

PARENTAL ATTITUDES TOWARDS BEHAVIOUR MANAGEMENT TECHNIQUES USED IN PAEDIATRIC DENTISTRY- A REVIEW

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ABSTRACT

Oral health care and dental defects or diseases in infants and children are provided by the paediatric dentists. A child's attitude and behaviour is essential for the clinicians to provide them with an effective and safe treatment. Quality of treatment and care will be affected due to the unwillingness and non-cooperative behaviour of the child. This might also lead to the risk of injury to the child during the course of treatment. In order to avoid such circumstances several behaviour management techniques are employed. This article is focused on knowing the acceptance or modifications needed in paediatric patients behaviour management techniques as opined by parent's towards the behaviour management techniques used in paediatric dentistry, in order to improve the paediatric care. It also provides a brief explanation on the different methods used in paediatric dentistry for behaviour management like tell-show-do, nitrous oxide sedation, voice control, hand over mouth exercise, passive restraint, oral premedication and others.

KEYWORDS: Paediatrics, behaviour management, management techniques, tell-show-do, hand over mouth exercise, voice control, positive reinforcement

INTRODUCTION

Good behaviour management techniques are required for essential dental treatment and it is a key factor in the care of children in paediatric dentistry. It is difficult or even impossible to carry out any dental procedure if the child's behaviour cannot be managed. The establishment of a good rapport between dentist and child has been shown to influence the success of the treatment. Hence behaviour management is considered as one of the corner stones of paediatric dentistry. For this purpose, guidelines are developed to help the dental practitioners. As these behaviour management may differ in every country, the guidelines were made while keeping this into account. In recent years the journal of European Archives of Paediatric Dentistry (EAPD) has published papers regarding the aspects of behavior management^[1-6].

The traditional management techniques used are Tell-show-do, physical restraint, conscious sedation, voice control, positive reinforcement and the hand-over-mouth procedure. Researches regarding behaviour management has focussed exclusively on parental attitudes towards the use of different behavioural management techniques. A number of surveys regarding different behavioral management techniques used in dentistry has been expanded between various countries, examining and contrasting the attitudes of paediatric dentists^[7].

Various factors like the type and urgency of treatment and the child's needs at the time of the treatment are to be taken in to consideration for the selection of a required technique and parental acceptance of that technique. Aim of this review is to inform the paediatric dentist, specialists and other members of the dental health team about the parent's attitude towards the various behavioural techniques used in the field of dentistry for the establishment of the required treatment for the child. It also aims to build and maintain relationships with the child and parent that will allow the highest quality of dentistry to be delivered.

MATERIAL AND METHODS

Several articles were collected using keywords like Paediatrics, behaviour management, management techniques, tell-show-do, hand over mouth exercise, voice control and positive reinforcement. As per the articles, they conducted survey which included minimum of 40 and a maximum of 400 subjects for their questionnaire. According to the referred articles, the questionnaire mostly revolved around the requirement of the parents to complete a brief demographic intake form requesting for the information about the age of the child, parents occupation, their status of education and their anxiety about the child's dental visit rated on a four point scaling. And these questionnaire also included the most important question which involves the opinion of the parents on the selection of the method that they prefer.

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Tell-show-do

As the name suggests, this method introduces the child patient to the procedure in a step by step process. First, the patient is told about what today's visit is going to be about, then he is shown the instruments that are to be used in course of the process and finally the procedure is carried out.

Nitrous oxide sedation

Children who are tensed or anxious are provided with nitrous oxide which is commonly known as laughing gas, to relax them for their dental procedure. This gas is given to them via a small breathing mask which is placed over the child's nose, allowing them to relax without inducing them to sleep. The effect of this gas persists only for five minutes after which it slowly wears off.

Passive restraint

This is also known as papoose board as this board is wrapped around the child to prevent the uncooperative child from doing its movements and allowing the dentist to provide the child with proper treatment.

Voice control

This method is the one which is used by the parents and also others to control a child who is capable of understanding what we are to say, but it's just that it doesn't listen to us. After several attempts of making the child understand, we then increase the volume or change the tone of our voice to explain the child. This does not mean that we are angry because it's just a method used to control the child, after which we praise the child for their cooperation and at times if needed we provide them with compliments.

Hand-over-mouth method

This method is used only after the failure of the other methods after which the child is still loud and uncooperative. Hence the dentists keep their hand over the child's mouth making sure that the child can breath properly. Once the child calms down, the dentist explains everything and then starts the process towards the end compliments the child and praises him for his cooperation.

Oral premedication

Children who are incapable to understand due to their age or other factors are provided with a drink of medicine and make them drowsy after which they are treated. It is made sure that the child's breathing, blood pressure, heart beat and oxygen in the blood are monitored.

Drugs which can be used for sedation include diazepam, triazolam, zaleplon, lorazepam, hydroxyzine and midazolam. The use of oral medication in children is usually well accepted. However, this route of administration has its difficulties. The major barrier in the administration of the medication is its unpleasant taste which may result in the child rejecting the medication. In developing a technique for oral sedation, the drug preparation must be palatable.

However, in using such solutions one must be aware of the stability and therefore the shelf life of the drug, and the method of storage^[8,9].

Active restraint by dental personnel

This method is done with the help of dental assistant who will hold the child's hands, legs or head who behaves in an uncooperative manner while the dentist numbs the teeth.

General anaesthesia

This is the most effective form for treating a child who needs a long time for his treatment to be done. This method helps the dentist from any worries related to the disturbance caused by the child or any hinderances that has to be taken care of for the dentist to carry out the treatment^[10-16].

RESULT

According to the articles that has been referred to, the result has always been either tell-show-do or positive reinforcement. The presence of parents during the clinical procedures have always been a why. The result for this question was referred from an article and was observed that 75% believed that the parent felt the need to protect the child, 61% thought that the parent had a strong emotional bond with the child, and 54% assumed that the parent felt the child would behave better. However, less than 17% believed that it was because the parent did not trust the dentist in treating her or his child^[2]. The results of these articles have indicated that there has been a significant change that has been made by the pediatric dentists in their field of practice regarding parental presence during the treatment.

DISCUSSION

The most frequent problem faced by the pediatric dentists are the behavioral management of children during the course of treatment. This has been a problem faced by majority of the dentists for a while, hence there were establishment of different management techniques which has made the entire process into a simpler form. One of the effective method that has been established and used is the method of positive reinforcement and tell-show-do^[17-20].

Most parents prefer tell-show-do as the best form as they can also know about the treatment that is to be done. This helps the child in reducing the anxiety and tension towards the treatment. It brings about an awareness among the child and the parent about how effective and harmless the treatment is.

The presence of parents with their child during the course of treatment has significantly helped the dentist to provide the patient with appropriate treatment in an effective manner. Few dentists feel that the presence of the child's parent makes their work easier, helps in comforting the patient and improves the behaviour, while others feel that it wastes time, disrupts the child, makes the dentist uncomfortable and delays the process as the parent themselves undergo anxiety and tension towards the treatment that is to proceed with^[21-23].

The wishes of the child patient's parent and the dentist's attitude are the two important factors in determining the treatment. The effect of parent age, socioeconomic status, parental anxiety and the severity of dental disease on the desire of the patient to be present during dental treatment has not been elucidated. Every child acquires his own set of learned behavior that has helped the child to cope with other difficult situations, with this he walks into the clinic and uses the same set of behavior to manage this situation too. For some their learned strategies help them to get adapted to the dental situation while for others it makes the process more difficult and cause the dentist to provide the patient with a low quality or ineffective dental care^[24-29].

In paediatric dentistry, empathy is the ability to understand the internal frame of reference of the child patient, including the emotions and cognitive processes. The aim of behavior management is to reframe the perception of dentistry and to enhance the child's useful coping skills. "Contemporary dental care for children must include empathy rather than indifference, structure rather than diffuseness, and exible uthority rather than rigid control" was stated by Troutman^[1,30-32].

The dentists who treat the children don't practice all the approaches that has been established for the improvement of behavior management. This is due to the difference in the attitude amongst dentists and some may be due to the rules that has been imposed in the country which refers the method to not be legal or socially acceptable. Nevertheless, it is important to include all of the techniques available within the literature, their rationale, indications and contraindications. Individual circumstances will dictate which of those each dentist develops and adopts for the benefit of the child patient.

CONCLUSION

The results of these articles have indicated that there has been a significant change that has been made by the pediatric dentists in their field of practice regarding parental presence during the treatment.

Presence of parents during the dental procedures were always noted to be more, while treating children of age four or younger than the children aged more than four.

REFERENCES

1. J.F. Roberts, M.E.J. Curzon, G. Koch, L.C. Martens. Review: Behaviour Management Techniques in Paediatric Dentistry. *European Archives of Paediatric Dentistry*.2010. 11 (Issue 4):166-174
2. Weinstein P, Getz T, Ratener P, Domoto P. Behaviour of dental assistants man-aging young children in the operatory. *Pediatr Dent*. 1983a; 5:115-120.
3. Weinstein P. Child-centred child management in a changing world. *Eur Arch Paediatr Dent*. 2008;9(Suppl 1) Suppl 1:6-10.

4. Klingberg G. Dental anxiety and behaviour management problems in paediatric dentistry – a review of background factors and diagnostics. *EurArchs Paediatr Dent* 2008;9(Suppl 1):11-15.
5. Klassen MA, Veerkamp JS, Hoogstraten J. Changes in children's dental fear: a longitudinal study. *Eur Archs paediatr Dent* 2008;9(Suppl 1): 29-35.
6. Freeman R. Communicating with children and parents: recommendations for a child-centered approach for paediatric dentistry. *Eur Arch Paediatr Dent* 2008; 9(Suppl 1):16-22
7. K. E. Wilson, N. M. Girdler, R. R. Welbur. A comparison of oral midazolam and nitrous oxide sedation for dental extractions in children. Volume 61, Issue 12, December 2006. Pages 1138–1144
8. Barry K. Marcum, DMD Clara Turner, DMD Frank J. Courts, DDS, Ph. Pediatric dentists' attitudes regarding parental presence during dental procedures. *American Academy of Pediatric Dentistry*. 1995. 17(7):432-436.
9. Ari Kupietzky, Milton I. Houpt. Midazolam: a review of its use for conscious sedation of children. *Pediatric Dentistry*: July/August 1993 - Volume 15, Number 4:237-241
10. Keith D. Allen, PhD Robert T. Stanley, DDS Keith McPherson, MA. Evaluation of behavior management technology dissemination in pediatric dentistry. *Pediatric Dentistry*: april/may, 1990 ~ volume 12, number 2:79-82
11. Ingersoll TG, Ingersoll BD, Seime RS, McCutcheon WR: A survey of patient and auxiliary problems as they relate to behavioral dentistry curricula. *J Dent Educ* 42:260-63, 1978.
12. Ktesges R, Malott J, Ugland M: The effects of graded exposure and parental modeling on the dental phobias of a four year old girl and her mother. *J Beh Ther Exp Psychiatry* 15:161-64, 1984.
13. Klingman A, Melamed B, Cuthbert M, Hermecz D: Effects of participant modeling on information acquisition. *J Consult Clin Psychol* 52:414-22, 1984.
14. Melamed B, Weinstein D, Hawes R, Katin-Borland M: Reduction of fear-related dental management problems with use of filmed modeling. *J Am Dent Assoc* 90:822-26, 1975.
15. Murphy MG, Fields HW, Machen JB: Parental acceptance of pediatric dentistry behavior management techniques. *Pediatr Dent* 6:193- 98, 1984.
16. Treiber F, Seidner A, Lee A, Morgan S, Jackson J: Effects of a group cognitive-behavioral treatment on preschool children's responses to dental treatment. *Child Health Care* 13:117-21, 1985.
17. M. L. Crossley and G. Joshi. An investigation of paediatric dentists' attitudes towards parental accompaniment and behavioural management techniques in the UK. *British Dental Journal* 2002; 192: 517–521
18. Brett R. Kuhn, PhD Keith D. Allen, Ph. Expanding child behavior management technology in pediatric dentistry: a behavioral science perspective. *Pediatric Dentistry*: January/February 1994 - Volume 16, Number 1:13-17
19. Keith D. Allen, PhD Eric D. Hodges, DDS Sharon K. Knudsen, MS. Comparing four methods to inform parents about child behavior management: How to inform for consent. *Pediatric Dentistry* 17:3, 1995. 180-186
20. Benjamin Peretz, DMD Dan Zadik, DMD, MPH. Parents' attitudes toward behavior management techniques during dental treatment. *American Academy of Pediatric Dentistry*. *Pediatric Dentistry* – 21:3, 1999. 201-204
21. Scott M. Lawrence, DDS, MS Dennis J. McTigue, DDS, MS, Stephen Wilson, DMD, MA, PhD John G. Odom, PhD, William F. Waggoner, DDS, MS Henry W. Fields, Jr., DDS, MS, MS. Parental attitudes toward behavior management techniques used in pediatric dentistry. *Pediatric dentistry* may/June, 1991 ~ volume 13e, number 3. 151-155
22. Rogers CR. A theory of therapy, personality and interpersonal relationships, as developed in the client-centered framework. *Psychology: A study of science*, (Vol. 3, pp. 210-211; 184-256).
23. Murphy MG, Fields HW, Machen JB. Parental acceptance of paediatric dentistry behavior management techniques *Pediatr Dent* 1984; 6:193-198.
24. Williams JA, Hurst M, Stokes TF: Peer observation in decreasing uncooperative behavior in young dental patients. *Behav Modif* 7:242-55, 1983.
25. Allen KD, Stokes TF: The use of escape and reward in the management of young children during dental treatment. *J Appl Beh Anal* 20:381-90, 1987.
26. Melamed BG, Bennett CG, Jerrell G, Ross SL, Bush JP, Hill C, Courts F, Ronk S: Dentists' behavior management as it affects compliance and fear in pediatric patients. *J Am Dent Assoc* 106:324-30, 198
27. Machen JB, Johnson R. Desensitization, model learning and the dental behaviour of children *J Dent Res* 1974; 53:83-87
28. Ghose LJ, Giddon DB, Shiere FR, Fogels HR. Evaluation of sibling support. *J Dent Child* 1969; 36:35-40

29. Gordon DA, Terdal L, Sterling E. The use of modelling and desensitization in the treatment of a phobic child patient. *J Dent Child* 1974; 41:012-105 Machen JB, Johnson R. Desensitization, model learning and the dental behaviour of children. *J Dent Res* 1974; 53:83-87
30. Horst G, Prins P, Veerkamp J, Verhey H. Interactions between dentists and anxious child patients: a behavioural analysis. *Community Dent Oral Epi- demiol* 1987; 15:249-252
31. Toledano M, Osomo FS, Aguilera A, Pegalajar J. Children's dental anxiety: in uence of personality and intelligence factors. *Int J Paediatr Dent* 1995; 5:123-128
32. Wurster CA, Weinstein P, Cohen AJ. Communication patterns in pedodontics. *Perceptual and Motor Skills* 1979; 48:159-166.

