MINISTRY OF HEALTH OF THE REPUBLIC OF BELARUS

Educational Institution
BELARUSIAN STATE MEDICAL UNIVERSITY

Nearche Colors

APPROOVED

by First Vice-rector, Professor

I.N.Moroz

Reg. № UD

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PREVENTIVE DENTISTRY

Curriculum of higher educational institution in the educational discipline for the specialty:

1-79 01 07 «Dentistry»

Curriculum is based on the educational program «Preventive Dentistry», approved 03.10.2018, registration № UD-L.633/typ.

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RECOMMENDED FOR APPROVAL:

by the Department of Pediatric Dentistry of the Educational Institution «Belarusian State Medical University» (protocol # 15 of May 23, 2018);

by the Methodological Commission of Dental disciplines of the Educational Institution «Belarusian State Medical University» (protocol # 9 of May 24, 2018)

EXPLANATORY NOTE

Preventive Dentistry is an academic discipline containing systematized scientific knowledge about primary prevention of dental diseases in the population.

The curriculum of the discipline «Preventive Dentistry» includes the latest scientific data on the etiology, pathogenesis and primary prevention of the main dental diseases.

The aim of teaching and learning the discipline «Preventive Dentistry» is to provide the students with the scientific knowledge and skills necessary for professional maintaining the oral health of the population.

The tasks of studying the discipline are to develop the students' academic competences, based on the ability to self-search educational and information resources, as well as acquire and understand the knowledge of:

- 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 dental diseases;
 - principles of planning and implementation of prevention programs.

The tasks of teaching the discipline include the formation of students' social, personal and professional competences, based on the knowledge and application of:

- 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 dental diseases;
 - methods and means of primary prevention of dental diseases;
 - prevention-oriented methods of rendering dental care to the population.

Teaching and successful learning of the discipline «Preventive Dentistry» is based on the knowledge and skills previously acquired by the students in the following disciplines:

Medical and Biological Physics. Basic mechanical features of teeth, muscle and bone tissue. Basic concepts of functional and pathological dynamic and static loads on dental tissues, restorations and periodontium. Features of X-ray and laser radiation. Basic physical and chemical properties of restorative materials.

Biological Chemistry. Biochemistry of hard tissues of the tooth and jaw. Biochemical composition of saliva. Fluorine, calcium and phosphorus metabolism in the human body. The role and function of vitamins.

Medical Biology and General Genetics. The basic laws of human embryonic development. Critical periods of the human organism development and teratogenesis. Clinical manifestations of genetic diseases. The evolution of the maxillofacial region

Human anatomy. Anatomical terminology. The structure of the teeth and jaws. The development of the facial muscles, neck, dental, alveolar and basal arches. Structure and function of the periodontium and temporomandibular joint. Hard and soft palate: the structure, shape. Age differences in oral anatomy.

Histology, cytology, embryology. The development of the face and dentoalveolar system. General morphological characteristics of the tooth tissues (enamel, dentin, pulp, periodontium, cement). Structure and cellular composition of the periodontium. Structure and functional features of the dental alveoli. Histochemical and functional features of oral mucosa.

General Dentistry. The purpose of dental medical instruments. Preparation and restoration of dental hard tissues. Instrumentation, materials and methods (techniques) for endodontic treatment.

Normal physiology. Functional features of organs and tissues of the maxillofacial region.

Microbiology, virology, immunology. Oral microflora; biocenosis of supra- and subgingival microbial biofilm. Specific and nonspecific protection factors of the oral cavity. Methods of diagnosis of bacterial, fungal and viral diseases.

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 oral hygiene and periodontal tissue;
- means and methods of oral hygiene;
- means to prevent dental caries and periodontal diseases;
- methods of promoting healthy lifestyles;

be able to:

- perform dental examination;
- fill in primary medical documentation;
- assess oral hygiene;
- prescribe individual means and methods of oral hygiene and teach the patient how to use them;
 - use the means for caries prevention;

master:

- methods for assessing dental morbidity at the individual and group levels;
- methods for determining the state of teeth, gums, 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.

The structure of the curriculum in the educational discipline includes 12 chapters.

Total number of hours for the study of the discipline is 332 academic hours. Classroom hours according to the types of studies: lectures - 28 hours, laboratory

studies (practical classes) - 152 hours, student independent work (self-study) - 152 hours.

Current assessment is carried out according to the syllabus of the specialty in the form of a credit (3rd semester), and examination (4th semester).

Form of higher education - full-time.

ALLOCATION OF ACADEMIC TIME ACCORDING TO SEMESTERS OF STUDY

			Num				
				fro	om them		
Code and name of the specialty	Semester	total	in-class	lectures	laboratory studies (practical classes and seminars)	out-of-class self-studies	Form of current assessment
1-79 01 07 Dentistry	3	148	90	14	76	58	credit
1-79 01 07 Dentistry	4	184	90	14	76	94	examination

THEMATIC PLAN

	Number of class hours		
Section (topic) name	lectures	Practical classes	
3 rd Semester	·	****	
1. Preventive dentistry as a part of medicine	1	_	
2. Workplace organization for prevention activities	-	5	
3. Dental examination	_	10	
4. Primary prevention of dental caries			
4.1. Etiopathogenetic concept of dental caries prevention	1	5	
4.2. Estimation of dental caries incidence and effectiveness of its prevention	2	5	
4.3. Dental plaque: its role in caries development, ways to control	4	25	
4.4. Tooth caries susceptibility: ways of formation and optimization measures	1	5	
4.5. Saliva: caries protective possibilities and their assessment, correction of hyposalivation	1	10	
4.6. Primary prevention of dental caries with products containing calcium, phosphate and fluoride	4	11	
4 th Semester	r		
4.7. Prevention of dental caries in pits and fissures	2	14	
4.8. Individual programs of caries prevention, based on caries risk level	1	5	
5. Primary prevention of non-carious tooth lesions and			
dental trauma	2	5	
6. Prevention of gingivitis and periodontitis	2	15	
7. Prevention of halitosis	1	5	
8. Prevention of malignant tumors of oral mucosa, lips		_	
and tongue	1	5	
9. Prevention of malocclusion	2	10	
10. Health education in the prevention of oral diseases	1	5	
11. Planning and implementation of individual programs for the prevention of oral diseases	2	5	
12. Program of prevention of oral diseases		7	
Total hours	28	152	

CONTENTS OF THE EDUCATIONAL MATERIAL

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. Workplace organization for prevention activities

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, 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. Management of wounds, contacts with blood and other biological materials of patients.

3. Dental examination

The objectives of dental 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.

4. Primary prevention of dental caries

4.1. Etiopathogenetic concept of dental caries prevention

The history of studying the etiology and pathogenesis of dental caries. 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.

4.2. Estimation of dental caries incidence and effectiveness of its prevention

Rules of caries accounting in epidemiological and clinical studies. Estimation of the prevalence and intensity of dental caries in a primary, mixed and permanent 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.

4.3. Dental plaque: its role in caries development, ways to control

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.

The strategy of minimizing the cariogenic potential of dental plaque at various stages of its formation. Diet: role in forming the cariogenic potential of dental plaque; assessment and correction. Antimicrobial therapy in dental caries prevention.

Concept of oral hygiene. Methods (techniques), means and tools for home oral hygiene. Techniques of tooth brushing and using the interdental tools. The strategy of home oral hygiene in different age groups: goals, objectives, means and methods, effectiveness.

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.

4.4. Tooth caries susceptibility: ways of formation and optimization measures

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

Pre-eruptive stage of the susceptibility/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 end extraoral examination, determination of risk factors of forming the caries susceptible enamel, assessment of the tooth caries susceptibility, 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.

4.5. Saliva: caries protective possibilities and their assessment, correction of hyposalivation

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 end 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.

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

lons 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 fluorine-containing solutions, gels, foams, pastes, varnishes, fixed pills, glassionomer 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 anti-caries action, methods of application, contraindications, effectiveness. Combined use of calcium, phosphorus and fluoride.

Clinical work with patient: oral end 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 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.

4.7. 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 end extraoral examination, assessment of caries risk in pits and fissures, choice of the individual preventive care. Teaching the patient 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 for 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.

4.8. 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».

Clinical work with patient: oral end 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.

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

Tooth malformation: causes, effects of damaging factors; nosological forms. Identification of risk factors, etiotropic 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 post-eruptive 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 gingivitis and periodontitis

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 post-eruptive 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

Ilalitosis: 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 post-eruptive 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 ant 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 post-eruptive 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 ant 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 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. 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

ant periodontal diseases. Recording the data in the dental outpatient card and current educational documents.

10. 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 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. 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 ant periodontal diseases. 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 malocelusion, 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 end 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 ant periodontal diseases taking into account the general health status of the patient. Recording the data in the dental outpatient card and current educational documents.

12. Program of prevention of oral diseases

Purpose, tasks and methods of the «Program for the Prevention of Main Oral Diseases of the Population of the Republic of Belarus». Duties of the dentist for the implementation of the program.

Clinical work with patients, i.e. oral end extraoral examination, assessment of risk of oral pathology, choice of the individual preventive care taking into account the requirements of existing municipal preventive programs.

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 ant periodontal diseases taking into account the general health status of the patient. Recording the data in the dental outpatient card and current educational documents.

EDUCATIONAL DISCIPLINE CURRICULAR CHART

	Form of control		1.3, 2.1, 2.4, 4.1	1.1, 1.3, 2.1, 2.2, 2.4, 3.1, 4.1	1.1, 1.3, 2.1, 2.2, 2.4, 3.1, 4.1		1.1, 1.2, 1.3, 2.1, 2.3, 2.4, 3.1, 4.1	1.1, 1.2, 1.3, 2.1, 2.3, 2.4, 3.1, 4.1	1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.4, 3.1, 4.1, 5.1	1.1, 1.3, 2.1, 2.3, 2.4, 3.1, 4.1	1.1, 1.3, 2.1, 2.2, 2.3, 2.4, 3.1, 4.1
	Equipment			1,2	1, 2		1,2	1, 2	1, 2	1, 2	1, 2
	soibuts-AloS		I	5	7		\$	5	16	5	7
Number of classroom hours	practical (laboratory or seminars)		ı	\$	10		\$	5	25	5	10
Number	lectures		_	l	•		-	2	4		
	Name of unit, topic	3 rd semester	Preventive dentistry as a part of medicine	Workplace organization for prevention activities	Dental examination	Primary prevention of dental caries	Etiopathogenetic concept of dental caries prevention	Estimation of dental caries incidence and effectiveness of its prevention	Dental plaque: its role in caries development, ways to control	Tooth caries susceptibility: ways of formation and optimization measures	Saliva: caries protective possibilities and their assessment, correction of hyposalivation
; ;	Section, topic #		1.	2.	3.	4	4.1.	4.2.	4.3.	4.4.	4.5.

4.6.	4.6. Primary prevention of dental caries with products containing calcium, phosphate and fluoride	\	\Box	×	1, 2	1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.4, 3.1, 4.1
4.7.	4 th semester 4.7. Prevention of dental caries in pits and fissures			<u>~</u>	1, 2	1.1, 1.4, 2.1, 2.2. 2.3, 2.4, 3.1, 4.1,
4.8.	Individual programs of caries prevention, based on caries risk level	1	\$	9	1, 2	1.1, 1.2, 1.4, 2.1, 2.2, 2.3, 2.4, 3.1, 4.1
5	Primary prevention of non-carious tooth lesions and dental trauma	2	5	9	1, 2	1.1, 1.4, 2.1, 2.2, 2.3, 2.4, 3.1, 4.1
. 9	Prevention of gingivitis and periodontitis	2	15	20	1, 2	1.1, 1.4, 2.1, 2.2, 2.4, 3.1, 4.1
7.	Prevention of halitosis	-	5	9	1, 2	1.1, 1.4, 2.1, 2.2, 2.3, 2.4, 3.1, 4.1
∞ ं	Prevention of malignant tumors of oral mucosa, lips and tongue		\$	9	1,2	1.1, 1.4, 2.1, 2.2, 2.4, 3.1, 4.1
9.	Prevention of malocclusion	2	10	13	1, 2	1.1, 1.4, 2.1, 2.2, 2.3, 2.4, 3.1, 4.1
10.	Health education in the prevention of oral diseases	-	5	9	1, 2	1.1, 1.2, 1.4, 2.1, 2.2, 2.4, 3.1, 4.1
11.	Planning and implementation of individual programs for the prevention of oral diseases	2	\$	9	1,2	1.1, 1.4, 2.1, 2.2, 2.4, 3.1, 4.1
12.	Program of prevention of oral diseases	I	7	12	1, 2	1.1, 1.4, 2.1, 2.2, 2.4, 3.1, 4.1

INFORMATION AND INSTRUCTIONAL UNIT

LITERATURE

Basic:

- 1. Shakavets, N.V. Preventive dentistry. Part I: educational and methodological manual / N.B.Shakavets, D.N.Naumovich, Zh.M.Burak. Minsk: BSMU, 2015. 111p.
- 2. Shakavets, N.V. Preventive dentistry. Part II: educational and methodological manual / N.B.Shakavets, D.N.Naumovich, Zh.M.Burak. Minsk: BSMU, 2015. 60p.

Additional:

- 1. Irish Oral Health Services Guideline Initiative. Pit and Fissure Sealants: Evidence-based guidance on the use of sealants for the prevention and management of pit and fissure caries. Irish Health Research Board, 2010. 53 p.
- 2. Marya, C.M. A Textbook in Public Health Dentistry / C.M.Marya. J.P Medical Ltd, 2011. 572 p.
- 3. Marya, C.M. A Practical Manual in Public Health Dentistry / C.M.Marya. JP Medical Ltd, 2012. 263 p.
- 4. Suneja, E.S, Suneja, B., Tandon, B, Philip, NI. An overview of caries risk assessment: Rationale, risk indicators, risk assessment methods, and risk-based caries management protocols // Indian Journal of Dental Sciences. 2017. N. 9. –P. 210-214.
- 5. Zürcher, A. Diagnosis, Prevalence and Treatment of Halitosis / A. Zürcher, M.L.Laine, Δ.Filippi // Current Oral Health Reports. DOI 10.1007/s40496-014-0036-5 (published online: 30 September 2014).

EQUIPMENT

- 1. Multimedia projector.
- 2. Personal computer.

LIST OF AVAILABLE DIAGNOSTIC TOOLS

The following methods are used for the competencies diagnosis:

- 1.Oral form:
- 1.1. discussion;
- 1.2. report in practical class;
- 1.3. credit:
- 1.4. examination;
- 2. Written form:
- 2.1. test:
- 2.2. control quiz;
- 2.3. test work;
- 2.4. evaluation on the base of module-rating system;
- 3. Oral-written form:
- 3.1. report on home practical exercises with its oral presentation;
- 4. Technical form:

- 4.1. electronic tests.
- 5. Simulation form:
- 5.1. Assessment of communicative competence skills using a standardized (simulated) patient.

LIST OF PRACTICAL SKILLS

- 1. To organize the working place in accordance with safe working conditions and ergonomics.
- 2. To interview the patient for making an anamnesis vitae, taking into account medical and other features of the patient, identifying the risk factors for the occurrence of dental diseases.
- 3. To perform dental examination with recognition of dysfunction of the maxillofacial area, signs of pathological changes in the oral organs and tissues, local risk factors of oral diseases.
 - 4. To record the patient's dental status.
- 5. To record carious decay of the teeth and to evaluate the caries activity using caries indices.
- 6. To calculate the caries prevalence and caries intensity at the group and communal level.
 - 7. To assess the effectiveness of caries prevention with caries indices.
 - 8. To diagnose dental deposits with the use of hygienic indices
- 9. To master the basic and additional methods of tooth brushing with a manual tooth brush.
 - 10. To master the methods of tooth brushing with a power tooth brush.
 - 11. To use the tools for interdental hygiene in proper way.
 - 12. To conduct a qualitative and quantitative evaluation of salivation.
 - 13. To use topical remineralizing drugs for office use.
- 14. To seal the pits and fissures of teeth in different ways and with various dental materials.
- 15. To assess the risk of caries in a patient and plan the preventive care according to the criteria «Karyogram», «CAMBRA».
 - 16. To assess the periodontal tissue with gingival and periodontal indices.
 - 17. To identify the signs of cancer risk in the oral cavity.
- 18. To evaluate the functions of the maxillofacial region and the occlusion by age criteria.
 - 19. To create educational project for the prevention of oral diseases

LIST OF LECTURES

The 3rd semester

- 1. Preventive dentistry as a section of medical science.
- 2. Modern concept of etiopathogenetic prevention of dental caries.
- 3. Estimation of dental caries incidence and effectiveness of its prevention.
- 4. Dental plaque: its role in caries development.

- 5. Diet as caries-producing and caries-protective factor.
- 6. Means, tools and methods for home oral hygiene.
- 7. Tooth caries susceptibility.
- 8. The role of saliva in caries prevention.
- 9. Topical mineralizing caries prevention with use of calcium and phosphate.
- 10. Topical fluoridated drugs and products for dental caries prevention.
- 11. Systemic fluoridated drugs for caries prevention.

The 4th semester

- 1. Dental caries in pits and fissures: features of the pathogenesis and prevention.
- 2. Modern ways and techniques of caries prevention in pits and fissures.
- 3. Individual programs of caries prevention.
- 4. Health education in the prevention of oral diseases.
- 5. Primary prevention of non-carious tooth lesions and dental trauma.
- 6. Prevention of gingivitis and periodontitis.
- 7. Professional oral hygiene (prophylaxis) in the prevention of periodontal diseases.
 - 8. Prevention of halitosis.
 - 9. Prevention of malignant tumors of oral mucosa, lips and tongue.
 - 10. Prevention of malocclusion.
- 11. Planning and implementation of individual programs for the prevention of oral diseases.

LIST OF LABORATORY (PRACTICAL) STUDIES

The 3rd semester

- 1. Workplace organization for prevention activities.
- 2. Oral examination.
- 3. The estimation of dental caries incidence.
- 4. Causes, conditions and ways of the development of dental caries as objects of primary prevention.
 - 5. The role of dental plaque in caries development.
 - 6. Control of the cariogenicity of dental plaque. Diet as local caries-producing and earies-protective factor.
 - 7. Assessment of oral hygiene.
- 8. Home oral hygiene. Self-cleaning, washing, rinsing, wiping. Mouthwashes.
 - 9. Tools for home oral hygiene. Tooth brushing methods, flossing.
- 10. Means for home oral hygiene (dentifrices). Tooth powders, pastes, gels, foams. Individual choice of oral hygiene means, tools and methods.
 - 11. Factors of tooth caries susceptibility. Diet evaluation and correction.
 - 12. Saliva as caries protective factor. Salivation assessment.
 - 13. Hyposalivation and caries prevention.
- 14. Topical mineralizing drugs with calcium and phosphate for caries prevention.

15. Topical mineralizing drugs with fluoride for caries prevention. Combined use of topical products containing fluoride, calcium and phosphate.

The 4th semester

- 1. The use of systemic vehicles of fluoride for caries prevention.
- 2. Dental caries in pits and fissures: risk assessment and prevention possibilities.
 - 3. Techniques of pits' and fissures' sealing.
- 4. Drawing up of individual programs based on the assessment of the risk of dental caries.
 - 5. Health education: psychological basis, tasks and methods.
- 6. Possibilities to control risk factors for odontogenesis disorders and posteruptive non-carious tooth lesions. Prevention of dental trauma.
- 7. Periodontium: age norm and functions. Epidemiological and clinical assessment of the periodontal status.
- 8. Etiology and pathogenesis of the gingivitis and periodontitis. Risk factors and their minimization.
 - 9. Tasks, means and methods of professional oral hygiene (prophylaxis).
 - 10. Halitosis: diagnosis of risk factors, means and ways of prevention.
- 11. Diagnosis of risk factors for tumor growth in the oral cavity and planning their minimization.
- 12. Occlusion and function of the maxillofacial region: conditions of formation, age norm and deviations.
 - 13. Factors contributing to malocclusion: diagnosis, medical tactics.
 - 14. Individual prevention of oral diseases.
 - 15. National program of the prevention of oral diseases.

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AGREEMENT PROTOCOL OF THE CURRICULUM

Discipline for	Department	Proposals for changes	Decision of the
agreement		in the content of the	Department
		curriculum of higher	which worked out
ļ.		education institution in	the training
		the academic	curriculum (with
		discipline	the date and
			protocol number)
Pediatric and	Department of	No proposal	«23» May 2018
Preventive	Pediatric		(protocol № 15)
Dentistry	Dentistry		

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Design of the Training Curriculum and accompanying documents meets the established requirements.

Dean of the Medical Faculty for International Students

E.G. 11. 20/8

A.U. Gaiduk

Methodologist-expert Educational institution «Belarusian State Medical University»

<u>EG. 11. 2018</u>

O.R. Kashan

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