

MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION
Pirogov Russian National Research Medical University (Pirogov Medical University)

Institution of Dentistry

ANNOTATION OF THE WORKING PROGRAM OF THE DISCIPLINE

B.1.O.44 DENTAL DISEASE PREVENTION

for the educational program of higher education -
specialist's programs
by specialty
31.05.03 Dentistry

Moscow 2023г.

1. General provisions

1.1. The purpose and objectives of mastering the discipline

1.1.1. The purpose of mastering the discipline

1.1.1. The purpose of mastering the discipline B.1.O.44 "Dental Disease Prevention" is to provide students with the theoretical and practical knowledge necessary to teach patients how to prevent diseases of hard tissues of the teeth, as well as necessary to provide a set of measures aimed at preventing the development of diseases of hard tissues of the teeth.

1.1.2. Tasks to be solved in the course of mastering the discipline program:

- formation of a system of knowledge in the field of chemical and physical properties of materials used in assisting patients with diseases of hard dental tissues;
- formation of the student's ability to plan and determine the indications for preventive measures for patients with diseases of the hard tissues of the teeth;
- the formation of theoretical and practical skills for the prevention of diseases of hard tissues of teeth in an outpatient clinic; - development of skills and abilities necessary to identify, eliminate and prevent possible complications in the treatment of diseases of hard dental tissues;
- development of professionally important personality traits that are significant for the implementation of the competencies being formed.

1.2. The place of discipline in the structure of the educational program

The discipline B.1.O.44 "Dental Disease Prevention" is studied in the 5th and 6th semester and belongs to the obligatory part of Block B1 of the Discipline.

The total labor intensity of the discipline is 7 credit unit.

For the successful development of this discipline, students must master the following disciplines:

Human anatomy; biological chemistry; Biology; Histology, embryology, cytology; Immunology; Foreign language; History (history of Russia, general story) ; Latin language; Materials Science; Medical Informatics; Microbiology, virology; normal physiology; Psychology and pedagogy; Physics mathematics; Philosophy; Chemistry; Bioethics; foreign language in professional field; History of medicine; Medical law and patient orientation; Assistant ward and procedural nurse.

Knowledge, skills and practical experience acquired during the development of this discipline are necessary for the successful development of the following disciplines: Gerontostomatology; Children's dentistry; Pediatric maxillofacial surgery; Diseases of the head and neck; Dental prosthetics (simple prosthetics); Cariesology and disease of hard tissues of teeth; Clinical dentistry; Radiation diagnostics; oncostomatology; Orthodontics and children's prosthetics; Fundamentals of the doctor-patient relationship; Periodontology; Dental prosthetics (complex prosthetics); Prosthetics in the complete absence of teeth; Prevention of dental diseases; Oral surgery; Oral and maxillofacial surgery and gnathic surgery; Maxillofacial prosthetics; Endodontics; Gnathology; Dental implantology; Reconstructive oral surgery; Modern methods of prosthetics for atrophy of the alveolar processes of the jaws; Modern methods of endodontic

treatment; 3-D modeling and nanomaterials in dentistry; Psychological aspects of the work of a dentist; Modern technologies in dentistry; Emergency conditions in dentistry; Pharmacotherapy of diseases of the maxillofacial area; Surgical anatomy of the maxillofacial area; Anomalies in the development of the cranio-maxillofacial region in children; Prosthetics on implants; Forensic examination in dentistry; Deformation of the dentition as a result of partial loss of teeth; Ethics and legal aspects in the work of a dentist; and passing practices: Restoration of the chewing and frontal group of teeth with modern composite materials; Modern methods of mechanical treatment and obturation of root canals; Assistant dentist (hygienist); Assistant dentist (children's); Assistant to the dentist (surgeon); Assistant dentist (therapist); Assistant to the dentist (orthopedist).

2. The content of the discipline (module)

2.1 The content of sections (modules), topics of discipline (module)

5 semester

№	Competence code	Name of the section (module), topic of the discipline (module)	The content of the section and topic in didactic units
1	2	3	4
Section 1. Individual oral hygiene and caries resistance.			
1.	UC-1.IA1 GPC-4.IA1 GPC-5.IA1 PC-4.IA1 PC-5.IA1 PC-6.IA1 PC-7.IA1	Topic 1. Introduction to the course "Prevention and community dentistry".	Prevention of dental diseases. Purpose, tasks and methods. Dental morbidity of the population. Prevalence and intensity of caries and periodontal diseases. Levels of implementation of prevention in practical health care. The purpose and objectives of WHO for the prevention of dental diseases. Experience of foreign countries and Russia in preventive and communal dentistry.

		Topic 2. Individual oral hygiene.	<p>Surface formations on the teeth and dental deposits: cuticle, pellicle, plaque, tartar. The mechanism of formation of dental deposits, composition, structure, role in the occurrence of caries and periodontal diseases.</p> <p>Determination of the hygienic state of the oral cavity according to the indices of Fedorov-Volodkina, Green-Vermillion, etc.</p> <p>Oral hygiene products. Toothbrushes and requirements for them. Classification, composition, properties of toothpastes. Abrasiveness of toothpastes. Appointment and methods of using rinses, elixirs, dental floss, interdental brushes, toothpicks, irrigators, tongue brushes, chewing gums.</p> <p>Individual selection of oral care products for the patient, taking into account the age and dental status.</p> <p>Teeth brushing methods. Controlled brushing of teeth and methods of its implementation.</p> <p>Features of teaching brushing teeth to children of different ages and adults.</p>
Section 2. Prevention of dental caries.			
1.	UC-1.IA1 GPC-4.IA1 GPC-5.IA1 PC-4.IA1 PC-5.IA1 PC-6.IA1 PC-7.IA1	Topic 3. Prevention of dental caries.	<p>General methods of caries prevention: a healthy lifestyle, hardening, balanced nutrition, dental education, hygienic education of the population, clinical examination.</p> <p>Methods of fluoride prevention of caries. Modern ideas about the mechanism of action of fluorides.</p> <p>Endogenous (systemic) methods and means: fluoridation of drinking water, milk, salt, sodium fluoride tablets. Indications, contraindications, dosages, methods of implementation, effectiveness of use, experience abroad and in Russia.</p> <p>Exogenous (local) methods and means: fluoride-containing varnishes, gels, solutions for rinsing and applications, fluoride-containing toothpastes. Indications,</p>

			<p>contraindications, technique, effectiveness.</p> <p>Prevention of fissure caries. Teeth fissure sealing method. Indications, contraindications, methods, evaluation of effectiveness. Modern materials for sealing fissures.</p>
2.		Topic 4. Focal demineralization (initial caries).	<p>Modern ideas about the mechanism of de- and remineralization of enamel. Methods for detecting focal enamel demineralization: visual, instrumental, vital enamel staining, etc.</p> <p>Prevention of focal demineralization of enamel. Remineralizing agents, methods of application.</p>
3.		Topic 5. Prevention of non-carious diseases of hard dental tissues.	<p>Risk factors for fluorosis. Optimum content of fluorides in drinking water for different climatic zones. Individual and collective preventive measures for fluorosis.</p> <p>Risk factors for local and systemic enamel hypoplasia. Prevention of hypoplasia.</p> <p>Prevention of non-carious lesions that occur after teething: abrasion of hard tooth tissues, enamel erosion, necrosis.</p> <p>Hypersensitivity of hard tissues of the tooth. Risk factors for the occurrence and prevention of increased tooth sensitivity.</p>

2.2 List of sections (modules), topics of the discipline (module) for self-study by students (in the presence of).

Sections and topics of the discipline for self-study by students in the program are not provided.