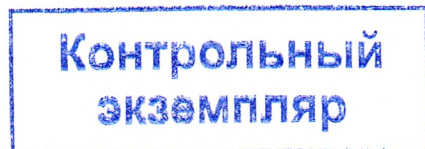



MINISTRY OF HEALTH OF THE REPUBLIC OF BELARUS
Educational Institution
BELARUSIAN STATE MEDICAL UNIVERSITY



APPROVED
by Rector of the Educational
Institution «Belarusian State
Medical University»
 S.P. Rubnikovich
20.11.2024
Reg. # UD-0911-01-18/2425/edu.

PREVENTIVE DENTISTRY

**Curriculum of the educational institution
in the academic discipline for the specialty**

7-07-0911-03 «Dentistry»

Curriculum is based on the educational program «Preventive Dentistry», approved 20.11.2024, registration # УД-0911-03-18/2425/уч; on the educational plan in the specialty 7-07-0911-03 «Dentistry», approved 15.05.2022, registration # 7-07-0911-03/2425/mf.

COMPILERS:

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D.N.Naumovich, Associate Professor of the Department of Pediatric Dentistry of the Educational Institution «Belarusian State Medical University», Ph.D., Associate Professor

RECOMMENDED FOR APPROVAL:

by the Department of Pediatric Dentistry of the Educational Institution «Belarusian State Medical University»
(protocol # 3 of 03.10.2024);

by the Scientific and Methodological Council of the Educational Institution «Belarusian State Medical University»
(protocol # 3 of 20.11.2024)

EXPLANATORY NOTE

«Preventive Dentistry» – the educational discipline of the module «Medical Prevention in Dentistry», which contains systematized scientific knowledge about primary prevention of dental diseases in the population.

The aim of the discipline «Preventive Dentistry» is the formation of specialized competency for maintaining the oral health of the population.

The objectives of the discipline «Preventive Dentistry» are to form students' scientific knowledge about:

- the basic concepts of primary prevention in dentistry;
- methods and means of diagnosis and treatment of main oral diseases in the population;

- principles of diagnosis of individual risk level of main dental diseases;
- principles of planning and implementation of prevention programs;
- risk factors of dental caries, non-carious tooth lesions, dental trauma, inflammatory periodontal diseases, inflammatory diseases of oral mucosa, halitosis and malocclusion;

- methods of diagnosis and assessment of risk factors and risk level of main dental diseases;

- methods and means of primary prevention of main dental diseases;
- preventive-oriented methods of rendering dental care to the population;
- skills and abilities necessary for:
- revealing of risk factors of dental caries, non-carious tooth lesions, dental trauma, inflammatory periodontal diseases, inflammatory diseases of oral mucosa, halitosis and malocclusion;

- diagnose risk factors and assessing the level of risk of main dental diseases;
- choosing and appointment of methods and means of primary prevention of main dental diseases;

- provision of preventive measures to the population.

The knowledge, skills, and abilities acquired during the study of the academic discipline «Preventive Dentistry» are necessary for successful mastering of the following modules: «Therapeutic Dentistry», «Periodontology», «Oral and Maxillofacial Surgery Module», «Orthodontics» and educational discipline «Therapeutic Pediatric Dentistry».

Studying the educational discipline «Preventive Dentistry» should ensure the formation of students' the following specialized competency: apply methods of prevention of the dental system diseases, organs and tissues of the oral cavity in children and adults, to conduct sanitary and hygienic education of the population.

As a result of studying the discipline «Preventive Dentistry» the student should **know:**

- risk factors of oral diseases and how to eliminate them;
- algorithm of dental examination at preventive visit;
- cariogenic and caries protective properties of food;
- methods for assessing risk of dental caries development;
- methods for assessing oral hygiene and periodontal tissue;

means and methods of oral hygiene;
means to prevent dental caries and periodontal diseases;

be able to:

perform dental examination;

fill medical documentation;

assess oral hygiene;

prescribe individual means and methods of oral hygiene and teach the patient how to use them;

draw up an individual plan of preventive measures based on the identified risk factors;

use the means for caries prevention in correct way;

carry out preventive measures in organized groups;

master:

methods for assessing dental morbidity at the individual and group levels;

methods for determining the state of teeth, gingiva, oral mucosa and methods of index assessment of oral hygiene and periodontal status;

skills of planning preventive measures;

methods of group and individual prevention of oral diseases;

skills of sealing the tooth fissures;

skills in organizing and carrying out health education;

methods of promoting healthy lifestyles.

Total number of hours for the study of the discipline is 274 academic hours, of which 179 classroom hours and 95 hours of student independent work. Classroom hours according to the types of studies: lectures – 27 hours, practical classes –152 hours.

Intermediate assessment is carried out according to the syllabus of the specialty in the form of a credit (4 semester) and examination (5 semester).

Form of higher education – full-time.

ALLOCATION OF ACADEMIC TIME ACCORDING TO SEMESTERS OF STUDY

Code, name of the specialty	semester	Number of academic hours						Form of intermediate assessment
		total	in-class	including			out-of-class self-studies	
				lectures	supervised student independent work	practical classes		
7-07-0911-03 «Dentistry»	4	138	91	15	-	76	46	credit
	5	136	88	12	-	76	50	exam
Total hours		274	179	27	-	152	69	

THEMATIC PLAN

Section (topic) name	Number of class hours	
	lectures	practical
1. Preventive dentistry as a part of medicine	1,5	2
2. Organization of workplace for preventive activities. Examination of maxillofacial region	-	10
3. Primary prevention of dental caries	15	79
3.1. Modern concept of dental caries development	1,5	3
3.2. Estimation of dental caries incidence and effectiveness of prevention	-	5
3.3. The role of microorganisms in dental caries development	-	2
3.4. Dental plaque and its role in dental caries development	1,5	23
3.5. The role of diet in dental caries development	1,5	5
3.6. Caries susceptibility of teeth	1,5	-
3.7. The role of saliva in dental caries prevention	1,5	5
3.8. Primary prevention of dental caries with products containing calcium, phosphate and fluoride	4,5	21
3.9. Prevention of dental caries in pits and fissures	1,5	10
3.10. Individual programs of caries prevention, based on caries risk level	1,5	5
4. Health education in the prevention of oral diseases	-	5
5. Primary prevention of non-carious tooth lesions and dental trauma	1,5	5
6. Prevention of inflammatory periodontal diseases	1,5	10
7. Prevention of halitosis	1,5	10
8. Prevention of malignant tumors of oral mucosa, lips and tongue	1,5	5
9. Prevention of malocclusion	1,5	10
10. Prevention of dental caries in prenatal period and in children in early age	1,5	5
11. Planning and implementation of programs for the prevention of oral diseases	1,5	11
Total hours	27	152

CONTENT OF THE EDUCATIONAL DISCIPLINE

1. Preventive dentistry as a part of medicine

Concept of the health and disease. Medical prevention. The objectives and content of primary, secondary and tertiary prevention in dentistry. The concept of risk factors, causes and circumstances of the pathology. The concept of causal and pathogenic prevention. The main pathological conditions in dentistry. Scientific basis for primary prevention of dental diseases. The main practical methods of dental

disease prevention. Organizational principles of primary prevention. The concept of the individual, group and population prevention. The concept of community, office and home prevention of dental diseases.

2. Organization of workplace for preventive activities. Examination of maxillofacial region

Minimal and optimal conditions to organize individual and group prevention activities. Requirements to ergonomics and safety for prevention activities. Rules of chemical, technical and infectious safety during preventive visits.

Planning the dental office in accordance with sanitary rules. Organization of preventive visits of patients, equipping of dental office, working conditions of medical personnel (staff), stages of disinfection, pre-sterilization cleaning and sterilization of medical instruments in a basic healthcare institution. Ergonomic rules when examining a patient, when examining using a dental mirror and a probe, when working with rotating instruments. Workflow development in wounds, contacts with blood and other biological materials of patients.

The objectives of oral examination during preventive dental admission. Questioning, extraoral examination, study of the skin, lymph nodes, evaluation of the main functions of the maxillofacial region. Bite assessment. Examination of the oral mucosa and periodontium. International Digital Dental Notification System (ISO). Registration of the status of primary and permanent teeth.

Clinical work with patient: collecting the anamnesis vitae, studying and assessing the main developmental parameters, assessing the state of tissues and organs of the maxillofacial area, highlighting differences with the norm, recording the information in the dental outpatient card and current educational documents.

3. Primary prevention of dental caries

3.1. Modern concept of dental caries development

Modern concept of the etiology, pathogenesis and prevention of dental caries. Objects, main directions and methods of primary prevention of dental caries. Experience of dental caries prevention in Belarus and in the world.

Clinical work with patient: collecting the anamnesis vitae, studying and assessing the main developmental parameters, assessing the state of tissues and organs of the maxillofacial area, highlighting differences with the norm, recording information in the dental outpatient card and current educational documents, choice rationale of the preventive care to the patient.

3.2. Estimation of dental caries incidence and effectiveness of prevention

Rules of caries accounting in epidemiological and clinical studies. Estimation of the prevalence and intensity of dental caries in a primary, mixed and constant dentition (DMFT (deft), DMFS (defs)). Significant Caries Index (SiC). Dynamics of the carious process (progress, reduction). Level of caries intensity (LCI). The level of dental care (LDC). Assessment of hard tissues of the teeth and restorations according to ICDAS criteria.

Clinical work with patient: oral end extraoral examination, determination of caries risk factors, choice of the individual preventive care, assessment of individual level of caries with indices DMFT (deft), DMFS (defs), LCI, ICDAS, recording the data in the dental outpatient card and current educational documents. Calculation of

caries progress and caries reduction, LDC in population groups in accordance with the proposed training material.

3.3. The role of microorganisms in dental caries development

The concept of the microbiome of the oral cavity, the species of oral microorganisms, the ways and period of infection with cariogenic microflora, the mechanisms of transmission and the biochemistry of cariogenic action. The concept of probiotics.

Clinical work with patient: collecting the anamnesis vitae, studying and assessing the main developmental parameters, assessing the state of tissues and organs of the maxillofacial area, highlighting differences with the norm, recording the information in the dental outpatient card and current educational documents.

3.4. Dental plaque and its role in dental caries development

Types, composition and properties of dental plaque. Stages of formation, biochemistry of cariogenic effects of plaque. Qualitative and quantitative (with hygienic indices) assessment of dental plaque and its cariogenic activity.

Ways to reduce the cariogenic potential of dental plaque at various stages of its formation.

The concept of oral hygiene. Methods, objects and means of individual oral hygiene. Methods of oral hygiene using toothbrushes and interdental hygiene products. Individual oral hygiene in different age groups: goals, objectives, means and methods, efficiency. Professional removal of soft dental deposits. The use of antimicrobial drugs in the prevention of dental caries.

Clinical work with patient: oral end extraoral examination, determination of caries risk factors, choice of the individual preventive care. Detection of dental plaque in the patient and its registration with hygienic indices. The individual choice of means and methods (techniques) of home oral hygiene, teaching the patient. Carrying out of supervised tooth brushing. Collecting the information from the patient to assess the diet and identify the caries risk associated with the consumption of carbohydrates; diet counseling for dental caries prevention. Recording the data in the dental outpatient card and current educational documents.

3.5. The role of diet in dental caries development

Diet as a local factor influencing the activity of the carious process. Biochemical structure and dental effects of carbohydrates. The role of diet and regimen of nutrition of in the formation of the cariogenic potential of dental plaque; methods of assessment and correction. Sweeteners.

Clinical work with patient: oral end extraoral examination, determination of caries risk factors, choice of the individual preventive care. Detection of dental plaque in the patient and its registration with hygienic indices. The individual choice of means and methods (techniques) of home oral hygiene, teaching the patient. Collection of patient's data to assess the features of nutrition and identify the risk of caries associated with the consumption of carbohydrates; counseling patients on rational diet for the prevention of dental caries. Recording the data in the dental outpatient card and current educational documents.

3.6. Caries susceptibility of teeth

Concept of tooth caries susceptibility/caries resistance: chemical basis, conditions of formation, evaluation possibilities.

Pre-eruptive stage of the resistance development: the content, risk factors and critical periods, optimization and correction of conditions (assessment and control of the diet of the pregnant woman and the child, the possibility of antenatal and pre-eruptive prevention of dental caries).

Post-eruptive maturation of enamel and its susceptibility/resistance to caries.

Clinical work with patient: oral and extraoral examination, determination of risk factors of forming the caries susceptible enamel, assessment of the tooth caries resistance, choice of the individual preventive care. Individual recommendation in home oral hygiene, diet counseling. Recording the data in the dental outpatient card and current educational documents.

3.7. The role of saliva in dental caries prevention

Composition and functions of the saliva, ways of its caries protective effect. Diagnosis and assessment of the salivation. Hyposalivation: causes, risks for oral health, ways of correction.

Clinical work with patient: oral and extraoral examination, assessment of the salivation, determination of risk factors of dental caries, choice of the individual preventive care taking into account the quality and quantity of saliva. Individual recommendation in home oral hygiene, diet counseling. Individual recommendation in home oral hygiene, diet counseling. Recording the data in the dental outpatient card and current educational documents.

3.8. Primary prevention of dental caries with products containing calcium, phosphate and fluoride

Ions of calcium, phosphate and fluoride in the mineral exchange between the tooth tissues and the environment.

Pre- and post-eruptive effects of the optimal fluoride exposure. Concept of the formation of a natural fluoride exposure and the principles of its evaluation. Preventive Fluoride supplements for systemic use: history of the method, «optimization» of fluoride exposure with fluorinated products (water, milk, salt) and pharmacological agents (solutions and tablets), the choice of dose and mode of consumption of fluoride supplementation, security control, effectiveness.

Fluoride product for topical (local) use: mechanisms of preventive action of various compounds and concentrations of fluoride, features and ways of using fluoride-containing solutions, gels, foams, pastes, varnishes, fixed pills, glass-ionomer cements; safety requirements; effectiveness.

Systemic use of calcium and vitamin D products for dental caries prevention.

Topical agents containing calcium and phosphate: composition, mechanisms of anticaries action, methods of application, contraindications, effectiveness. Combined use of calcium, phosphorus and fluoride.

Clinical work with patient: oral and extraoral examination, assessment of the fluoride exposure, determination of risk factors of dental caries, choice of the individual preventive care taking into account the quality and quantity of saliva. Individual recommendation in home oral hygiene, diet counseling. Individual

recommendation in systemic use of calcium, phosphate and fluoride. Choice for the patient hygienic and preventive means containing calcium and fluoride. Carrying out the office procedures with the use of products containing calcium, phosphate and fluoride. Recording the data in the dental outpatient card and current educational documents.

3.9. Prevention of dental caries in pits and fissures

Pits and fissures of enamel: morphology, risk factors for caries. Possibilities of caries prevention in pits and fissures. GIC-defense of pits and fissures. Fissure sealing options for the intended purpose and technology, sealing materials, choice, effectiveness. Sealing techniques and quality assessment, resealing.

Clinical work with patient: oral and extraoral examination, assessment of caries risk in pits and fissures, choice of the individual preventive care. Teaching the patient in home procedures for caries prevention in pits and fissures, carrying out the various sealing techniques, carrying out the procedures with topical preventive means. Individual recommendation in home oral hygiene, diet counseling. Individual recommendation in home systemic and topical use of calcium, phosphate and fluoride. Choice for the patient hygienic and preventive means containing calcium and fluoride. Carrying out the office procedures with the use of products containing calcium, phosphate and fluoride. Recording the data in the dental outpatient card and current educational documents.

3.10. Individual programs of caries prevention, based on caries risk level

Criteria for assessing the individual risk of dental caries for the formation of differentiated prevention programs. Use of prognostic systems «Kariogram», «CAMBRA». Registration of the state of hard tissues of teeth according to the International System for the Detection and Assessment of Caries ICDAS II. Drawing up recommendations for the patient on oral care, diet and diet, home use of prophylactic agents. Performing office procedures to prevent dental caries. Registration of information about the patient and the work performed in the outpatient card and educational records.

Clinical work with patient: oral and extraoral examination, assessment of caries risk with prognostic systems «Kariogram», «CAMBRA», choice of the individual preventive care. Individual recommendation in home oral hygiene and use of preventive means, diet counseling. Carrying out the office procedures for dental caries prevention. Recording the data in the dental outpatient card and current educational documents.

4. Health education in the prevention of oral diseases

Health education of the population in the context of the formation of skills of dental self-help for the prevention of dental diseases: the concept of mechanisms and structure of behavioral motivation. Communication, education and training as methods of formation and correction of the motivation. The role of knowledge in the motivation formation; requirements for the structure and content of educational projects. Psychological aspects of communication with patients on preventive topics. Strategy to formation the healthy lifestyle. Forms and methods of health education in different age groups. Preparation and implementation of a health educational project for preschool children and (or) their parents.

Clinical work with patient: oral end extraoral examination, assessment of risk of caries risk, pre- and posteruptive non-carious tooth lesions, dental trauma, periodontal pathology, halitosis, precancerous conditions and oral cancer, abnormal functions of the maxillofacial region and malocclusion. Choice of the individual preventive care. Creation of the health educational project. Individual recommendation in home oral hygiene and use of preventive means, diet counseling, recommendation in the normal bite forming. Carrying out the office procedures to prevent dental caries and periodontal diseases. Recording the data in the dental outpatient card and current educational documents.

5. Primary prevention of non-carious tooth lesions and dental trauma

Tooth malformation: causes, effects of damaging factors; nosological forms. Identification of risk factors, etiologic prevention of non-hereditary pathology of formation of hard dental tissues.

Pathology of dental hard tissues of teeth after tooth eruption: nosological forms, etiology and pathogenesis. Identification of risk factors of non-carious tooth lesions, ways of minimization and elimination.

Dental trauma: risk factors, their detection and minimization

Clinical work with patient: oral end extraoral examination, assessment of risk of caries risk, pre- and posteruptive non-carious tooth lesions, dental trauma. Choice of the individual preventive care. Individual recommendation to prevent non-carious tooth lesions and dental trauma. Individual recommendation in home oral hygiene and use of preventive means, diet counseling. Carrying out the office procedures for dental caries prevention. Recording the data in the dental outpatient card and current educational documents.

6. Prevention of inflammatory periodontal diseases

Concept of periodontal norm and periodontal pathology. Clinical and index methods for periodontium state assessment.

Modern concept of etiology and pathogenesis of periodontal pathology: the role of oral and physical conditions in periodontal health maintaining and in the development of periodontal pathology. Identification of risk factors for periodontal pathology, their minimization.

Oral hygiene as a primary means of periodontal disease primary prevention. Professional oral hygiene (prophylaxis). Individual home oral hygiene for the patients with periodontal pathology or risk of its development.

Clinical work with patient: oral end extraoral examination, assessment of risk of caries risk, pre- and posteruptive non-carious tooth lesions, dental trauma and periodontal pathology. Choice of the individual preventive care. Individual recommendation to prevent periodontal diseases. Registration of the periodontal status with the gingival and periodontal indices. Individual recommendation in home oral hygiene and use of preventive means, diet counseling. Carrying out the office procedures for dental caries prevention, professional oral hygiene. Recording the data in the dental outpatient card and current educational documents

7. Prevention of halitosis

Halitosis: definition, prevalence, nature, classification. Differential diagnosis of the halitosis. Determining the oral causes of the halitosis. Choice of means and

methods to minimize the risk of physiological and pathological oral halitosis.

Clinical work with patient: oral end extraoral examination, assessment of risk of caries risk, pre- and posteruptive non-carious tooth lesions, dental trauma, periodontal pathology and halitosis. Choice of the individual preventive care. Individual recommendation to prevent physiological and pathological oral halitosis. Individual recommendation in home oral hygiene and use of preventive means, diet counseling. Carrying out the office procedures to prevent dental caries and periodontal diseases. Recording the data in the dental outpatient card and current educational documents.

8. Prevention of malignant tumors of oral mucosa, lips and tongue

Concept of the pathogenesis of the tumor process. Risk factors of the precancerous conditions and neoplasms of the oral mucosa, tongue and lips. Methods to diagnose and minimize the risk factors.

Clinical work with patient: oral end extraoral examination, assessment of risk of caries risk, pre- and posteruptive non-carious tooth lesions, dental trauma, periodontal pathology, halitosis, precancerous conditions and oral cancer. Choice of the individual preventive care. Individual recommendation in home oral hygiene and use of preventive means, diet counseling. Carrying out the office procedures to prevent dental caries and periodontal diseases. Recording the data in the dental outpatient card and current educational documents.

9. Prevention of malocclusion

Conditions that determine the formation of the functions of the maxillofacial region and bite. Age norm of the functions and bite. Controllable risk factors of abnormal functions and bite: ways of action, effects, strategy to minimize. Diagnosis of risk factors contributing to malocclusion and planning their correction. Minimizing and elimination the oral factors determining malocclusion.

Clinical work with patient: oral end extraoral examination, assessment of caries risk, pre- and posteruptive non-carious tooth lesions, dental trauma, periodontal pathology, halitosis, precancerous conditions and oral cancer, abnormal functions of the maxillofacial region and malocclusion. Choice of the individual preventive care. Individual recommendation to form the normal functions of the maxillofacial region and bite; parafunction control and space maintaining in the dentition. Individual recommendation in home oral hygiene and use of preventive means, diet counseling. Carrying out the office procedures to prevent dental caries and periodontal diseases. Recording the data in the dental outpatient card and current educational documents.

10. Prevention of dental caries in prenatal period and in children in early age

Terms of tooth germs initiation, mineralization and teething. Optimal conditions for the formation of a qualitative structure of tooth hard tissues. Evaluation and correction of regimen of nutrition and diet of a pregnant woman. «Window of Infection». Measures to prevent the transmission of cariogenic microflora to a child. Features of oral hygiene in children in early age. Rational feeding. Influence of the child's regimen of nutrition and diet on the activity of the carious process, pre- and probiotics.

Clinical work with patient: oral and extraoral examination, assessment of the risk of dental diseases with the planning of appropriate preventive measures according to the requirements of existing community preventive programs.

Drawing up a prevention plan for a child under the age of 3 years. Making recommendations for the patient on oral care, regimen of nutrition and diet, home use of prophylactic agents and normal bite formation. Performing office procedures for the prevention of dental caries and periodontal diseases, taking into account the patient's features. Recording the data in the dental outpatient card and current educational documents.

11. Planning and implementation of individual programs for the prevention of oral diseases

Assessment of risk factors for the main oral diseases at individual level. Choice of the means and methods, determination of the performers, planning and organization of the individual preventive care.

Features of preventive oral care for pregnant women, young children, adolescents and elderly patients. Features of home oral hygiene in patients with malocclusion, orthodontic appliances and dental implants.

Features of preventive oral care for the patients with somatic pathology, mental and physical disabilities.

Clinical work with patient: oral and extraoral examination, assessment of risk of caries risk, pre- and post-eruptive non-carious tooth lesions, dental trauma, periodontal pathology, halitosis, precancerous conditions and oral cancer, abnormal functions of the maxillofacial region and malocclusion. Choice of the individual preventive care. Individual recommendation in home oral hygiene and use of preventive means, diet counseling, recommendation in the normal bite forming, taking into account the general health status of the patient. Carrying out the office procedures to prevent dental caries and periodontal diseases according to the general health status of the patient. Recording the data in the dental outpatient card and current educational documents.

ACADEMIC DISCIPLINE «PREVENTIVE DENTISTRY» CURRICULAR CHART

Section, topic #	Section (topic) name	Number of hours		Literature	Practical skills	Form of control	
		lectures	practical			of practical skills	of current / intermediate assessment
4 semester							
	Lectures	15	-				
1.	Preventive dentistry as a part of medicine	1,5	-	1, 4			
3.1.	Modern concept of dental caries development	1,5	-	1, 4			
3.4.	Dental plaque and its role in dental caries development	1,5	-	1, 4			
3.5.	The role of diet in dental caries development	1,5	-	1, 4			
3.6.	Caries susceptibility of teeth	1,5	-	1, 4			
3.7.	The role of saliva in dental caries prevention	1,5	-	1, 4			
3.8.	Systemic fluoride supplements for dental caries prevention	1,5	-	1, 4			
3.8.	Topical mineralizing prevention of dental caries. Mechanisms and effectiveness	1,5	-	1, 4			
3.8.	Fluoride-, calcium- and phosphate-containing medications in the prevention of dental caries	1,5	-	1, 4			
3.10.	Caries risk assessment. Cariogenic situation	1,5	-	1, 4			
	Practical lessons	-	76				
2.	Organization of workplace for preventive activities. Examination of maxillofacial region: extraoral examination	-	5	1	1. Collection of the patient's complaints, life history and illness.	1. Solving a situational task. 2. Filling in a dental	Interview. Electronic tests

					2. Compliance with ergonomic rules during a preventive appointment. 3. Extraoral examination of patient, palpation of submandibular lymph nodes, an assessment of functions of maxillofacial area	outpatient chart	
2.	Examination of maxillofacial region: intraoral examination	-	5	1	Assessment of the condition of oral mucosa, lips and tongue frenulums and periodontium	Performing a practical skill at the dental chair. Solving a situational task. Filling in the patient's dental outpatient card	Interview. Electronic tests. Reports on home practical exercises with oral defense
3.2.	The estimation of dental caries incidence	-	5	1	Assessment of the condition of the teeth, recording the dental formula, determining the intensity of dental caries according to the indices DMFT, DMFS, LCI*	Performing a practical skill at the dental chair. Filling in the patient's dental outpatient card. Performing a practical skill on simulation equipment	Interview. Electronic tests. Solving situational tasks
1. 3.1.	Preventive dentistry as a part of medicine. Modern concept of dental caries development	-	5	1	Filling in medical documentation	Filling in the patient's dental outpatient card	Interview. Electronic tests. Reports on home practical exercises with oral defense
3.3. 3.4.	The role of microorganisms in dental caries development. Dental plaque: structure, properties, role in dental caries development	-	5	1	Drawing up an individual plan of treatment and preventive measures	Filling in the patient's dental outpatient card	Interview. Electronic tests. Reports on home practical exercises with oral defense

3.5.	Methods for reducing of cariogenicity of dental plaque. The role of diet in the development of dental caries. Probiotics	-	5	1			Interview. Electronic tests
7.	Factors determining susceptibility to caries. Evaluation and correction of the diet. Terms of initiation, mineralization and eruption of teeth in children	-	5	1			Interview. Electronic tests. Reports on home practical exercises with oral defense
3.7.	Saliva: composition, functions, properties. Violation of salivation	-	5	1			Interview. Electronic tests. Control work*
3.4.	Oral hygiene indices	-	5	1	Estimation of oral hygiene using the Green-Vermilion index simplified (OHI-S) and Plaque Index (PLI)	Performing a practical skill at the dental chair. Filling in the patient's dental outpatient card. Performing a practical skill on simulation equipment	Interview. Electronic tests. Reports on home practical exercises with oral defense
3.4.	Methods and tools for individual oral hygiene	-	5	1	Selection of home hygiene products, items and methods*	Performing a practical skill at the dental chair	Interview. Electronic tests
3.4.	Individual and professional methods of dental plaque removing	-	5	1	1.Teaching the methods of tooth brushing on a model.* 2.Teaching the flossing on a model*	Performing a practical skill on simulation equipment	Interview. Electronic tests. Reports on home practical exercises with oral defense
3.4.	Means for oral hygiene (tooth powders, pastes, gels, foams, rinses)	-	5	1	Performing of the supervised toothbrushing	Performing a practical skill at the dental chair	Interview. Electronic tests
3.8.	Mechanism of caries-preventive action of fluorides and factors determining its effectiveness. Fluoride compounds	-	5	1			Interview. Electronic tests. Solving situational tasks

3.8.	Medications containing fluorides for home and office use	-	5	1	Performing of the local preventive measures (applications of the gels, varnishes)	Performing a practical skill at the dental chair. Performing a practical skill on simulation equipment	Interview. Electronic tests. Control work*
3.8.	Calcium- and phosphate-containing medications in the local prevention of dental caries. Combined use of local products containing fluorides, calcium and phosphates	-	6	1			Interview Electronic tests.* Credit
5 semester							
	Lectures	12	-				
3.9.	Prevention of caries in pits and fissures	1,5	-	1, 3			
5.	Primary prevention of non-carious tooth lesions and dental trauma	1,5	-	2, 4			
6.	Prevention of inflammatory periodontal diseases	1,5	-	2, 4			
7.	Professional oral hygiene in prevention of inflammatory periodontal diseases. Halitosis.	1,5	-	2, 4			
8.	Prevention of malignant tumors of oral mucosa, lips and tongue	1,5	-	2, 4			
9.	Prevention of malocclusion	1,5	-	2, 4			
1.0	Prevention of dental caries in prenatal period and in children in early age	1,5	-	2, 4			
11.	Planning and implementation of individual programs for the prevention of oral diseases	1,5	-	2, 4			
	Practical lessons	-	76				
4.	Health education: psychological basics, tasks, methods	-	5	1	Individual motivation based on risk factors for the development of dental diseases	Performing a practical skill at the dental chair	Interview. Electronic tests
3.8.	The use of systemic fluoride supplements for dental caries prevention	-	5	1			Interview. Electronic tests
3.9.	Dental caries in pits and fissures: risk assessment	-	5	1, 3			Interview.

	and prevention possibilities						Electronic tests. Reports on home practical exercises with oral defense
3.9.	Sealing of pits and fissures	-	5	1, 3	Sealing of pits and fissures of teeth with GIC*	Performing a practical skill on simulation equipment	Interview. Electronic tests
3.10.	Drawing up of individual programs based on the assessment of the risk of dental caries. ICDAS index	-	5	2			Interview. Electronic tests. Reports on home practical exercises with oral defense
5.	Risk factors and methods for the prevention of non-carious lesions of hard dental tissues. Prevention of trauma to the teeth and maxillofacial region	-	5	2			Interview. Electronic tests. Solving situational tasks
6.	Periodontium: age norm and functions. Methods of assessment of the periodontal status	-	5	2	Assessment of periodontal tissue	Performing a practical skill at the dental chair. Filling in the patient's dental outpatient card. Performing a practical skill on simulation equipment	Interview. Electronic tests
6.	General and local risk factors for periodontal disease	-	5	2	Removal of soft dental deposits	Performing a practical skill at the dental chair. Performing a practical skill on simulation equipment	Interview. Electronic tests
7.	Professional removal of dental deposits in the prevention of periodontal diseases. Halitosis: diagnosis of risk factors, means and methods of prevention	-		2			Interview. Electronic tests. Control work*

8.	Diagnosis of risk factors for tumor growth in the oral cavity and planning of their minimization	-	5	2			Interview. Electronic tests
9.	Occlusion and functions of the maxillofacial area: conditions of formation, age norm and deviations from the norm	-	5	2			Interview. Electronic tests. Reports on home practical exercises with oral defense
9.	Risk factors for the malocclusion development: diagnosis, medical tactics	-	5	2			Interview. Electronic tests. Control work*
10.	Prenatal prevention, prevention of dental caries in children in early age	-	5	2			Interview. Electronic tests
11.	Individual prevention of oral diseases in people of different ages and people with special needs	-	5	2	Drawing up an individual plan of treatment and preventive measures	Filling in the patient's dental outpatient card	Interview. Electronic tests
11.	Community and group programs of oral diseases prevention	-	6	2	Drawing up an individual plan of treatment and preventive measures for patient with special needs	Filling in the patient's dental outpatient card	Interview. Electronic tests. Solving situational tasks
Total:		27	152				Exam

*This is a mandatory form of current certification

INFORMATION AND INSTRUCTIONAL UNIT

LITERATURE

Basic (relevant):

1. Primary prevention of dental caries : textbook for foreign students of higher education institutions in the specialty «Dentistry» / N. V. Shakovets, M. I. Klenovskaya, D. N. Naumovich, Zh. M. Burak – Minsk : BSMU, 2023. – 172 p.
2. Primary prevention of oral diseases : textbook for foreign students of higher education institutions in the specialty «Dentistry» / N. V. Shakovets, M. I. Klenovskaya, D. N. Naumovich, Zh. M. Burak – Minsk : BSMU, 2024. – 136 p.

Additional:

3. Shakovets, N. V. Pits and fissure sealing : manual. – Minsk : BSMU, 2024. – 40 p.

Electronic courseware for the educational discipline «Preventive Dentistry»

4. <https://etest.bsmu.by/course/view.php?id=273>.

METHODOLOGICAL RECOMMENDATIONS FOR THE ORGANIZATION AND PERFORMANCE OF STUDENT INDEPENDENT WORK IN THE ACADEMIC DISCIPLINE

The time allotted for self-studies can be used by students for:

- preparing for lectures and practical classes;
- preparing for tests, control questioning, credit and exam in the academic discipline;
- performing of research and creative tasks;
- preparing of thematic reports, abstracts, presentations;
- note-taking of educational literature;
- designing of the sanitary-educational project.

LIST OF AVAILABLE DIAGNOSTIC TOOLS

The following forms of current certification are used to diagnose competencies:

- control work;
- electronic test;
- interview;
- solving situational tasks;
- reports on home practical exercises with oral defense.

LIST OF AVAILABLE TEACHING METHODS

Traditional method (lecture, laboratory practicals);

active (interactive) methods:

- Problem-Based Learning (PBL);
- Team-Based Learning (TBL);
- Case-Based Learning (CBL);
- Research-Based Learning (RBL);
- simulation-based learning.

LIST OF PRACTICAL SKILLS

#	Name of practical skills	Form of practical skills control
1.	Collection of the patient's complaints, life history and illness	Solving a situational task. Filling in the patient's dental outpatient card
2.	Compliance with ergonomic rules during a preventive appointment	Solving a situational task
3.	Extraoral examination of patient, palpation of submandibular lymph nodes, an assessment of functions of maxillofacial area	Solving a situational task. Filling in the patient's dental outpatient card
4.	Assessment of the condition of oral mucosa, lips and tongue frenulums and periodontium	Performing a practical skill at the dental chair. Solving a situational task. Filling in the patient's dental outpatient card
5.	Assessment of the condition of the teeth, recording the dental formula, determining the intensity of dental caries according to the indices DMFT, DMFS, LCI	Performing a practical skill at the dental chair. Filling in the patient's dental outpatient card. Performing a practical skill on simulation equipment
6.	Filling in medical documentation	Filling in the patient's dental outpatient card
7.	Drawing up an individual plan of treatment and preventive measures	Filling in the patient's dental outpatient card
8.	Estimation of oral hygiene using the Green-Vermilion index simplified (OHI-S) and Plaque Index (PLI)	Performing a practical skill at the dental chair. Filling in the patient's dental outpatient card. Solving a situational task using simulation equipment
9.	Selection of home hygiene products, items and methods	Performing a practical skill at the dental chair
10.	Teaching the methods of tooth brushing on a model	Performing a practical skill on simulation equipment
11.	Teaching the flossing on a model	Performing a practical skill on simulation equipment
12.	Performing of the supervised toothbrushing	Performing a practical skill at the dental chair
13.	Performing of the local preventive measures (applications of the gels, varnishes)	Performing a practical skill at the dental chair Performing a practical skill on simulation equipment

14.	Individual motivation based on risk factors for the development of dental diseases	Performing a practical skill at the dental chair
15.	Sealing of pits and fissures of teeth with GIC	Performing a practical skill on simulation equipment
16.	Assessment of periodontal tissue	Performing a practical skill at the dental chair. Filling in the patient's dental outpatient card. Performing a practical skill on simulation equipment
17.	Removal of soft dental deposits	Performing a practical skill at the dental chair. Performing a practical skill on simulation equipment
18.	Drawing up an individual plan of treatment and preventive measures	Filling in the patient's dental outpatient card
19.	Drawing up an individual plan of treatment and preventive measures for patient with special needs	Filling in the patient's dental outpatient card

LIST OF EQUIPMENT USED

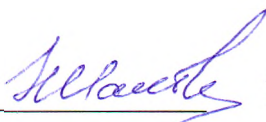
1. Dental unit (working drill) with a lamp and imitation spittoon and handpieces (mechanical, angular, turbine).
2. Table for instruments.
3. Washbasin.
4. Table with consumables and containers for disposal.
5. Bag for class A waste.
6. Bag for class B waste.
7. Container for disinfection of instruments.
8. Set of instruments in sterile packaging (imitation): tray, dental tweezers, dental mirror, dental probe, tweezers, polishing head (rubber, silicone), UV photopolymerization lamp; brushes for professional tooth brushing.

**PROTOCOL OF THE CURRICULUM APPROVAL
BY OTHER DEPARTMENTS**

Title of the discipline requiring approval	Department	Amendments to the curriculum in the academic discipline	Decision of the department, which designed the curriculum (date, protocol #)
1. Conservative Dentistry	Conservative Dentistry	No amendments	Protocol # 3 of 03.10.2024
2. Therapeutic Pediatric Dentistry	Pediatric Dentistry	No amendments	Protocol # 3 of 03.10.2024
3. Orthodontics	Orthodontics	No amendments	Protocol # 3 of 03.10.2024

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Curriculum content, composition and the accompanying documents comply with the established requirements.

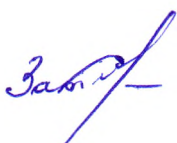
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