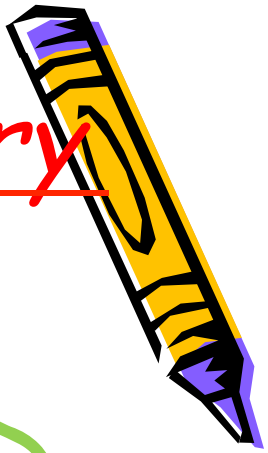
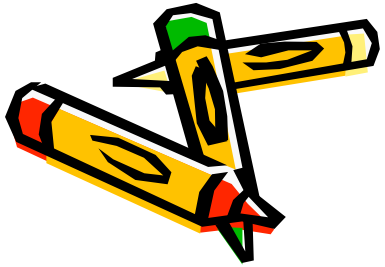
Dept. of Public Health Dentistry



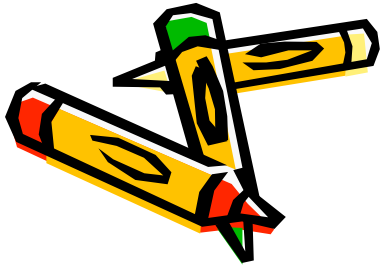
MANAGEMENT OF A CHILD IN A DENTAL OFFICE

By. Dr. Parth Pandya



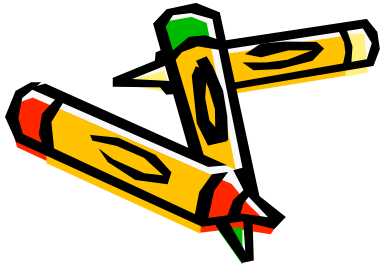
CHILD PSYCHOLOGY

- Science which deals with the mental power or an interaction between the conscious & subconscious element in a child
- Importance: to produce a comfortable environment for the dental team to work on the child

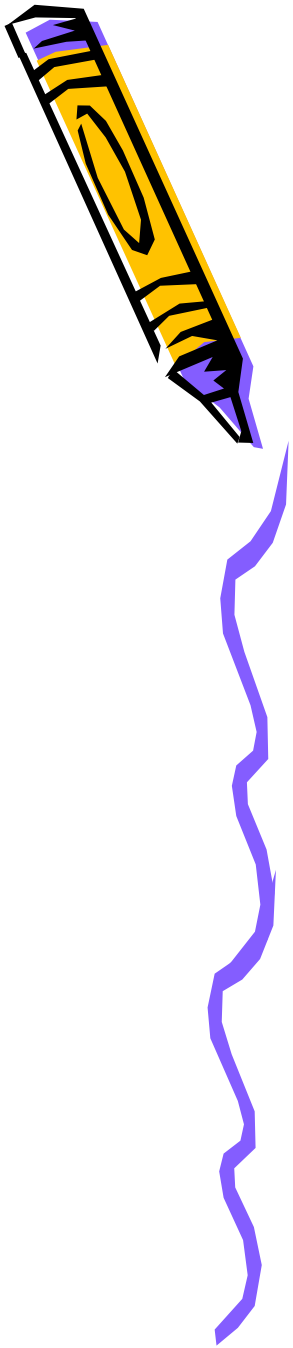


DEVELOPMENT

- PHYSICAL
- SOCIAL
- EMOTIONAL
- LANGUAGE
- COGNITIVE
- MORAL



PHYSICAL DEVELOPMENT

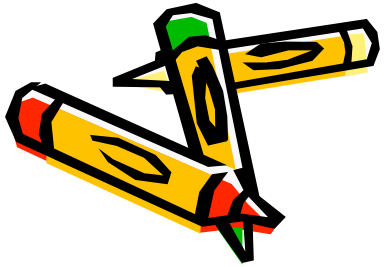


- PRENATAL

Embryo: end of 2nd week- 1month
Foetus: from 1 month till birth

- POSTNATAL:

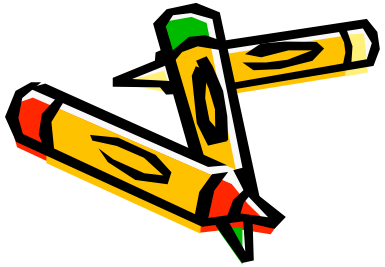
Neonate: 2 weeks- 1 month
Infancy: 1 month- 1 year
Preschool: 1year-3years
Primary school: 4years- 8 years
Middle school: 8 years- 12 years
Puberty: 13 years- 15 years



CLASSIFICATION

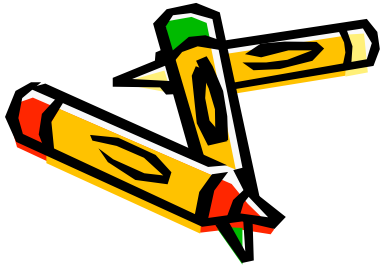
- Psychodynamic theories

- Behaviour learning theories



Psychodynamic theories

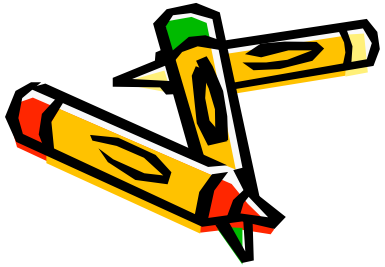
- Classical psychoanalytical theory by Sigmond Freud
- Developmental task theory by Erik Erikson
- Hierarchy of needs by Maslow

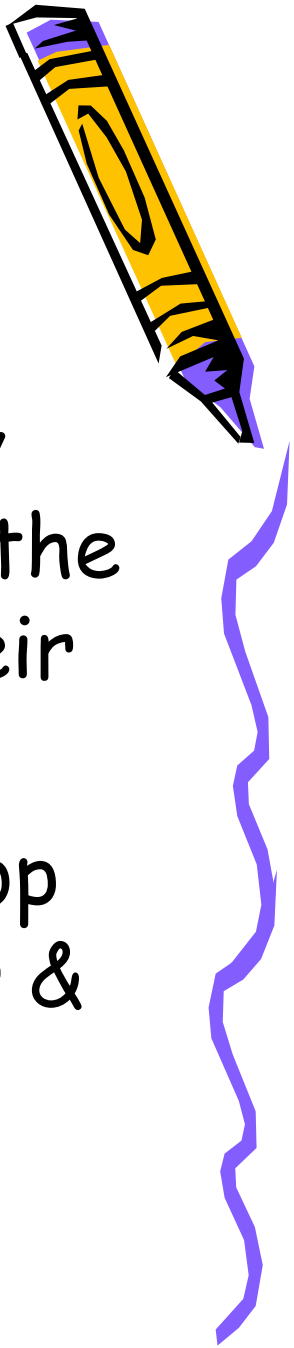


Psychoanalytical theory: Sigmund Freud

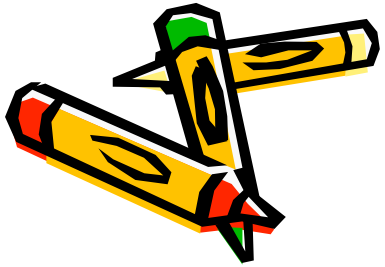
- Psychic structure : 3 parts

1. Id: present at birth, impulse ridden, immediate pleasure & gratification
2. Ego:2nd -6th month of life, reality principle, memory & judgment
3. Super ego: learnt from parents & environment. Moral principles





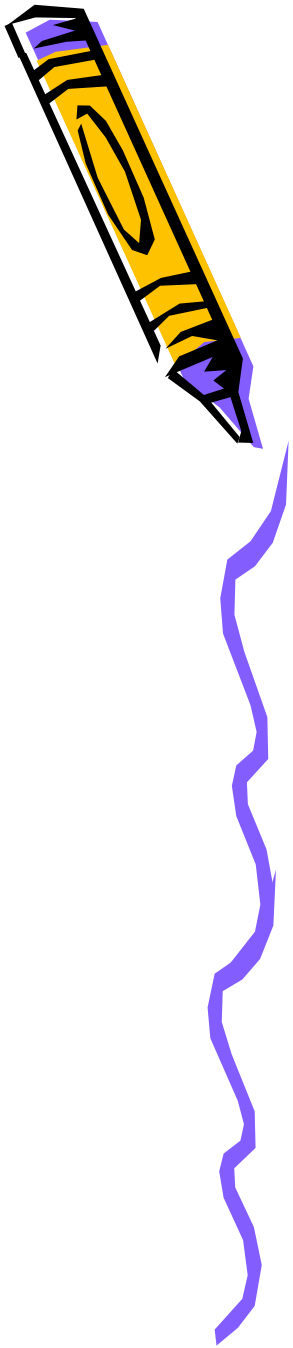
- Oedipus complex: natural tendency for young boys to be attached to the mother & they consider father their enemy
- Electra complex: young girls develop an attraction towards their father & resent their mother



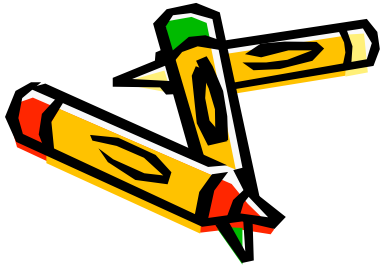
Erickson's Psychosocial theory 1963

- Basic trust vs. mistrust [oral stage]
  age-0-1yr. [mother- hope]
- Autonomy vs. shame [anal stage]
  age-2-3yr
- Initiative vs. guilt [phallic stage]
  Age-4-5 yrs[parents- will]
- Industry vs. inferiority [latency stage]
  age- 6-12yrs [family- purpose]
- Identity vs. role confusion [genital stage]
  age- 13-18 yrs [neighbourhood- competence]

BEHAVIOUR LEARNING THEORY

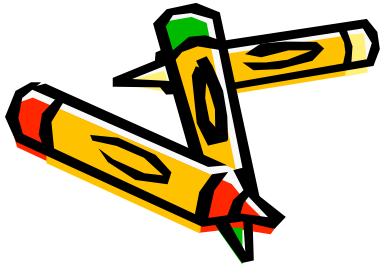


- Classical conditioning theory
- Operant conditioning skinner
- Social learning theory- Bandura
- Coginitive theory by Jean Piaget

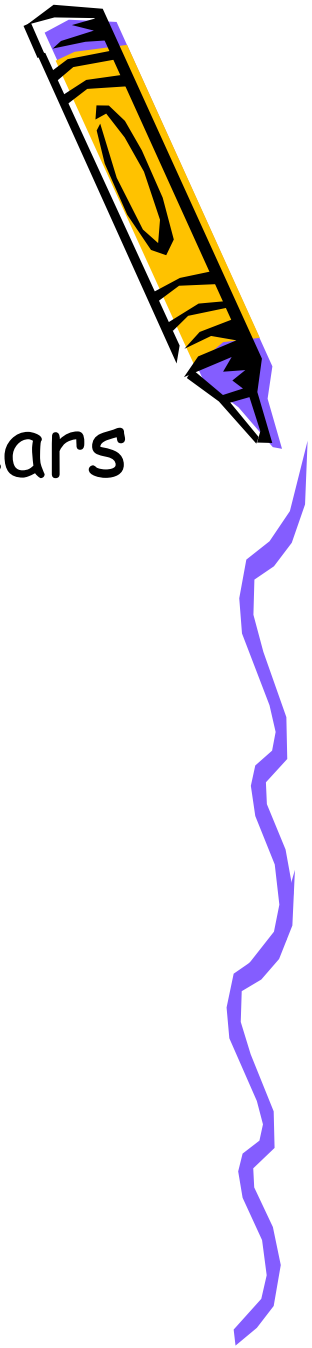


Cognitive theory by Jean Piaget

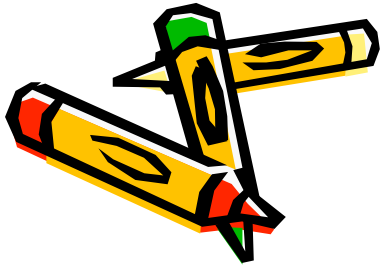
- Sensorimotor: 0-2 years
- Preoperational Stage: 2-6 years
- Concrete operation stage: 6-12 years
- Formal operation Stage: 11-15 years



Cognitive theory by Jean Piaget



1. Sensory motor period-birth-2 years
   -action governed by sensations
   -simple learning
   -child does not think



Cognitive theory by Jean Piaget

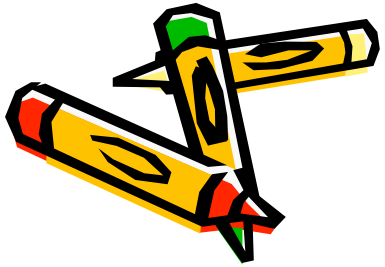
- Preoperational period 2-7 yrs; ego centric

  -preconceptual period (2-4 yrs)

  concepts not clear; symbolic representation

  -intuitive stage (4-6 yrs)

  school going, incomplete thinking



Cognitive theory by Jean Piaget

3. Concrete operation period (7-11 yrs)

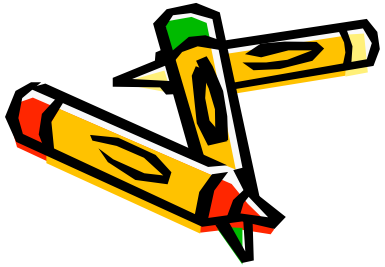
Focus on multiple attentionsFruit juice seriations

4. Formal operation period: (> 11 years)

philosophical poltical beauty ,esthetics and religion, experimental spirit.

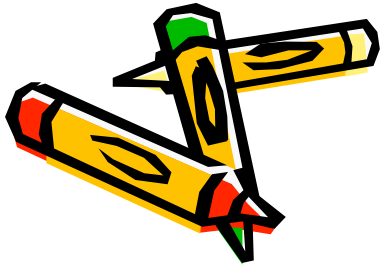
CLASSICAL CONDITIONING

- Ivan Pavlov
- Hand piece sound



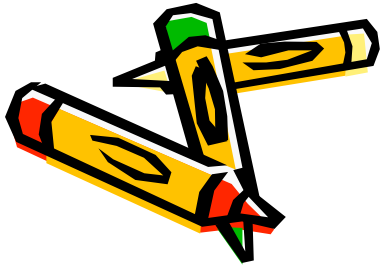
Operant conditioning by B.f skinner

- Positive reinforcement
- Negative
- punishment



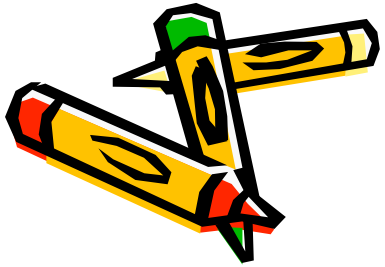
Parental attitudes

- Overprotective
- Manipulative
- Dominating
- Overindulgent
- Hostile
- Neglectful



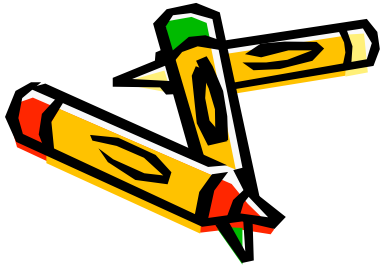
Children's behavior

- Wright
  - cooperative
  - lacking cooperative behavior
  - potentially uncooperative



Potentially uncooperative

- Uncontrolled
- Defiant
- Timid
- Tense cooperative
- Whining



- Intimacy vs. isolation [age-19-25 yrs]

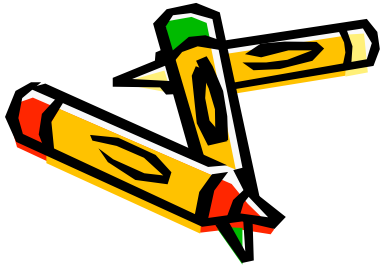
[friends, spouse- love]

- Generativity vs. stagnation [age 26-50]

[job, acquaintances, family interactions-care]

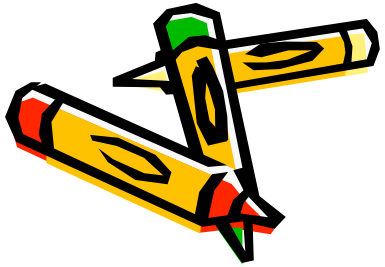
- Ego integrity vs. despair [age- 50+]

[all of mankind- wisdom]



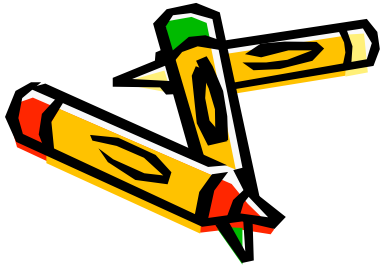
Emotional development

- Kind: positive & negative
- Develop of emotions:
  - During infancy
  - During childhood
  - During adolescence
  - During adulthood



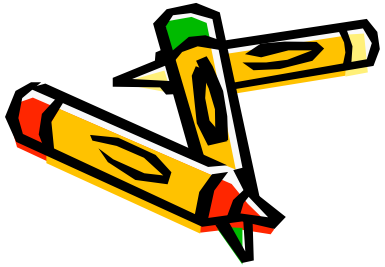
Social learning theory By Bandura

- Social needs
- Modelling
- Anxious dental pt seeing other pt.



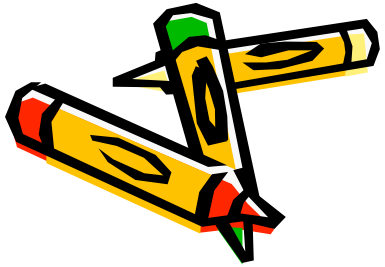
Language development

- Sounds
- Words
- Sentences



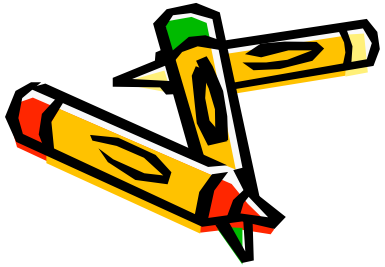
INFANT'S ORAL CARE

- Microorganisms are seen in the oral cavity within 6-8 hours after birth
- S. Mutans gets transmitted from mother to infant
- Cariogenic food & diet with low pH can cause severe & rapid destruction of hard tissues.

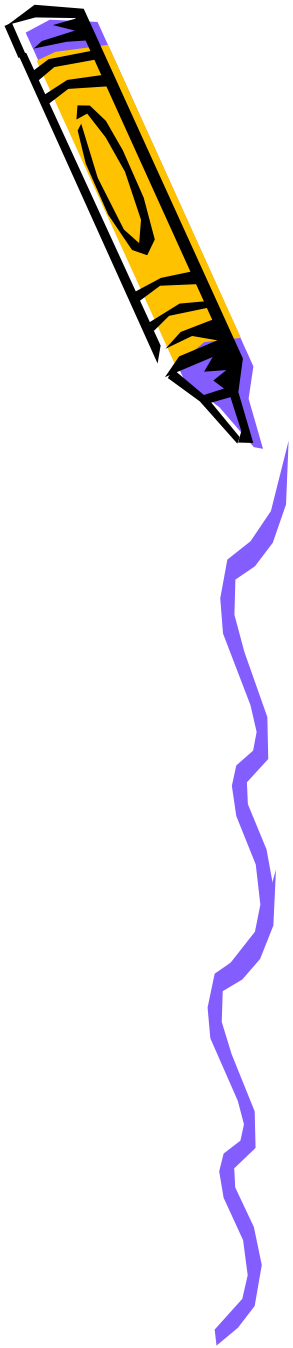


Factors affecting child behavior in dental office: under control of dentist

- Effect of dental office environment
- Effect of dentist's activity & attitudes
- Dentist's attire
- Presence or absence of parent in the operatory
- Presence of older sibling

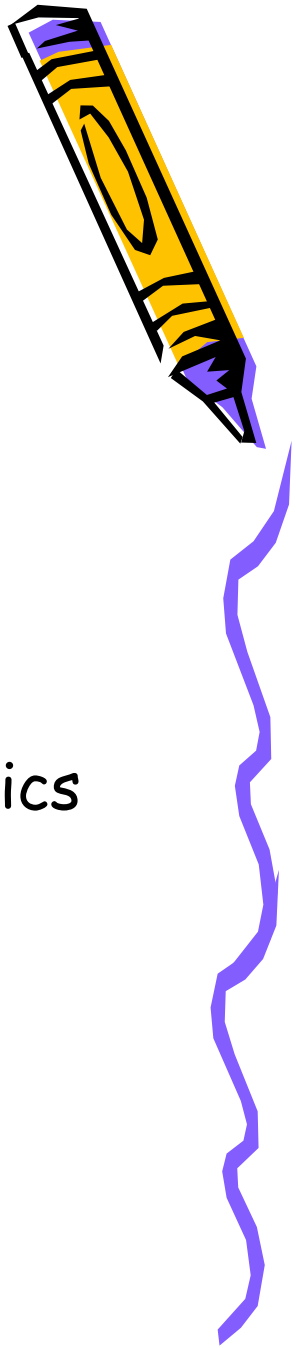


Factors affecting child behavior in dental office: out of control of dentist

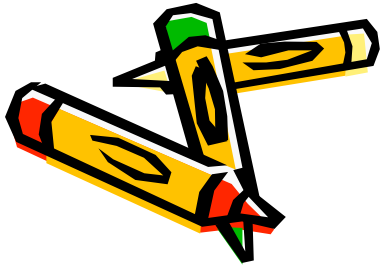


- Growth & development
- Nutritional factors
- Past dental experience
- Genetics
- School environment
- Socio-economic status

MANAGEMENT OF A CHILD IN A DENTAL CLINIC

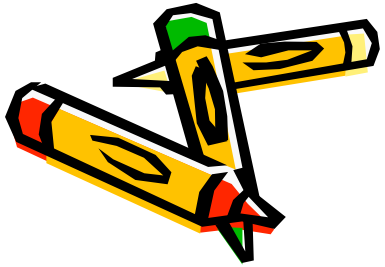


- Neutral colors, attractive color accessories
- Aquarium, muffled music
- Homely pleasant environment
- Operating environment: colorful, lively with posters, video games, TV
- Separate waiting room for kids with toys, comics for all ages
- Short appointments; no waiting time
- Decrease the anxiety of a child before the appointment by pamphlets, telephone, letter



reconditioning

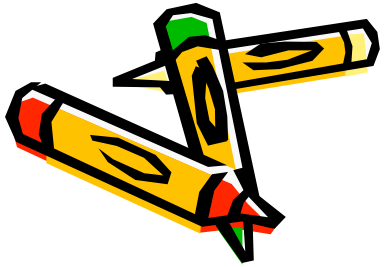
- Determine undue fear
- Familiarize
- Gain child's confidence
- Appearance of the dental office
- Personality of the dentist & auxillaries
- Time & length of appointment



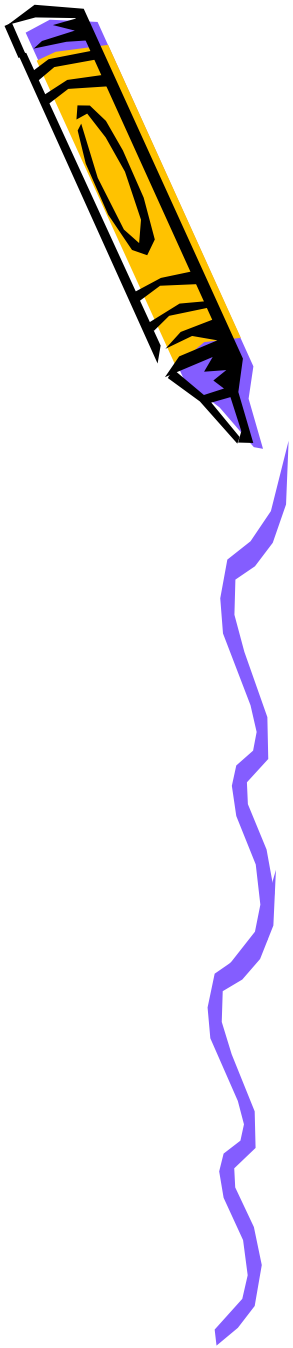
Reconditioning

- Dentist's conversation:
  - constant, gentle, repetitive
  -tone & modulation: empathy & firmness
  -movements: slow, smooth & measured

Dentist's skill & speed



Reconditioning



- Second language:

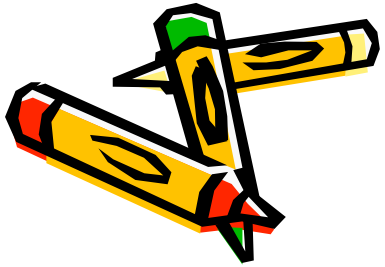
-rubber dam------raincoat

-matrix------fence for filling

- anaesthetic----sleepy water
- Impression material-----pudding
- Evacuator-----vacuum cleaner

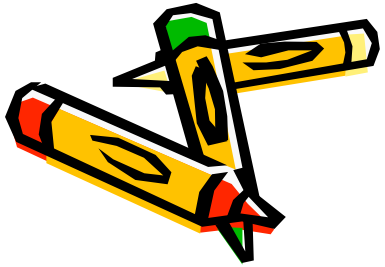
Reconditioning

- Bribery
- Dentist's self control
- Gracefulness of the dentist



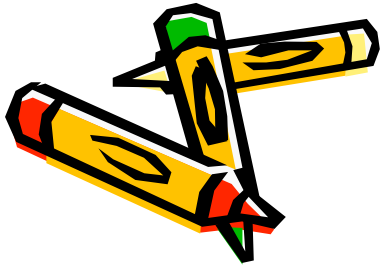
Effect of dentist's attitude & activities

- Greet with a smile
- Avoid quick & jerky movements
- Fluent in words & activities
- Direct physical contact with the child during all procedures, see patient's hands.
- Sharps: burs, syringes, forceps to be kept away from child's sight

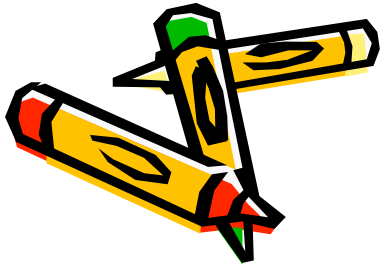


First visit of the child

1. Gather data & observations
2. Structuring: explain to a child what to expect
3. Externalization: distract & involve child
4. Empathy & support: listen & respond to a child; comfort if required
5. Education & training of child & parents



- Dentist's attire: white clothed apron may evoke negative behavior
- Presence/ absence of parent in operating area: mother for a preschool & handicapped child
- Presence of an older sibling: little on 3yr old, no effect on 5 yr old, noticeable effect on 4 yr old.



Behavioral management

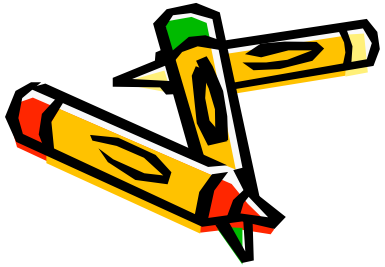
- Means by which dental health team effectively & efficiently performs dental treatment & thereby instills a positive dental attitude
- Child behavior:

  2 yrs cooperative,

  2 ½ contrary & difficult,

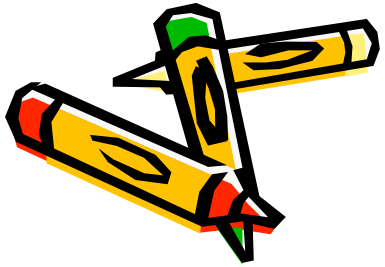
  3yrs amiable,

  4-4 ½ yrs dogmatic & difficult to control

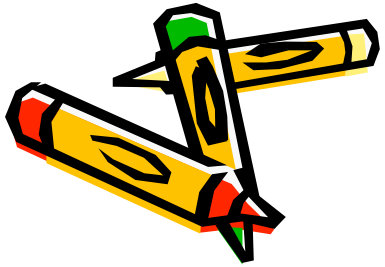


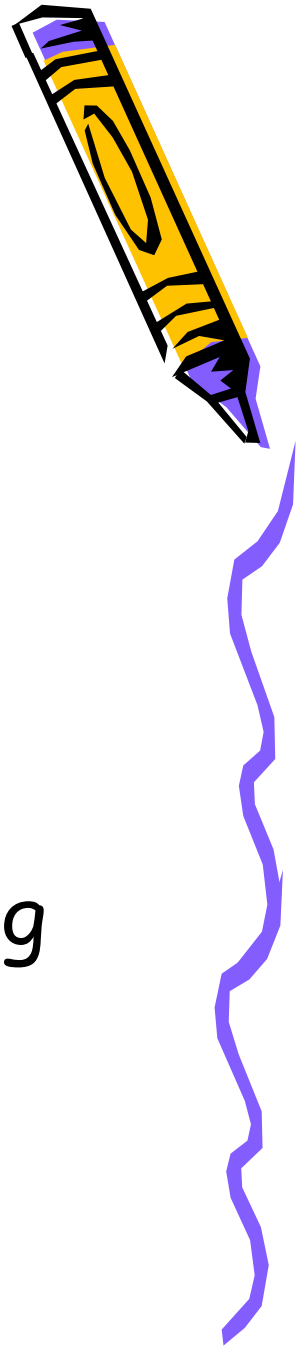
Fear

- Lowers threshold of pain
- Child should be taught that dental office is not a place to fear
- Not as a punishment
- Objective fears: felt, seen, heard, tasted
- Subjective fears: hearing unpleasant experiences in dental office from parents/ friends
- If parents exhibit fear, child too exhibits fear

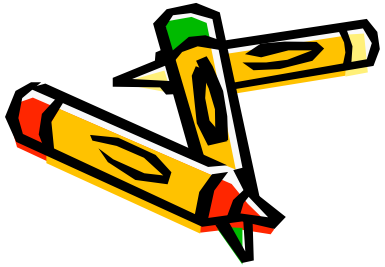


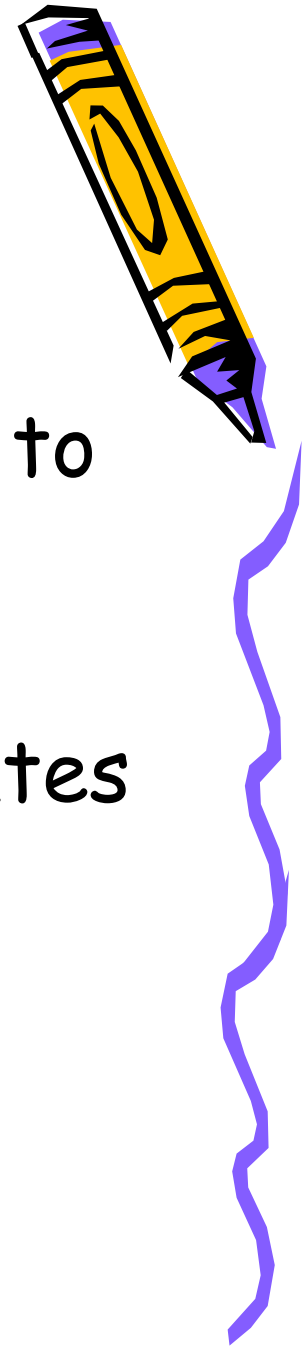
- Preschool child: fear of separation from parent(<50 months- mother helpful in operatory, > 50 months: no difference
- Over enthusiasm arouses suspicion & fear





- 4 yrs: peak of definite fear
- 4-6 yrs: decline in fears; period of fantasy, curiosity
- Intelligent children: more fears
- Make believe play helps in dispelling undue fear

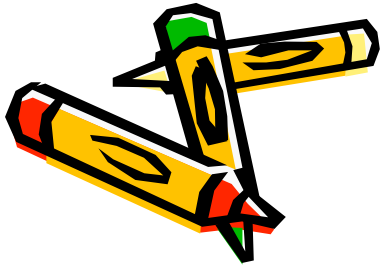




- 7 yrs: reasoning age; can be asked to raise hand
- 8-14 yrs: good emotional control, tolerates unpleasant situations, hates when people make fun
- Girls : aesthetically conscious

Effect of behavior at home

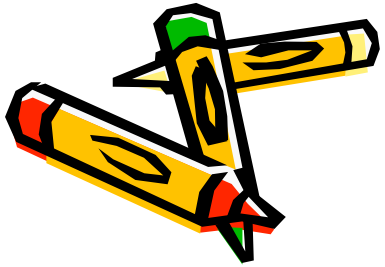
- If he's used to throwing tantrums at home to get away from unpleasant situations ; he'll do the same in clinic
- Introduce the child to a dental clinic when not in pain to familiarize him with surroundings
- Tantrum- ask the mother to come after 6 months ; fear intensifies; do not ridicule
- Observing an older sibling/ parent gives confidence to a child
- Better to forewarn the child about pain rather than to deceive him



Reconditioning

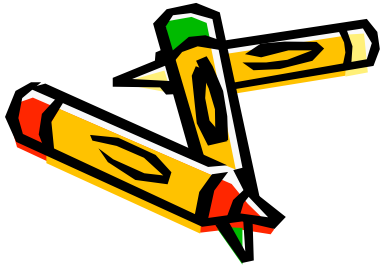
- Guidance by the dentist:

1. Discover the cause of undue fear
2. Familiarize the kid with dental treatment by showing gadgets
3. Talk about familiar subjects: pets & school etc.



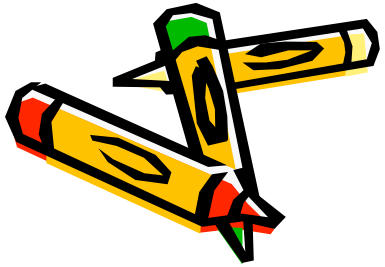
Rewards

- Praise behavior rather than individual
- Gift trinket, toy, coupon for ice-cream, gold stars on bulletin board, plaster models etc.
- Do not bribe the child



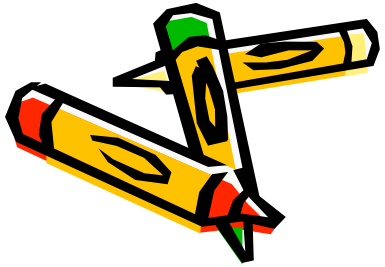
Tell, show, do technique

1. Use language which child understands slowly & repeatedly.
2. Show the procedure on a model slowly
3. Do the procedure

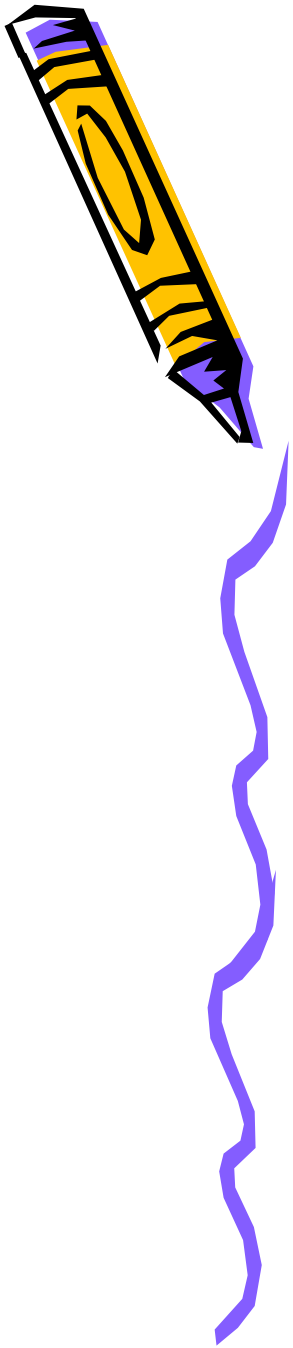


Uncooperative child

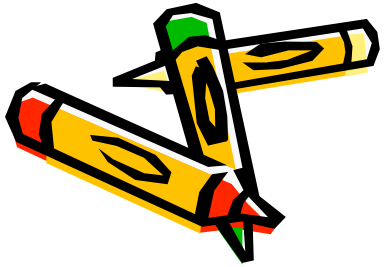
- Continual screaming: **HOME**: hand over mouth exercise.
- With/without airway restricted
- Dry/wet towel over nose & mouth
- Physical restraints: LAST RESORT:
- Active: parents/ staff
- Passive: tapes, Velcro straps, mouth props, Pedi wraps, towel
- Speak in a firm voice & smile & encourage constantly; never become angry/ loose control



Non pharmacological methods

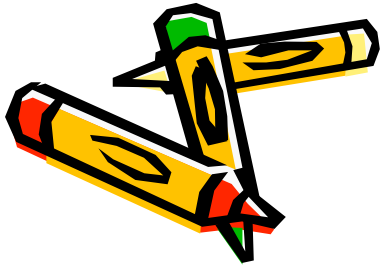


- Communication: verbal & non verbal
- Behavior shaping: desensitization, modeling, contingency management (material, social & activity)
- Behavior management: audioanalgesia, biofeedback, voice control, hypnosis, humor, coping, relaxation, implosion therapy, aversive conditioning.



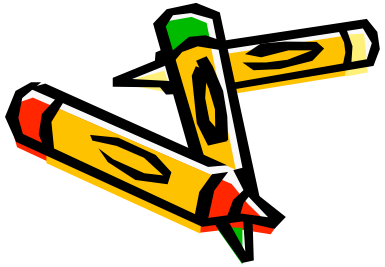
Aversive conditioning

- Hand over mouth exercise (HOME)
- Hand over mouth- airway restricted (HOMAR)
- Physical restraint: for body(pedi wrap, sheets, towels & tapes, bean bag with straps; for extremities (velcro straps, towel & tape); for mouth (mouth block, banded tongue blade, mouth props), for head(head positioner, forearm body support)



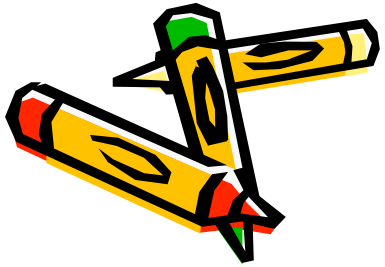
Pharmacologic means of patient management

- Conscious sedation: Nitrous oxide, diazepam- valium(2,5,10,15 mg)
- Combination of promethazine (Phenargan) & Meperidine (Demerol)
- Deep sedation [Ketamine IM]
- GA- mentally retarded chidren, systemic disturbances & congenital anomalies, behavior guidance not effective



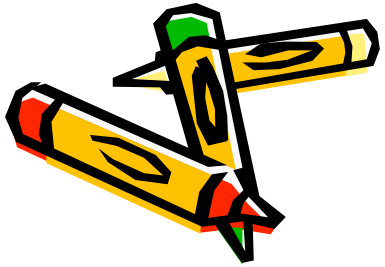
INFANT'S ORAL CARE

- Gum pads: small gauze (2'-2') between thumb & forefinger; wipe vigorously
- Twice: morning & after last feed (2-3minutes)
- Specially designed infant's tooth brushes, finger cots & wipes.
- Child should be supported at all times, movements slow & careful.
- Head in the lap, feet pointing away, open mouth, slide forefinger over gum pads.



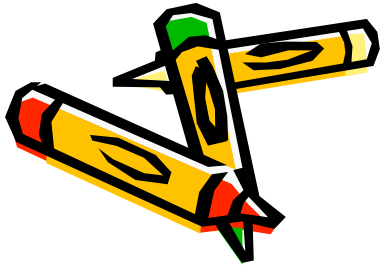
FIRST DENTAL VISIT

- Within the first 6 months of eruption of first primary tooth
- Take H/o: socioeconomic & sociodemographic status [to predict caries]
- General body examination
- Risk assessment: feeding practices, amount of plaque formation, dietary factors
- Therapy: restorative & prophylactic procedures



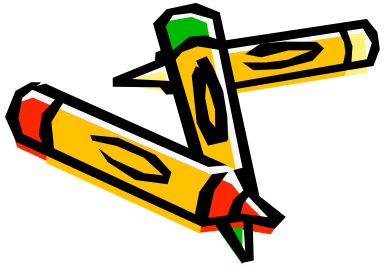
PARENT COUNCELLING

- Educating parents regarding the child's oral health status, optimal health care & informing them about the prevention of potential dental diseases.



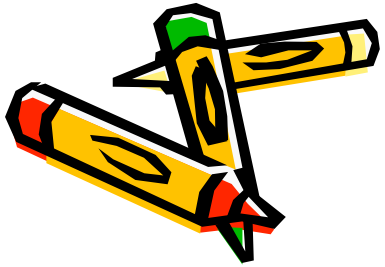
PARENT COUNCELLING

- Signs of teething should be made aware to the patient
- Rubbing honey discouraged strictly
- Teething toys, hard sugar free rusks
- Veggies introduced before fruits after weaning



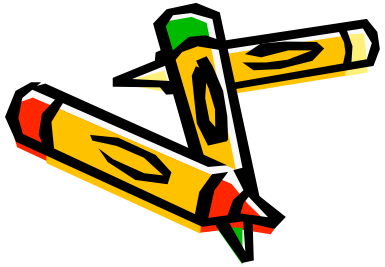
Bottle feeding: fruit juices & milk

- Remove bottle immediately after feeding
- Substitute milk/ juice with plain boiled water
- Encourage baby to drink in an pright position
- Smaller nipple will make infant's muscles work.
- Introduce a cup as soon as possible
- Give water after feeding with the bottle & clean mouth soon after feeding



PACIFIERS

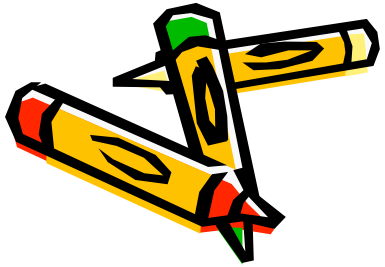
- Bottle should not be used as a pacifier
- If they are dipped in honey; cause caries & malocclusion
- Unhygienic→ cause GIT disorders



Parental guidance/ counseling: Prenatal

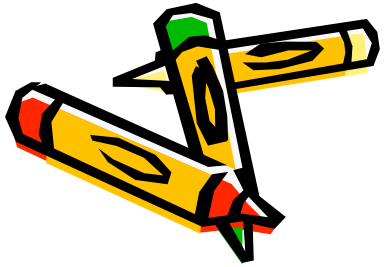
- educate about

1. Dental development of a child
2. Disease process
3. Feeding practices
4. Oral hygiene measures
5. Mother's health & dietary habits influence on child's dental development
6. Importance of primary teeth
7. Increase in food needs to meet physiologic changes



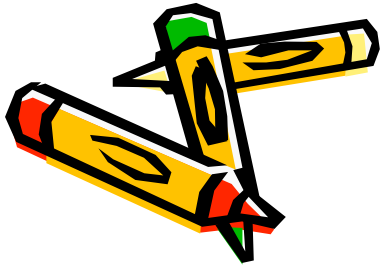
3-6 YEARS

- Diet: sticky foods, its frequency
- Safe snacks: cheese, peanuts, milk, sugarless chewing gum, raw veggies
- Avoid: sugared gum, fruit juices, soft drinks, cakes, candies.
- Parental assistance in brushing at least once a day; brush twice; floss if teeth are in contact
- Fluoride: once a day with F toothpaste (pea sized)
- Apply F gel
- Dental check up every 6 months



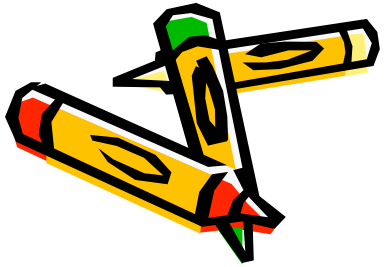
6-12 years

- Importance of first molar
- Sealants
- School snacks
- Fluorides: 2 times a day with F toothpaste- parental monitoring; (expectorating); flossing
- Habits



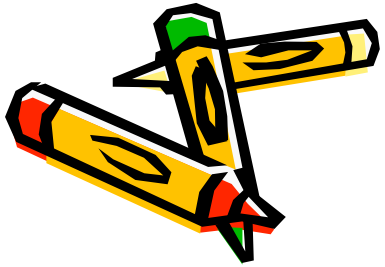
Adolescents

- Parents should have a friendly & diplomatic approach, give emotional support
- Fluoride toothpaste 3 times a day, floss.
- Topical F therapy in kids having smooth surface caries
- Diet: POOR ORAL HYGIENE PRACTICES, high frequency sugar consumption
- Orthodontics
- Smokeless tobacco
- Preventing dental injuries (avulsed tooth, mouth guards)

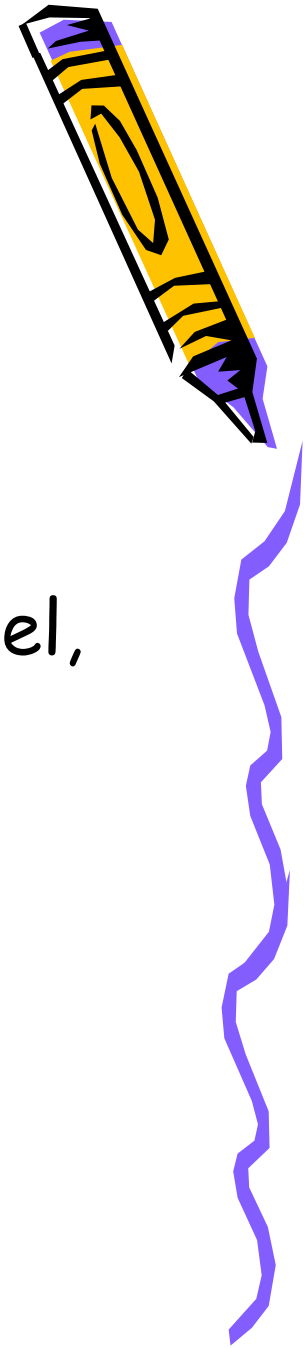


Instructions to parents

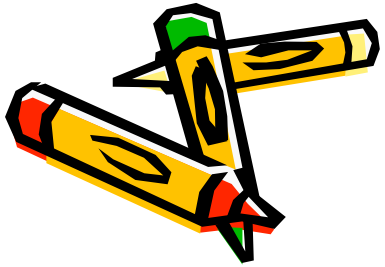
1. Not to voice personal fears
2. Not to use dentistry as a threat/ punishment
3. Familiarize child to the dental office
4. Never to shame, ridicule child to overcome fear of dental treatment
5. Not to promise the child what the dentist is going to do
6. Not to bribe the child for going to the dentist
7. Convey to the child casually that they have been invited to a dental office
8. Parent's courage in the dental office builds child's courage too.



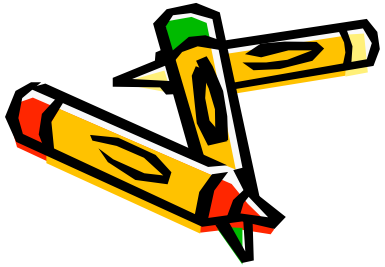
NURSING BOTTLE CARIES



- S Mutans
- Fermentable carbohydrates
- Host[hypomineralised areas, thin enamel, developmental grooves]
- Time: decrease in saliva when asleep
- Predisposing factors: overindulgent parents, malnutrition, salivary gland impairment, low birth weight infants

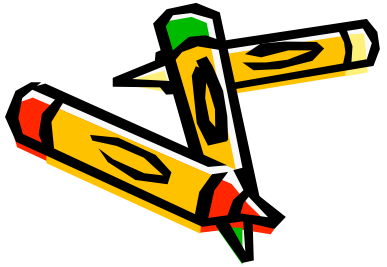


- Maxillary CI, Maxillary LI, Maxillary First molars, Maxillary canine & 2nd molars, mandibular molars
- Progress of the lesion: demineralized dull white area along the gum line on labial aspects of Maxillary CI----cavities involving neck of the tooth----crown destroyed leaving black/ brown stumps



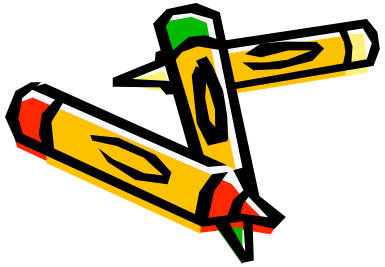
Implications

- Increase risk development in permanent dentition
- Child becomes susceptible to other health hazards
- Financial burden

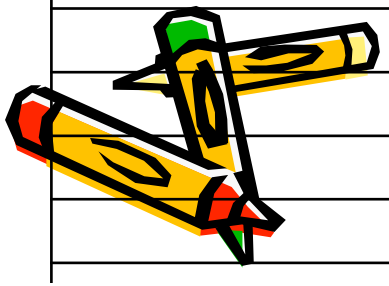


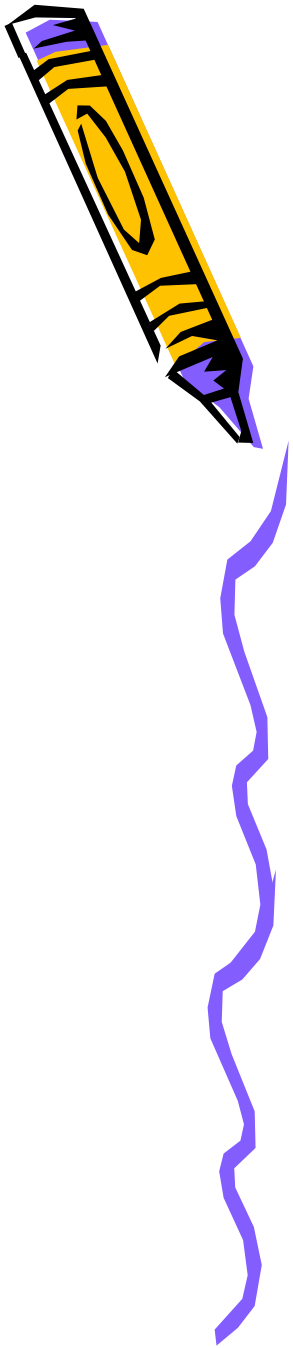
Treatment

- Restoring all carious teeth
- Collect saliva to check viscosity & flow
- Apply F topically
- Dietary h/o & advice accordingly
- Take radiographs
- Parent counseling
- CAT



NURSING BOTTLE CARIES	**RAMPANT CARIES**
Specific form of rampant caries	Acute widespread caries with early pulpal involvement of teeth which are usually immune to decay
Age :Infant and toddler	Seen at all ages including adolescence.
Primary dentition	Affects primary and permanent dentition.
Maxillary incisors – following by molars. Mandibular incisors are not involved.	Surfaces immune to decay are involved. Mandibular incisors are affected .Rapid appearance of new lesions.
Etiology :Improper feeding practices.	Multifactorial: Feeding practices, decrease salivary flow, genetic background.
Treatment: If detected in early stages-F application	Long term treatment
Prevention :DHE	DHE





RAMPANT CARIES

Questions Asked

- Psychology of a child
- reconditioning
- Management of a child in a dental clinic

1. Dental office
2. Parent counseling
3. Management according to age groups
4. Presence / absence of a parent in clinic

- Rewards/ bribes

Short notes on1. Parent counseling in relation to dental hygiene of a child

- 2.Management of an uncooperative child
  Pharmacological & non pharmacological means