



Lec. 6

## Management of Children Behaviors

### RETRAINING

A technique similar to behavior shaping, designed to fabricate positive values and to replace the negative behavior. Children who require retraining approach the dental office displaying considerable apprehension or negative behavior.

The demonstrated behavior may be the result of a previous dental visit or the effect of improper parental or peer orientation. Determining the source of the problem is helpful because the undesirable behavior can then be avoided through another technique or deemphasized, or a distraction can be used. These plays begin the retraining program, which eventually leads to behavior shaping.

When encountering negative behavior, the dentist should always remember that an objective is to build a new series of associations in the child's mind. If a child's expectation of being hurt is not reinforced, a new set of expectations is learned. The dentist can be trusted! The child develops a new perception of the dental office and a new relationship to dentistry. Unacceptable behavior previously learned extinguishes. It is critical to remember that the stimulus must be altered to elicit a change in the response.

Individuals respond to stimuli to which they have been preconditioned. If the original stimulus and the new one are very similar, then the response will be similar. This is known as stimulus generalization. If a child has had an unpleasant experience in the dental office and then is taken to a different office where there is a different dentist and an entirely different staff and surroundings, the child still tends to generalize that an unpleasant event will occur in this new dental office. There are enough similar stimuli to produce this response. To offset the generalization, the dental team must demonstrate a "difference." This is one of the reasons why the use of nitrous oxide-oxygen sedation often works when retraining children. It offers a difference.

**Example:** If a child associates the smell of eugenol with pain, *using a different-smelling material*



## Indications

- Child who had a previous bad experience.
- Child who exhibits negativism due to improper parental and peer influence.

## Approaches

- Avoidance
- De-emphasis and substitution
- Distraction.

## AVERSIVE CONDITIONING

There are three modes of aversive conditioning.

- Hand over mouth technique
- Physical, restraining
- Voice control.

### Hand Over Mouth (HOME)

The behavior modification method of aversive conditioning is also known as hand-over-mouth exercise (HOME). Its purpose is to gain the attention of a highly oppositional child so that communication can be established and cooperation obtained for a safe course of treatment.

The technique fits the rules of learning theory: maladaptive acts (screaming, kicking) are linked to restraint (hand over mouth), and cooperative behavior is related to removal of the restriction and the use of positive reinforcement (praise).

It is important to stress that aversive conditioning should not be used routinely but as a method of last resort, usually with children from 3-6 years of age who have appropriate communicative abilities.

Aversive conditioning can be a safe and effective method of managing a child with an extremely difficult behavior problem.

- HOME is now obsolete and considered inappropriate by AAPD and most regulatory bodies.

The purpose of HOME is to gain the attention of a child so that communication can be achieved.



## **THE TECHNIQUE:**

Informed consent by the parents and explanation of the indication for the use of HOM should be done at first. After determining the child's behavior, the dentist firmly places his hand over the child's mouth and behavioral expectation are calmly explained close to child's ear. When the child's verbal outburst is stopped and child indicates his willingness to co-operate, the dentist removes his hand. Once the child cooperates, he should be complimented for being quiet and praised for good behavior. The whole procedure should not last for more than 20-30sec.

## **INDICATION:**

- A healthy child who can understand but who exhibits hysterical behavior during treatment
- 3 to 6 yrs. old child
- Children displaying uncontrollable behavior

## **CONTRAINDICATION:**

- Child under 3yrs of age
- Frightened child
- Physical, mental and emotional handicap
- It should not be set as routine procedure, inform the parent about the procedure

## **RESTRAINTS**

Restraints are devices, wraps or other individuals assisting in dental operatory that are designed to prevent patients from causing harm to themselves and to the dental personnel.

Partial or complete immobilization of the patient sometimes, is necessary to protect the patient and/or the dental staff from injury while providing dental care. Recently the term 'Protective stabilization' is used instead of Immobilization.

Restraints can be performed by the dentist, staff or parent, with or without the aid of a restraining device. The parents must be informed and the consent must be documented, before immobilization is used, they should have a clear understanding of the type of immobilization to be used, the rationale, and duration of use.

## **Indications for Using Immobilization**

- A patient who requires diagnosis or treatment and cannot cooperate because of lack of maturity.



- A patient who requires diagnosis or treatment and cannot cooperate because of mental or physical disabilities.
- A patient who requires diagnosis or treatment and does not cooperate after other behavior management techniques have failed.
- When the safety of the patient or practitioner would be at risk without the protective use of immobilization.

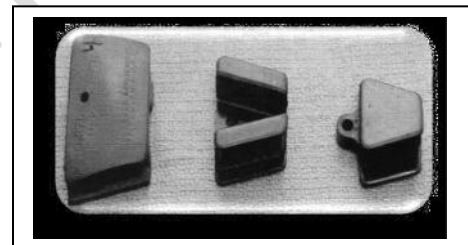
### Contraindications

- A cooperative patient
- A patient who cannot be safely immobilized because of underlying medical or systemic conditions.
- As punishment
- Should not be used solely for the convenience of the staff.

### The restraints are of the following types:

#### 1. Oral

- Mouth props
- Padded wrapped tongue blades
- Rubber bite blocks
- Finger guards



#### 2. Body

- Papoose board
- Triangular sheet
- Pedi-wrap
- Bean bag dental chair insert
- Safety belt
- Extra assistant





### 3. Extremities

- Posey straps
- Velcro straps
- Towel and tape
- Extra assistant



### 4. Head

- Forearm body support
- Head positioner
- Plastic bowl
- Extra assistant



## Parents and their influence on dental treatment

From the moment of their children's birth, parents shape children's behaviors by selective encouragement and discouragement of particular behaviors, by their disciplinary techniques and by the amount of freedom they allow. Children learn the basic aspects of everyday life from their parents. This process is termed socialization, and is ongoing and gradual. By the age of 4 years children know many of the conventions current in their culture, such as male and female roles. The process of transmitting cultural information early in life is called primary socialization. In industrialized countries, obtaining information on many aspects of life is gained formally in schools and colleges rather than from the family. This is termed secondary socialization.

In early years, at least historically, it is mainly from parents that children learn what they are supposed to do and what behavior is forbidden. Unfortunately, societal changes in recent years have created dynamics that can indirectly affect the behavior of children in dental offices.

When providing dental care for children, it is important that dentists understand parents' expectancies. As with any health issue the social class background of the



respondent's influences attitudes and beliefs. For example, parents of high socioeconomic status are more interested in professional competence and gaining information, whereas parents from poorer areas want a dentist to reassure and be friendly to their child.

- ✚ Parents are integral to the social learning and shaping process.
- ✚ Children mirror parental anxiety, attitudes, and expectations.

### **Note: PARENTAL PRESENCE OR ABSENCE**

#### **Objective**

- 1) To gain patient's attention and compliance
- 2) To avert avoidance behavior
- 3) To establish authority

#### **Advantages of Parental Presence**

- 1) Supporting and communicating with the child
- 2) Very young patients

#### **Advantages-of Parental Absence**

- 1) Overcoming parental conditioning and encouraging child independence
- 2) Helps establish dentist's authority
- 3) Avoiding parental and communication interference

- ✚ AAPD (2024) recommends case-by-case decisions based on age, anxiety level, and dentist—parent rapport.

### **Parent-Child Separation**

In the past, parents did not expect to enter the operatory. Today's parents actively participate in health care services through the process of informed consent, and increasingly want to accompany their children during their health care experiences. Having parents stay with their child can streamline informed consent and communication into the normal office flow.

In addition to increasing communication efficiency, parental presence can reassure both the child and the parent. Parents can witness the dentist's compassionate approach and hear the educational instructions provided to the



children. At the same time, the dentist obtains rapid feedback on parental attitudes and beliefs.

A parent can be a major asset in supporting and communicating with a child who has a disability, often providing important information and interpretation. Because of the close symbiotic relationship that very young children (those who have not reached the age of understanding and full verbal communication) have with their parents, they often remain together. Excluding the parent from the operatory could be justified for many reasons, including parental interference and limitations on dentist-child interactions.

With older children, an independent experience may contribute toward development of confidence and appropriate coping mechanisms and, ultimately, a positive attitude on the part of the child.

Another reason for advocating a separation policy is that the dentist may be more relaxed and comfortable when the parent remains in the reception area, so as not to be perceived as “performing.” As a consequence of this more relaxed manner, the dentist’s actions are likely to have a more positive effect on the child’s behavior.

The separation procedure warrants serious consideration. The dentist must develop an office policy, inform the office staff, and assume responsibility to train office personnel in reception room strategies. In this age of accountability, the dentist may also have to explain the policy to a parent. Establishment of the policy should therefore be based on a rationale that takes into account the benefits and drawbacks resulting from separation, the benefits to the individual child, and the dental team’s personal comfort level. Because some dentists become tense when parents are present and others enjoy having parents in the operatory, an office policy becomes, to some extent, an individual decision.



“Behavior management is the art of transforming fear into trust — through science, empathy, and innovation”





## Key Takeaways for clinical Practice

Principle	Goal	Clinical Application
<b>Successive approximation</b>	Gradual learning	Tell-Show-Do, reinforcement
<b>Reinforcement</b>	Increase desired behavior	Praise, stickers, smiles
<b>Desensitization</b>	Reduce anxiety	Gradual exposure
<b>Modeling</b>	Encourage imitation	Live or video models
<b>Contingency</b>	Link actions with outcomes	Reward systems
<b>Distraction</b>	Divert focus from stimuli	VR, stories, conversation
<b>Retraining</b>	Rebuild trust	Gentle reintroduction post-trauma

## 🎮 Evidence-Based Behavioral Techniques

Category	Technique	Description	Modern Update
<b>Communication</b>	Tell-Show-Do (TSD)	Explain, demonstrate, perform	Incorporate AR/VR or interactive apps
<b>Positive Reinforcement</b>	Verbal praise, tokens	Reward cooperative behavior	Use digital badges, gamified charts
<b>Distraction</b>	Toys, stories, cartoons	Divert attention from fear stimulus	Use VR headsets, ambient soundscapes
<b>Modeling</b>	Observe cooperative peer	Learn by imitation	Use digital video modeling (e.g., YouTube Kids demos)
<b>Desensitization</b>	Gradual exposure	Stepwise familiarization	Combine with mindfulness breathing
<b>Cognitive Restructuring</b>	Discuss and reframe thoughts	Build confidence	Introduce CBT-based short scripts
<b>Pharmacological Adjuncts</b>	Nitrous oxide, oral sedation	For high-anxiety children	Under updated sedation guidelines (AAPD 2024).

\*\* Augmented and virtual reality (AR & VR)





## **Role of Technology and AI**

Modern pediatric behavior management integrates:

- AI-driven anxiety assessment via facial expression and heart rate tracking.
- Tele-dentistry behavioral interviews for pre - visit acclimatization.
- Virtual dental tours to reduce fear of the unknown.
- Digital parental coaching tools for home-based reinforcement.

## **Ethical and Cultural Dimensions**

- Obtain informed assent from the child and informed consent from parents.
- Avoid coercive techniques; use protective stabilization only when ethically justified.
- Maintain transparency, empathy, and trauma-informed care standards.