

Original Article

Assessing the Need for Anesthesia and Sedation Services in Dental Practice

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ABSTRACT:

The practice of dentistry has an enduring association with fear and apprehension. These feelings of anxiety continue despite advances in dental techniques. People with high dental fear and anxiety preferred to receive some type of medication to relieve their anxiety. Consequently, use of this modality is important in the provision of dental treatment. The aim of this study was the assessment of dental treatment fears in general population and need for anesthesia services by dental care providers. A cross sectional questionnaire-based survey will be conducted among patients reporting to OPD of RUHS College of Dental Sciences, Jaipur and Dental care providers. Results will be statistically analyzed. This study will serve as a baseline to allay fear of general population towards dental treatment.

Key words: Anesthesia, Sedation, Services.

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INTRODUCTION:

Although the continue advances, the dental practice still has enduring association with fear and anxiety. Fear and anxiety both are related but differ in that fear may be considered the physiological process that occurs in the body when threatened by danger, whereas anxiety is the anticipation of the possibility of danger and is perceived to be less immediate in nature.^{1,2}

The prevalence of fear and anxiety represents a barrier to routine and expanded dental care resulting in impairment of their oral health which is becoming a global concern. Therefore, a need does exist for anesthesia and sedation services within dentistry.³ A number of scales have been used to determine the level of fear and anxiety.⁴

- The most widely used is Corah's Dental Anxiety Scale (DAS).
- Others include Gatchel's 10-point scale,¹ which uses a scale of 1–10 to gauge the level of anxiety towards dental treatment.
- Milgrom's single-item scale² asks the respondent "How do you rate your own feelings toward dental treatment?" and uses a 5-point response scale. not at

all afraid, a little afraid, somewhat afraid, very afraid, and terrified

- Kleinknecht's Dental Fear Survey (DFS) is a 20-item measure which assesses the subject's avoidance behaviors, fears, and physiological responses experienced during dental treatment.²⁶
- Spielberger's State-Trait Anxiety Inventory (STAI) consists of 40 statements to distinguish whether the anxiety is general or specific in nature.
- The Dental Belief Scale (DBS) is a 15-item survey that considers four areas of the dentist-patient relationship: communication, belittlement, lack of control, and trust.⁵

Many patients are unable to benefit from appropriate dental care due to their fear and anxiety. Treatment options to help these patients include behavioral modification, systematic desensitization, hypnosis, and guided relaxation.³⁰ Nevertheless, for many individuals these techniques are insufficient and they may require sedation or general anesthesia (GA) in order to undergo dental procedures.⁴ The objective of this study is to assess the fear and anxiety

towards dental treatment in patients and the need for anesthesia and sedation services by dental care providers.⁶⁻⁸

MATERIALS AND METHODS:

A cross sectional questionnaire-based surveys were conducted among the patients reporting to OPD of Department of Periodontics (RUHS College of Dental Sciences, Jaipur) and Dental care providers

Sample size:

1. Random sample of 350 patients (161 male, 189 female)

The survey consisted of closed-ended questions focusing on 4 categories:

- Demographic characteristics,
- frequency of use of oral health services,
- Anxiety and fear towards dentistry, and
- Preference of using anti-anxiety therapy before seeking oral health services

2. 100 Dental care providers

The survey consisted of closed-ended questions focusing on 3 categories:

- Practice demographics,
- Perceived need for sedation anesthesia, and
- Sedation training

Inclusion criteria:

Patients:

- Age group: 15-65
- Systemically healthy

Exclusion criteria:

- Mentally and physically challenged volunteers

Statistical Analysis:

Data were collected and frequency distribution table were prepared.

RESULTS & DISCUSSION

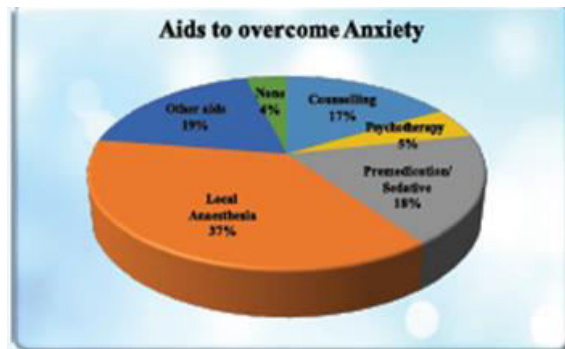
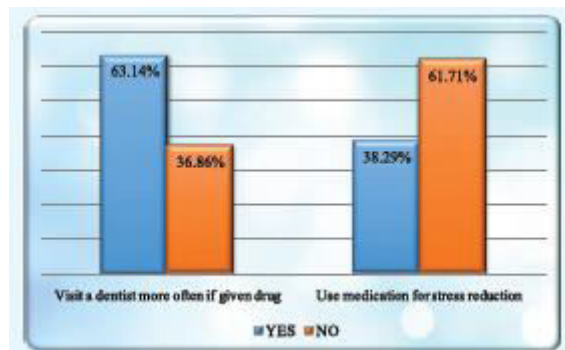
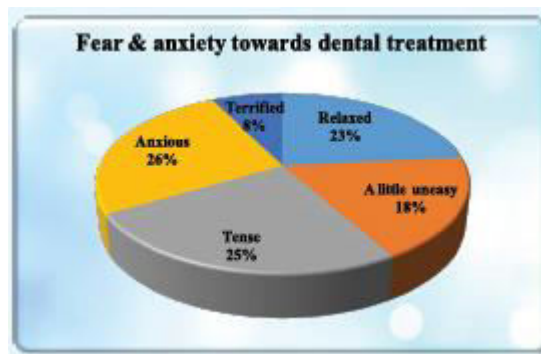
Table 1. Demographic Characteristics of the Sample

Characteristics	No. (%) of Respondents
Total respondents	350
Education level	
Illiterate	81 (23.14%)
Primary	93 (26.57)
Secondary	96 (27.43)
Graduate	64 (18.29)
Post graduate	16 (4.57)

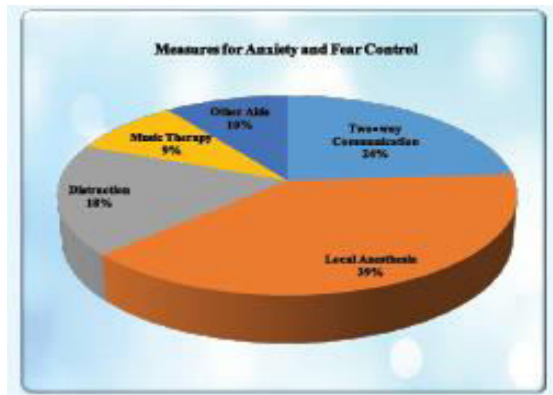
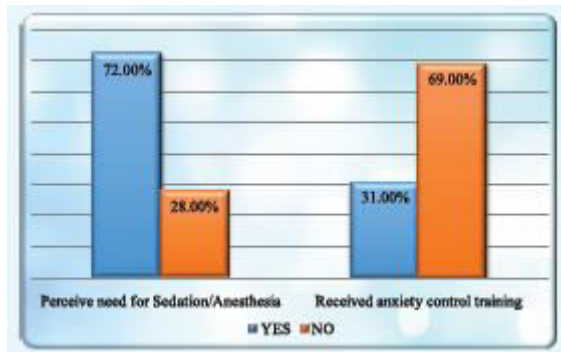
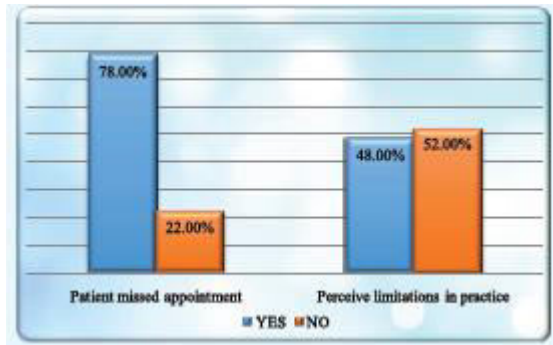
Table 2. Survey Responses of Dental Care Providers

Subject	Yes	No
Perceive a need for anxiety control in dental practice	72 %	28 %
Received appropriate pain and anxiety control training and education	31 %	69 %
Perceive certain limitations to dental practice because of inadequate availability of anxiety and pain control	48 %	52 %

Patients Survey Results



Dental Care Provider Survey Results



During survey 22% missed their appointments due to fear which depicts a significant association between dental treatment and fear & anxiety. Anxiety and fear level towards the dental treatment ranged from being “Relaxed” to “Terrified” with about 26% falling in the category of being “Anxious”. Among 350 respondents, ~63% indicated that they were willing to visit a dentist if they were given medication to reduce their anxiety and ~37% respondents preferred “Local Anesthesia” as a measure. of fear and anxiety control.

Majority of practitioners (72%) expressed a need for anxiety control within their individual practices. Only a minor percentage (31%) of dental practitioners surveyed deemed that they had received proper training in the field of sedation anesthesia. About 48% practitioners perceive certain limitations to dental practice because of inadequate availability of anxiety and fear control.

CONCLUSION:

Study showed that there is high prevalence of fear and anxiety among patients seeking dental care and its presence leads to missed or delayed dental appointment thereby jeopardizing their ability to optimize their oral health. In addition, the study showed that more people would be willing to go to the dentist if anesthesia services were available to them. Majority of the practitioners perceived that there is significant need and demand for sedation and anesthesia services for anxiety and fear control in dentistry.

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