Lec. 5

COMMUNICATING WITH CHILDREN

Communicative management is used universally in pediatric dentistry with both the cooperative and uncooperative child. It comprises the most fundamental form of behavior management. It is the basis for establishing a relationship with the child, which may allow successful completion of dental procedures, and, at the same time, help the child develop a positive attitude towards dental health. The fears and the natural innate curiosity of a child predict that explanations must be given for new or different techniques and procedures. Explanations must be given for each step of dental treatment.

Effective vocabulary is an important aspect, as the dentist must only use the words that are understandable by the child. Communicative management is comprised of a host of communication techniques which when integrated together enhance the evolution of a compliant and relaxed patient. These key points are guidelines and not inflexible rules, because in the unpredictable world of pediatric health care, one must always be prepared to improvise.

The important aspect of communication is getting the child to respond to dentist's commands. Two things must be remembered here. Firstly, the command may take some time to sink in and be implied, and secondly, the command should be within the ability of child. It is imperative to use positive language like *please can you move your hand* rather than use negative aspect like *do not get your hand here*. The three most important facets of communication are source, medium and receiver. In reference to dentistry, the dentist is the source, the dental clinic is the medium, and the child is the receiver. If the dentist is good, sympathetic, confident and honest, dental clinic is neat, quiet, familiar to children, full of toys; then automatically the child is communicating and is well managed.

There are two ways of establishing communication:

1. Verbal - Spoken language to gain confidence.
2. Nonverbal - Expression without words like welcome hand shake, patting, eye contact.

Note:

- ✓ The Studies show that non-verbal communication contributes up to 60 % of a child's perception of safety and trust in the dental setting.
- ✓ Advanced Communication Tools
  - Digital apps for child preparation and parental coaching
  - VR distraction therapy for anxiety reduction
  - Biofeedback-based calm apps to monitor child stress levels
  - Social stories and interactive animations for children with autism spectrum disorders (ASD)

Objectives of communication

a. Establishment of communication:

Communication helps the dentist to learn about the child and makes the child at ease and relaxed. There are many ways of initiating verbal communication, and the effectiveness of these approaches differs with the age of the child. Generally, verbal communication with younger children is best initiated with complimentary comments, followed by questions that elicit an answer other than "yes" or "no."

b. Establishment of the communicator:

Communicator may be any person in the clinic who can provide information. The receptionist who welcomes the child and the parent with the smile provides initial communication. This initial communication is very important in building confidence and projecting the attitude of the clinic staff to the patient. The dental assistant should talk to the child during the transfer from reception room to operatory and during the preparation of the child in the dental chair. When the dentist arrives, the assistant usually takes a more passive role, as the child can listen to one person at a time.

c. Message clarity:

Message content varies from a hearty good morning to relevant information and thank you. Message should be simple and easy to understand by a young child. Euphemisms can be used.

<u>While talking to a child it is important to remember certain points. They are:</u>

- The child may not respond to a question immediately. It takes more time for the question to 'sink in' than for adults
- The command that are given should be simple and within the ability of the patient to obey
- All commands should be given in a positive language since the negative approach may tend to stimulate fear. Example — "Do not move" is avoided and replaced by "I can't fix your teeth until you sit still"

To improve the clarity of messages to young patients, dentists use euphemisms to explain procedures. For pediatric dentists, euphemisms or word substitutes are like a second language.

Word Substitutes for Explaining Procedures to Children

DENTAL TERMINOLOGY WORD SUBSTITUTES

Rubber dam	Rubber raincoat
Rubber dam clamp	Tooth button
Rubber dam frame	Coat rack
Sealant	Tooth paint
Fluoride varnish	Tooth vitamins
Air syringe	Wind gun
Water syringe	Water gun
Suction	Vacuum cleaner
Alginate	Pudding
Study models	Statues
High speed	Whistle
Low speed	Motorcycle
Anesthetic solution	water to put your teeth sleep
Radiograph	tooth picture

It is important to be careful in selecting words and phrases used to indoctrinate the new pediatric dental patient because for the young child, language labels are the basis for many generalizations. The classic example is the language label for "doctor," which confuses many youngsters. This is known as mediated generalization. Eventually, as a result of experiences, the child learns that the "dentist doctor" is different from the "physician doctor" and that the physician's

office and the dentist's office are different environments. The process of sorting out such differences is referred to as discrimination. Response is then appropriate.

Voice Control

Sudden and firm commands that are used to get the child's attention and stop the child from his current activity. Soft, monotonous soothing conversation can also be used as it is supposed to function like music to set the mood.

In both cases what is heard is more important because the dentist is attempting to influence behavior directly and not through understanding. The tone of voice and the facial expression of the dentist are also important as they function like a mirror.

Voice control is most effective when used in conjunction with other communications. A sudden command of "Stop crying and pay attention!" may be a necessary preliminary measure for future communication. Used properly in correct situations, voice control is an effective behavior guidance tool.

However, because parents may find voice control to be an aversive technique, discussing this technique with parents prior to its use may decrease the risk for misunderstanding. (It may not be acceptable to all parents or clinicians; some parents might feel offended if you raise your voice on their child.)

Objectives

- To gain the patient attention and compliance
- To avert negative or avoidance behavior
- To establish authority

Indications

- Uncooperative and inattentive patients

Contraindications

- Children who due to age, disability, mental or emotional immaturity are unable to understand.

Multisensory Communication

Nonverbal messages can also be sent to patients or received from them. Body contact can be a form of nonverbal communication. The dentist's simple act of placing a hand on a child's shoulder while sitting on a chairside stool conveys a feeling of warmth and friendship. Greenbaum et al.34 found that this type of physical contact helped children to relax, especially those aged 7 to 10 years.
Eye contact is also important. The child who avoids it often is not fully prepared to cooperate. Apprehension can be conveyed without a spoken word. Detecting a rapid heartbeat or noticing beads of perspiration on the face are observations that alert the dentist to a child's nervousness. When the dentist talks to children every effort should be made not to tower above them. Sitting and speaking at eye level allows for friendlier and less authoritative communications.

Note: Sometimes the non-verbal signals are more important than what the dentist said, because children can read these signals and can feel if the dentist is stressed out when he is giving them local anesthesia. Therefore, the dentist needs to try and calm himself so that they feel that he is confident and they're in good hands.

There are 3 'essential messages' that we want to send to child patients mainly through non-verbal communication:
1."I see you as an individual and will respond to your needs as such".
2. "I'm thoroughly knowledgeable and highly skilled".
3. "I'm able to help you and will do nothing to hurt you needlessly".

Objectives
1.To enhance the effectiveness of communicative management techniques.
2. To gain or maintain the patient's attention and compliance.
Contraindications: Children who due to their age, disability or emotional maturity are unable to cooperate.

Problem Ownership

In difficult situations, dentists sometimes forget that they are guiding the behavior of children. They begin by sending "you" messages, for example, "You stop that immediately!" or "If you don't stay still, we will have to hold your hands." "You" messages have been termed roadblocks to communication; instead of gaining cooperation, they only undermine the rapport between a pediatric patient and dentist. *"You" messages* may impugn a child's character, depreciate him as a person, shatter his self-esteem, underscore his inadequacies, and cast judgment. They are more likely to provoke conflict and rebellion than *"I" messages.* "I" messages reflect the practitioner's experience and disclose the focus of the problem, such as "I can't fix your teeth if you don't open your mouth wide." They are honest, clear, and inarguable.

This self-disclosing assertiveness is one technique that is particularly well suited to increase the flow of information between the dentist and the pediatric patient.

A technique that encourages the use of "you" is attending. Attending describes the desirable conduct to help shape compliance. For example, "You are staying so still" reinforces the specific cooperative behavior that is necessary for the treatment to be completed. Positive attention to discrete behaviors confirms to children that they are doing what was requested and can nurture the relationship between patients and providers.

Active Listening

Listening is important in the treatment of children. Children express their feelings by word and by action.

Listening to the spoken words may be more important in establishing rapport وئامwith the older child, whereas attention to nonverbal behavior is often more crucial in guiding the behavior of a younger child.

Active listening mirrors the communicated emotion. Whether the child says "I'm scared" or hesitates in opening his mouth, the dentist needs to acknowledge, not ignore, what the child is feeling. Sensitivity to the expressed emotions can reassure the child and encourage genuine communication. The patient is stimulated to express feelings, and the dentist does the same, as necessary processes in communication.

Enhancing Control

Enhancing control can influence how the patient experiences a situation. Allowing an anxious child to have some sense of control during procedures may help contain anxiety and avoid disruptive behaviors. This technique allows the patient to alert the dentist using a predetermined stop signal (e.g., a raised hand) that he needs a brief pause before continuing care. Use of this technique has been shown to reduce pain during injection and routine dental care. The signal should be rehearsed, and the dentist should act quickly in response to its use. This technique, if introduced too early in the fear hierarchy, may increase anxiety by implying that the child has need to be concerned about the impending care.

Appropriate Responses

Another principle in communicating with children is that the response should be appropriate to the situation.

The appropriateness of the response depends primarily on the extent and nature of the relationship with the child, the age of the child, and evaluation of the motivation of the child's behavior.

An inappropriate response would be a dentist's displaying extreme displeasure with an anxious young child on the first visit, when there has been insufficient time to establish a good rapport. On the other hand, if a dentist has made inroads with a child, who then displays unacceptable behavior, a dentist may well express disapproval without losing personal control. The response is then appropriate.

Children management techniques

BEHAVIOR SHAPING

Behavior shaping is a common non pharmacological technique. It is a form of behavior modification; hence, it is based on the established principles of social learning. **By definition,** it is that procedure which very slowly develops behavior by reinforcing successive approximations of the desired behavior until the desired behavior occurs.

Proponents of the theory holds that most behavior is learned and that learning is the establishment of a connection between a stimulus and a response. For this reason, it is sometimes called stimulus-response (S-R) theory.

When shaping behavior, the dental assistant or dentist is teaching a child how to behave. Young children are led through these procedures step by step. Patients have to be communicative and cooperative to absorb information that may be complex for them.

The following is an outline for a behavior-shaping model:

1. State the general goal or task to the child at the outset. (Define the Goal Clearly). Start by clearly explaining what you expect the child to do (e.g.," We'll open wide so I can count your teeth").

2. Explain the necessity for the procedure. A child who understands the reason is more likely to cooperate "We're cleaning the sugar bugs to keep your teeth strong"

3. Divide the explanation for the procedure. Children cannot always grasp the overall procedure with a single explanation; consequently, they have to be led through the procedure slowly. Use incremental guidance; complex procedures should be simplified and divided.

4. Give all explanations at a child's level of understanding. Use euphemisms appropriately (Use Child-Friendly Language) appropriately. Replace clinical terms with friendly words ("sleepy juice" for anesthesia, "tooth camera" for mirror.

5. Use successive approximations. Tell-show-do technique has remained a cornerstone of behavior guidance. It is a series of successive approximations, and it should be used routinely by all members of the dental team who work with children. Dental assistants, dental hygienists, and dentists should demonstrate various instruments step by step before their application by telling, showing, and doing. When the dentist works intraorally, a pediatric patient should be shown as much of the procedure as possible.

6. Reinforce appropriate behavior. Be as specific as possible because specific reinforcement is more effective than a generalized approach. Immediate and specific reinforcements can reduce children's fear-related behaviors. Immediate, specific,

and positive reinforcement is most effective. Example: "You did a great job keeping your mouth open I'm proud of you!"

7. Disregard minor inappropriate behavior. Ignored minor misbehavior tends to extinguish itself when not reinforced.

Behavior shaping is regarded as a learning model. The most efficient learning models are those that follow the learning theory model most closely. Deviations from the model create less efficiency in terms of learning. One way to improve consistency in this area is for the dental team to record various clinical sessions with pediatric patients and then to review the recordings, keeping in mind the basics of the behavior-shaping learning model. Although tell-show-do is similar to behavior shaping, the two differ. In addition to demanding the reinforcement of cooperative behavior, behavior shaping also includes the need for steps to be retraced if misbehavior occurs.

Behavior shaping aligns with:

- **Operant conditioning (Skinner, 1953):** Behavior is shaped y reinforcement and feedback.
- **Social Learning Theory (Bandura, 1977):** Learning occurs by observing others (basis for modeling)
- **Cognitive-Behavioral Framework:** Children perception and understanding influence their cooperation.

Behavior shaping may include:

➢ Desensitization
➢ Tell-Show-DO
➢ Modelling
➢ Contingency
➢ Distraction

Desensitization

It is also called as reciprocal inhibition. It is a training procedure or steps taken to reduce the sensitivity of the patient to a particular anxiety producing situation or

object. Each situation or object is then introduced progressively starting from least fear producing to more threatening stimuli.

The Technique Involves 3 Stages

1.Training the patient to relax

2. Constructing a hierarchy of fear producing stimuli related to the patient's principal fear.

3. Introducing each stimulus in the hierarchy in turn to the relaxed patient, starting with the stimulus that causes least fear and progressing تقدمto the next only when the patient no longer fears that stimulus.

Preventive desensitization is a philosophically possible for the child dental patient approaching the first dental appointment. A graded introduction of the child to dentistry, tell-show-do approaches, and accomplishment of easy procedures (examination, prophylaxis, fluoride treatment, brushing instruction) are aspects of preventive desensitization.

The conflict in the term preventive desensitization is since that logically nothing can be desensitized unless previously sensitized. However, because of mass media and fears acquired from siblings, peers, and parents, it is reasonable to believe that most children aged 30 months or older are to a degree sensitized to dentistry before their first appointment. Additionally, medical appointments may have sensitized the child to any clinical setting.

INDICATIONS:

1)First Visit
2) Subsequent visits when introducing new dental procedure
3) Fearful Child
4) Apprehensive Child because of information received from parents.

- **Studies** show that guided desensitization combined with **visual aids and parental modeling** improves long-term cooperation and reduces dental fear recurrence

Tell-Show-Do (TSD)

It is a component of behavior shaping that should be routinely used by all members of the dental team who work with children. Specifically, the dentist tells the child what is going to be done in words the child can understand. Second, the dentist demonstrates to the child exactly how the procedure will be conducted. Finally, the practitioner performs the procedure exactly as it was described and demonstrated.

Objectives

1.To teach the patient aspects of dental visit and to familiarize him with the dental setting.

2. To shape patients' response to various procedures through desensitization and well-described expectations.

Note: With Tell-Show-Do we don't ask permission

Modeling (What is modeling?)

The child learns a certain behavior by observing the behavior of other children whom receiving the same treatment by a mean of modeling. It involves allowing the patient to observe one or more model who demonstrate appropriate behavior in a particular situation.

Modeling will encourage the appropriate behavior when the patient see the dentist is happy with other child, so this will give them a desire to mimic the other child's behavior as well, so it is better to bring somebody to be a model for them.

Types of modeling

1. **Audio-visual:** watching videos of children undergoing dental treatment calmly.
2. **Live modeling by sibling or parent** (Observation of another child, sibling, or cooperative peer in real time)
3. **Virtual Modeling:** Digital simulations or VR-based role modeling, proven effective for anxious or neurodivergent children.

Advantages

1. Obtain the patient attention and builds confidence and reduces uncertainty.
2. Designed behavior is modelled.
3. Physical guidance of the desired behavior.
4. Reinforcement of the guided behavior.

Objectives

1. Stimulate acquisition of new behavior.
2. Facilitating the behavior already in the patients in a more appropriate manner.
3. Elimination of avoidance behavior.
4. Extinction of fear.

Q: Is modeling technique always considered positive and effective?

Note:

For best effects, modeling should be at the same age of the target child, otherwise it would not be relevant (The model child is aged similarly to the targeted child)

Contingency

Contingency management is the term used for presentation or withdrawal of reinforcers in behavior management. Reinforcers can be:

I. **Positive reinforcers**- presentation of which increases the frequency of desired behavior. "You sat still! You get a sticker"

II. Negative reinforcers- withdrawal of which increases the frequency of desired behavior. Example: -

(Exclusion of the parents once the child shows an inappropriate reaction at the dental clinic). Parents allowed back after the child calms down.

Therefore, we are shaping the child behavior by removal of a stimulus (parents) and this action (the exclusion of parents) is what considered unpleasant to the child [Negative reinforcement]

Reinforcers can of the following types:

1. Materials reinforcers - In the form of gifts like toothbrush kits, drawing kits, favorite cartoon stickers or toys appropriate for their age.

2. Social reinforcers (the most effective) - In the form of a pat on the back of shoulder, shaking hands, hugging the child or verbal praise in the presence of their parent for which the child will be happy.

3. Activity reinforcers- In the form of allowing, the child to perform his/her choice of activity (like watching a favorite TV show or movie or playing his favorite instrument for some time or games of interest, e.g. giving the child privilege of participating in a preferred activity). This is only after performing a less preferred behavior i.e., first you work, then you may play.

- ✓ UAAPD (2024) emphasizes that **specific**, **immediate**, and **consistent reinforcement** builds intrinsic motivation and trust.

Note:

Externalization: It is a process by which the child's attention is focused away from the sensation associated with dental treatment by involving in verbal or dental activity.

Objectives:

- To decrease perception of unpleasantness.
- To interest and involve children.

DISTRACTION (What do we mean by distraction?)

Distraction is stealing the attention of the child either from the whole dental clinic like make them feel somewhere else (in different environment) or from stealing their attention from something specific unpleasant the dentist wants to do at the clinic such as giving local anesthesia. Therefore, dentist will shift their attention. (This is a newer method of behavior management in which the patient is distracted from the sounds and / or sight of dental treatment thereby reducing the anxiety.)

What is the aim of distraction?

The aim is to decrease the perception of unpleasantness experienced by the target patient, which will then facilitate our clinical work.

Examples:

- ✓ When giving anesthesia try pulling the patient lips so the child won't know what to concentrate on is it the needle going there or the sensation of pulling (he will be confused), so it is a distraction for them.
- ✓ Talking also another example of distraction, we must talk with them all the time especially when giving local anesthesia.

- ✓ Another example when taking an impression let the patient raise their legs to stop them gagging.

Types of Distraction:

I. Audio Distraction

Patient listens to audio presentation through headphones throughout the course of the treatment**. (This is useful for adults mostly and shows low success for children.)**

II. Audio-visual distraction

Patient is shown audio-visual presentation through television during the entire treatment. (Here we show children (cartoons) while working and that will reduce any unwanted behavior and also let the child know that it will be switched off if they not behave appropriately)

III. A combination of both visual and auditory: -

Recently, an (audio-visual glasses) has been used which offer an effective way of distraction and reduces unpleasantness and distress throughout the restorative procedures.

** Using combination of both visual and auditory is much better than using a single mean alone


A 2024 meta-analysis (Front Dent Med) showed that VR (virtual reality-based distraction reduced observed anxiety by 45% and physiological distress (pulse rate) by 30% compared to conventional methods.

Objectives:

To relax the patient and to reduce anxiety during treatment.