



Dentistry and psychology in the care and treatment of odontophobic patients: the concise systematic review

Aline Cristina Jianoti de Jesus^{1,2}, Lucieli Henk Baroni^{1,2}, Ana Paula Bernardes Rosa Maluf^{1,2*}

¹ UNORP - University Center North Paulista - Sao Jose do Rio Preto, Sao Paulo, Brazil.

² UNIPOS - Post graduate and continuing education, Sao Jose do Rio Preto, Sao Paulo, Brazil.

*Corresponding author: Dr. Ana Paula Bernardes Rosa Maluf. Unorp/Unipos - Post graduate and continuing education, Sao Jose do Rio Preto, Sao Paulo, Brazil.

Email: implantesecia@terra.com.br

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Abstract

This study aimed to demonstrate the use of psychological methods in the routine care of a dental office. The research was carried out through a literature review in the PubMed, Scielo, Cochrane Library, Web of Science and Scopus, and Google Scholar databases, from 2002 to 2021. Throughout the work, the causes and symptoms of anxiety of these patients during the care process and the view of the dentist was also described in terms of crises of fear and often refusal of treatment by these patients. At the end of the study of the works described above, the great importance of the interdisciplinary work of Psychology and Dentistry as a method of optimizing the care of odontophobic patients was concluded.

Keywords: Psychology. Dentistry. Fear. Anxiety. Phobia. Odontophobic. Treatments.

Introduction

The World Health Organization (1960) conceptualizes "health as a state of physical, mental and social well-being and not just the absence of disease." In this context, Psychology combined with Dentistry, seeks to improve techniques for the mental and social health of patients, bringing information that reduces stress and anxiety during dental care [1].

Note that this environment is stigmatized by the history of dentistry and also by the lack of information from people as a place that refers to pain and suffering. The first research focused on the behavioral area in the field of dentistry took place throughout the 20th century. These researches had as a line of study to investigate the relationships between human behavior,

disease conditions, stress, and medical conditions [2-4].

In this aspect, Moraes (2017) [5] reported in his work that researchers started the first works in Psychology in Dentistry describing: clinical reports of patients' experiences influenced by their behavior textbooks on empirical and theoretical information on Psychology whose content involved applications in contexts where specific oral health care was carried out and experimental scientific articles on research in Psychology Applied to Health.

In 1960, the first movement of researchers interested in behavioral research applied to Dentistry was formed. It was during this period that dentistry faculties began to include subjects aimed at social and behavioral education in their grid [2]. In 1970, more effective psychodynamic approaches began to be applied to the treatment of phobic (fearful) patients. After this period, exactly in 1980, Health Promotion and Prevention began to play a prominent role, emphasizing the dissemination of healthy habits [3].

As a result, in 1990, research turned to the scope of developing new technologies as a way to reduce oral disease. In subsequent years, the lines of study focused on the relationship between surgeon-dentist and patients and new intervention techniques to deal with the behavior and promote more effective care, reducing the patient's stress and anxiety [4].

Therefore, this study, through a literature review, demonstrated the problem of the professional versus patient relationship, describing psychological approach techniques that help the dentist in the management of odontophobic patients.

Methods

Study Design

The present study followed a systematic review model, following the rules of systematic review - PRISMA (Transparent reporting of systematic review and meta-analysis, access available in: <http://www.prisma-statement.org/>).

Data Sources

The search strategy was performed in the PubMed, Scielo, Cochrane Library, Web of Science and Scopus, and Google Scholar databases, using scientific articles from 2002 to 2021.

Descriptors (MeSH Terms)

The main MeSH Terms used were "*Psychology. Dentistry. Fear. Anxiety. Phobia. Odontophobic. Treatments*". For greater specification, the description "dental treatment phobia" for refinement was added during the searches, following the rules of the word PICOS (Patient; Intervention; Control; Outcomes; Study Design).

Selection of Studies and Risk of Bias in Each Study

Two independent reviewers (1 and 2) performed research and study selection. Data extraction was performed by reviewer 1 and fully reviewed by reviewer 2. A third investigator decided some conflicting points and made the final decision to choose the articles. Only studies reported in Portuguese and English were evaluated. The **Cochrane Instrument** was used to assess the risk of bias of the included studies.

Results

A total of 98 articles were found involving the psychological approach in the routine care of patients who have a phobia of dental treatment. Initially, the duplication of articles was excluded. After this process, the abstracts were evaluated and a new exclusion was performed, based on the elimination of articles with biases that could compromise the reliability of the results, according to the rules of the Cochrane instrument, as well as articles that presented low quality in their methodologies, according to the GRADE classification. A total of 44 articles were fully evaluated and 16 were included in this study (**Figure 1**).

Considering the Cochrane tool for risk of bias, the overall assessment resulted in 4 studies with a high risk of bias (studies with a small sample size) and 2 studies with uncertain risk (studies with results without

statistical significance). The domains that presented the highest risk of bias were related to the number of participants in each study addressed, and the uncertain risk to the most efficient types of psychological treatment for patients. In addition, there was a lack of funding sources in 3 studies and 2 studies did not disclose information about the declaration of conflict of interest.

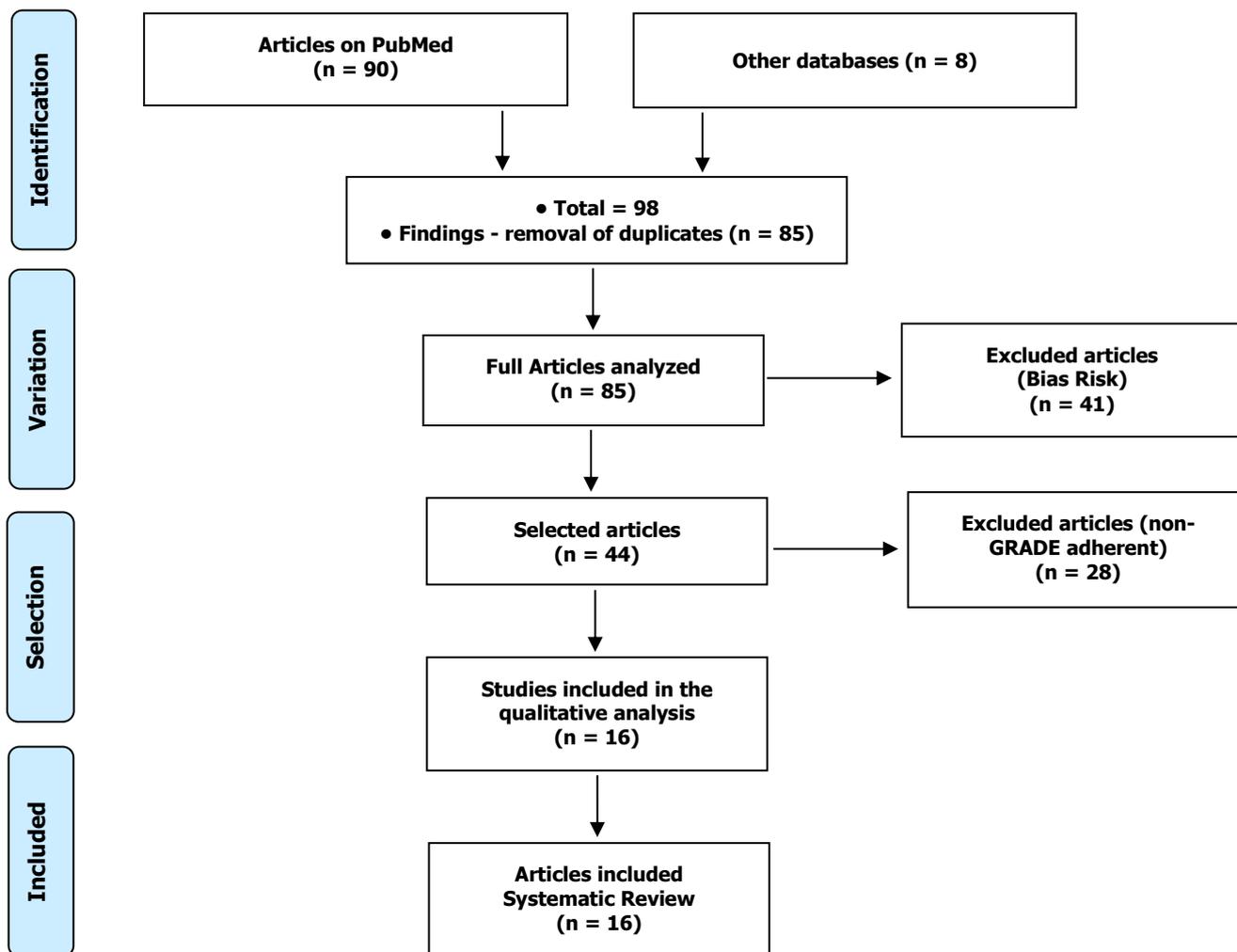
Thus, based on the main findings that composed this study, it was found that currently the fear of dental treatments has come to be called Odontophobia and has its origins in psychosocial and behavioral sciences. Pain, fear, stress, and anxiety are factors that negatively influence dental care. According to Brandão (2011) [6], pain is an unpleasant emotional and sensory experience associated with potential or real damage that, by producing a more complex psychological reaction, leads the individual to focus their attention only on the painful organ, decreasing their interest in everything the rest.

It is believed that this phobia may be related to a possible lack of self-control when the patient imagines himself/herself going through an experience of suffering and pain. Thus, Wolf (2002) [7] described that the fact that the patient needs another person to solve his problem, his lack of knowledge about the subject and the position of the bodies during treatment, in which the patient remains practically lying down and with little mobility, being unable to speak for most of the time and having the professional who works inside their oral cavity bent over themselves, taking instruments with an aggressive appearance are factors that induce the subject to experience feelings of dependence and fragility.

Also, according to Bulgarelli (2012) [8], most people seek dental treatment because of pain and discomfort in the oral cavity. The Brazilian Unified Health System, for many years, had oral health care focused on the rehabilitation of caries morbidities, and for several generations, Brazilians have suffered from tooth extraction. The negative conception of oral treatments comes from a past of torture, pain, and suffering, thus the image of the surgeon-dentist is associated with causing pain.

As a result of this phobia, it is common for the patient to demonstrate behaviors such as regression, where there is an infantilization of the subject and the idealization of the professional as a superior and powerful being to which he will passively submit. Aggressive behavior is also noted, since the patient, to defend his emotions, attacks the figure of the dentist, distrusting his capacity, questioning and continually confronting him [1-3].

In this context, it is very common to avoid

Figure 1. Flowchart showing the article selection process.


thetreatment with the use of arguments based on the pain you may experience, the financial cost, and the time spent to complete the treatment. The dentist should be aware of other manifestations of phobia symptoms such as crying, nausea, sweating, screaming, rocking (children), tachycardia, shortness of breath, and panic attacks. The patient can also establish excess prevention. The individual may demonstrate an excess of preventive actions to avoid going to the dentist [3,4].

Still, low self-esteem is another characteristic that can be developed, originating from the phobia that the patient has, resulting in poor oral health as a consequence, he finds difficulties in evolving in the labor market and interpersonal relationships. The concept of stress is largely related to psychophysiological changes both as environmental conditions that arise over time and developmental issues to maintain the body's balance [4].

In this sense, stress is a dynamic adaptation of the individual, which may involve issues such as heat, cold, pollution, and emotional issues, such as interpersonal conflicts, violence, and pain. Currently, the most modern lifestyle of people, together with technological progress,

has brought to light the incessant search for professional achievement, financial success, and immediacy to solve problems. Stress becomes an endemic problem in a society that has become increasingly ill over the years [2,3].

There is a great influence of stress on the body's metabolic and immunological activities. Among these changes, there are those of a positive character, classified as exciting and pleasurable, and those of a negative nature that unbalance homeostases, such as pain, discomfort, and suffering. Dental care for odontophobic patients is largely a stressful issue for these individuals. It is up to the professional to provide social support or social support as a resource for coping with this phobia [3].

In this sense, the perception of a high level of social support by the patient makes the service less stressful and their level of coping with the fearful situation becomes more effective with each session. The motivation of the dentist and his collaborators in carrying out the procedures to be performed shows the patient's confidence, enthusiasm, making the individual practice the procedures recommended by the

professional at home and participate in the next appointments in a more positive way [2,3].

Thus, the ability to transmit to people their motivation is contagious and becomes a decisive factor in achieving success in the clinic, both in terms of financial return and in becoming a space for promoting oral health, seeking quality of life, and more humanized service. Demonstrating to the patient in a conversation the importance of associating more appropriate oral hygiene with the satisfaction of needs such as self-esteem, status and self-fulfillment bring surprising changes to the patient's posture [1,2].

However, it is a process of building a professional-patient emotional bond. Dentists should always be aware of the real needs of their patients at the time and awaken this motivation gradually and naturally. It is believed that the dentist's availability to observe and listen to the patient reveals itself as a method to prevent relationship problems between patient and dentist. It is noted that the knowledge obtained through this methodology allows us to recognize the signs and symptoms that the patient presents, and thorough knowledge of the causes and attitudes of phobic patients, the dentist becomes able to promote tranquility and motivation to all of their patients. patients, leading to a feeling of comfort, confidence, and expressing in the patient the desire to contribute to the treatment proposed by the professional [3,4].

The patient will feel more relaxed when noticing that the dentist is aware of their reactions, understanding of their feelings, and promoting biosafety actions during the procedure to be performed. In the work of Wolf (2002) [7], there is a report of some techniques that should be adopted to promote a more humanized care, as the description of the procedures to be performed by the dentist should be done simply and in layman's terms, from To be easily understood, the patient must know what measures are being taken for his/her safety, forms and signs must be combined before performing the procedure in case there is a need to interrupt the service when the patient feels uncomfortable, the use of expressions of encouragement and appreciation on the part of the professional and the entire team favor a more collaborative action by the patient during treatment.

It is believed that from the moment that phobic patients start to have information about the procedures and to better recognize the environment of the dental office, trust in the team and the dentist starts to exist [9-11]. Anxiety whose main characteristic is the fear of the unknown, of what is to come, begins to demystify and the patient becomes more apt to receive professional care [12,13].

Therefore, during the study of several scientific articles for the bibliographical review of this work, numerous publications were found that demonstrate the influence of a musical intervention during the performance of more invasive procedures, such as in cases of third molar extraction. In these studies, there was a description of an interview carried out with a group of patients before an extraction [14-16]. Also, there was a selection of 10 songs of her choice and during surgery they were played randomly [2]. In the next consultation for removal of the suture, the group that had the procedure performed with the music selection reported less anxiety than the group that did not listen to music during the surgery.

It is believed that music can be one more method to reduce anxiety and the perception of pain in patients and, therefore, increasingly humanize care in an invasive situation. In addition, it is observed that the concern of the dentist in post-operative care with a phone call or a message, also to being an ethical issue, it also becomes a psychological issue to be used in promoting trust for future appointments and brings to light humanization with the patient's emotional issues [3,14,16].

Conclusion

It is concluded at the end of the research of scientific articles and books that served as a study basis for the completion of this Course Conclusion Work, that Dentistry has undergone major changes over the years. These changes demonstrate that Dentistry goes beyond the techniques, instruments and materials used for its practice. Currently, it has a more humanized character, encompassing the psychic and emotional health of individuals. It demonstrates a more modern dentistry focused on promoting prevention and oral rehabilitation with a more psychosocial nature. In this way, it is intended to remove the stigmas of the past that referred dental treatment to feelings such as pain and suffering. The emotional health of both the dentist, his team and the patient becomes of great relevance in the conclusion of a successful dental treatment, seeking to promote, in addition to oral health, the elevation of self-esteem and well-being for all. It should be noted that Psychology has become an extremely important discipline in dental practice, through which it is possible to better understand issues related to fear and put into practice the best way to deal with this feeling, thus avoiding an aggravation of this phobia to more fearful patients.

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Data sharing statement

No additional data are available.

Conflict of interest

The authors declare no conflict of interest.

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