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 | Modeling | Contingency Management | | |
| 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. | * 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) | * **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 | 2. Physical Restraint  (Aversive Conditioning) | 3. HOME Technique |
| * Loud voice to gain child attention 🡺 speak softly * Facial expressions must mirror tone of voice | * 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 | * 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. | | |