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conscious sedation (80.1%) through their curriculum yet over 69.4% among them also preferred short certified courses to enhance their practice in conscious sedation[1,3,17,18].

It is evident that advanced behavior guidance techniques such as conscious sedation, General anesthesia (GA), and protective stabilization were commonly taught and practiced in postgraduate/masters pediatric dental training programs. A study done by Monisha K et al (90%), reported that more than half of the pediatric dental surgeons reported the use of conscious sedation over GA[18] comparable to the present study where 46.1% considered conscious sedation over GA for all dental procedures like restoration, scaling, minor bone fractures and minor surgeries. A higher prevalence might be attributed to observations done only on dental professionals in the present study whereas previous study involved parents as well as other health care professionals also. In contrast, some studies suggest that dental surgeons working in hospitals preferred the utilization of GA[18, 19, 20].

In our study, 44.8 % preferred intravenous conscious sedation over oral sedation which is almost similar to the study by Tingey et al (49.8%) [21] but much higher than the study by Sivakumar N et al (3 %) [22]. This variation can be due to case preferences as sedation in children is different from the sedation methods in adults. Cunha et al stated that sedation in children is often used to control behavior and permit safe completion of the dental procedure and it depended on chronological as well as developmental age of the child[1, 18, 23].

In this present study, the participants preferred to treat patients in minimal or moderate conscious sedation state. But few studies suggest that moderate sedation was comfortable to diagnose and treat uncooperative or anxious patients, decreased the pain and discomfort compared to minimum sedation and also maximized the effectiveness of amnesia, and controlling the anxiety, movement, and behavior of the child during dental procedures[23, 24, 25, 26].

We observed that 56.8% of the participants considered that conscious sedation was contraindicated in children below 6 months of age and with extreme fear and anxiety. Likewise, Veeramachaneni et al[24] states that the Council of European Dentist and AAPD (American association of Pediatric dentistry) has recommended that this technique of behavior control should not be administered in severely compromised patients and in children less than 1 year[13].

In the present study, more than half of the study participants 78.4% preferred Nitrous oxide sedation which is similar to study by Sivakumar N et al (72%) [22] and Wali et al (73%)[1]. These studies have shown that care must be taken when Nitrous oxide sedation is used in addition to other sedatives where the chances of attaining deep sedation in a short span of time are relatively high[1].

In the present study, 39.3% preferred that general anesthetist should be present during conscious sedation technique. In a study by Thomas P et al[16], it was observed that the dentist experienced difficulties in managing sedation in the absence of anesthesiologists resulting in anxiety and forced and hasty completion of the treatment. However, in presence of anesthesiologists, dentist failed to experience such nervousness thus providing quality dental treatment while the anesthesiologists took care of the vital signs and related complications. Also, AAPD recommends that Pediatric dentists must be well-qualified and skilled for incorporating specific training in their practice to integrate a multidisciplinary team approach which permits the recognition of the need of general anesthesia thus providing a quality oral health care[9,24,27].

In the present study, 40.1% recommended midazolam as a fast acting drug for conscious sedation which is in contrast to the study by Sivakumar N et al (76%)[2] . It can be observed that higher preference of midazolam might be due to its short duration of action with potent anxiolytic and anticonvulsant property over other drugs such as propofol. Also, midazolam has lower incidence of complications like nausea, vomiting and prolonged discharge time when compared to other drugs given orally and/or nasally[28, 29, 30].

About 60.2% opted for oral route as the safer mode of sedation which is similar to study by Perumal K et al (58%)[8]. Most of the study participants believed oral sedatives were easier to administer, required less expertise and skill, avoided needle usage and adequate sedation was achieved with minimal or no complications[31].

RECOMMENDATION

It is recommended that dental curriculum should include guidelines and advanced sedation techniques to train the dental students at the undergraduate level. Subsequently dental practitioners should be encouraged to attend workshops, continuing dental education programs on conscious sedation technique by experts in the field to improve their skills and confidence.

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CONCLUSION

The present clearly shows lacunae in adequate knowledge, attitude and practices towards conscious sedation among dental practitioners. One must be also aware of patient related factors like perceptions, preferences and treatment needs nonetheless managing an uncooperative or anxious child is always challenging that requires skill and expertise with sufficient knowledge and awareness. The results of this study thus provide an insight on need for strategies to provide knowledge and incorporate positive attitude among the Dental professionals to offer effective conscious sedation in children necessitating oral health care.

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CONFLICTS OF INTEREST

There are no conflicts of interest.

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