

# INTRODUCTION TO PEDIATRIC DENTISTRY



LECTURE BY,  
Dr. SWATI GOYAL

# OUTLINE OF SEMINAR

Definition and Introduction of Pedodontics

History of Pedodontics

Aims and Objectives of Pedodontics

Attitudes of Pedodontist

Difference Between Adult and Child

Scope of Pedodontics

ISPPD

# Pedodontics ??

*Pedo* → *Pais (Greek)* → *child*

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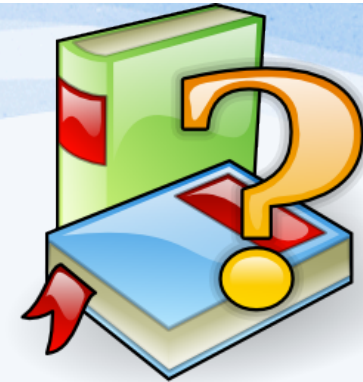
*Dontics* → *study of the tooth*

Pedodontics or Pediatric dentistry is  
synonymous with dentistry for children

# DEFINITION :

- **STEWART- 1982**
- **“Pediatric Dentistry is the practice and teaching of comprehensive ,preventive and therapeutic oral health care of child from birth to adolescence. It is constructed to include care for special patients who demonstrate physical, mental or emotional problems.**

- **Acc. To Pinkham:**
- **Pediatric Dentistry is synonymous with dentistry for children. Pediatric dentistry exists because children have dental and orofacial problems. The genesis of dentistry for children is allied to dental decay, pulpitis and the inflammation and pain associated with infected pulpal tissue and suppuration in bone.**



## **American Academy of Pediatric Dentistry (1999):**

**Pediatric Dentistry is an age-defined specialty that provides both primary and comprehensive, preventive and therapeutic oral health care for infants and children through adolescence, including those with special health care needs.**

# Worldwide History of Pedodontics

❖ **1737 GERAULDY**

Writes about theories of tooth eruption and exfoliation

❖ **1763 JOSEPH HURLOCK**

Published first book on children's dentistry

❖ **1764 ROBERT BUNON (FATHER OF PEDODONTICS)**

Reiterates the importance of deciduous dentition

❖ **1947 AAP**

American Academy of pedodontics was founded.

❖ **1984 AAPD**

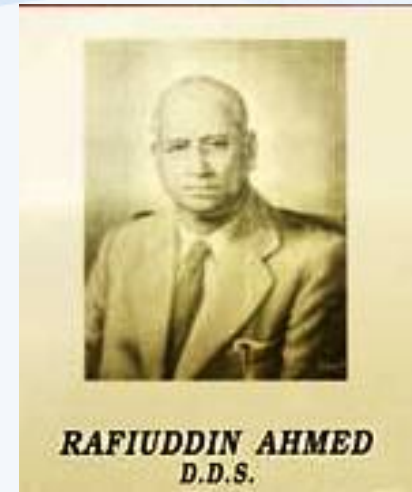
AAP is renamed to American Academy of Pediatric Dentistry

# Pedodontics in India

## ❖ 1920: Calcutta Dental College

1<sup>st</sup> dental college by Dr. Rafiuddin Ahmed.

Known as “Father of dentistry” in India



## ❖ 1950: Pedodontics is introduced

Govt. dental college, Amritsar starts Pedodontics as a speciality

## ❖ 1979-Indian Society of Pedodontics and Preventive Dentistry

The Association of pedodontics holds the 1<sup>st</sup> conference

Dr BR Vacher is made the “Father of Pedodontics in India”

## ❖ 1982-Affiliated to IADC

ISPPD becomes an affiliated member to IADC (International Academy for Dentistry For Children.)

# Aims And Objectives of Pedodontics

## ❖ **Aims**

- ❖ To Determine What is the best for the child at that moment
- ❖ What is the best for the Adult into whom the child will eventually grow

## ❖ **Objectives:**

- ❖ Overall health of the child is primary concern.
- ❖ Prevention is always better than cure. So it should be the primary objective.
- ❖ Early Diagnosis And Prompt Treatment
- ❖ Restoring mouth to good Health

- ❖ Constantly Monitoring developing dentition in growing child.
- ❖ Update his knowledge from time to time with recent advancement to deliver quality dental care to child.
- ❖ Instil a positive attitude And Behavior
- ❖ Comprehensive oral health care
- ❖ Management of Special patients



# Attitudes of Pedodontist:



- To adopt ethical principles in all aspects of pedodontic practice
- Professional honesty and integrity
- Treatment care to be delivered irrespective of social status, cast, creed and religion of the patient
- Willingness to share the knowledge and clinical experiences with professional colleagues
- Willingness to adopt new methods and techniques of pedodontics management
- Respect child patient's rights and privileges
- Develop an attitude to seek opinion from other medical and dental specialities ,as and when required.

## Children are not little Adults

**A child differs from an adult in various ways :**

- Physical
- Emotional and psychological
- Consideration of behavior
- Type of treatment
- Dentist patient relationship
- Parent dentist relationship



# PHYSICAL DIFFERENCES

Difference	Child	Adult
Respiratory system	Narrow nasal passages	Normal
Predisposed to airway obstruction	Tongue/oral cavity disproportion	Normal
	Decreased airway diameter	Normal
React more rapidly to Inhaled gases.	Alveolar ventilation is grater	Normal
	Functional residual capacity lesser	Normal
CVS	Heart rates 120/min	72/min
	Stroke volume low due to inefficiency of left ventricle.	Normal
GIT	Acid concentration low because of immature gut mucosa and hepatic enzymes are not well developed.(barbiturates group of drugs less absorbed but penicillin group of drugs well absorbed)	Normal
Renal	GFR is low	Normal
	Tubular secretion is low so drug metabolism affected result in chances of high drug concentration	Normal
Body Fluids	80% water. Which affect distribution of water soluble drug	60%

- **Emotional and Psychological Differences:**
  - Lower level of psychological competence
  - While treating child, his attachment to parents should be considered
  - Children have lesser logic and cognition
- **Consideration of Behaviour**
  - Impact of first dental visit influences future dental behaviour in a child
  - Behaviour management techniques to be used in treating child.

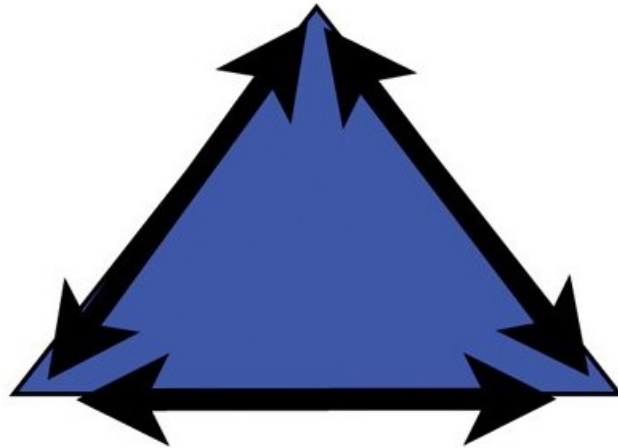
- **Treatment Consideration**

- Modified cavity designs
- Radiographic considerations
- Endodontic considerations due to different root canal morphology

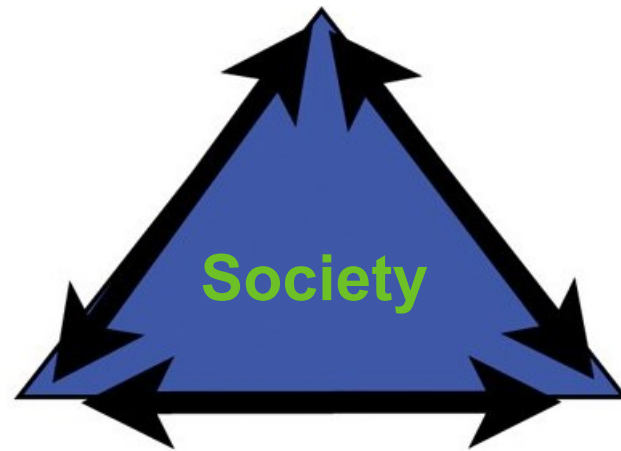


# Pedodontic Triangle

## ❖ Conventional model



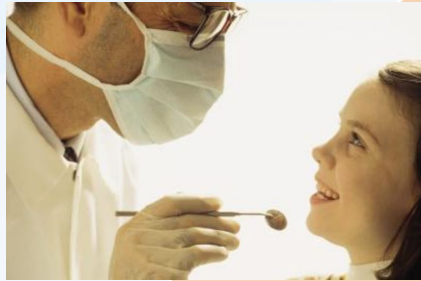
## ❖ Modified model



# Pediatric dentistry treatment model

- **Vivek p et al (2012)** proposed a new model based on pedodontics triangle and have termed it pediatric dentistry treatment model
- It presents the former triangle as a square which has the pediatric dentist, pediatrician, family and society playing important roles and child is center of attention.

# Pediatric dentistry treatment model



prevention



Behavior  
management



Child  
psychology



Risk assessment  
And management



# Scope of Pedodontics

- Preventive dentistry
- Preventive orthodontics
- Oral surgery
- Oral rehabilitation
- Material science
- Special care dentistry
- Allied health sciences
- Periodontics

- Endodontics
- Child psychology
- Neonatology
- Immunology
- Restorative dentistry
- Oral medicine
- Dental radiology
- Cariology

# Indian Society of Pedodontics and Preventive Dentistry (ISPPD)

- **ISPPD** concerned with the oral health of children in India.
- aim : improve oral health in children and encourage the highest standards of clinical care.

## LOGO OF ISPPD

- The emblem is based on the famous triad of Keyes (1960).
- One circle represents the tooth, the other the bacteria and the third diet.
- The shaded area of inter-section of the circles<sup>22</sup> represents dental caries.



- The Stress given is that for caries to develop all the three factors are essential; caries cannot occur if one factor is missing.
- Incidentally, this area of inter section of circles takes the form of Triangles.
- The triangle connotes two aspects
  - (I) it represents delta, which is the sign of dentistry,
  - (ii) it depicts the Pedodontics triangle : Wright (1975).
  - The three corners of triangles are indicative of (a) Child, (b) Mother (parent) and (c) Dentist.



Thank you