

ISSN 1989 - 9572

DOI: 10.47750/jett.2022.13.06.074

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Journal for Educators, Teachers and Trainers, Vol. 13 (6)

https://jett.labosfor.com/

Date of reception: 11 Oct 2022

Date of revision: 12 Nov 2022

Date of acceptance: 07 Dec 2022

Kaviya S¹,Dr.D.Sri Sakthi^{2*} (2022). Knowledge, Attitude And Practice Of Dental Practitioners Towards Behavioural Management Of An Uncooperative Patient In Dental Office. *Journal for Educators, Teachers and Trainers*, Vol. 13(6). 750-757.

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Journal for Educators, Teachers and Trainers

The LabOSfor electronic, peer-reviewed, open-access Magazine



Journal for Educators, Teachers and Trainers, Vol. 13 (6) ISSN 1989 - 9572

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Knowledge, Attitude And Practice Of Dental Practitioners Towards Behavioural Management Of An Uncooperative Patient In Dental Office. Kaviya S¹, Dr. D.Sri Sakthi²

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ABSTRACT

Background and aim

In the career of a dentist, they come across so many types of patients. Managing each patient's temperament and gaining co-operation and trust is the key to any dentist patient relationship. Inorder to practice from an empathetic point of view, any dentist should know how to deal with different behaviour patterns, which ultimately leads to success in treatment outcome greatly.

Methodology

A total of 80 registered dental practitioners participated in the study. A pre - tested, 14 item questionnaire was circulated among the dental practitioners. Only completely filled forms were taken in for analysis. Data was transferred and analyzed using SPSS software (Version 23) Descriptive statistics included frequency and percentage, A chi square test was done to analyze the association and a P value of < 0.05 was considered statistically significant.

Results

Final analysis was done using responses from 80 dental practitioners. On the whole, the knowledge, Attitude and practice regarding behavioural management was found to be satisfactory. On the contrary, the majority (67%) were unsure about managing an un co-operative patient. Majority of the dentists suggest counselling (97.2%) as a preventive measure. Almost 72.5% of them did not prefer to use nitrous oxide to sedate the patients.

Conclusion

This survey shows that the majority of dental practitioners were aware of patients perceptions, preferences and fear towards dental treatment. Hence existing curriculum should give more weightage in this context and regular continuing education programs should be organised.

Keywords:Knowledge, Practice, Attitude, Behavioural management, Dental practitioners, Un cooperative patients, Innovative analysis, Innovative techniques.

INTRODUCTION

Most of the time, a basic KAP survey forms a baseline data for program planning or for managing practice related issues (1). EAch component of the survey is valuable in decision making. Dentistry is a field of medicine, which requires an empathetic approach by the clinician, towards the patient apart from skilled hands. Having a thorough knowledge about behaviour pattern of each patient would enable the clinician to have an effective chair side time with the patient and also to build a strong dentist patient relationship.(2)

Dental surgeons are expected to diagnose and manage effectively childhood dental diseases that are within the knowledge and skills during dental education. Many alternative measures have been taken to control the child patient by playing videos or music during the dental treatment and by giving complimentary gifts (3,4). Dental surgeons should be encouraged to increase and update their clinical skills and knowledge in innovative behaviour guidance techniques by reading dental literature or attending educational programs and workshops (5). Dental surgeons do have the opinion that good communication is important amongst the dentist, patients in building trust and confidence (6,7).

Studies show that mothers, while pregnant and after delivering, have a major role in controlling and shaping behaviour of children in various surroundings(8). And most of the time pediatric dentists and consultants have to put up with a child's tantrum than dentist / doctors tending to adult patients (9). This questionnaire study was planned as an online survey among registered dental practitioners in chennai. Our team has extensive knowledge

and research experience that has translated into high quality publications(10–29). Hence this study was done as a baseline attempt to assess the KAP components of behaviour modification techniques, employed on uncooperative patients visiting dental clinics.

MATERIALS AND METHODS

Study Design

A cross sectional questionnaire survey

Study Setting

Online questionnaire survey.

Sample Size

80 registered dental practitioners, sample size was calculated from the results of a study done for similar study group, but in a different geographical location.

Sampling and Scheduling

A list of registered dental practitioners were obtained from DCI, which served as the sampling frame; from which 80 were selected at random and the questionnaire were sent online after their consent. The data was collected over a period of 15 days.

Survey Instrument

A pre tested and validated questionnaire was used to measure the baseline of Knowledge, Attitude and Practice of dental practitioners towards behavioural management of an un co-operative patient visiting a private dental institution.

Inclusion and Exclusion Criteria

All those who were willing to participate were included in the study. Those who did not respond to the online questionnaire even after 3 reminders and those who sent incomplete forms were excluded from the study.

Ethical Clearance

Prior to the start of the study, ethical clearance was obtained from the institution ethical committee of Saveetha university

Statistical Analysis

The responses from the google sheet was transferred into excel and was then exported to SPSS software, version 25. Descriptive statistics was done using frequency and percentage. Inferential statistics was done using Chi square test. Interpretation was based on a p value less than 0.05, which was considered statistically significant. Comparisons were done between independent variables like age, gender, occupation and knowledge, attitude practice responses by the participants.

RESULTS

A cross sectional questionnaire study containing a sample size of 80. Among 80 sample sizes, the study population contains 77.5% Female participants and 22.5% Male participants. In our study, 78.6% were post graduates and 21.4% were under graduates. 97.5% of the dental practitioners suggest counselling for uncooperative patients and 2.5% say that they may give counselling to them (Fig 2). We asked a few questions on KAP study like, does the dentist allow the parents into their clinic while the dental treatment is being performed. Most of them answered yes (85.9%) and 5.6% answered No. 98.6% of the dental practitioners agreed that keeping the office decorated will attract the children. 93% of the dental practitioners prefer that playing videos or music can change the child's focus away from the dental treatment. Most of them answered 52.5% that they may stop the dental treatment when discomfort is felt and 40% answered yes.

In our study, 72.5% of the dentists says that they do not use nitrous oxide inhalation or drugs to sedate the patients, few say 12.5% they might use the drugs and 15% say that they'll use the drugs (Fig 1). On the whole, 71.25% of the dental practitioners suggest giving complimentary gifts to co operating patients.



Figure1: Distribution of use of nitrous oxide or drugs to sedate the patient

Figure 1 : Pie chart denotes the responses related "Use of nitrous oxide inhalation or use of drugs to sedate the patients". Green (72.50%) denotes the percentage of the dental practitioners who were not comfortable with using nitrous oxide inhalation or drugs and Beige (15%) denotes the percentage of the dental practitioners preferring to use the nitrous oxide inhalation or drugs.



Figure 2: Distribution of counselling for un co operative patients

Figure 2 : Pie chart denotes the percentage of participants, who counselled the uncooperative patients". Majority 97.50% (Green) agree for counselling and 2.50% (Blue) prefer that it may help the uncooperative patients.

In our study, we observed that 46% of our postgraduates refused to use nitrous oxide inhalation or drugs to sedate the patients and 12% of the undergraduates also refused to use nitrous oxide inhalation or drugs to sedate the patient (Fig 3). The Chi square analysis was done and the association was found to be statistically not significant, p-value: 0.941(p>0.05). We also observed that 62% of the postgraduates suggest counselling for un co operative patients and on the other hand, 16% of the undergraduates also suggest counselling for un co operative patients (Fig 4). The Chi square analysis was done and the association was found to be statistically not significant, p-value: 0.382(p>0.05).



Figure 3 :Distribution of study subjects based on the use of nitrous oxide inhalation or use of drugs to sedate the patients

Figure 3: Bar graph showing association between the speciality and the use of nitrous oxide or drugs to sedate the patients. The X-axis represents the students according to the highest degree of education and the Y-axis represents the percentage of the students. 46% of our postgraduates refused to use nitrous oxide inhalation or drugs to sedate the patients and 12% of the undergraduates also refused to use nitrous oxide inhalation or drugs

to sedate the patients. The Chi square analysis was done and the association was found to be statistically not significant, p-value: 0.941(p>0.05)



Figure 4: Distribution of counselling for un co operative patients

Figure 4:Bar graph showing association between the speciality and counselling for un co-operative patients.Xaxis represents the students according to highest degree of education and the Y-axis represents the counselling for un co operative patients. 62% of the postgraduates suggest counselling for un co operative patients and on the other hand, 16% of the undergraduates also suggest counselling for un co operative patients. The Chi square analysis was done and the association was found to be statistically not significant, p-value: 0.382(p>0.05)

DISCUSSION

Understanding the levels of Knowledge, Attitude and Practice will enable a more efficient process of awareness creation as it will allow the program to be tailored more appropriately to the needs of the community. Communication skills of the dental surgeons play an important role in behaviour guidance and the health professional may be inattentive to communicating style, but parents and patients are very attentive to it. In our study, 96.3% of the dental practitioners modify their voice and use good communication skills to direct their patients' behaviour(7). Dental surgeons' behavior of vocalizing, directing, empathizing, persuading, giving the patient a feeling of control, and operant conditioning have been reported as efficacious responses to uncooperative patient behaviors.

The shortcoming of most of the dental surgeons when treating children is their lack of knowledge, clinical skill, or attention to the vital performance of providing and assuring profound local anesthesia. Most of the dental surgeons felt uncomfortable with their clinical skills and avoided giving children local anesthesia. In our study, 72.5% of the dental practitioners refuse to use nitrous oxide or use drugs to sedate the patients. (30). Nitrous oxide (N₂O) is an attractive agent for pediatric procedural sedation because it provides rapid onset and offset of sedation(31). Another study results reported that the dental surgeons were totally comfortable with nitrous oxide sedation technique. The present study results showed that 15% of the dental surgeons preferred to use nitrous oxide to sedate children(32)

The unfamiliar sights, sounds, and smells of the dental surgery may contribute to a child's anxiety. The surgery and a part of the waiting area should be made child-friendly and less threatening by decorating with child-orientated pictures and a few strategically placed soft toys (for example, a children's corner). In our study, 97.5% of the dental surgeons think that keeping the office neat and clean or decorated with attractive toys may help to manage their treatment. Good ventilation minimizes the smells associated with dentistry. Use of low vibration instruments may also be helpful. The dental team should avoid wearing protective eye glasses and masks when the child first enters the surgery. Some children may relate clinical wear such as white coats to previous hospital visits(33). The auxiliary staff, as well as the clinical team, should be welcoming and friendly. In this present study, 88.8% also say giving a warm welcome can change the mindset of an un co-operative patients(34).

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CONCLUSION

In this study, understanding the barriers will help the dental practitioners and awareness on this will have a good impact and conducting educational programs can b e done. In this study all the dental practitioners are aware of the patients Knowledge, Attitude and Practice.

Author contributions

Kaviya S - Study design, Data collection, Data analysis, Manuscript writing. Sri Sakthi D - Study concept, Data verification, Data analysis, Manuscript drafting and correction.

Acknowledgment

We thank all the participants and Saveetha Dental College for their support to conduct this study.

Conflict of interest

The authors reported the conflict of interest while performing this study to be nil.

Source of funding

The present project is supported/funded/sponsored by

- 1. Saveetha Institute of Medical and Technical Sciences ,SaveethaDental College and Hospitals,Saveetha University
- 2. Funding organization name:

REFERENCES

- Haq N ul, Hassali MA, Shafie AA, Saleem F, Farooqui M, Aljadhey H. A cross sectional assessment of knowledge, attitude and practice towards Hepatitis B among healthy population of Quetta, Pakistan. BMC Public Health [Internet]. 2012 [cited 2021 Mar 11];12:692. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3490724/
- 3. [No title] [Internet]. [cited 2021 Mar 11]. Available from: http://v2020eresource.org/content/files/guideline_kap_Jan_mar04.pdf
- 4. Error Cookies Turned Off [Internet]. [cited 2021 Mar 11]. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1002/j.0022-0337.2011.75.5.tb05087.x
- Bimstein E, Azari AF, Riley JL. Predoctoral and Postdoctoral Students' Perspectives About Pediatric Dental Behavior Guidance [Internet]. Vol. 75, Journal of Dental Education. 2011. p. 616– 25. Available from: http://dx.doi.org/10.1002/j.0022-0337.2011.75.5.tb05087.x
- 6. Sheller B. Challenges of managing child behavior in the 21st century dental setting. Pediatr Dent [Internet]. 2004 Mar;26(2):111–3. Available from: https://www.ncbi.nlm.nih.gov/pubmed/15132271
- Feigal RJ. Guiding and Managing the Child Dental Patient: A Fresh Look at Old Pedagogy [Internet]. Vol. 65, Journal of Dental Education. 2001. p. 1369–77. Available from: http://dx.doi.org/10.1002/j.0022-0337.2001.65.12.tb03496.x
- 8. Freeman R. Communicating with children and parents: recommendations for a child-parentcentred approach for paediatric dentistry. Eur Arch Paediatr Dent [Internet]. 2008 Feb;9 Suppl 1:16–22. Available from: http://dx.doi.org/10.1007/BF03262651
- Patil RU, Sahu A, Kambalimath HV, Panchakshari BK, Jain M. Knowledge, Attitude and Practice among Dental Practitioners Pertaining to Preventive Measures in Paediatric Patients. J Clin Diagn Res [Internet]. 2016 Dec;10(12):ZC71–5. Available from: http://dx.doi.org/10.7860/JCDR/2016/22300.9122
- 10. Treatment outcome in uncooperative child dental patients: an exploratory study [Internet]. Vol. 196, British Dental Journal. 2004. p. 151–151. Available from: http://dx.doi.org/10.1038/sj.bdj.4810938
- 11. Mathew MG, Samuel SR, Soni AJ, Roopa KB. Evaluation of adhesion of Streptococcus mutans, plaque accumulation on zirconia and stainless steel crowns, and surrounding gingival inflammation in primary molars: randomized controlled trial. Clin Oral Investig [Internet]. 2020 Sep;24(9):3275–80. Available from: http://dx.doi.org/10.1007/s00784-020-03204-9
- 12. Samuel SR. Can 5-year-olds sensibly self-report the impact of developmental enamel defects on their quality of life? Int J Paediatr Dent [Internet]. 2021 Mar;31(2):285-6. Available from: http://dx.doi.org/10.1111/ipd.12662

- Samuel SR, Kuduruthullah S, Khair AMB, Al Shayeb M, Elkaseh A, Varma SR, et al. Impact of pain, psychological-distress, SARS-CoV2 fear on adults' OHRQOL during COVID-19 pandemic. Saudi J Biol Sci [Internet]. 2021 Jan;28(1):492–4. Available from: http://dx.doi.org/10.1016/j.sjbs.2020.10.033
- Samuel SR, Kuduruthullah S, Khair AMB, Shayeb MA, Elkaseh A, Varma SR. Dental pain, parental SARS-CoV-2 fear and distress on quality of life of 2 to 6 year-old children during COVID-19. Int J Paediatr Dent [Internet]. 2021 May;31(3):436–41. Available from: http://dx.doi.org/10.1111/ipd.12757
- Samuel SR, Acharya S, Rao JC. School Interventions-based Prevention of Early-Childhood Caries among 3-5-year-old children from very low socioeconomic status: Two-year randomized trial. J Public Health Dent [Internet]. 2020 Jan;80(1):51–60. Available from: https://onlinelibrary.wiley.com/doi/10.1111/jphd.12348
- Vikneshan M, Saravanakumar R, Mangaiyarkarasi R, Rajeshkumar S, Samuel SR, Suganya M, et al. Algal biomass as a source for novel oral nano-antimicrobial agent. Saudi J Biol Sci [Internet]. 2020 Dec;27(12):3753–8. Available from: http://dx.doi.org/10.1016/j.sjbs.2020.08.022
- Chellapa LR, Rajeshkumar S, Arumugham MI, Samuel SR. Biogenic Nanoselenium Synthesis and Evaluation of its antimicrobial, Antioxidant Activity and Toxicity. Bioinspired Biomim Nanobiomaterials [Internet]. 2020 Jul 23;1–6. Available from: https://www.icevirtuallibrary.com/doi/10.1680/jbibn.19.00054
- Samuel SR, Mathew MG, Suresh SG, Varma SR, Elsubeihi ES, Arshad F, et al. Pediatric dental emergency management and parental treatment preferences during COVID-19 pandemic as compared to 2019. Saudi J Biol Sci [Internet]. 2021 Apr;28(4):2591–7. Available from: http://dx.doi.org/10.1016/j.sjbs.2021.02.002
- 19. Barma MD, Muthupandiyan I, Samuel SR, Amaechi BT. Inhibition of Streptococcus mutans, antioxidant property and cytotoxicity of novel nano-zinc oxide varnish. Arch Oral Biol [Internet]. 2021 Jun;126:105132. Available from: http://dx.doi.org/10.1016/j.archoralbio.2021.105132
- 20. Muthukrishnan L. Nanotechnology for cleaner leather production: a review. Environ Chem Lett [Internet]. 2021 Jun 1;19(3):2527–49. Available from: https://doi.org/10.1007/s10311-020-01172-w
- 21. Muthukrishnan L. Multidrug resistant tuberculosis Diagnostic challenges and its conquering by nanotechnology approach An overview. Chem Biol Interact [Internet]. 2021 Mar 1;337:109397. Available from: http://dx.doi.org/10.1016/j.cbi.2021.109397
- Sekar D, Auxzilia PK. Letter to the Editor: H19 Promotes HCC Bone Metastasis by Reducing Osteoprotegerin Expression in a PPP1CA/p38MAPK-Dependent Manner and Sponging miR-200b-3p [Internet]. Hepatology. 2021. Available from: http://dx.doi.org/10.1002/hep.31719
- 23. Gowhari Shabgah A, Amir A, Gardanova ZR, Olegovna Zekiy A, Thangavelu L, Ebrahimi Nik M, et al. Interleukin-25: New perspective and state-of-the-art in cancer prognosis and treatment approaches. Cancer Med [Internet]. 2021 Aug;10(15):5191–202. Available from: http://dx.doi.org/10.1002/cam4.4060
- 24. Kamala K, Sivaperumal P, Paray BA, Al-Sadoon MK. Author response for "Identification of haloarchaea during fermentation of Sardinella longiceps for being the starter culture to accelerate fish sauce production" [Internet]. Wiley; 2021. Available from: https://publons.com/publon/47375106
- 25. Ezhilarasan D, Lakshmi T, Subha M, Deepak Nallasamy V, Raghunandhakumar S. The ambiguous role of sirtuins in head and neck squamous cell carcinoma. Oral Dis [Internet]. 2021 Feb 11; Available from: http://dx.doi.org/10.1111/odi.13798
- Sridharan G, Ramani P, Patankar S, Vijayaraghavan R. Evaluation of salivary metabolomics in oral leukoplakia and oral squamous cell carcinoma. J Oral Pathol Med [Internet]. 2019 Apr;48(4):299–306. Available from: http://dx.doi.org/10.1111/jop.12835
- 27. R H, Hannah R, Ramani P, Ramanathan A, Jancy MR, Gheena S, et al. CYP2 C9 polymorphism among patients with oral squamous cell carcinoma and its role in altering the metabolism of benzo[a]pyrene [Internet]. Vol. 130, Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology. 2020. p. 306–12. Available from: http://dx.doi.org/10.1016/j.0000.2020.06.021
- J PC, Pradeep CJ, Marimuthu T, Krithika C, Devadoss P, Kumar SM. Prevalence and measurement of anterior loop of the mandibular canal using CBCT: A cross sectional study [Internet]. Vol. 20, Clinical Implant Dentistry and Related Research. 2018. p. 531–4. Available from: http://dx.doi.org/10.1111/cid.12609

- 29. Wahab PUA, Abdul Wahab PU, Madhulaxmi M, Senthilnathan P, Muthusekhar MR, Vohra Y, et al. Scalpel Versus Diathermy in Wound Healing After Mucosal Incisions: A Split-Mouth Study [Internet]. Vol. 76, Journal of Oral and Maxillofacial Surgery. 2018. p. 1160-4. Available from: http://dx.doi.org/10.1016/j.joms.2017.12.020
- Mudigonda SK, Murugan S, Velavan K, Thulasiraman S, Krishna Kumar Raja VB. Non-suturing microvascular anastomosis in maxillofacial reconstruction- a comparative study. Journal of Cranio-Maxillofacial Surgery [Internet]. 2020 Jun 1;48(6):599–606. Available from: https://www.sciencedirect.com/science/article/pii/S1010518220301098
- Krauss B. Continuous-flow nitrous oxide: searching for the ideal procedural anxiolytic for toddlers. Ann Emerg Med [Internet]. 2001 Jan;37(1):61–2. Available from: http://dx.doi.org/10.1067/mem.2001.112004
- 32. Badina L, Norbedo S, Barbi E. Procedural sedation and analgesia in children [Internet]. Vol. 367, The Lancet. 2006. p. 1900–1. Available from: http://dx.doi.org/10.1016/s0140-6736(06)68838-7
- 33. Crossley ML, Joshi G. An investigation of paediatric dentists' attitudes towards parental accompaniment and behavioural management techniques in the UK. Br Dent J [Internet]. 2002 May 11;192(9):517–21. Available from: http://dx.doi.org/10.1038/sj.bdj.4801416
- Fayle SA, Tahmassebi JF. Paediatric Dentistry in the New Millennium: 2. Behaviour Management
 Helping Children to Accept Dentistry [Internet]. Vol. 30, Dental Update. 2003. p. 294–8.
 Available from: http://dx.doi.org/10.12968/denu.2003.30.6.294
- 35. Bhatia S, Chadwick B. Behaviour management of anxious children [Internet]. Vol. 6, Dental Nursing. 2010. p. 88–92. Available from: http://dx.doi.org/10.12968/denn.2010.6.2.46235