Fear and Anxiety in Children For Dental Treatment: Literature Review

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Quick Response Code

doi: 10.5866/2016.8.10247

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Article Info:

Received: October 13, 2016

Review Completed: November 12, 2016

Accepted: December 11, 2016

Available Online: December, 2016 (www.nacd.in)

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INTRODUCTION

Oral health care for young children can have a significant effect on their wellbeing and that of their families; however, dental anxiety can be a major barrier to children accepting dental treatment. Failure to accept dental treatment may lead to a dental emergency, resulting in extraction of teeth under general anesthesia. Children have limited communication skills and are less able to express their fears and anxieties. Their behavior is a reflection of their inability to cope with anxiety, and behavior management provides children with appropriate coping strategies.¹

The aim of behavior management is to instill a positive dental attitude in the anxious patient.² It

ABSTRACT:

Children with dental anxiety may refuse treatment, which can lead to dental emergencies. Behavior management is an essential skill and should be acquired by all members of a dental team treating children. Dental surgery staff should be relaxed, welcoming and friendly. Make the child the centre of attention and smile. Use age-appropriate language and avoid the use of jargon. Decide who will talk to the child and when, as he/she may only be able to listen to one person at a time. Avoid non-dental conversations with colleagues during procedures.

Key words: behavior, anxiety, communication.

is the means by which the dental team can effectively and efficiently perform treatment, and encourages a child to have a long-term interest in improving dental health and the ongoing prevention of disease.³ Therefore, behavior management is an essential skill and should be acquired by all members of the dental team who treat children. Successfully managing anxious children can be a challenging but rewarding experience for everyone concerned.

CHILDREN WITH DENTAL ANXIETY

Dental anxiety is defined as a feeling of apprehension about dental treatment that is not necessarily connected to a specific external stimulus.⁴ According to Chadwick and Hosey (2003), anxiety is common in children and the symptoms of

anxiety are dependent on the age of the child. Toddlers exhibit anxiety by crying, while older children manifest anxiety in other ways. Common anxieties among children include fearing the unknown and being worried about a lack of control – both of which can occur with dental examination and treatment.¹ The ability of a child to cope with dental procedures depends on his/her stage of development. Children may be cooperative, potentially cooperative, or lack the ability to be cooperative (sometimes called pre-cooperative) (2). Pre-cooperative children include the very young and those with specific disabilities with whom cooperation may not be achieved (5). A number of factors are known to influence dental anxiety in children:

Parental Anxiety

Anxiety in a child can be made worse by the attitude to dentistry of those around him/her (typically parents, siblings, and peers). Parents who cannot contain their own anxieties can unwittingly pass them on to their children or make things worse when they are actually trying to help. Bailey et al (1973) reported that there was a relationship between maternal anxiety and child management in children of all ages, especially those aged 4 years or younger.⁶ One way to alleviate parental fears and possibly help them to prepare for a visit to the dentist is for a practice to send them a welcome letter explaining what the first visit to the dentist will entail.⁵ These letters are particularly useful if they also advise parents on how to prepare the child for the visit to the dental surgery.⁷

Medical and Dental Experience

Children, who have had negative experiences, associated with previous hospital visits or medical treatment, or dental visits, may be more anxious about dental treatment. When taking medical history, it is important to ask the parents about previous treatments and the child's response to them. This would identify potential anxiety-related behavior, and allow the dentist to adopt appropriate behavior modification strategies.⁸

Appearance of Surgery and Staff

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). 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, so care when choosing clinical protective clothing is important.⁸

Communication with the Patient

The reception staff, as well as the clinical team, should be welcoming and friendly. Both verbal and non-verbal communication plays a major role in behavior management. The dental team must establish a relationship based on trust with the child and the accompanying adult to ensure compliance with preventive regimens and allow treatment to occur.⁹ Non-verbal communication happens all the time and can sometimes contradict verbal messages. For the young, pre-cooperative patient, nonverbal communication is paramount. These patients may not understand the words that are used, but they will recognize a smile and respond to tone of voice.⁹ As well as smiling, non-verbal communication also includes maintaining eye contact to establish trust. A handshake may increase the confidence for some parents. Having a calm, caring and empathetic manner is more likely to result in successful management of an anxious child. Children should be made the centre of attention; greeting them by the name they prefer is important. Communication should be age-specific, and the dental team needs to develop a specialized vocabulary to communicate with children. Examples include 'sleepy juice' for local anesthesia, or 'tooth paint' for fissure sealant.¹⁰ Explanations should be given in simple and nonthreatening language, avoiding the use of jargon.

Good communication is essential and involves the child, the dentist, the accompanying adult, and the dental nurse. However, the child may only be able to concentrate on one individual at a time. When

problems occur, they are often made worse by unhelpful communication between the child and the parent/care taker. Each member of the dental team and the accompanying adult must understand his/her role.⁵ If dentists allow the parent / care-giver in the surgery with the child, they should ensure that they have explained how they want the parent / caregiver to assist them and what they wish, or indeed do not wish, him/her to do and say.

BEHAVIOR MANAGEMENT TECHNIQUES

The following are few of the commonly used behavior management techniques. The dentist will choose the most appropriate depending on the individual patient's needs. The techniques may have to be used in combination. However, any technique that requires an understanding of language will not be effective for pre cooperative patients because they will only understand the tone of the message rather than its content.

Tell-show-do

This technique is widely used to familiarize a patient with a new procedure, while minimizing the fear of the unknown. A member of the dental team describes to the patient what is about to happen (taking account of the patient's age, therefore using language that he/she will understand), gives a demonstration of the procedure (e.g. the slow-hand piece on the fingernail), and finally the procedure is carried out. The tell-show-do reduces anticipatory anxiety in a new patient.¹¹

Behavior shaping and positive reinforcement

Behavior shaping teaches children in small, clear steps the ideal behavior that is expected of them in the dental surgery. This is achieved by selective reinforcement. The desired behavior is encouraged by rewarding with praise or stickers, and undesirable behavior is discouraged by ignoring it. Positive reinforcement is an effective technique to reward desired behaviors and, therefore strengthen the recurrence of those behaviors. Social re-inforcers include positive voice modulation, facial expression, verbal praise, and appropriate physical demonstrations of affection by all members of the dental team. Non-social re-inforcers include tokens and toys (American Academy of Pediatric Dentistry

(AAPD), 2005–06).¹² Children respond well to praise and encouragement. Both praise and positive reinforcement need to be given immediately after appropriate behavior is demonstrated. Giving praise at the end of the session is not as helpful as giving it immediately after the desired behavior because the dental team need to clarify which behavior they are rewarding.¹ The most powerful reinforcements are facial expression, praise, and approval.¹³ Child-centered specific praise should be used. For example, 'I like the way you keep your mouth open' is more effective than a general comment such as 'good girl'.¹⁴

Enhancing control

A significant cause of anxiety is feeling out of control. Encouraging a child to use the 'stop signal' if he/she has a problem during a procedure can give him/her a degree of control and alleviate anxiety beforehand. The signal is usually carried out by raising the arm and should be rehearsed before any treatment begins. If the child uses the signal, the dentist should respond quickly by stopping.¹⁵ This engages the child actively in the treatment process and gives him/her some control over the dentist.

Distraction

Distraction aims to shift the attention of the patient's attention away from the dental procedure. This may be in the form of music, cartoons, or stories. Another well recognized method is for dentists to talk to patients as they work so that patients listen to them rather than focusing on the procedure. Short term distractions, such as pulling the lip and talking to the patient when giving local anesthesia, are also helpful.⁵

Systemic desensitization

Systemic desensitization helps individuals to overcome specific fears or phobias through repeated contacts. A hierarchy of fear-producing stimuli is constructed and the patient is exposed to them in order, starting with the least threatening.¹ This is a useful technique for overcoming a specific fear, for example dental injections in young children.

Modeling

Watching another similar aged child or older sibling having dental treatment successfully can

have a positive influence (Stokes and Kennedy, 1980) on a nervous child. This technique is most useful in those aged between 3 and 5 years (1).

CONCLUSION

The successful use of behavior management techniques allows the child to accept dental treatment become actively involved in his/her long-term dental health, and avoids the need for emergency treatment under general anesthesia. Dental fear / anxiety and dental behavior management problems were relatively common for pediatric dental patients.¹⁶ The corners of pediatric treatment triangle have been changing rapidly, which influences the practice of dentistry for children. Recognizing these changing times, the council on clinical affairs of the American Academy of Pediatric Dentistry has produced guidelines for behavior guidance.¹⁷ Dental anxiety is a major obstacle in patient management in both children and adults.¹⁸ There are some common disruptive behaviors that are elicited in children when they are in the dental setting.¹⁹ Pediatric dentists should expect more dental anxiety among: females, patients who wait long periods between visits (greater than one year), patients expecting operative procedures, and also in early years of school.¹⁸ It seems that general factors such as family factors have less impact on behavior of school aged children in a dental visit.²⁰ To offer more humanized dental care, the prevalence of dental anxiety should not be overlooked in clinical practice, especially in pediatric dentistry. Strategies for the assessment, prevention and control of dental anxiety should be implemented to allow better treatment for children, adolescents and their parents.²¹

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