

Assessment Of Fear And Anxiety In Endodontic Patients: VAS Based Survey

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Abstract:

Background: One well-known issue among the people delaying dental care is anxiety prior to dental treatment. Patients that are tense and worried cause scheduling issues, complicate treatment, and make the dentist uncomfortable.

The survey will be based on a set of questionnaire and VAS scale and the patients will be asked to complete the questionnaire before and after endodontic treatment. Questionnaire will help to analyze the response of the patient's anxiety and fear towards endodontic treatment. Hence, the aim of the present survey is to evaluate fear and anxiety levels of patients before and after endodontic treatment.

Materials and Methods: The Questionnaires created specifically for the study were used to conduct it. 200 patients visited the dentistry college's outpatient department for the study, and observations were noted and examined. Due to experiences shared by parents or other family members, the majority of participants, both male and female, exhibited dental phobia.

Results: Significant factors are early and negative medical experiences, family impact, age and cause of the first visit to dentist. Several studies shows that fear of dental treatment in adults can be acquired and learned in childhood. Considering the question of anxiety, we should consider the patients trust in the doctor. Results confirmed that the most important positive quality of a physician for patients are competence and avoidance of pain.

Conclusion: As the source of the most unpleasant experiences during the appointment, maximum responds describe anxiety before the procedure. 70% of the patients were scored to be anxious about the procedure and 30% patients shows anxiety after the treatment. The greatest anxiety was aroused in patients before the procedure.

Key Word: VAS scale; Anxiety, Dentophobia.

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I. Introduction

Extreme anxiety and severe autonomic nervous system symptoms are the hallmarks of dentophobia. Increased anxiety leads to a worsening of oral hygiene because a patient who is "obsessively" afraid of dental treatment tends to avoid appointments. If the patient does decide to receive treatment, it is a very traumatic experience that negatively impacts and exacerbates their overall well-being and quality of life. Although dental health is a crucial component of physical health, it has received less attention than the poor physical health experienced by individuals with mental illness. The reciprocal relationship between dental and mental health is covered in this article. On the one hand, the idea of receiving dental care may cause fear and worry. In contrast, numerous mental illnesses, Dental disease is linked to conditions like eating disorders, emotional disorders, and severe mental illness: These consist of periodontitis, caries, and erosion. People with serious mental illness are 2.7 times more likely than the normal population to lose all of their teeth if dental disorders are not treated. Oral health exams using standard checklists that nondental staff can complete, assistance with oral hygiene, treatment of iatrogenic dry mouth, and early dental referral are examples of potential therapies.¹ The efficacy of therapy and rehabilitation is compromised by irregular visits or discontinuations, which can also postpone recovery.²

Considering the aforementioned, a dentist's assessment of a patient's level of dental anxiety can have a significant impact on the entire course of treatment and patient care, including the scheduling of appointments, adaptation visits, treatment plans and recommendations, anesthesia methods, and the need for pharmaceutical premedication. Psychometric scales, which are typical patient-completed questionnaires, are among the numerous techniques that are most frequently employed. The Modified Dental Anxiety Scale is a quick five-item test with a standard response format for each issue, ranging from "not anxious" to "extremely anxious." A Likert scale with a minimum score of 5 and a maximum value of 25 is created by adding them all together.³⁻⁶

It is straightforward to score, has high psychometric qualities, and can be completed really quickly.^{7,8}

Empirical research has shown that a cut-off score of 19 or higher indicates high dental anxiety, which may necessitate extra care from dental professionals. The measure has been employed in studies and has advanced our understanding of this significant psychological concept associated to dentistry. It is one of several tools created to assist in researching the characteristics of this unpleasant emotion.⁹

Fear of pain during extraction, anesthetic, or drilling is the main cause of dental anxiety, according to numerous research.¹⁰ In several medical specialties, but especially in oncology, palliative care, and anesthesiology, simplified scales are used to gauge the intensity of pain. These enable the patient to accurately and swiftly document the level of pain. The Visual Analog Scale (VAS) is one of these scales. The VAS is a 10-cm segment that ranges from 0 (no pain) to 10 (excruciating agony). The patient's job is to mark the point on the scale that represents their current level of pain with a vertical line. The subjective experience of fear is comparable to that of pain. Unfortunately, the literature that is currently available only contains isolated findings that employ the VAS (which is derived from the pain assessment approach) to measure anxiety in hospitalized patients who are awaiting surgery.¹¹ It was first used and described by Aitken in 1969. Huskisson (4) popularized it for measuring pain, and it was demonstrated to be extremely responsive, valid, and dependable. The VAS is widely used in epidemiological and clinical research to quantify subjective feelings such as pain, anxiety, sadness, tension headaches, exhaustion, anxiety, psychological distress, quality of life, and worry. The completion time is less than a minute (5). Typically, the VAS is displayed as a 10-cm horizontal line with distinct markings at each end. Participants are asked to mark the position on the line that best expresses their current feelings toward the phenomenon. A quantitative variable that can be utilized in statistical analysis is obtained by measuring the distance between one end of the line and the participant's mark.¹² Here, the aim of the study is to determine the dental anxiety in patients attending the Department of Conservative dentistry and endodontics in CSMSS dental college, Chh.Sambhajinagar.

II. Material And Methods

The study was carried out in the Department of Conservative Dentistry and Endodontics between January–March (2025).

Patients of age group 18 and above were included in the study. The sample size of total 200 patients were selected.

While sitting in the dental chair awaiting dental treatment, each patient was asked to fill out questionnaire. I had explained them about aims and purpose of survey. None of the patients were taking any sedative, hypnotic or anti-psychotic drugs.

The questionnaire format was in two languages i.e. Maharashtrian's local language (Marathi) and in English.

Inclusion Criteria –

- Scale for adult
- Only for dental use

Exclusion Criteria –

- Scale for adolescent/child
- Not for dental use

Patients awaiting a dentists appointment were asked to complete a survey containing

1. Informed consent
2. Demographics
3. questions related to source of most unpleasant experiences during treatment.
4. a Modified scale of anxiety assessment which consist of 5 questions and its responses were recorded from not anxious to extremely anxious.

The questionnaire format was designed as follows –

Procedure methodology

Department Of Conservative Dentistry And Endodontics

Patients details –

NAME –

AGE –

SEX-

OCCUPATION –

OPD NO. –

ADDRESS –

III. Results

Table no 1

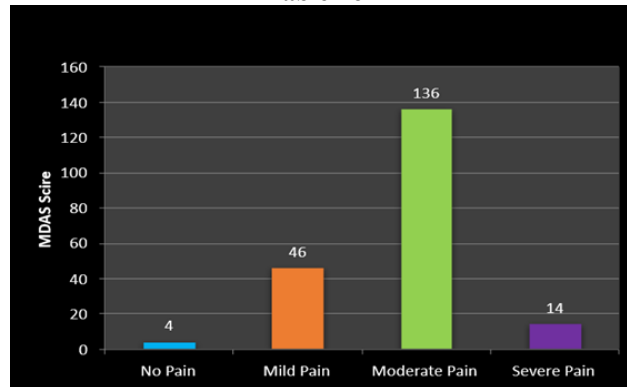


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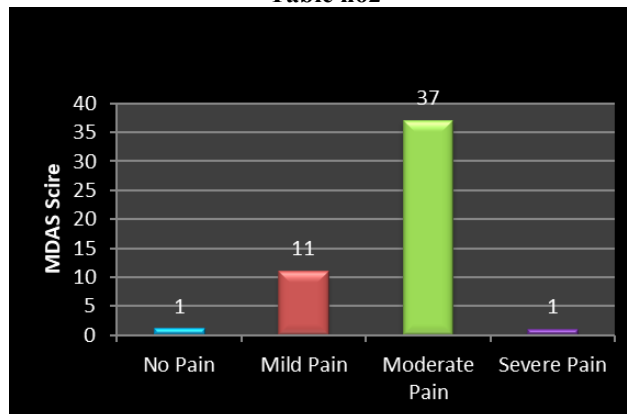


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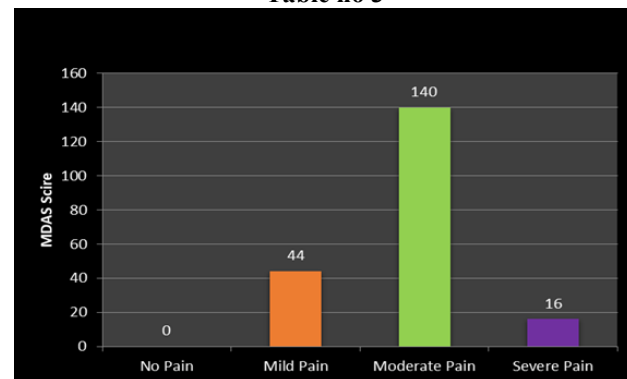


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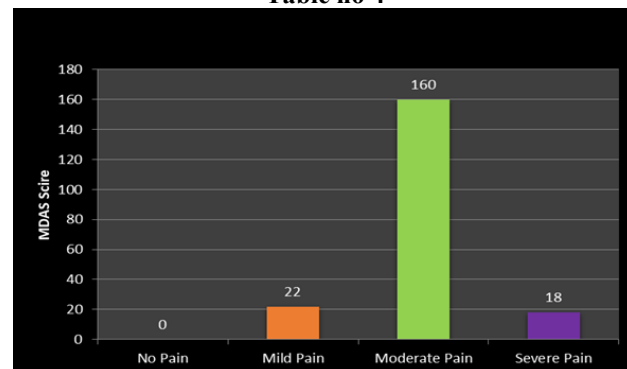


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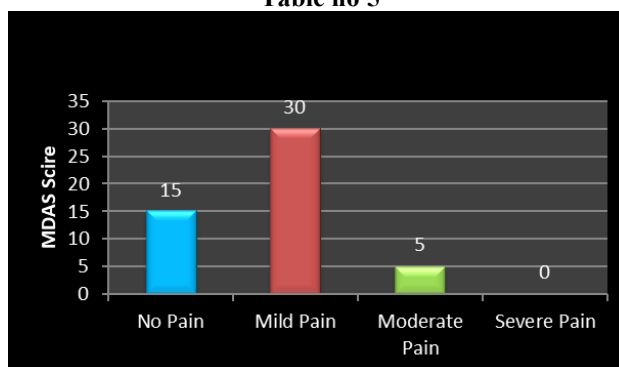


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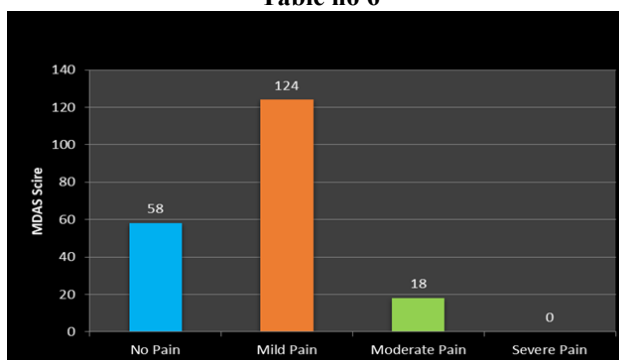
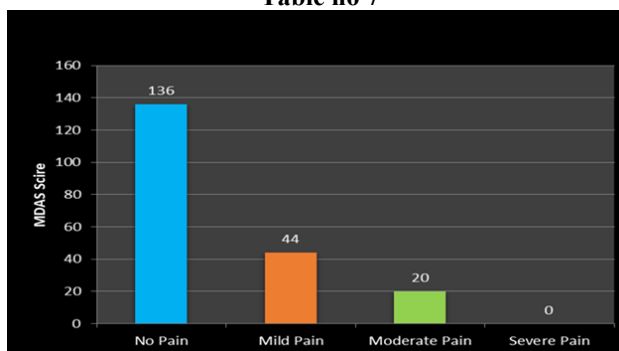


Table no 7



IV. Discussion

Dental anxiety is an excessive and irrational negative emotional state that patients experience as a result of Having a premonition that something undesirable is going to happen.

- Environmental variables and past experiences can model this worry to a great extent.
- Early and unfavorable medical experiences, the influence of family, age, and the reason for the initial dental appointment are significant factors.
- Numerous studies indicate that an adult's fear of dental care can be acquired and taught throughout childhood.
- In light of the worry issue, we ought to take the patient's confidence in the physician into account. The findings verified that a doctor's competency and ability to prevent discomfort are the most significant favorable attributes for patients.
- Patients who have dental anxiety suffer an excessive and illogical negative emotional state that stems from a premonition that something undesirable is going to happen.
- Environmental variables and past experiences can model this worry to a great extent.
- We should take the patient's faith in the physician into account while addressing the anxiety issue. The findings verified that a doctor's competency and ability to prevent discomfort are the most significant favorable attributes for patients.

V. Conclusion

Maximum responses indicate Anxiety before the procedure.

70% of patients displayed anxiety while waiting for treatment, while 30% of patients were found to be anxious during and after treatment.

Fear of Procedures like root canal therapy, airtor sound, and local anesthesia caused the most anxiety in patients.

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