

Aversion to Dental Treatment in Adults

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Received: January 22, 2019; **Published:** March 01, 2019

Abstract

Aim: To determine the reason for the demand for dental care and the patients' aversion to it.

Method: The study was observational, cross-sectional, comparative, non-probabilistic, of 34 adult patients, after the sample calculation, 17 men and 17 women who underwent some dental intervention, for which questions were asked to detect if there is aversion to treatment and what are the main causes.

Results: It was observed that the majority of the sample was in search of dental care when presenting complaint or pain, being more prevalent in the male gender. As for the use of the needle in the local anesthesia to perform procedures, the men were more tense and the women, more anxious. The response was similar between the genders regarding the acceptance of the use of anesthesia for the restorative procedure.

Conclusion: The predominant reason for the demand for dental care was the pain or the presence of some unbearable complaint. The tense behavior was present in both genders when they heard the noise of the dental instrument during the care. The most frequent reasons for aversion to dental treatment were the possibility of experiencing pain and the noise of dental equipment.

Keywords: Dental Anxiety; Dentist-Patient Relations; Dental Fear

Introduction

Suffering and pain during the dental procedure are related to patients' rejection of dental treatment. Surveys have pointed to fear as a reason for not visiting the dentist regularly. This aversion is almost always manifested by the association of pain with the image of the professional and his or her craft [1,2].

Anxiety is a psychic state characterized by symptoms of tension, apprehension, nervousness and worry that are present in response to some threat or anticipation of an unpleasant situation [3].

Previously, dental practice was associated with torture, punishment, punishment and pain. The dental surgeon assumed the role of executioner, a bad and cruel person. It is necessary to demystify the culture of a mutilating dentistry, humanizing it, taking care of the psychological aspects of the patient [4].

It is not only the dental instruments that generate fear to the patient, but also the oral handling itself. In addition, the office can be evaluated as an anxiogenic site. It has been observed that patients with greater pain sensation are preferred to be attended by the pro-

fessional who is able to deal with fears and behaviors coming from the procedure that will be performed [5].

Odontophobia still arises in childhood and adolescence. The probable causes for exacerbation of fear are pain, ignorance, negative experiences passed on by third parties, the office environment and physical contact with the professional [6].

Even if this fact is not fully elucidated, the interaction between phobia and traumatic dental experience is indisputable and it is advisable to perform less invasive initial procedures in order to adapt the patient to the dental experience before performing more invasive treatments [7].

Preventive dentistry, for example, avoids the onset and exacerbation of oral pathologies and also promotes the prevention of phobia generated by experiences with more invasive procedures [8].

Although dentistry has evolved in an attempt to alleviate the unpleasant sensations that the patient may undergo during the

clinical procedure, there is still a certain aversion to dental care. This exerts a negative influence on the treatment, whether for periodic visit of prevention or control or for curative procedures.

Aim of the Study

This study aimed to determine the reason for the demand for dental care and the patients' aversion to it.

Materials and Methods

The design of the epidemiological study was of the observational, transversal, comparative, non-probabilistic type of 60 adult patients, after the sample calculation, being 30 men and 30 women who were undergoing some dental intervention, for which they were made questions to detect if there is aversion to treatment and what are the main causes. It was decided to conduct this research only with adults because they believed that they would remember possible traumatic dental experiences in the past that could influence treatment aversion.

We sought to obtain the exact number of patients for both genders for the purpose of comparing the answers to the questionnaire applied by the researcher. The research was carried out at the Clinical School of Dentistry of the State University of Piauí (UESPI), Campus Parnaíba.

The pilot project in November 2015 was carried out by a single researcher, with the objective of verifying the adequacy of the questionnaires to be used in the research, with the participation of the first 10 patients seen on the first Wednesday. The questionnaire was applied again to the same patients on the following Wednesday, prior to the dental care of that day, totaling 20 questionnaires, in order to observe if there was divergence in the responses. It was found that there was no divergence.

We included in the questionnaire all adult patients, above 18 years of age, attended in the mornings and afternoons from Monday to Friday, from March to July of 2016, who voluntarily wanted to participate. The exclusion criterion considered in this study was the refusal of adult patients to respond to the questionnaire and those under the age of 18 (underage). Of the total of 70 patients attended in the period mentioned above in the Clinical School of Dentistry of UESPI, 10 did not want to participate in the research.

The questionnaire was composed of sixteen objective and two subjective questions, filled by a single researcher. The answers between the genders were compared, and the economic situation and level of education of the interviewees were investigated (Figure 1). After the application of the questionnaire, an educational lecture was given, with explanatory pamphlets on the importance of dental treatment both for the maintenance of oral and general health of the individual, with emphasis on combating treatment aversion.

Questionnaire

1. If you work, what is your income?
 - () Less than one minimum wage
 - () A minimum wage
 - () More than one minimum wage
 - () Two or more minimum wages
2. What is your education?
 - () Incomplete elementary school
 - () Complete primary education
 - () Incomplete high school
 - () Complete high school
 - () Incomplete or complete university education
3. How often do you visit the dentist?
 - () goes when he has a problem and when he feels pain
 - () follows the dentist's instructions
 - () once a year
 - () every six months
4. Ever been anxious before some dental procedure?
 - () Yes () No
5. Are you afraid to undergo dental treatment?
 - () Yes () No
6. If you answered yes, would you know how and when to develop this fear?
 - () gets tense () goes badly () uncomfortable () calm () anxious
7. When you realize that needle with anesthetic will be applied to you, what do you feel?
 - () gets tense () goes badly () uncomfortable () calm () anxious
8. For simple treatment, do you find it unnecessary to use anesthesia?
 - () prefers without anesthesia so the mouth does not get cushioned
 - () without anesthesia
 - () trusts the dentist and gets tense
 - () negotiates with the dentist, if it hurts, will use the anesthesia
9. What makes you clear or clear the dental appointment?
 - () fear of pain () being hours waiting () fear of instrumental () traumas
10. Knowing that the next day you will have consultation with the dental surgeon, what do you feel the day before?
 - () Apprehensive () Anxious () Uncomfortable () Does not bother me () I'm terrified.
11. What is the feeling of being in a waiting room?
 - () Tense () Moody () Uncomfortable () Quiet () Eager
12. What do you feel when you listen to the doctor's voice?
 - () fear () feel shivers just thinking () a little tense () anxious
13. The professional says that you need to extract a tooth, what do you do?
 - () already marks the surgery anxious
 - () already marks the surgery anxious
 - () look for opinions to see if surgery is even needed
 - () What is the most apprehensive feeling you feel when you visit the dental surgeon?
 - () Noise () Pain () Odor () Dentist's Den
14. Did you have any trauma in childhood or during your life when undergoing dental treatment? If so, which one?
 - () Yes () No
15. When a child, did your parents promise any punishment (punishment) related to the figure of the dental surgeon? Example: IF YOU DO NOT BE CAREFUL DO I TAKE THE DENTIST TO START YOUR TEETH?
 - () Yes () No

Figure 1: Questionnaire.

The present study was submitted to the Committee of Ethics and Research in human beings of the State University of Piauí - UESPI, under CAEE (54948416.5.0000.5209), awaiting opinion. The research complied with the determinations of resolution 466/12 of the National Health Council, which determines the ethical principles of the research.

We used the SPSS software, version 21, to perform descriptive statistics (mean and standard deviation) to characterize the sample, seeking to know the relationship between the dental procedure and the participants' fear, also comparing the responses between the genders. Distribution charts were drawn from the percentages and proportions of the responses.

In order to know the characteristics of the participants regarding the frequency of visits to the dental surgeon (DS), the specificities of psychological trauma and fear of dental procedures, graphs described in numerical values were presented to demonstrate sample data and compare their responses. Therefore it was previously determined that the number of participants should be identical for both genders.

Results

The participants' ages ranged from 18 to 53 years, with a mean of 31.23 (SD = 11.85). The majority (58.3% n = 35) had as income a minimum wage. However, 15 (25%), monthly income less than the minimum wage, 10 (16.6%) above a salary and 5 (8.3%) without paid work activity. As for schooling, it was observed that 24 (40%) of them had the incomplete fundamental, 10 (16.6%) the complete middle, 8 (13.3%) the higher education, 9 (15%) the incomplete middle and 9 (15%) the complete fundamental.

It was found that the greatest number of dental care searches is when some complaint or pain occurs (61.6% n = 37), being more

prevalent in men such a situation (in male 63.3% n = 19, in female 56.6% n = 17) (Figure 2).

Figure 2: Reason for searching for dental care.

The women were anxious and fearful about dental care. As for people who reported fear, they said that it was developed by: "Hearing reports from other people", "Imagining that the experience of anesthesia and injection will cause pain" or that "They did not know the reason for fear, being a situation which has occurred since childhood".

The men were more apprehensive about the use of the needle in local anesthesia (60% n = 18) corresponding to 36 of the total of 60 participants (60%) in while the women were more nervous (16.6% n = 5) (Figure 3). The response was similar between the genders regarding the acceptance of the use of anesthesia and trust for the restorative procedure (46.6% n = 14) (Figure 4).

Figure 3: Reaction to needle use during local anesthesia.

Figure 4: Anesthesia for restorative procedure.

The noise generated more nervousness in men (46.6% n = 14) than in women (36.6% n = 11), already the tension prevailed in them (53.3% n = 16) (Figure 5). The male patients were more relaxed in the waiting room (40% n = 12) (Figure 6). The pain caused greater apprehension to the dental treatment to the men (60% n = 18), whereas in the women was the noise (50% n = 15) (Figure 7).

Figure 5: Reaction to the noise of dental equipment during care.

Figure 6: Behavior while waiting in the waiting room.

Figure 7: Reason for greater seizure during dental care.

Asked if they had any dental trauma in childhood, the majority (85% n = 51) of the participants denied. Those who answered yes (15% n = 9), reported that the same happened when they had to do some procedure and there were bleeding and cuts. However, they did not suffer punishment and/or punishment as a child, for not having behaved well or did not want to go to the office.

Discussion

According to the results obtained, the SD should always be aware of the applicability of the scientific knowledge and the vari-

ous forms of behavior that the patient can present during the care. Thus, the training of the academic is fundamental to use psychological resources in an attempt to reduce anxiety, so that there is a predominance of collaborative behaviors that should be as important as the preparation for the clinical procedure [9,10].

Anxiety can be an obstacle for the patient to seek dental services [9]. Fearful patients usually wait considerable time to go to the doctor's office and often do not attend [10,11]. The current study found that women are more nervous, but the number of men was quite considerable (Figure 3), corroborating with the findings of other authors [4,12-16].

The study found that the patient generally seeks dental care when he or she is experiencing pain or has a complaint and it is difficult for preventive or habitual activities to go to the office every year or every six months (Figure 2), as was also observed by other authors [16-20].

Regarding the use of anesthetics in dental procedures, there are treatments that trigger a greater sensation of anxiety, such as local anesthetics and exodontia [17,18]. The research considered high tension in both men and women, knowing that the professional will apply the anesthetic solution (Figure 3), diverging from some authors [1-4,6] whose predominance was greater in the female gender. If exodontia was needed, the women responded that they seek a second opinion before the surgical procedure. This is probably due to its anxiogenic potential.

It seems evident that anxiety has a huge share of the contribution to pain felt during care. The painful process occurs both in a more invasive procedure and during the injection of the anesthetic solution which seems to be the procedure that causes the most pain [19,20].

Two factors may contribute to increase sensitivity to pain perception, which is one of the main factors that generate aversion. When care is delayed, evolution occurs in the context of oral pathology, making the procedure to be performed more invasive, thus promoting greater discomfort. The painful process is often associated with the presence of inflammation, since there was an increase in the sensitivity of the nociceptors [21,22].

The patient, after being aware that the use of the anesthetic prior to dental procedures is an ally in the control of pain, accepts it (Figure 4). It is believed that local anesthesia allows the practitioner to perform procedures with tranquility and perfection, without causing anxiety or tension to the patient.

The noises generated in the office, mainly by micromotors of high and low rotation cause more nervousness to the male members, and greater tension to the female gender (Figure 5).

Probably the use of silent micromotors would generate less potential of tension and anxiety to the patient, as emphasized by other authors [18-20].

Regarding behavior in the waiting room women are more nervous than men (Figure 6). It is believed that a pre-service conversation would help to control anxiety, being explained clearly what will be done in the patient, promoting a relationship of trust, agreeing with the findings of other authors [8,9,11].

Regarding the reason for the aversion to dental care, the majority of women did not respond, whereas for most men the greatest reason was the fear of feeling pain (Figure 7), corroborating with the findings of Maggrias and Locker, 2002 [20].

The most frequent suggestions from patients for aversion to dental treatment were to reduce or eliminate the noise of the instruments or to make people aware that treatment is necessary. In addition to promoting educational lectures, since childhood, the dental surgeon and patient should develop a clarity relationship of friendship and trust and all procedures in an attempt to keep the patient calm and knowledgeable about the treatment.

Therefore, pain control and use of quieter instruments may promote lesser anxiety in those attended.

Conclusion

The predominant reason for seeking dental care was the pain or presence of some complaint.

The tense behavior was present in both genders when they heard the noise of the dental instrument during the care.

The most evident reasons for the aversion to dental treatment were the possibility of experiencing pain and the noise of dental equipment.

The interpretation of the results should consider some limitations inherent to this study. It is important that future studies be conducted on aversion to dental treatment and what to do to minimize or eliminate it.

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Volume 3 Issue 4 April 2019

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