



KNOWLEDGE, ATTITUDE, PRACTICE ABOUT CONSCIOUS SEDATION IN ADULTS AMONG DENTAL PRACTITIONERS –A QUESTIONNAIRE BASED STUDY

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ABSTRACT

Background: Conscious sedation is a combination of medicines to help as relax (a sedative) and to block pain (an anesthetic) during a medical or dental procedure. The patient will probably stay awake but may not be able to speak. Anxiety and fear in relation to dentistry are long-standing problems and the incidence of dental fear does not appear to be decreasing. It can result in poor dental health and wastage of clinical time. Conscious sedation is one method of allaying anxiety in dental patients and enables such patients to accept dental treatment.

Aim and Objectives: to assess the levels of dental anxiety in these adults, the impact on their attendance for dental treatment, and their knowledge of and desire to have conscious sedation, should it be available.

Methods and Materials: 100 Dental practitioners from chennai participated in this survey. The questionnaire included 15 questions and the participants responded to the all questions in the questionnaire and there were no dropouts in the study. The data was extracted and analysed.

Results and Conclusion: This study concluded 83% of practitioners had referred patients for sedation. With the reduction in the provision of general anaesthesia, there is a need to train more practitioners to undertake conscious sedation in primary care.

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INTRODUCTION

Conscious sedation is a combination of medicines to help as relax (a sedative) and to block pain (an anesthetic) during a medical or dental procedure. The patient will probably stay awake but may not be able to speak¹. Anxiety and fear in relation to dentistry are long-standing problems and the incidence of dental fear does not appear to be decreasing. It can result in poor dental health and wastage of clinical time². Conscious sedation is one method of allaying anxiety in dental patients and enables such patients to accept dental treatment³. Dental anxiety remains a significant barrier to care for many patients and conscious sedation via oral, intravenous and inhalational routes has been shown to be a safe alternative to general anaesthesia in many cases⁴. Whatever the sedation method used, it is of fundamental importance that the level of sedation must be such that the patient remains conscious and is able to both understand and respond to verbal commands during the entire sedation treatment session⁵. Where patients are unable to communicate verbally in their normal, pre-sedated state (for example, deaf patients who use sign language to communicate); then their usual method of

communication must be maintained throughout the entire sedation treatment session, from first administering the sedation agent through to patient discharge⁶. Its aims are to assess the levels of dental anxiety in these adults, the impact on their attendance for dental treatment, and their knowledge of and desire to have conscious sedation, should it be available⁷.

METHODS AND MATERIALS

100 Dental practitioners from chennai participated in this survey. The questionnaire included 15 questions and the participants responded to the all questions in the questionnaire and there were no dropouts in the study. The data was extracted and analysed.

This questionnaire identified as

Practitioners Detail

1. Gender
2. Year of qualification
3. Postcode of practice
4. Sector of practice
5. Generalist or specialist
6. whether SEDATION was offered

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IF YES,
 Types of patient treated
 Routes of administration
 Sedative agents used
 Training received for SEDATION
 Details of the team undertaking sedation
 Have you experienced any complications while handling those patients?
 Has patients recovered from these cases?
 If No,
 why you don't prefer SEDATION ?
 Are you willing to receive training for SEDATION?
 Space was also left for specific comments.

Questionnaire

The questionnaire was conducted based upon their knowledge, attitude, practice about conscious sedation in adults among Dental practitioners. This questionnaire was divided into 3 parts. The first part consist of the Dental practitioners general information which included their gender, year of qualification, postcode of practice, sector of practice, Generalist or specialist etc,. It help in finding of their praction level based on their personal data. The second part consist of question based on whether sedation was offered or not. It includes the Types of patients treated, routes of administration, sedative agents used, training used for sedation etc,.The final part consist of not offering sedation it includes why they don't prefer sedation and whether they were willing to receive training for sedation. After completion by the questionnaire, the responses were scored and interpreted in accordance with the norms.

RESULTS

For the above study it was concluded that all respondents had a knowledge about conscious sedation. The year of qualification for all responding dentists offering sedation is detailed in Table 1.

Table 1 Year of qualification for all responding dentist

Year qualified	>5	5-3yrs	<3	No reply	Total
Dentists	20	26	54	0	100

In total 100 dentists offered some form of sedation; almost two thirds of them (n = 73, 73%) were in the urban , 27 (27.6%) semi urban and six (6.9%) in both urban and semi urban is detailed in table 2.

Table 2 sector of dental practice

Location	Urban	Semi urban	Rural	Total
N(%)	73	27	0	100

Table 3 details the route of sedation used adults and by dentists who offered it. For adults just over half (n =71, 71%) of dentists offered IV, with 23(23.7%) and 6 (6.4%) offering oral and both IV and oral respectively.

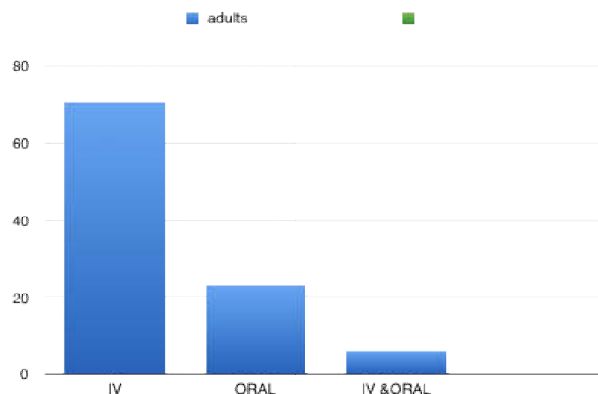
Table 3 Route of SEDATION offered by dentist for adults

Route of Sedation offered by dentists	For adults
Intravenous	71
Oral	23
Intravenous and oral	6
Total	100

Reasons for this variation are not clear, but might include the undergraduate and postgraduate training, differences in dental school curricula, availability of training courses in the area and patient choice. The estimated travelling times reported to sedation centres in this study are good, with over half of journeys estimated to be less than 30 minute.

Table 4 sedation training undertaken by dentist

S.no	Type of training	Dentist offering Sedation	Dentist not offering Sedation
1)	Undergraduate	43	9
2)	Postgraduate	40	8
	Total	83	17



Graph 1 Type of sedation offered in dental practice

DISCUSSION

Despite the publication of a number of authoritative guidelines on pain and anxiety control for dentistry it has become evident that there remain areas of confusion and lack of consensus⁸. Competently provided Conscious Sedation is safe, valuable and effective. It is absolutely essential that a wide margin of safety be maintained between Conscious Sedation and the unconscious state of general anaesthesia. Conscious Sedation must under no circumstances be interpreted as light general anaesthesia⁹. Operating chairs and patient trolleys must be capable of being placed in the head-down tilt position¹⁰. All equipment for the administration of intravenous sedation must be available in the treatment area and appropriately maintained. Supplemental oxygen delivered under intermittent positive pressure must be immediately available¹¹.

Fasting for Conscious Sedation is not normally required however some authorities recommend the same fasting requirements as for general anaesthesia¹². The three standard techniques of inhalation, oral and intravenous sedation employed in dentistry are effective and adequate for the vast majority of patients. The simplest technique to match the requirements should be used. The generally agreed standard technique for intravenous sedation is the use of a titrated dose of a single benzodiazepine¹³. Conscious Sedation for children must only be undertaken by teams which have adequate training and experience. Nitrous oxide / oxygen should be the first choice for paediatric dental patients. Intravenous sedation for children is rarely appropriate¹⁴. Recovery from sedation is a progressive step-down from completion of treatment through to discharge. A member of the dental team must supervise and monitor the patient throughout this period. The decision to discharge a patient into the care of the escort

following any type of sedation must be the responsibility of the sedationist¹⁵.

The majority of respondents gave the postcode of their practices on the questionnaire. By using this information from respondents that currently offer sedation, the availability of primary care practitioners offering sedation can be deduced. In addition, where sedation is being used instead of a general anaesthetic in the past there is another dimension to consider. A general anaesthetic required one visit to complete all treatment, often with restorable teeth being extracted in a single visit. Sedation involves more than one visit where multiple quadrant extractions or restorations were also involved. It is not unusual for patients to need four or more appointments¹⁶.

The data show wide variation in the availability of primary dental care sedationists; not all areas with a high dentist to population ratio have access to a primary care sedationist, while some areas with generally poor dentist to population ratios have relatively high numbers of sedationists.

CONCLUSION

This study concluded 83% of practitioners had referred patients for sedation. With the reduction in the provision of general anaesthesia, there is a need to train more practitioners to undertake conscious sedation in primary care

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