



## PSYCHOLOGICAL IMPACT OF TOOTH EXTRACTION IN RURAL POPULATION: STUDY IN 100 PATIENTS

: Dental Science

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### ABSTRACT

**Background:** Tooth extraction is considered to be highly distressing and belongs to the top 5 most fear evoking treatment in dental procedures.[1] Studies investigating the onset of long standing negative psychological response to dental treatment have shown that the severity of patient's current level of dental anxiety is significantly associated with the extent to which they experienced their past dental treatments as painful or otherwise traumatic.[2] It is important to prospectively examine the emotional impact of tooth extraction which is the most common potentially distressing surgical procedure practiced in Oral & Maxillofacial Surgery.[3] **Objective:** To prospectively examine the psychological impact of tooth extraction. **Materials and Methods:** A total of 100 patients participated in the study. All patients were informed about the study and were asked to sign an informed consent to confirm their voluntary participation. Data regarding psychological distress was collected using different variables like pain, anxiety and emotional disturbance by use of separate scales at 1-month follow-up. **Results:** 86% experienced mild pain, 12% moderate and 2% severe of total sample size. In which mildly anxious people were 81% and moderate were 19% of the sample size **Conclusion:** Findings of this study show that the emotional impact of tooth extraction is still on higher side, which suggests there is definitive need to follow stress reduction protocol to reduce emotional disturbance.

### KEYWORDS:

#### Introduction:

A tooth extraction or even just an idea of having a tooth pulled out puts many persons ill at ease. This is in agreement with research indication that tooth extraction is considered to be highly distressing and that it belongs to the top five most fear evoking treatment procedures in dental situations. [1] Studies investigating the onset of long standing negative psychological response to dental treatment have shown that the severity of patient's current level of dental anxiety is significantly associated with the extent to which they experienced their past dental treatments as painful or otherwise traumatic. [2] In a recent study, patients were monitored until 1 month after their tooth extraction, in which the post-operative levels of dental anxiety were found to be significantly associated with the level of emotional distress experienced during treatment. Thus, distressing experiences are likely to make patients vulnerable, thereby increasing the risk for long-standing dental anxiety developing in response to a distressing event. To our knowledge until now only 2 studies have examined possible risk factors for the development of anxiety after tooth extraction. [3]

#### Materials and Methods:

100 patients reporting to the OPD of Department of Oral & Maxillofacial Surgery for tooth extraction were chosen for the study. All patients were informed about the study, invited to participate, and signed an informed consent to confirm their voluntary participation. Teeth were extracted by standard technique. The patients were then recalled after a month for follow-up, during which they were given different variables for pain, anxiety and emotional distress. The result of the patient was then categorized as mild, moderate and severe. Only those patients were considered for the study, who reported back after a month for follow-up.

Result:

To evaluate the levels of pain, anxiety and emotional distress in patients undergoing tooth extraction, all 3 variables were classified into mild, moderate and severe.

The level of pain was categorized as per the Visual Analogue Scale in which (0-30) mild, (40-60) moderate and (70-100) severe. (Table 1) In this study, 86% experienced mild pain, 12% moderate pain and 2% severe pain. Thus, most of the subjects predicted mild pain after a month.

For the anxiety levels, universal questionnaire was provided to the patients. The questions were whether they were anxious a day prior to tooth extraction, how they were feeling in the waiting room, also about level of anxiety if informed about their tooth to be drilled or local anesthetic injection to be injected into their gums. Cumulative score was calculated on basis of all answers. Then the score was categorized into (1-6) mild, (7-13) moderate and (14-20) severe. In this study, 81% were mildly anxious and 19% were moderately anxious. Thus, level of anxiety was mild in most of the cases. (Table 2)

Removal of the molars had an emotional impact on patients which was classified as per the facial expressions of the patients. The score ranging from (0-1) was mild, (2-3) was moderate and (4-5) was severe. The patients with mild emotional distress were 42%, while 53% had moderate and 5% had severe emotional distress. (Table 3)

#### Discussion:

Tooth extraction by definition poses a potential threat to someone's physical integrity, it is likely that individuals who are exposed to such events are at increased risk for development of dental anxiety and psychological stress after the treatment. [5-7] However, the present

data shows that the emotional impact of tooth extraction was relatively moderate. The level of anxiety was much lower than the previous studies. This may be explained by sample characteristics and personal features of the surgeon who performed the procedure, indicating his/her skills and experience, not only regarding the tooth extraction, but also with regard to communication and anxiety management and the extent to which he or she is capable of establishing a trusting relationship with the patient.[4]

**Conclusion:**

Although, percentage of population undergoing routine tooth extraction is quite high, findings of this study suggest that the although pain & anxiety after 1 month of tooth extraction was mild, but the emotional impact of tooth extraction is still on higher side. Thus, there is a definitive need to follow stress reduction protocol or other standard approach to reduce emotional disturbance. More elaborative studies are necessary to determine possible causes for such emotional impact.

**References:**

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