Study program: Integrated Academic Studies in Dental Medicine

Course title: Paediatric Dentistry I

Teacher: Duska D. Blagojevic, Sanja B. Vujkov, Bojan B. Petrovic

Course status: compulsory

ECTS Credits: 7

Condition: none

Course aim

The aim of the course is to get students acquainted with the methods of diagnosis and suppressing fear from the dentist. Students would be trained to diagnose the status of the patient and propose measures and methods for maintaining oral hygiene, to set indications and to apply prophylactic measures aimed at preventing oral diseases

Expected outcome of the course:

Comprehend and understand biological mechanisms of the protection of oral cavity. Comprehend and understand the etiopathogenesis of the most common oral diseases (caries, periodontitis, oral cancer, orthodontic anomalies, trauma). Knowledge of complex interaction of oral and general health as well as numerous common risk factors (diet, bad habits - smoking, alcohol, drugs, using drugs, etc.). Comprehend, understand and use methods for diagnosis and exclusion of risk for the occurrence of oral diseases. Comprehend and understand the role of nutrition in general and oral health and is able to provide competent advice on food security to the general oral health. Grasp, understand and properly use fluoride in preventing caries knows and uses the methods of prevention and interceptive Orthopedics prophylaxis

Course description

Theoretical education

1. Introduction to preventive dentistry. The role and potentials of oral hygiene in maintaining oral health. 2. Socio-medical significance of oral diseases. 3. The importance of communication with the patient in the prevention of oral diseases. Fear and anxiety. 4. Psychological types of children. Motivation of the patient. 5. Diagnostic status and habits in oral hygiene. Maintenance of oral hygiene. 6. Methods of cleaning teeth, local application of fluoride prophylaxis of oral disease: definition, significance. 7. Biological protective mechanisms in the oral cavity. Characteristics of healthy tissue in oral cavity (mucosa, gingival, periodontal tissue, enamel, pulp-dentine complexes, cement). Clinical aspects of mouth and teeth development. Chronology of tooth eruption and replacement. 8. Protective role of saliva. Composition, physical and chemical protection, the role of remineralisation. Protective role. Clinical significance of stimulation of saliva secretion. 9. Oral flora. Dental plaque. Pathogenesis, microbiological composition, metabolic processes of plaques. 10. Diagnostics, need of planning prophylaxis of oral diseases (periodontitis, caries, orthodontic disorders, injuries of the mouth and teeth). 11. Prophylactic measures in the prevention of periodontitis. Prophylactic measures in prevention of caries. 12. Prophylactic measures in the prevention of orthodontic anomalies. Chemoprophylaxis of oral diseases. 13. Preventive Dentistry. Introduction, definition, significance and tasks. Levels of prevention. The relationship between preventive dentistry and other medical/dentistry disciplines. 14. Etiology of caries. Background research. Theory. Modern understanding. Primary and secondary factors in the etiology of caries. 15. Pathogenesis of "early" carious lesions in enamel. Macroscopic and microscopic features. Microbiology of caries lesions. 16. Dentine caries. Root caries. 17. Erosion of teeth. Etiology. External factors. Internal factors. Biological factors. Prevention of erosion. 18. Etiopathogenesis of periodontitis. Etiology. General and local factors. Development of gingival lesions. Pathogenesis of periodontitis. Prevention of periodontitis. 19. Etiology of soft tissue diseases . Oral cancer, precancerous lesions. Oral infection in immunocompetent and immunocompromised patients. 20. Nutrition and oral health. Influence of nutrition on teeth in the development and function. Sugar. Replacing sugar. 21. Fluorides and oral health. Biokinetics. Toxicology. The mechanism of cariostatic effects. Application of fluoride in preventing caries. 22. Diagnostics of potential risk of caries. Nutrition. Oral hygiene. Volume, acidity, Buffer capacity of saliva, saliva microflora. 23. Diagnostics of potential risk of diseases of soft and supporting tissue. Risks for the emergence of periodontitis. Risks for the occurrence of oral cancer. 24. Preventive and interceptive orthopedics. Etiology of malocclusion. Prevention of orthodontic anomalies in prenatal and postnatal period of life. Premature loss of milk teeth. Interceptive measures in preschool and school children. 25. Contemporary developments and trends of preventive dentistry. 26. Oral health during pregnancy – prevention. 27. Application of chemoprophylactic measures Etiology and prevention of teeth injuries. 28. Minimum invasive caries therapies. 29. Promotion of oral health and prevention of oral diseases.

Practical education

1. The importance, role and possibilities of oral hygiene in maintaining oral health. The problem of fear and anxiety. Admission of patients. 2. Diagnostics of patients' behavior, fear and anxiety. 3. Psychological types of children. Methods of preparing children for

dental procedure. The role of preventive services in overcoming fear and anxiety. 4. Diagnostic habits in oral hygiene. Medical history, observing the patient during oral hygiene. Taking anamnestic data on oral hygiene, diagnosing habits, habits of control patients in oral hygiene (brushing teeth). 5. The main means of oral hygiene – teeth brush. Introduction to interdental stimulators, toothpicks, devices with liquid jet etc. 6. Methods of cleaning teeth. Exercising methods for teeth cleaning on models. 7. The main instruments of oral hygiene – dental floss, usage of dental floss. Different types of dental teeth. Training the techniques of dental floss use on the model, training patients to use dental floss. 8. Diagnosing dental plaque. Plaque index. Plaque staining, determination of PLI, discussion with the patient on the plaque and teeth hygiene, plaque removal using special instruments – plaque removers. 9. Prophylaxis of caries by using fluoride. 10. Taking the history of nutrition, survey questionnaires, data evaluation and diagnosis of behavior related to oral health, motivation for proper nutrition and correction of errors in the diet. 11. Prescribing fluoride prescription. Local application of fluoride (solution, gel, glaze). 12. Diagnosing the risk of caries based on the analysis of diet, oral hygiene, quantity, quality and properties of saliva. Diagnosing risk based on the presence of microorganisms in the saliva. 13. Evaluation of oral hygiene (PI), gingiva (GI, bleeding index), tests for risk assessment. 14. Professional removal of soft and solid deposits from teeth. Training and motivating patients to maintain oral hygiene. Fissure sealing. 15. Taking anamnesis (newborns, childbirth). Diagnosing bad habits. Early diagnosis of orthodontic irregularities (early milk tooth extraction, primary anxiety, forced bite). Placeholder. Selective grinding of teeth. 16. Health educational. Diagnosing oral health status, indication and planning of prophylactic measures. 17. Professional removal of soft plaque from the teeth. Removal of solid deposits from the teeth. Sealing of fissures. Preventive teeth filling. Chemoprophylaxis of mouth and teeth diseases. Making intraoral flaps.

Literature

Compulsory

1. Goran Koch. Paediatric Dentistry: A Clinical Approach, John Wiley & Sons, Jun 29, 2009
2. Welbury R, Duggal M, Hosey MT. Paediatric dentistry. Oxford: Oxford University Press, 2005.

Number of active classes	**Theoretical:** 30	**Practice:** 75

Teaching methods

Theoretical and practical

Student activity assessment (maximally 100 points)

Pre-exam activities	**Points**	**Final exam**	**points**
Lectures	5 attendance 10 activity	Written	20
Practices	5 attendance 20 activity	Oral	40
Colloquium		.....	
Essay			