

PAEDIATRIC & PREVENTIVE DENTISTRY – UG CURRICULUM

THEORY:

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 gingiva & 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. 72
12. PEDIATRIC ENDODONTICS - Principles & Diagnosis. - Classification of 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 compromising 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.

B. 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.