

Behaviour Guidance in Paediatric Dental Patients

Purpose

The aim of this Clinical Guideline is to provide advice to public oral health providers on the management of paediatric dental patients and to set forth the indications, objectives, and therapeutic interventions for ideal management and behaviour guidance in children. Evidence-based clinical guidelines are intended to provide guidance, and are not a standard of care, requirement, or regulation. However, the application of clinical guidelines in publicly-provided oral health services allows for consistency to occur across large patient cohorts with a variety of oral health clinicians.

Guideline

If a child's behaviour in the dental office cannot be managed then it is difficult if not impossible to carry out any dental care that is needed. Behaviour management is therefore one of the corner stones of treating children. Barriers to treatment may be dental fear or behaviour management problems (BMP). Estimates of the prevalence of dental fear and BMP are hard to find, however one Swedish study reported a value of 10.5% of children with BMP out of a population of 4 to 11-year olds [Klingberg 1994].

Background

Behavioural management approaches have changed considerably during the second half of the 20th century, with an increasing emphasis on communication and empathic skills [Rogers, 1939; 1951]. This approach acknowledges that a child's disruptive dental behaviour reflects his or her reaction to a perceived threat in the dental environment and his/her attempt to control that perceived threat.,

The aim is to build and maintain relationships with the child and parent that will allow the highest quality of dentistry to be delivered. It is also to help each child to develop the skills and behaviours necessary to willingly seek appropriate lifetime of dental care, not hindered by undue anxiety or fear.

Parental Influences on Child Dental Behaviour-in or out the room?

Parental influences play a major part in how a child copes with the stresses and stimuli of dental treatment [Bailey et al., 1973]. Earlier research [Frankl, 1962; Pfefferle, 1982] showed that at least with only mildly anxious children, passive parental presence does not make a child's behaviour worse and in pre-school children it has a positive effect. However, a parent who is directly communicating with their child during treatment can make the dentist/child communication more difficult.

Each dentist treating children will have to decide for him or herself whether having a parent present during treatment will be beneficial or not. There does seem to be a trend for parents to have a greater desire to be actively involved in all aspects of their children's life [Pinkham, 1991; Peretz and Zadik, 1998], and a growing unwillingness to allow another responsible adult to guide their child's behaviour. Nevertheless, dentists should acknowledge that parenting trends change with changing society [Long, 2004], and the need to accommodate parental involvement in their approach to managing child behaviours.

Behaviour Management Techniques

Desensitisation

Description. While desensitisation is traditionally used with a child who is already anxious about the dental situation, its principles can be readily utilised by clinicians with all patients, in order to minimise the possibility that patients might develop dental anxiety. The child's existing anxieties are dealt with by exposing him or her to a series of dental experiences, presented in an order of increasing anxiety evocation, progressing only when the child can accept the previous one in a relaxed state [Wolpe, 1958; Machen and Johnson, 1974]. For most children a digital examination would precede the use of a mirror and probe, followed perhaps by radiography, rubber cup prophylaxis, fissure sealing and leading eventually to local analgesia, rubber dam and restorations.

Objectives

- To help the child overcome dental anxieties.
- To expose the child to a graduated series of potentially anxiety-inducing experiences.

Indications. May be used with all child patients.

Tell-show-do

Description. Closely aligned with desensitisation, this is a method of introducing child patients to a procedure in a stepwise fashion. This allows the child to assimilate the procedure in a graduated manner [Addleston, 1959]: the procedure is first described in words and phrases appropriate to the child's understanding [Kreinces, 1975], then demonstrated in a way that involves the appropriate senses, and finally performed immediately without any delays. When acceptance has been obtained, the child's behaviour can be rewarded, and the technique then becomes part of behaviour shaping (see below).

Objectives

- To allow the child to learn about and understand dental procedures in a way that minimises any anxiety.
- Used with rewards, to gradually shape the child's behaviour towards acceptance of more invasive procedures.

Indications. Can be used with all patients. Can be used to deal with pre-existing anxieties and fears, or with patients facing dentistry for the first time.

Nonverbal communication

Description. Nonverbal communication recognizes that some patients may be equally, or more sensitive to body language and facial expression, than he or she is to spoken words. For many people with special needs, nonverbal communication may be the primary means of sensing and reading the intentions of others and interpreting situations during daily socialization. Most patients will positively sense that a dental team is genuine and relaxed in their interactions [Kemp 2005].

Objectives

- To help the child overcome dental anxieties.
- To expose the child to a calm and confident environment in the dental operatory which will help facilitate successful behaviour.

Indications. May be used with all child patients.

Distraction

Description. Distraction is a method of diverting a patient's focus to positive thoughts, or other stimulating sensory images in an effort to override unpleasant procedures or as redirection from negative behaviour. Many children have shortened attention spans, and can be remarkably amenable to distraction techniques. As described above, counting may require the patient to focus on a mental task that "keeps his or her mind busy" while otherwise negative activity is occurring. Members of the dental team make an effort to discover topics of interest or stimuli that are important to the individual, and then use their mention to redirect escalating behaviour back toward cooperative participation. Remarkably, something as simple as addressing the patient by name can redirect a patient to focus. Humour can also be effective for certain patients.

Sometimes sensory overload can be an issue for the patients with special needs. In this situation, a non-stimulating environment may be the ideal setting. Music, excessive conversation, and other distractions should be eliminated to support behaviour [AAPD 2006]

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Modelling

Description. A large part of a child's development and learning is based upon his observation and imitation of others vicarious conditioning, and this forms the basis of the management technique of modelling [Adelson and Goldfried, 1970]. It is particularly effective when the observer is paying attention to the model, and the model is perceived to be similar status and sex as him/herself. Ideally, for an anxious patient, the model would also appear to be initially anxious but then proceed to develop better coping behaviour, and is then rewarded for the modelled behaviour. It is indirect learning, i.e. learning from others, who may be parents, teachers, peers, siblings or the media.

Modelling however may work to our disadvantage when children visit the dentist for the first time with negative expectations based upon misinformation gained from siblings or peers; that child, if uncooperative or anxious, might be better treated in a private room, rather than in an open clinic or multi-chair office/surgery, where his/her behaviour may be overheard and then modelled by other patients.

Objectives

- To reduce anxiety in a child with previous experience.
- To introduce a child to dentistry through indirect learning

Indications. Introduction of a child to new procedures and reduction of anxiety.

Reinforcement

Description. Behaviour can be reinforced positively or negatively. If, as a consequence of a particular behaviour, a child dental patient receives something

of value, materially or otherwise, then potentially that behaviour has been positively reinforced [Allen et al 1988].

When behaviour is immediately followed by the removal of an unpleasant stimulus, it is potentially negatively reinforced. For example a negative reinforcement would be when a highly anxious child runs from the treatment room and is allowed by his parent simply to go home without any dentistry being accomplished; the consequences of his/her behaviour was immediate cessation of the unpleasant stimulus (dentistry), and the behaviour of running away is likely to have been strengthened.

Objectives

- To strengthen desired behaviours.

Indications. Can be used with all patients.

Voice control

Description. Changes in the tone and loudness of speech have long been used in paediatric dentistry Brauer [1964] was of the opinion that a sharp, loud, surprise comment of “stop crying” will frequently be effective.

Voice control can quickly re-establish a relationship between dentist and child to the desired one of guidance-cooperation [Szasz and Hollender, 1956], if the disruptive behaviour is altering that relationship. Although the technique is usually described in terms of a punishment, with the intention of weakening or eliminating behaviour, it should be recognised that a modulation of tone can be equally effective in encouraging a particular behaviour, reinforcing it.

Objectives

- To control disruptive behaviour.
- To gain the child’s attention.

Indications. Can be used with all patients.

Knee-to-knee

Infant oral examination does not require the use of dental operator and can fairly be achieved by examining the infant in a “knee-to-knee” position where the upper legs of the parent and the doctor form the examination table [Snawder, 1980] Infant examination requires adequate light and occasionally an assistant to help the consultant or the parent in handling the infant. The initial examination usually involves a visual examination and digital palpation. It is generally accepted as a means of examining infants. Occasionally some restraint is required by both the parent and the dentist.

Objectives

- Knee-to-knee which may sometimes involve a level of restraint is used to control unwanted physical movement of the child, both to facilitate treatment and also to prevent harm to the child and dental staff.

Indications Can be used for a patient that requires immediate diagnosis and/or urgent limited treatment and cannot cooperate due to emotional and cognitive developmental levels or lack of maturity or medical and physical conditions;

Can also be used for a patient with special health care needs may experience uncontrolled movements that would be harmful or significantly interfere with the quality of care.

Restorative Techniques

Minimally invasive treatment in children relies on the provision of less traumatic experience for the child patient. It is underpinned by an understanding of the role of the dental plaque biofilm in disease initiation and progression, and how this is affected by lifestyle and behavioral factors [Featherstone et al 2003].

When circumstances do not permit for traditional cavity preparations atraumatic options can be considered to help manage these children without the need for a general anaesthetic. It should be noted however that minimal intervention is not indicated for all children but rather for children with severe early childhood caries that require restorative treatment but are challenged by behavioural or medical management issues.

- Caries removal can be done using hand or rotary instruments without pulp exposure.
- The preparation can be restored using the Hall Technique [CG-A013-06-Stainless-Steel-Crowns-in-Deciduous-Molars](#)
- Follow-up care with topical fluoride is beneficial in high caries risk dental populations
- A newly recognized product used in the management of Dental Caries is Silver Diamine Fluoride that functions to arrest caries and prevents the further progression of the disease [CG-A004-05-The-Use-and-Application-of-Topical-Fluoride](#)
- Sealing the caries from the external environment preventing progression further to the pulp [CG-A014-06-Caries-Management](#).
- Using additional specialised equipment such as the Wand, a computer-controlled local anaesthetic system with a low flow rate for a more comfortable experience.

CONCLUSION

Clinicians should have a variety of techniques and approaches available to them in order to effectively deal with the many different responses to dentistry that their child patients will manifest. For each child's behaviour there will be a dentist response that could help the child to adapt to the dental experience in a positive manner, and the dentist must be capable of changing his/her own behaviour to meet the individual child's needs at a particular moment.

It should be recognised that although there follows a list of management techniques, they are rarely used in isolation; for instance tell-show-do, a basic desensitisation technique is nearly always immediately followed by some form of praise (reinforcement), and if this is used as an approximation to an eventual cooperative behaviour the technique could be termed 'behaviour shaping'.

The use of general anaesthesia must only be considered as a last resort to providing necessary quality dental care for the child once all other behaviour management techniques have been exhausted.

Prior to the delivery of general anaesthesia, appropriate documentation shall address the rationale for use of general anaesthesia, informed consent, instructions provided to the parent, dietary precautions, and preoperative health evaluation. See [CG-A018-03-Treatment-planning-for-children-managed-under-dental-general-anaesthesia](#)

Definitions

Revision date	Policy owner
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Chief Oral Health Advisor	February 2018

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