

PACIFIC DENTAL COLLEGE AND HOSPITAL, DEBARI, UDAIPUR

BDS CURRICULUM

Department of Paediatric & Preventive Dentistry

AIM:

The broad goal of the teaching of undergraduate students in Paediatric & Preventive Dentistry, being an age defined specialty, aims at providing the student the knowledge of both the primary & comprehensive, preventive & therapeutic oral health care for infants & children through adolescence, including those with special health care needs who demonstrate mental, physical or emotional problems.

OBJECTIVES:

Knowledge:

At the end of the course, the student shall be able to

Provide a good oral health care in the child

Instil a positive attitude & behaviour in children

Understand the principles of prevention & Preventive Dentistry right from birth to adolescents

Guide & counsel the parents in regards to various treatment.

Skills:

At the end of the course, the student shall be able to take case history of the child patient including thorough clinical and radiographic examination as well as other investigations, diagnosis and treatment planning.

Manage to repair & restore the lost tooth structure to maintain harmony between both hard & soft tissues of the oral cavity

Diagnose & treat the child patient appropriately

Prevent & intercept developing malocclusion

Manage the disabled children effectively & efficiently to the needs of individual requirement and conditions

Attitude:

A graduate should develop during the training period the following attitude,

Willing to apply the acquired knowledge of paediatric dentistry in the best interests of the patients and community

Maintain a high standard of professional ethics and conduct and apply these in all aspect of professional life

OUTCOME:

Guide & counsel the parents in regards to various treatment modalities including different facets of Preventive Dentistry

Manage to repair & restore the lost tooth structure to maintain harmony between both hard & soft tissues of the oral cavity

Prevent & intercept developing malocclusion

Manage the disabled children effectively & efficiently to the needs of individual requirement & conditions

SYLLABUS

A. 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 counselling.

- 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.

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.

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