

# Dental Anxiety: Relationship with Oral Health Behavior in Brazilian Population

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## Short Communication

Dental anxiety is an important obstacle to health care and constitutes a serious epidemiological challenge to oral health care professionals [1]. The impact that dental anxiety can have on an individual's life is broad and dynamic [2], leading to the avoidance of dental care and exerting individual effects, such as sleep disorders, low self-esteem and psychological problems [3,4]. Fear of visiting the dentist is common, even among adults, and is one of the most important issues for dentists with regard to child and adolescent patients [5].

Over the centuries, the expectation of pain during dental treatment has been a source of fear and anxiety [6]. While the scientific literature has demonstrated significant progress in dental treatment [7], patients often exhibit a high degree of anxiety. Fear seems to be a natural reaction, as dental treatment is known to cause pain.

Data on the prevalence of dental treatment anxiety in adults remain at a proportion of 10% to 15% [8,9]. Studies involving children and adolescents report prevalence values of 6.7% to 18% [10,11]. Studies involving elderly individuals report prevalence values ranging from 7.2% to 13.0% [12-14]. Thus, dental anxiety remains a significant obstacle to a consistent portion of the population [15], leading to the avoidance of dental care.

It is not yet clear why some become anxious when facing treatment, while others do not [16]. Thus, researchers have been searching for possible predictive factors of dental anxiety among the Brazilian population [3,11], adjusting a multivariate model to identify each of the predictors in this population.

Dental fear and anxiety indeed exist in the Brazilian population, and the findings suggest that, besides the lack of economic resources, negligence of oral health may increase the degree of dental anxiety. The findings could be employed to guide health education programs aimed at combating dental anxiety, with a focus on strategies directed towards patients who avoid treatment because of dental fear.

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This line of research employed Corah's dental anxiety scale [17], which has been the most widely used measure for assessing dental anxiety since the 1970 [18]. This scale allows the objective determination of the degree of anxiety through the sum of answers provided for multi-item questions (Table 1). The measure has been validated for the Portuguese language [19] and has demonstrated adequate internal consistency and test-retest reliability. Figure 1 displays the interpretation of the Corah's dental anxiety scale [17].

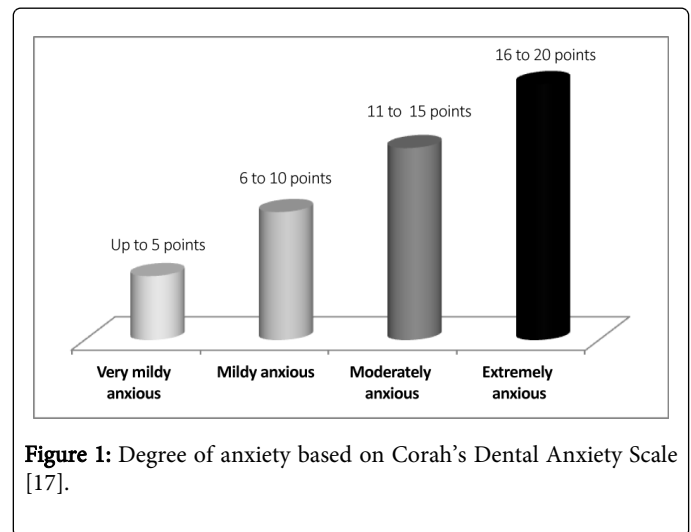


Figure 1: Degree of anxiety based on Corah's Dental Anxiety Scale [17].

If you had to go to the dentist tomorrow, how would you feel?	
1	Fine. It wouldn't bother me.
2	I would be slightly worried.
3	I would be uneasy about it.
4	I would be afraid about what might happen.
5	I would be very apprehensive. I wouldn't be able to sleep well.
When you are in the waiting room waiting for the dentist to call you, how do you feel?	
1	Calm, relaxed
2	A little uneasy
3	Tense
4	Anxious or afraid
5	So anxious or afraid that I break out in a sweat and feel almost physically sick.
When you are in the dentist's chair waiting for the dentist to begin the local anaesthesia procedures, how do you feel?	
1	Calm, relaxed
2	A little uneasy
3	Tense
4	Anxious or afraid
5	So anxious or afraid that I break out in a sweat and feel almost physically sick.

<b>You are in the dentist's chair, already anesthetized. While you are waiting for the dentist to get the instruments to begin the procedure, how do you feel?</b>
Calm, relaxed
A little uneasy
Tense
Anxious or afraid
So anxious or afraid that I break out in a sweat and feel almost physically sick.

**Table 1:** Multi-item questions on Corah's Dental Anxiety Scale [17].

The age group of the patients who displayed anxiety was varied, with a greater frequency among those aged 12 to 14 years ( $p < 0.05$ ) and those who had never been to the dentist ( $p < 0.05$ ). This demonstrates that the prevalence of dental anxiety diminishes with age and as a consequence of early visits to the dentist, which has also been reported for the child population [4,5]. This profile is the opposite of that reported for adults, in whom there appears to be a positive association between an increase in age and anxiety, which may be explained by the fact that dentists currently treat adults who visited dental offices in childhood in which there was no technology that allowed stress-free dental care, which is quite different from the situation today's teenagers face.

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