BEHAVIOR ASSESSMENT & MANAGEMENT

- Effective communication (first objective in behavior management) requires behavior assessment.
  - Behavior assessment is based on the understanding of:
    - **Motor development –** Piaget's stages of cognitive development
    - **Language development –** Psychosocial Theory (Erikson)
    - **Psychosocial development –** Learning Theory:
      - Classic conditioning (Ivan Pavlov)
      - Operant conditioning (Skinner)
  - In order to assess behavior, the target behavior first needs to be defined according to behavior rating scales:
    1. **Frankl Scale**
    2. **Wright's Scale of Cooperative Ability**

Frankl Scale	Wright's Scale of Cooperative Ability
++ Definitely Positive *Good rapport, interested & enjoying dental procedure*	**Cooperative** *Relaxed, minimal apprehension, enthusiastic, can be treated by simple behavior shaping*
+ Positive Accepts treatment but cautious	**Potentially Cooperative** *Behavioral problems but has the capacity to perform cooperatively with appropriate behavior modification*
- Negative Reluctant to accept treatment	**Pre-cooperative/Lacking Cooperative Ability** *Very young or special needs children.*
- - Definitely Negative Refusal of treatment, crying forcefully	

- **Fear**: emotional response to an external threat or danger. This is a preventive response developed to protect the individual from harm and self-destruction. Types:
  - **Objective Fear**: Direct physical stimulation of the sense organs.
  - **Subjective Fear**: Feelings and attitudes that have been suggested to child by others.

FACTORS AFFECTING CHILD'S BEHAVIOR IN DENTAL OFFICE

FACTORS OUTSIDE DENTIST CONTROL

Maternal Characteristics		Maternal Attitudes		Sibling Relationship		Sociocultural Factors
Mother	Child	Mother	Child	Order of Birth	Child	
Loving	Calm & Happy	Over-Protective	Submissive & Shy	First	Anxious	1. Socioeconomic factors: have effect on child's behavior
Hostile	Excitable	Under Affection	Uncooperative	Middle	Outgoing	
Give Autonomy	Friendly & Cooperative	Rejecting	Low self-esteem	Young	Irritable	2. Cultural & Ethnic factors: each subculture has its own values
Punitive	Lack confidence	Identification	Feeling Guilty			

FACTORS UNDER DENTIST CONTROL

1	**Data Gathering**	• Collect information about child and his/her parents • Observation begins with noting the child in the waiting room
2	**Structuring**	• Explain to the child • Prepare child for each phase of treatment • Separate procedures into stages • Prepare child for change in sensation before he will experience it
3	**Externalization**	• Child's attention is focused away from the sensations associated with dental treatment, through: ○ **Distraction**: shift attention from the dental setting ○ **Involvement**: get child to identify then alter their dysfunctional beliefs.
4	**Empathy & Support**	• Dentist should not be totally engrossed in the technical aspect; dentist should be sensitive and responsive to child's feelings.
5	**Flexible Authority**	• Authority must be tempered with a degree of flexibility in order to meet needs of particular patient
6	**Education & Training**	• Educate child and their parents as to what constitutes good dental health • Stimulate a behavioral change necessary to achieve these goals.
7	**Dentist Attire**	• Appearance of a white clothed individual would evoke negative behavior in children.
8	**Appointment Time**	• Appointment should be short (because of short attention span) and in early mornings because children will be more rested and cooperative.
9	**Dental Environment**	• Pleasant environment lowers anxiety levels.
10	**Pre-appointment Preparation**	• Anything that is said or done to positively influence the child's behavior before child enters the clinic. • If the first visit is pleasant it paves the road for future successes.

MODIFYING A CHILD'S BEHAVIOR

BEHAVIOR MODIFICATION – ALTER BEHAVIOR ACCORDING TO LEARNING THEORY

Desensitization

Describe imaginary scenes relevant to his fears in a graduated fashion. **Systemic Desensitization** reduce anxiety by working through various levels of fear (from least to most)

1. Tell-Show-Do Approach.
2. Use of age appropriate euphemism language.

Modeling

- Children acquire favorable responses by watching and listening to people around them.
- Steps: obtain child attention ➔ retention of observed behavior ➔ motor reproduction depends on child ➔ when reinforced, the observed will be performed.
- Merits:
  - Stimulate new behavior
  - Facilitate desired behavior
  - Extinction of fear
- Models:
  - Older Sibling (Prestige)
  - Younger Patient
  - Multiple Models
  - Modeling film (Vicarious)

Contingency Management

- **Positive Reinforcers**: contingent presentation increases the frequency of behavior
- **Negative Reinforcers**: contingent withdrawal increases frequency of behavior (termination of aversive stimulus)

Classification of Reinforcers

Material	Social	Activity
Most effective	Praise, facial expression, Nearness, talking, Physical contact	Privilege of participating in a preferred activity

BEHAVIOR SHAPING – DEVELOP BEHAVIOR BY REINFORCING DESIRED BEHAVIOR

BEHAVIOR MANAGEMENT – **EFFECTIVELY** & **EFFICIENTLY** INSTILL A POSITIVE DENTAL ATTITUDE

1. Voice Control

- Loud voice to gain child attention ➔ speak softly
- Facial expressions must mirror tone of voice

2. Physical Restraint (Aversive Conditioning)

- Mouth Props: at time of injection or when children become fatigue. Also used in mentally or physically handicapped
- Parent: child facing forward in mothers lap ➔ one hand of mother on forehead while other on wrist ➔ control movement of infant
- Sheets & Body wrappings: Restrain techniques (papoose boards, Vac-Pac) to restrict patient movement

3. HOME Technique

- Indication: normal children who are momentarily hysterical or defiant.
- Contraindication: very young or immature children, physical, mental, or emotionally handicapped patient.
- Purpose: gain attention ➔ stop verbal outburst ➔ establish communication. Steps:
  1. Hand firmly over mouth
  2. When outburst stop, child is told that hand will be removed when he cooperates.

4. Pharmacological Management

- Depends on age, behavior, treatment required, medical conditions, distance traveled, language and education.
- Forms of intervention:
  - **Local Anesthesia** – Maximum allowable dose (4.4mg/kg: 2% lidocaine = 20mg/ml; 2.2ml carpoule = 44mg/carpoule)
  - **Nitrous Oxide** – Conscious sedation is contraindicated in patients with ASA III (patient with severe systemic disease) but can be done for ASA I (normally healthy patient) and ASA II (patient with mild systemic disease)..
  - **Oral/Nasal Sedation** – Sedative agent selected ➔ dose calculated ➔ child is monitored ➔ effect is observed in 30 – 60 mins
  - **Intramuscular Sedation** – Injection site: **a) upper & outer quadrant of gluteal region** or **b) anterior aspect of thigh (vastus lateralis muscle)** or **c) Middle of posterior lateral aspect of deltoid muscle** ➔ dose calculated & effect observed within 20 mins.
  - **IV Sedation** – Sedation levels at which patient remains conscious, Benzodiazepine is used and effect observed in 20 – 25 seconds.