

PAEDIATRIC & PREVENTIVE DENTISTRY

COURSE CONTENT:

1. INTRODUCTION TO PEDODONTICS & PREVENTIVE DENTISTRY
 - Definition, Scope, Objectives and Importance.
2. GROWTH & DEVELOPMENT:
 - Importance of study of growth and development in Pedodontics
 - Prenatal and Postnatal factors in growth & development
 - Theories of growth & development.
 - Development of maxilla and mandible and related age changes.
3. Development of occlusion from birth through adolescence.
 - Study of variations and abnormalities.
4. Dental Anatomy and Histology:
 - Development of teeth and associated structures.
 - Eruption and shedding of teeth.
 - Teething disorders and their management.
 - Chronology of eruption of teeth
 - Differences between deciduous and permanent teeth.
 - Development of dentition from birth to adolescence.
 - Importance of first permanent molar.
5. DENTAL RADIOLOGY RELATED TO PEDODONTICS.
6. ORAL SURGICAL PROCEDURES IN CHILDREN.
 - Indications and contraindications of extractions of primary and permanent teeth in children.
 - Knowledge of Local and General Anesthesia.
 - Minor surgical procedures in children.
7. DENTAL CARIES:
 - Historical background.
 - Definition, aetiology & pathogenesis
 - Caries pattern in primary, young permanent and permanent teeth in children.
 - Rampant caries, early childhood caries and extensive caries:
 - Definition, aetiology, Pathogenesis, Clinical features, Complications & Management
 - Role of diet and nutrition in Dental Caries.
 - Dietary modifications & Diet counseling.
 - Caries activity, tests, caries prediction, caries susceptibility & their clinical application.
8. GINGIVAL & PERIODONTAL DISEASES IN CHILDREN.
 - Normal gingival & periodontium in children.
 - Definition, aetiology & Pathogenesis.
 - Prevention & Management of gingival & Periodontal diseases.
9. Child Psychology
 - Definition
 - Theories of child psychology.
 - Psychological development of children with age.
 - Principles of psychological growth & development while managing child patient
 - Dental fear and its management.
 - Factors affecting child's reaction to dental treatment.
10. Behaviour management:
 - Definitions.
 - Types of behaviour encountered in the dental clinic.
 - Non-pharmacological & pharmacological methods of Behaviour Management
11. PEDIATRIC OPERATIVE DENTISTRY:

- Principles of Pediatric Operative Dentistry.
 - Modifications required for cavity preparation in primary and young permanent teeth.
 - Various Isolation Techniques.
 - Restorations of decayed primary, young permanent and permanent teeth in children using various restorative materials like Glass Ionomer, Composites & Silver Amalgam. Stainless steel, Polycarbonate & Resin Crowns.
12. PEDIATRIC ENDODONTICS
- Principles & Diagnosis.
 - Classification Pulpal Pathology in primary, young permanent & permanent teeth.
 - Management of Pulpally involved primary, young permanent & permanent teeth.
 - Pulp capping – direct & indirect.
 - Pulpotomy
 - Pulpectomy
 - Apexogenesis
 - Apexification
 - Obturation Techniques & material used for primary, young permanent & Permanent teeth in children.
13. TRAUMATIC INJURIES IN CHILDREN:
- Classifications & Importance.
 - Sequelae & reaction of teeth to trauma.
 - Management of Traumatized teeth.
14. PREVENTIVE & INTERCEPTIVE ORTHODONTICS:
- Definitions.
 - Problems encountered during primary and mixed dentition phases & their management
 - Serial extractions.
 - Space management.
15. ORAL HABITS IN CHILDREN:
- Definition, Aetiology & Classification.
 - Clinical features of digit sucking, tongue thrusting, mouth breathing & various other secondary habits.
 - Management of oral habits in children.
16. DENTAL CARE OF CHILDREN WITH SPECIAL NEEDS:
- Definition, Aetiology & Classification, Behavioural and Clinical features & Management of children with:
 - Physically handicapping conditions.
 - Mentally handicapping conditions.
 - Medically compromising conditions.
 - Genetic disorders.
17. CONGENITAL ABNORMALITIES IN CHILDREN:
- Definition, Classification, Clinical features & Management.
18. DENTAL EMERGENCIES IN CHILDREN & THEIR MANAGEMENT.
19. DENTAL MATERIALS USED IN PEDIATRIC DENTISTRY.
20. PREVENTIVE DENTISTRY:
- Definition.
 - Principles & Scope.
 - Types of prevention.
 - Different preventive measures used in Pediatric Dentistry including pit and fissure sealants and caries vaccine.

21. DENTAL HEALTH EDUCATION & SCHOOL DENTAL HEALTH PROGRAMMES.
22. FLUORIDES:
 - Historical background
 - Systemic & Topical fluorides.
 - Mechanism of action.
 - Toxicity & Management.
 - Defluoridation techniques.
23. CASE HISTORY RECORDING:
 - Outline of principles of examination, diagnosis & treatment planning.
24. SETTING UP OF PEDODONTIC CLINIC.
25. ETHICS.

PRACTICALS

Following is the recommended clinical quota for under-graduate students in the subject of pediatric & preventive dentistry.

1. Restorations – Class I & II only : 45
2. Preventive measures e.g. Oral Prophylaxis – 20
3. Fluoride applications – 10
4. Extractions – 25
5. Case History Recording & Treatment Planning – 10
6. Education & motivation of the patients using disclosing agents. Educating patients about oral hygiene measures like tooth brushing, flossing etc.

BOOKS RECOMMENDED & REFERENCE:

1. Pediatric Dentistry (Infancy through Adolescence) – Pinkham.
2. Kennedy's Pediatric Operative Dentistry – Kennedy & Curzon.
3. Occlusal guidance in Pediatric Dentistry – Stephen H.Wei.
4. Clinical Use of Fluorides – Stephen H.Wei.
5. Pediatric Oral & Maxillofacial Surgery – Kaban.
6. Pediatric Medical Emergencies – P.S. whatt.
7. Understanding of Dental Caries – Niki Foruk.
8. An Atlas of Glass Ionomer cements – G.J.Mount.
9. Clinical Pedodontics – Finn.
10. Textbook of Pediatric Dentistry – Braham Morris.
11. Primary Preventive Dentistry – Norman O.Harris.
12. Handbook of Clinical Pedodontics – Kenneth. D.
13. Preventive Dentistry – Forrester.
14. The Metabolism and Toxicity of Fluoride – Garry M.whitford.
15. Dentistry for the Child and Adolescence – Mc.Donald.
16. Pediatric Dentistry – Damle S.G.
17. Behaviour Management – Wright
18. Pediatric Dentistry – Mathewson.
19. Traumatic Injuries – andreanson.
20. Occlusal guidance in Pediatric Dentistry – Nakata.
21. Pediatric Drug Therapy – Tomare
22. Contemporary Orthodontics – Profitt
23. Preventive Dentistry – Depaola.
24. Metabolism & Toxicity of Fluoride – whitford. G.M.
25. Endodontic Practice – Grossman.
26. Principles of Endodontics – Munford.
27. Endodontics – Ingle.
28. Pathways of Pulp – Cohen.
29. Management of Traumatized anterior Teeth – Hargreaves.