

Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"
Ministry of Health of the Russian Federation

BANK OF ASSESSMENT TOOLS FOR DISCIPLINE

DENTAL HEALTH OF THE POPULATION

Direction of training (specialty): __31.05.03_ DENTISTRY __

Department: _PROPEDEUTIC DENTISTRY__

Form of study ____FULL-TIME____

Nizhniy Novgorod
2021

1. Fund of assessment tools for the current monitoring of academic performance, intermediate certification of students in the discipline / practice

This Fund of assessment Tools (FOS) for the discipline "Propaedeutics and prevention of dental diseases" is an integral appendix to the work program of the discipline "Name of discipline/practice". All the details of the approval submitted in the RAP for this discipline apply to this FOS.

(assessment funds allow you to evaluate the achievement of the planned results stated in the educational program.

assessment tools – a fund of control tasks, as well as a description of forms and procedures designed to determine the quality of learning by students of educational material.)

2. List of assessment tools

The following assessment tools are used to determine the quality of mastering the educational material by students in the discipline:

№ п/ п	Assessment tool	Brief description of the assessment tool	Presentation of the assessment tool in the BAT
1	test	A system of standardized tasks that allows you to automate the procedure for measuring the level of knowledge and skills of a student	Test Task Fund
2	Case - task	A problem task in which the student is offered to comprehend a real professionally-oriented situation necessary to solve this problem.	Tasks for solving case tasks
3	Colloquium	A tool of controlling the mastering of study materials of a topic, section or sections of a discipline, organized as a class in the form of an interview between a teacher and students.	Questions on topics/sections of the discipline
4	Course work (project)	A tool of verifying the ability to present the results of theoretical, calculated, analytical, experimental studies	List of coursework topics (projects)
5	Report	The product of the student's independent work, which is a public presentation about the results obtained by solving a certain educational, practical, research or scientific topic	Topics of reports, presentations
6	Individual survey	A control tool that allows you to assess the degree of comprehension of the material	List of questions
7	Interview	A tool of control organized as a special conversation between the teacher and the student on topics related to the discipline being studied, and designed to clarify the amount of knowledge of the student on a specific section, topic, problem, etc.	Questions on topics/sections of the discipline

8	Round table, discussion, controversy, debate	Assessment tools that allow students to be included in the process of discussing a controversial issue, problem and evaluate their ability to argue their own point of view	List of discussion topics for a round table, discussion, polemic, debate
---	--	---	--

3. A list of competencies indicating the stages of their formation in the process of mastering the educational program and the types of evaluation tools

Code and formulation of competence *	The stage	Code and formulation of competence *	The stage
UC-1. He is able to carry out a critical analysis of problematic situations based on a systematic approach, to develop a strategy of actions	Input, Current	Sections: Focal enamel demineralization. Teeth whitening Sealing of fissures Hygiene of dentures Oncological alertness in the work of a dentist. Emergency conditions in dentistry Teratogenesis of congenital facial defects and their prevention. Prevention of injuries to the face and oral organs. Prevention of secondary dental anomalies. Composite filling materials. Photography in aesthetic dentistry.	<i>Test - 10</i> <i>Case assignment -2</i> <i>Colloquium -10</i> <i>Individual survey - 10</i> <i>Interview - 1</i> <i>Situational tasks - 3</i> <i>Credit - 1</i>
PC-10 readiness for educational activities to eliminate risk factors for the development of dental diseases, prevention of dental diseases, to teach the population basic hygienic measures of a health-improving nature, skills of self-control of basic physiological indicators that contribute to the preservation and strengthening of health	Current Intermediate	Sections: Focal enamel demineralization. Teeth whitening Sealing of fissures Hygiene of dentures Oncological alertness in the work of a dentist. Emergency conditions in dentistry Teratogenesis of congenital facial defects and their prevention. Prevention of injuries to the face and oral organs. Prevention of secondary dental anomalies. Composite filling materials. Photography in aesthetic dentistry.	<i>Test - 10</i> <i>Case assignment - 3</i> <i>Colloquium - 10</i> <i>Report - 2</i> <i>Individual survey - 10</i> <i>Interview - 1</i> <i>Situational tasks - 3</i> <i>Round table discussion – 2</i> <i>Credit 1</i>

4. The content of the evaluation means of input, current control

Entrance/current control is carried out by the discipline teacher when conducting classes in the form of:

4.1 Competence assessment test - UC -1, PC – 10

1. A SYSTEM THAT PRIMARILY DETERMINES THE BUFFER CAPACITY OF SALIVA

1. Hemoglobin
2. Oxyhemoglobin
3. Bicarbonate
4. Protein
5. Hydrophosphate

2. Low attachment of the upper lip frenulum can cause changes in periodontal tissues

1. local
2. generalized
3. does not cause changes

3. Mandatory in the prevention of periodontal diseases in children is:

1. hygienic oral care training
2. prevention of malocclusion
3. identification and correction of anomalies of attachment of soft tissues to the bony skeleton of the face
4. all of the above

4. FAINTING MAY DEVELOP AT THE STAGES OF LOCAL ANESTHESIA

- 1) only at the beginning of anesthesia (with needle injection)
- 2) only at the final stage (when removing the needle)
- 3) before the start of anesthesia (before needle injection)
- 4) at any stage of local anesthesia
- 5) after carrying out all manipulations

5. The deadline for conservative treatment of precancerous diseases is:

1. 2 weeks
2. 1 month
3. 7 days

6. What degree of gingivitis severity does the PMA index value equal to 31-60% correspond to?

1. mild
2. average
3. heavy

7. The "gold standard" for the diagnosis of malignant neoplasms is:

- autofluorescence diagnostics;
- cytological examination;
- stomatoscopy;
- histological examination.

8. The clinical symptom of malignancy during examination by the ViziLite plus device is:

- increase in the size of the pathological focus
- absence of pain syndrome
- the appearance of a green radiation spectrum on the scanner
- the appearance of the red radiation spectrum on the scanner

9. To determine the color of teeth before professional whitening, apply:

- Air-Max device
- Air Handy Device
- Easyshade Spectrophotometer
- The Zuhnfabrik device

10. Which dentists use a digital photo protocol:

- orthopedists
- therapists
- surgeons
- orthodontists
- all of the above

11. What type of lenses are used in dental photography:

- Portrait lens
- Zoom lens
- Standard lens that comes with the camera
- The lens is not used

12. What accessories are used to take macro photos:

- Dental unit, water-air gun
- Spatula, mirror, probe
- Mirrors, contrasters, retractors
- Retractors
- Obektiv, flash

13. The Opalustre system includes:

- 10% hydrochloric acid
- 37% orthophosphoric acid
- 6.6% hydrochloric acid
- 10% hydrofluoric acid

14. Methods for visualizing the mucous membrane of the ESP:

- sinusitis
- scintigraphy
- KLKT
- magnetic resonance imaging

15. A method in which the image remains dynamic, the doctor can study any area of interest to him at the right angle, in all planes:

- orthopantomogram
- radiovisiography
- 3D diagnostics
- telerentgenography

16. CAD/CAM system is:

- this is a digital program that helps to create a 3D model of the prosthesis
- laboratory scanning device
- digital optical apparatus of trans illumination
- inside the oral chamber + optical apparatus of trans illumination

4.2 Colloquium for competence assessment – UC -1, PC - 10

1. The nature of teeth staining. Indications, contraindications.
2. Classification of bleaching methods. Features of the procedure.

3. Technique of invasive and non-invasive sealing of fissures. The success of the method and the forecast.
4. Superficial formations on the teeth.
5. Hygienic education and training of the population in oral hygiene is an integral part of comprehensive programs for the prevention of dental diseases. Hygiene items and products.
6. Precancerous diseases of the oral mucosa. Clinical signs. Examination protocol.
7. Routing of patients in the detection of precancerous diseases of the oral cavity.
8. Motivation of the population to maintain oral health.
9. Diagnosis and choice of emergency care tactics.
10. Prevention of emergency conditions. Tactical errors in the treatment process.
11. Fainting.
12. Collapse.
13. Epilepsy. Psychogenic seizures.
14. Diabetes mellitus. Precautions during dental treatment.
15. Chronic renal failure and clinical manifestations in the oral cavity.
16. Allergic conditions in dentistry. Classification, etiology, clinical manifestations and necessary medical care in a dental clinic.
17. Cardio-pulmonary resuscitation
18. Embryogenesis of oral organs. Risk factors for congenital facial defects.
19. Treatment and rehabilitation of patients with congenital malformations of the face and oral organs
20. Diagnosis of pathological conditions in orthopedic dentistry
21. The influence of the contact point on the development of periodontal diseases
22. Types of lasers used, comparative characteristics, indications and contraindications

4.3 Situational tasks for competence assessment –UC – 1, PC – 10

1. A patient, 18 years old, of asthenic build, complained of increased dryness in the oral cavity. In addition to dryness of the oral cavity, he notes increased thirst, frequent urination, weakness, dizziness. From the anamnesis, it was revealed that these symptoms appeared about 2 weeks ago. During the reception, he suddenly lost consciousness; breathing is shallow, rhythmic, the skin is pale, moist. There is tachycardia, arrhythmia. Inhalation of ammonia vapors did not produce the desired effect. Which drug should be administered first:

a) cordiamine -1 ml (n / a)

b) 2% suprastin solution -2 ml (i/ m)

c) 40% glucose solution -20 ml (i/v)

d) lasix -20 mg (i/v). Make a dental caries prevention plan for this child, include fluoride preparations in the plan.

2. A 76-year-old patient suffering from hypertension treated with acute pain in the area of the upper jaw canine on the right. During the treatment, there was a severe headache, dark spots in front of the eyes, a feeling of noise in the head. Consciousness is preserved, blood pressure 210/120 mmHg. Suggest a diagnosis? Your actions.

3. The child is 12 years old at the reception. From anamnesis: was born full-term, artificial feeding from 3 months. In the first year of life, he suffered iron deficiency anemia. He suffers from colds 2-3 times a year. Suffers from insulin-dependent diabetes mellitus. Oral care has been started since the age of 3; he has been using toothpaste since the age of 6. Preventive dental measures were not carried out. When examining the oral cavity, the teeth are covered with plaque. CPU=6. Make a treatment plan, prescribe endogenous decarticular prophylaxis

4. The patient, 36 years old, notes the occurrence of an allergic reaction to anesthetics. During anesthesia with a 2% lidocaine solution, I suddenly felt dizziness, sharp weakness, ringing in the ears, difficulty breathing. After 1 min, he lost consciousness, pulse threadlike, weak filling, blood pressure 60/40 mmHg, pupils dilated, cyanotic skin is noted. Name the diagnosis.

Your actions.

4.4 Case assignment for competence assessment –UC – 1, PC –10

1. The student is given a detailed photoprotocol of the patient. It is necessary to describe briefly the clinical situation. Make a possible treatment plan, Prescribe hygiene items, Prescribe hygiene products in this situation. Which group, the main components. What methods of primary prevention of caries will you offer to this patient
2. The patient, 45 years old, underwent anesthesia Sol. Ultracaini DS forte 1,7 ml. After 1-2 minutes, the patient developed general weakness, pain in the heart area with irradiation behind the sternum, into the left shoulder blade. Provide the necessary assistance.
3. Perform cardiopulmonary resuscitation to the patient with respiratory arrest.
4. This patient came to you for an appointment (see photo):
 - Describe briefly the clinical situation (hygiene index, features, etc.)
 - Make a possible treatment plan
 - Assign hygiene items
 - Prescribe hygiene products in this situation. Which group, the main components.
 - What methods of primary prevention of caries will you offer to this patient
5. The patient is 3 years old, the diagnosis is Bilateral cleft palate and lip, unspecified. Plan diagnostic and rehabilitation measures based on the Clinical Protocol of Medical Care. Enter the data into the Medialog medical information system and schedule all the necessary scheduled visits to related specialists required as part of the provision of medical care.
6. Using the 3shape Trios scanner to obtain a digital impression of the prosthetic bed of a "simulated" patient. Using the Avantis 3D program, analyze the results obtained and plan a treatment plan, taking into account the individual characteristics of the patient's jaw system.

4.5 Competence assessment report –, PC – 10

1. search (selection) and review of literature and electronic sources of information on a given problem (Russian national library) http://nlr.ru/res/inv/ic_med/structure_full.php
 2. writing an informational report on a given problem using scientific databases <https://pubmed.ncbi.nlm.nih.gov/>
 1. Choice of anesthesia method in various clinical situations,
 2. Modern methods of rheotherapy
 3. Prevention of dental anomalies
 4. Precancerous diseases of the oral mucosa
 5. Cardiopulmonary resuscitation
- #### 4.6 Discussion
1. Group project in small groups using modern digital technologies (based on MIRO)
 2. Mastering the artificial intelligence program in radiation diagnostics Diagnocat is an online service in the evaluation and description of CT data. <https://diagnocat.ru>
 5. The content of the evaluation tools of intermediate certification

Intermediate certification is carried out in the form of an exam (4th semester) and a test (6th semester).

Tasks (evaluation tools) submitted to the exam / test for competence assessment – CC -1 PC - 10

1. 1. Tests for the 6th semester – posted on the SDO portal – <https://sdo.pimunn.net/question/edit.php?courseid=2016>

Questions for the test

1. Cariesogenic situation in the oral cavity. The concept of a cariesogenic situation and

cariesogenic factors.

2. Prevention of periodontal diseases in various age periods of life. State, medical and individual preventive measures. Periodontal disease prevention program.
3. Primary prevention of dental caries. The meaning, mechanism of action and methods of systemic administration of fluorides. Security control.
4. Communal dental caries prevention programs. The choice of strategies. Organization of programs. The importance of systemic and local fluoridation.
5. Methods of dental status research: study of the face, regional lymph nodes, respiratory function, swallowing, speech, chewing, temporomandibular joint, salivary glands. Signs of a physiological and pathological condition.
6. Epidemiology of dental diseases. Indicators of dental health of the population: the prevalence and intensity of diseases, the increase and degree of activity of caries, indices "kp", "KPU", PMA, CPI, and others. Methods of calculating indicators, their assessment, value for dentistry.
7. Cariesogenic situation in the oral cavity. The mechanism of action of the factor "diseases and functional disorders of the organs and systems of the body" on the development of dental caries in different age periods
8. Comprehensive system of prevention of dental diseases. Preparatory and organizational measures during the implementation of communal programs. The importance of epidemiological studies.
9. Prevention of periodontal diseases. Methods and means of prevention, the importance of individual and professional oral hygiene.
10. Professional oral hygiene. Importance in the prevention of dental diseases. A set of measures for professional oral hygiene, personnel and material support.
11. Features of oral care of patients with dental anomalies undergoing orthodontic treatment, having dentures, in the postoperative period, etc.
12. Caries resistance of tooth enamel. Direct and indirect methods of assessing enamel caries resistance.
13. Identification of dental deposits: methods, assessment using the hygienic indices of Fedorov-Volodkina, Green-Vermillion. The use of indices in dentistry.
14. Methods of examination of hard tooth tissues (examination, probing, drying, vital staining, transilluminative, luminescent, radiographic, etc.). Record of the international dental formula.
15. Examination of periodontal tissues: visual, palpatory, instrumental. Additional research methods. Indexes that register the periodontal condition (PMA, CPI, etc.).
16. Study of the condition of the oral mucosa, vestibule, frenulum of the lips and tongue, mucosal cords, signs of physiological and pathological condition. The role of disorders of the structure of the soft tissues of the oral cavity in the development of dental diseases.
17. Hygienic education and training of the population in dentistry. Performers and content of work in preschool institutions. Methods of conducting a health lesson in kindergarten.
18. Health education in dentistry: purpose, objects, types, means, forms, principles, methods of implementation. Importance in the prevention of dental diseases.
19. Items of individual oral hygiene. Toothpicks, floss, interdental stimulators, oral irrigators. Their varieties, structure, properties, indications and methods of application. Flossing technique.
20. Individual oral hygiene, its importance in the prevention of dental diseases. Items of individual oral hygiene. Toothbrushes (regular, special, electric): structure, properties, indications for use. Care of the brush.
21. The concept of the norm, variants of the norm, anomalies and deformities of the dental apparatus in children during the period of milk bite.
22. Composition and properties of oral fluid, its role in the processes of enamel maturation, demineralization and remineralization. The value of viscosity, PH, buffer capacity, ability to crystallize, etc. for the development of a cariesogenic situation of the oral cavity.
23. Dental plaque: identification, localization, composition, structure, mechanism of

formation. Microorganisms of dental plaque in the development of caries and periodontal diseases.

24. Prediction of dental caries in children and adults, population. Criteria for individual forecasting.

25. Oral hygiene products. Classification of toothpastes. Composition, properties, indications for the use of hygienic toothpastes.

26. Prevention of fissure caries. Composition, properties, mechanism of action, methods of application of materials for sealing and sealing natural recesses of teeth. Indications, technique of procedures, personnel, effectiveness of sealing of dental fissures.

27. Supra-gingival and subgingival tartar. Frequency and mechanism of formation, localization, detection, composition, properties, role in the development of periodontal diseases.

28. Endogenous drug prevention. Karyoprophylactic drugs: composition, properties, mechanism of action, indications and contraindications, methods of application. The meaning and mechanism of action of fluorides.

29. The importance of health education of future parents in the prevention of dental anomalies in children. The role of normalization of the functions of closing the lips, swallowing and chewing in the prevention of dental anomalies in children.

30. Controlled brushing of teeth: methods of carrying out, evaluation of the technique and quality of teeth cleaning. Application in dentistry.

31. The concept of the norm, variants of the norm, anomalies and deformations of the dental apparatus in children during periods of replaceable and permanent bite.

32. Instrumental and ultrasonic methods of tartar removal. Conditions and technique of execution, advantages and disadvantages of methods.

33. Cariesogenic situation in the oral cavity. Cariesogenic factors. The mechanism of action in different age periods.

34. Approaches, methods and means of prevention of dental caries in different age periods of a child's life. Antenatal and postnatal prophylaxis.

35. Bad habits in children as an etiological factor of dental anomalies and deformities. Methods of their identification and methods of elimination. The importance of timely sanitation of the oral cavity, pharynx, nasopharynx in the prevention of dental anomalies.

36. Modern photo protocol in dentistry

5.1 The list of control tasks and other materials necessary for the assessment of knowledge, skills, skills and experience of activity

5.1.2 Questions for the test in the discipline Dental health of the population:

Questions	Competence code
№1- 36	UC -1, PC – 10

6. Criteria for evaluating learning outcomes

For the credit

Learning outcomes	Evaluation criteria	
	Not counted	Credited
Completeness of knowledge	The level of knowledge is below the minimum requirements. There were gross mistakes.	The level of knowledge in the volume corresponding to the training program. Minor mistakes may be made

Availability of skills	Basic skills are not demonstrated when solving standard tasks. There were gross mistakes.	The basic skills are demonstrated. Typical tasks have been solved, all tasks have been completed. Minor mistakes may be made.
Availability of skills (possession of experience)	Basic skills are not demonstrated when solving standard tasks. There were gross mistakes.	Basic skills in solving standard tasks are demonstrated. Minor mistakes may be made.
Motivation (personal attitude)	Educational activity and motivation are poorly expressed, there is no willingness to solve the tasks qualitatively	Educational activity and motivation are manifested, readiness to perform assigned tasks is demonstrated.
Characteristics of competence formation*	The competence is not fully formed. The available knowledge, skills, and skills are not enough to solve practical (professional) tasks. Repeated training is required	The formation of competence meets the requirements. The available knowledge, skills, skills and motivation are generally sufficient to solve practical (professional) tasks.
The level of competence formation*	Low	Medium/High

For testing:

Mark "5" (Excellent) - points (100-90%)

Mark "4" (Good) - points (89-80%)

Mark "3" (Satisfactory) - points (79-70%)

Less than 70% – Unsatisfactory – Mark "2"

Developer(s):

A.V. Kochubeynik