental treatment and dentistry phobia. | Dentistry Scool of the Federal University of Minas Gerais- MG | Average age of 37 years.        | There are multiple determinants so that there is anxiety, particularly reports of dental treatments are avoided and dental consultations missed.         |

| Title   | Authors                        | Year | Type of Study           | Methodology  | Place of Study  | Age Patients  | Outcome   |
|---|--------------------------------|------|-------------------------|--|---|---------------|---|
| Relationship between consultation and anxiety to dental treatment: A study with a group of adolescents. | Bottan et al. <sup>20</sup>    | 2008 | Cross-sectional         | The instrument for the determination of the degree of anxiety to dental treatment was an adaptation of Dental Anxiety Scale. To characterize the subjects regarding gender, age, frequency and causes of consulting the dentist, a questionnaire was applied.  | City Schools in the region of Foz do Rio Itajaí- SC                     | 8 to 16 years | Oral health care is essential to any individual; however, a large part of the people face difficulties in accessing dental services due to anxiety.   |
| Control of anxiety in dentistry: Current approaches.  | Gaudereto et al. <sup>21</sup> | 2008 | Literature review       | It was used the Dental Anxiety Scale (DAS)   | Brazil  | —             | The anxious patient always prevents the dental treatment and, once in office, the administration of this feeling becomes more difficult, causing a certain difficulty for the professional. |
| The Dental Treatment anxiety in elementary school Students.   | Bottan et al. <sup>8</sup>     | 2007 | A cross-sectional study | The instruments used for data collection were adaptations of Dental Anxiety Scale (DASm) and of Dental Fear Survey (DFSsm). The researchers performed reading and explanation of each one of the issues so that, subsequently, students chose their responses. | Three public schools located in the urban perimeter of Campos Novos-SC. | 9 to 17 years | Ignorance of the procedures, the environment, negative knowledge passed on by other people are triggers of anxiety.   |
| The dental treatment as a generator of anxiety.   | Possobon et al. <sup>22</sup>  | 2007 | Literature review       | Application of “Dental Fear Survey” inventory, which assesses the extent and severity of the fear expressed in the dental situation and is among the most cited evaluation instruments of fear of dentists in the international literature                     | Brazil  | —             | The dental treatment and aspects related to the professional can generate anxiety and avoidant responses to treatment.  |
| Maternal anxiety manifested during the dental treatment of their children                               | Tomita et al. <sup>23</sup>    | 2007 | Qualitative study       | The recordings were performed by two independent observers, previously trained, who attended, separately, the sessions recorded and performed the mothers' record of behaviors, indicating also the clinical routine in implementation                         | State University of Campinas (UNICAMP)- Piracicaba, SP                  | 3 to 6 years  | The surgeon-dentist can adopt strategies to reduce the parents' anxiety, increasing the child's collaboration with the treatment.   |

| Title  | Authors                              | Year | Type of Study           | Methodology  | Place of Study  | Age Patients   | Outcome  |
|--|--------------------------------------|------|-------------------------|--|---|----------------|--|
| Behavioral Problems and stress in children with anxiety before the dental treatment. | Cardoso and Loureiro <sup>24</sup>   | 2005 | A cross-sectional study | The techniques used were coded in accordance with the propositions techniques. It was proceeded to non-parametric statistical treatment of the data comparing the groups in relation to the behavioral aspects and to stress. For the comparison the Mann Whitney test, Chi-square test and/or the Fisher exact test were used . | School Clinic of the School of Dentistry of Ribeirão Preto-SP | 6 to 11 years  | The situation of dental treatment is often related to anxiety and stress.                                    |
| Fear and/or anxiety as inhibitory factor for the visit to the dentist.               | Colares et al. <sup>25</sup>         | 2004 | Exploratory Study       | The data were collected through the application of a form in the form of an interview with angle-issues to fear and/or anxiety, both the child and the person responsible.   | Public and private schools in the city of Recife-PE           | 5 years        | The fear and anxiety in the dental office trigger different reactions and undesirable somatic repercussions. |
| Anxiety to dental treatment in Emergency care.                                       | Kanegane et al. <sup>26</sup>        | 2003 | A cross-sectional study | Dental anxiety was measured by two methods: Modified Dental Anxiety Scale (MDAS) and scale of fear of gatchel.   | School of Dentistry, São Paulo-SP                             | 18 to 81 years | One of the difficulties encountered by the clinician in dental care is fear.                                 |
| Scales of dental fear in children and adolescents: a literature review.              | Tambellini and Gorayeb <sup>27</sup> | 2003 | Literature review       | Most authors quantified fear and anxiety and divided the forms of evaluation in questionnaires and scales. The questionnaires were applied in adults, adolescents and children, and the scales in pre-school children.   | Brazil  | Over 3 years.  | It is natural that children manifest fear before the unexpected and unknown.                                 |

Source: Research Data.

For some patients, the attendance to the dental office can represent a great challenge<sup>21,22</sup>. Pereira et al.<sup>2</sup> observed that a simple visit to the surgeon-dentist can generate a state of anxiety, which in turn lowers the threshold of pain, making the patient more sensitive to physical stimuli, directly affecting the quality of the maintenance of oral health.

According to Mendes et al.<sup>11</sup>, an integrative review encompasses the analysis of relevant research, which provides support for information on a particular subject. In the area of health, this review is extremely important, because it allows the clinician to gain knowledge of how to make the best decision at the time of clinical practice.

According to Kanegane et al.<sup>26</sup>, a history of trauma during dental procedure is a triggering factor for the development of anxiety in the upcoming consultations, seen that 46.48% of the patients classified as anxious reported having already

experienced a traumatic event related to recent dental procedure. Similar results pointed in the literature claim that the fear to dental treatment occurs due to previous negative experiences<sup>18,20</sup>.

Even with so many scientific and technological advances, Dentistry is still seen as a profession which causes fear and anxiety in children and adults, being a real obstacle to the oral cares promotion<sup>1</sup>. According to the data of Carvalho et al.<sup>1,2</sup> in each 8 Brazilians evaluated showed moderate or severe anxiety to dental treatment. Although these data may be greater than that actually found, once the scales used for this data collection does not evaluate the patient's reaction to a treatment session, but rather the predisposition to be anxious in a hypothetical answer, this is a number considered high. Thus, fear, anxiety and phobia, have been appointed as responsible for the extensive index of oral diseases and

systemic manifestations, becoming a public health problem<sup>7</sup>.

Another aspect considered is the difference between the fear, which is classified as a primary emotion that indicates danger, and, on the other hand, anxiety is the fear transferred from an original situation, for a hypothetical situation<sup>26</sup>. Bottan et al.<sup>8</sup> found in schoolchildren from Campos Novos (SC), the most common symptoms among them, which were: tremors and acceleration of heartbeats.

The fear of dental treatment causes the patient to postpone or cancel his appointment, which ends up aggravating his or her oral health conditions<sup>22</sup>. However, people do not have this fear since always, which develops from the process of socialization. To ensure that there is a reversal in this picture, it is of utmost importance that the surgeon dentist develop a type of communication patient /professional, bringing numerous benefits to oral health. On the other hand, another research shows that anxiety is considered a biological characteristic of the human being which precedes moments of fear, danger or tension; in more advanced degrees it can become fear<sup>8</sup>. Consequently, the fear of dental treatment stems from the anticipation of danger. This type of patient tends to avoid the dental treatment and once in the office, it becomes difficult to administer this feeling, causing a difficulty for the professional of Dentistry. A large part of the population avoids visiting the dental practices as routine, seeking this type of service only when there is a real need for treatment, i.e., when they exhibit signs and/or clinical symptoms with pain, edema or fistulae<sup>28</sup>.

Among the most frequent age group in this profile of anxious patient, young and elderly people have 2x more this profile. According to Carvalho et al.<sup>1</sup>, the elderly belongs to the population which, in childhood attended clinics without technology that provided a service without stress. However, it is important to emphasize that some factors inherent to the treatment are still reasons of stress and evasion, including from equipment and instruments, such as the engine of high (or low) rotation until more invasive procedures such as local anesthesia, extraction and oral surgeries. This shows that, despite the technological advances, the modern dentistry has still not managed to produce instruments that cause less discomfort to the patient<sup>2</sup>. Therefore, it is evident the necessity of this subject to be still debated and discussed by the profession.

In this sense, the professionals should be even more attentive to the patients' concerns, not only with technical knowledge, but rather, know the patient as a whole, and offer the support needed and immediately to the patient if necessary<sup>22</sup>. The professional should maintain a dialog with the patients in order to decrease the stress that the dental care can cause<sup>19</sup>. Regarding this assertion, Pereira et al.<sup>2</sup> believe that it is essential to use methods that can be pharmacological or not, to decrease the frequency of anxiety in patients and facilitate the care. For Carvalho et al.<sup>1</sup>, even with the advances in pain control, data on the prevalence of anxiety before the dental care are still in the proportion of 10-15%, remaining as

a significant obstacle. Before the negative impact that anxiety exerts on dental care, it was sought to adjust a multivariate model to explain each of the factors predictors for the occurrence of anxiety to dental care in Brazil.

According to data of the epistemological surveys by Macedo et al.<sup>19</sup>, the individuals have difficulty admitting their feelings of anxiety, however, women find it easier to recognize this condition in comparison to their peers, who also seek more often dental care<sup>26</sup>. The study performed by Pereira et al.<sup>2</sup>, points out that although women are the majority in the indices of anxiety in relation to men, proportionally there was no difference between genders. Meneses et al.<sup>17</sup> also sought to highlight the incidence of anxiety in pregnant women, noting high levels of dental anxiety in this profile of patients, and there is a correlation with the emotional state in which the woman is. Few were the pregnant women who did not reveal dental anxiety.

Whereas among the epistemological studies that sought to evaluate the relationship of anxiety with the social classes in Brazil, some differences were reported because, according to surveys of Kanegane et al.<sup>26</sup>, although the patients of low income and high school or lower level education level are the ones that most seek dental care, the level of schooling and family income could not be associated with anxiety. To reinforce this debate, Macedo et al.<sup>19</sup> also show that anxiety is not associated with schooling, while Carvalho et al.<sup>1</sup> claim that anxiety scores were higher among patients with less schooling, low family income and without internet access and/or newspapers. However, these same authors agree that dental care ceased to be a privilege and became more accessible to low-income population. Pereira et al.<sup>2</sup> showed similar results to the study of Kanegane et al.<sup>26</sup> and Macedo et al.<sup>19</sup>, reporting no statistically significant difference between the populations of higher and lower income, nor between the populations of different schooling degrees. In addition, greater purchasing power and access to information also were not sufficient to prevent the development of a negative feeling related to dental treatment<sup>2</sup>.

Upon analyzing the influence of the age range of patients who have dental anxiety, this variable was very relative, and may affect people of all ages, even children<sup>1,14</sup>. The literature based on anxiety in children is considerably upgraded and has as its main focus the parents or guardians, highlighting in their majority the maternal presence, which is the one who usually accompanies the children in pediatric dentistry<sup>1,12</sup>. The study by Moreira et al.<sup>14</sup> reveals that the majority of parents or guardians remain together with their children, within the dental office and assign some episodes of childhood anxiety to anxiety demonstrated by the mothers. On the other hand, Ferreira et al.<sup>12</sup> disagree, stating that there is no correlation between anxious behavior of parents and the anxious behavior of children during the procedures. Hass et al.<sup>13</sup> when evaluating pre-school children, did not identify influence on anxiety during dental care when changing the environment of

the office and the clothing of the surgeon-dentist.

The ideas are also convergent regarding the conduct of patient-dentist relationship. Tomita et al.<sup>23</sup> mentioned that the surgeon-dentist should provide information and clarifications, enabling parents and carers to express their concerns and become more active participants in the process of dental treatment of their children. Possobon et al.<sup>22</sup> reinforce that the surgeon dentist must implement strategies that minimize the stress generated by treatment and by the environment, complementing that his or her technician performance, contrasts, many times, with the need for a more humanistic performance. Meneses et al.<sup>17</sup> corroborate with this statement when they state the need for humanitarian professionals who understand and can act with some caution. The professional should promote the acceptance of the anxious patient, passing security and respecting the individuality of each one.

### 3 Conclusion

Based on epistemological studies of this integrative review of literature, it can be concluded that the prevalence of anxiety is high in relation to dental procedures, able to trigger anxious reactions in people of different age groups, including children. In the majority of the framework of anxiety, women stand out, because they are also the ones that seek for the dental services the most. In relation to the interference of social, economic and schooling levels factors in the development of anxiety, there is a huge divergence in the literature, making it impossible for any type of conclusion, opening the possibility of new surveys to be carried out on this topic. However, it was evidenced that that anxiety directly interferes with the effectiveness of treatment, and the communication between the dentist-surgeon and his or her patient must be prioritized in order to recognize possible causes of discomfort.

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