

Dental Anxiety among UQU Dental Clinics Patients

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ABSTRACT

Background: Dental anxiety is a common worldwide problem; it may cause treatment difficulties for the dentist, as well as severe consequences for the patient. Pain is the main reason for seeking dental care. Expressing patient's anxiety appears when the stimulus triggers the reaction of anxiety.

Objective: The aim of this study is to determine the prevalence and causes of dental anxiety in patient attending teaching hospital at Umm Al-Qura University.

Methods: A questionnaire was designed to collect the data from adult dental patient regarding to dental anxiety. We used Modified Dental Anxiety Scale (MDAS) to determine the level of anxiety.

Result: The results showed that 90% of patients were anxious. Anesthesia and drilling were the most common causes for dental anxiety. According to Dental Anxiety Scale we found that 50 % of patients were slightly anxious, 25 % fairly anxious, 14% very anxious, 1% extremely anxious and 10% non-anxious.

Conclusion: The majority of patients were anxious and anesthesia was the major cause of anxiety. Necessary measures are needed to reduce dental anxiety.

Key words: Dental Anxiety, Modified Dental Anxiety Scale (MDAS), Umm Al-Qura University.

INTRODUCTION

Dental anxiety is specific reaction to stress linked to dental treatment. [1] It is a common problem among many dental patients. The prevalence of dental anxiety has been shown through various studies. Most studies estimated the prevalence of dental anxiety to be between 4 – 20%. [2]

Dental anxiety may exert a negative impact on the therapeutic management. Anxious patients are likely to postpone the appointment or avoid treatment completely which would adversely affect the health of the mouth and teeth. [3] It has been shown that anxious patients have more decayed and missing teeth compared with relaxed patients. [4] The quality of life can be affected by bad oral hygiene. [5] Treating anxious patients might require more time

and need more care and more experience. Expressing patient's anxiety appears when stimulus triggers the reaction of anxiety.

Dental anxiety is usually a very complex problem. It might sometimes be easy to see that the patient is anxious, but finding out exactly what the problem is and how to help the patient, is often more difficult. [6]

Many factors can contribute to dental anxiety. [7] A negative experience in the past is the main reason for the fear of the dentist. [8] Many of dental procedures may provoke more anxiety such as tooth extraction due to physical and psychological impact. [9] The dental anxiety can be affected negatively by the result of dental treatment. [10] The negative influence can be physical or psychological. [11] Physical effect may

include sudden shifts in "diastolic and systolic blood pressure or pulse rate. [12] Several studies have demonstrated that dental anxiety can affect oral health. [13-15] Oral health will deteriorate due to lack of proper dental treatments. [16]

The aim of this study is to assess dental anxiety by using Modified Dental Anxiety Scale (MDAS). [17]

MATERIALS AND METHODS

This cross-sectional study was conducted in dental teaching hospital at Umm Al-Qura University after approval of ethical committee. A self-administered 92 questionnaires were distributed to male and female dental patients aged 15-45 years.

We used the Modified Dental Anxiety Scale (MDAS) to determine the level of anxiety. MDAS consists of 5 items ranging from 'not anxious' to 'extremely anxious' on scale of 1 to 5 where 1 is not anxious and 5 is extremely anxious. Total score is a sum of all five items, range 5 to 25: Cut off is 19 or above which indicates a highly dentally anxious patient, possibly dentally phobic. [18] Data were analyzed using Excel software.

RESULTS

Prevalence of dental anxiety: To measure the Prevalence of dental anxiety in adult patients we used a questioner. We found that 90% of patients attending teaching hospital at Umm Al-Qura University were anxious (Fig. 1.)

Level of anxiety: We used Modified Dental Anxiety Scale to determine the anxiety level. We found that 50 % of our patient were slightly anxious, 25 % fairly anxious, 14% very anxious, 1% extremely anxious and 10% non-anxious (Fig.2).

Causes of dental anxiety: This study reveals that anesthesia and drilling were the main reason of dental anxiety (Fig.3.).

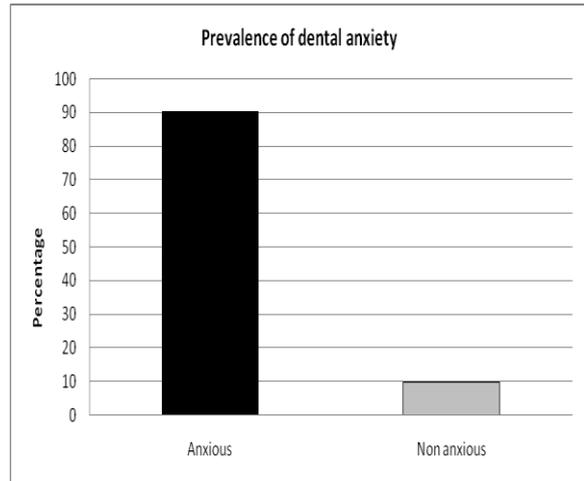


Fig. 1. Prevalence of dental anxiety. Anxiety was measured by questioner from adult dental patient.

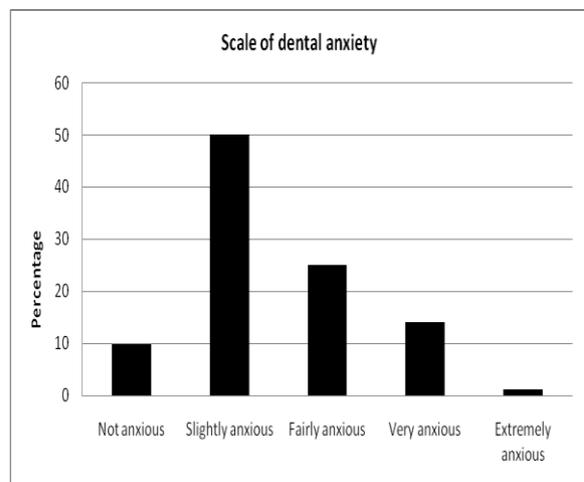


Fig. 2. The Level of anxiety was assessed according to Modified Dental Anxiety Scale

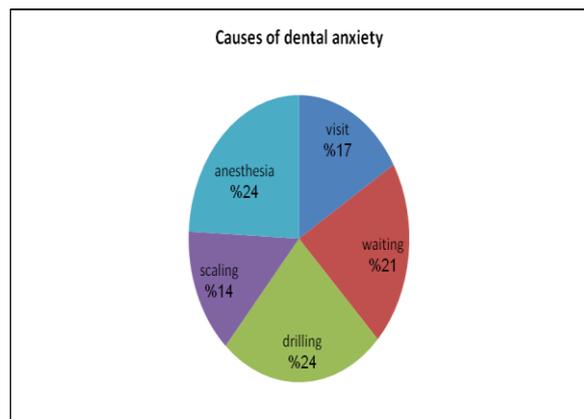


Fig.3. Causes of dental anxiety was assessed according to Modified Dental Anxiety Scale.

DISCUSSION

In the present work 90% of the patients attending teaching hospital at Umm Al-Qura University were anxious, this is in agreement with other studies which have shown that about 75% of US adults suffer

from dental anxiety experience. [19-21] In another study in Iran, the prevalence of dental anxiety among the study population was 58.8%. [22] On the other hand, other studies have shown that the prevalence of dental anxiety was much lower than our study. [23] In one study done in Brazil, the prevalence of dental anxiety was 28.2% according to Modified Dental Anxiety Scale of adult patients were anxious. [24] This difference may be due to the difference in culture and the nature of people. Another reason of high prevalence in our study may be due to the fact this study was conducted in teaching hospital where students do most of the work.

Level of dental anxiety was determined using the Modified Dental Anxiety Scale. In this study, we found that 50 % of patients were slightly anxious, 25 % fairly anxious, 14% very anxious, 1% extremely anxious and 10% non-anxious. About half of our patients were slightly anxious which may be because their previous negative feedback about dental practitioner.

We used a questionnaire to assess the major causes of dental anxiety including anesthesia, drilling, scaling, waiting time and visiting a dental appointment. In our study, we found that anesthesia and drilling were the most common causes for dental anxiety. This is in accord with other studies which showed that previous traumatic dental experiences had higher levels of dental fear and anxiety. [25] The fear of anesthesia may be due to the size of needle or using multiple injections and the same time not using topical anesthesia before injection. In addition, we found that the noise of drilling is the fearful cause in dental treatment. In contrast with other studies, the negative feedback was the main cause of anxiety. [26,27]

CONCLUSIONS

From what have been discussed, we can conclude that the majority of patients attending the teaching hospital at Umm Al-Qura University were anxious. However,

slight anxiety is considered normal among population. Anesthesia was a major cause of anxiety and dental practitioner should apply topical anesthesia before injection to minimize the pain from needle injection. It would be better to improve the hand piece to minimize the noise from drilling.

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