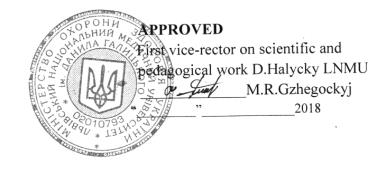
Danylo Halycky National Medical University

Department of Physical Training and Sports Medicine



### WORKING PROGRAM OF EDUCATIONAL DISCIPLINE Physical Rehabilitation and Sports Medicine

training of specialists of the second level of higher education knowledge section 22 "Health care"

specialty 221 "Dentistry"

Discussed and approved

on meeting of department

"Physical training and sports medicine "

Protocol No\_\_\_\_14\_\_\_ from 3/04/2018

Head of the department

Ran

Approved
profiled methodical commission
on Humanities
Protocol №4 from <u>4/04/2018</u>
Chairman of the nethodical commission

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#### **INTRODUCTION**

Program of study of discipline "Physical rehabilitation and Sport medicine" created in accordance with the higher education standard of Ukraine of the second master's level.

Knowledge section 22 "Health care"

Specialty 221 Dentistry

Educational program Master of dentistry

#### **1.General section**

Work program of discipline "Physical rehabilitation and sports medicine" prepared in accordance with the "Regulations on the organization of educational process in Danylo Halycky Lviv National medical university, approved by the Academic Council of the University 02/18/2015 p., Record №1-BP and pursuant order in Danylo Halycky Lviv National medical university from 24.04.2015 № 1229-with "On introduction of the new curriculum undergraduate training in the specialty" Dentistry ".

The work program of the subject "Physical Rehabilitation and Sports Medicine" compiled for the specialty 7.110106 "Dentistry" field of study in 1101 "Medicine," according to educational qualification characteristics (EQC) and educational and professional programs (EPP) training educational qualification "Specialist "qualification" dentist "in higher medical educational institutions of Ukraine IV level of accreditation, approved by the MES of Ukraine from 16.04.03 No 239 and from 28.07.03 No 504, and according to the new curriculum MoH Ukraine that is designed on the principles of the European credit Transfer system (ECTS) and approved by the MOH of Ukraine of 07.12.2009 p. No 929 of 08.07.2010 and. No 541.

The program is prepared in accordance with the "Guidelines for the development of educational disciplines" (MOH of Ukraine of 12.10.2004.,  $N_{2}$  492).

According to the curriculum, the study of physical rehabilitation and sports medicine at the dental faculty are in the 3rd year of study. The program lasts 45 hours (1.5 credits), including 30 hours of classroom (practical training) and 15 hours of independent work (CPC).

Physical rehabilitation and sports medicine as an academic discipline is based on studying by students of anatomy, physiology, pathophysiology, propaedeutics internal medicine, prosthetic dentistry; ensure consistency and correlation to the prevention of dental diseases, surgical dentistry, prosthetic dentistry, neurology, neurology, neyrostomatolohiyeyu and other subjects of the curriculum, which involves integration of teaching with these disciplines and forming of abilities application of knowledge in physical rehabilitation and sports medicine in further education and in professional activity; teaches effective and timely use of physical rehabilitation in complex restorative dental treatment of patients; providing prevention prepathological or conditions that arise when irrational use of exercise; teaches personal recreational use and recreational modes of physical activity for the prevention of occupational diseases in dentists.

At present discipline "Physical rehabilitation and sports medicine" is becoming increasingly important for quality comprehensive training of future doctors, including dentists. Especially on issues relating to the use of physical training and physical rehabilitation for quick recovery, preserving the quality of life and the prevention or elimination of various complications in patients with dental. WHO experts say that now, more than 500 dental diseases and dental manifestations of systemic diseases clinic are often accompanied by severe physical and psychological suffering. Diseases mechanical damage, defects or anomalies of maxillofacial system often lead to a profound violation of vital functions of man, such as external breathing, chewing, swallowing, speech and facial expressions, which adversely affects the functioning of the body as a whole, significantly inhibits the psychological state patients distorts the aesthetic appearance of the face. That is why, as soon as possible to prevent or eliminate these functional disorders are very important in the treatment of dental patients use means of physical rehabilitation.

The leading physical rehabilitation is therapeutic physical training (gymnastics). TE - the most active, purposeful and effective part of rehabilitation and preventive measures that has no equal in its unique natural and biological effects and therefore plays a major role among non-drug rehabilitation facilities. Underestimating or untimely and inadequate use of physical rehabilitation in treatment of dental patients often leads to a significant increase in terms of recovery of severe complications and even to permanent disability. Exercise and other physical factors must be additional means, and an integral part of a comprehensive treatment for all periods of rehabilitation. Very important is early, timely purpose of physical rehabilitation, especially in inflammatory processes in maxillofacial area, open and closed kinks jaw, traumatic injuries, including burns, soft tissue in maxillofacial area, contractures vyskovomandibular joints, neuritis or facial trigeminal nerve, the reconstructive operations on cleft lip and palate and other surgical interventions on soft tissues and bone of the facial skeleton, at abnormalities of occlusion, functional disorders and congenital anomalies of the teeth-jaw system in children. Of particular note is the appointment of special exercise during conservative treatment, as well as pre- and postoperative stages of intervention that selectively combined with restorative and breathing exercises, by means of quenching and preformed physical factors considering: clinical course of the disease (phase stage, the degree of functional disorders of the teeth-jaw system), comorbidity, as well as the characteristics of the individual (age, sex, functional abilities of basic life support systems, level of physical fitness and tolerance to physical exercise, state protection systems) at different stages of physical rehabilitation; Equally important is the use of physical training and rehabilitation for prevention or treatment of functional occupational diseases in dentists, especially violations of posture, scoliosis, osteochondrosis, varicose veins of the lower limbs, cardiovascular diseases, respiratory and other diseases. Thus, quality training dentist impossible without perfect mastery of the basics of physical rehabilitation and sports medicine.

The types of studies according to the curriculum are:

a) practical training;

b) independent work of students.

Practical exercises section of Sports Medicine conducted at the specialized educational rooms and laboratories specialized departments, in the offices of sports medicine universities or medical-sports clinic. Practical lessons in physical rehabilitation appropriate to clinical sites (in the offices of exercise and dental surgery) patients demonstrating relevant to the occupation, clinical analysis of their condition and the appointment of appropriate physical rehabilitation. The number of students in the study group should not exceed 5-10 people. While teaching physical rehabilitation and sports medicine allowed amendments to the curriculum within 15%, depending on the organizational and technical capabilities of specialized departments (courses), but in general should be made of the claims of discipline under the ultimate goals for the EQC and OPP and for specialty training curriculum. The acquisition is controlled themes at workshops. We recommend using these means of determining the level of training of students: tests, situational problems solving, conducting individual and frontal verbal questioning. Also teacher tested and evaluated performance of individual students. To test lecturers drug-control card (form № 061 /

o) cards and patient being treated in the office or department of exercise (form number 42-a), which are equal to the verification history, play 0.5 hours for each student.

### Description of the curriculum on discipline "Physical rehabilitation and sports medicine" for students of Faculty of Dentistry specialty 7.12010005 "Dentistry"

Structure of	Numb	per of credit	hours, including	Academic year	View	
the discipline	Total	Aud	Auditorium		Semester	control
	hours	Lectures	Practical lessons		3 year study	
Module Physical Rehabilitatin and Sports Medicine	1 credit ECTS / 30 hours.	4	16	10	Third year of studies	Passed

### 2. Purpose and objectives of the discipline

The main purpose of the discipline is to develop in students a holistic understanding of the possibilities, forms and methods of medical control during physical rehabilitation, understanding the importance of the timely use of physical rehabilitation in treatment and rehabilitation of dental patients, as well as the prevention of occupational diseases in dentists.

The ultimate goals of the discipline:

1. Identify the key concepts of physical rehabilitation and sports medicine as a clinical discipline.

2. Be able to analyze and predict the impact of physical activity on the human body according to medical monitoring and assign movement modes and means of physical rehabilitation according to health, nature of functional disorders of the teeth-jaw system, functional abilities and body tolerance to physical activity.

3. Select and apply methods of physical rehabilitation in treatment of dental patients for faster recovery, maintaining quality of life and prevent or eliminate the consequences of the pathological process.

4. Be able to evaluate the effectiveness of physical rehabilitation.

#### 3. The program of the discipline

Program material in physical rehabilitation and sports medicine consists of theoretical and practical sections. The theoretical section is professionally applied nature and realized in the form of educational material explanations during practical classes (but not more than 15% of the total time occupation), self-study of literature, writing essays, participation in scientific student circle in physical rehabilitation and sports medicine.

#### "Sports Medicine"

Specific objectives:

1. To acquire basic tasks, forms and features medical monitoring during exercise.

2. Master the technique of complex medical examination, including the study and evaluation of physical development, functional abilities of the body and human health.

3. Master degree method of diagnosis of functional disorders of the teeth-jaw system in dental patients.

4. To analyze survey data and generate drug output.

5. Assess tolerance to physical activity and different degrees of fatigue during exercise.

6. To diagnose the early signs of fatigue, prepathological and pathological conditions arising from the inadequate exercise, know the means of prevention and thus provide first aid.

### Theme 1. Modern aspects of physical rehabilitation and sports medicine. The concept of medical monitoring. Identification and assessment of physical development.

Physical rehabilitation and sports medicine in historical perspective. Modern concepts of physical rehabilitation and sports medicine, and their importance in the health care system. Effect of physical activity of varying intensity on the human body. Goals, objectives and content of medical monitoring during exercise. Comprehensive medical examination technique persons engaged in physical exercises. Physical development and human factors that define it. Research and evaluation of physical development.

### Theme 2. Research and evaluation of the functional state of the dento-alveolar system in the dental clinic. Medicinal conclusion. Research and Evaluation of the functional state teeth-jaw system.

The concept of functional tests. The main tasks of the functional studies. General requirements for the functional tests. Classification of functional tests. Functional tests of breath (woodwork Ghencea), with a change in body position in space (orthostatic, klinostatychna), with a standard physical activity (sample Martina Kushelevskoho - 20 sit-ups in 30 seconds.), Methods of implementation and evaluation. Types of reactions of the circulatory system into functional exercise testing: normotonichnyy, hypotonic, hypertonic, distonichnyy, stepped, their characteristics. Analysis of a comprehensive medical examination. The medical report. The concept of tolerance to physical exercise. External features of different degrees of fatigue when performing exercise. Prepathological and pathological conditions arising from the inadequate physical activity, means of prevention and first aid. Anatomical and physiological characteristics of the temporomandibular joints and muscles nyzhnochelyusnyh located in the maxillofacial region (facial, chewing, tongue, palate-pharyngeal muscle ring neck). Scheme of examination of the functional state of tissues of the maxillofacial area. Diagnostic exercise and test systems for detecting the degree of functional disorders of the teeth-jaw system. Evaluation of circular muscle contractile ability of the eye, the circular muscle of the mouth, tongue muscles, masticatory muscles, muscles of palate-pharyngeal ring and neck. Functional diagnostics of the tooth-jaw system with special chewing samples (for Ruby IS) and instrumental methods: hnatodynamometrivi, miotonometrivi, electromyography mastikatsyohrafiyi, measuring lung capacity. Opinion on the results of functional examinations of the teeth-jaw system. Anatomical and physiological characteristics of the temporomandibular joints and muscles nyzhnochelyusnyh located in the maxillofacial region (facial, chewing, tongue, palate-pharyngeal muscle ring neck). Scheme of examination of the functional state of tissues of the maxillofacial area. Diagnostic exercise and test systems for detecting the degree of functional disorders of the teeth-jaw system. Evaluation of circular muscle contractile ability of the eye, the circular muscle of the mouth, tongue muscles, masticatory muscles, muscles of palate-pharyngeal ring and neck. Functional diagnostics of the tooth-jaw system with special chewing samples (for Ruby IS) and instrumental methods: hnatodynamometriyi, miotonometriyi, electromyography mastikatsyohrafiyi, measuring lung capacity. Opinion on the results of functional examinations of the teeth-jaw system.

# Theme 3. The general principles of the use of physical rehabilitation of patients with dental profile. Exercise in the system of physical rehabilitation. Features of the application of therapeutic massage in dentistry.

General concepts of rehabilitation and its main focus (aspects). Physical rehabilitation (FR) as one of the areas of rehabilitation. General principles, stages and facilities FR. Therapeutic physical training (ET) as the primary means of FS. Features of the method and means of exercise. Forms, methods, timing and methodological principles of exercise. Mechanisms of action of therapeutic exercise. Classification of exercise. Indications and contraindications for appointment of DF. Basic principles of selection and dosage of exercise during physical rehabilitation. Evaluating the effectiveness of treatments and course of physical rehabilitation. The theoretical basis of therapeutic massage. Anatomical and physiological characteristics of blood, lymph and innervation of soft tissues of the face, head, neck. Effect of massage on the human body massages. Basic and advanced massage techniques. Features execution of classical beauty massage maxillofacial area in conjunction with special exercises physiotherapist (LH) for patients with dental profile. Evaluating the effectiveness of massage courses.

#### Theme 4. Physical rehabilitation in chronic inflammatory processes in the maxillofacial area.

Clinical and physiological study the use of RF in periodontal diseases, inflammatory processes of the maxillofacial area. Indications and contraindications for appointment of DF. Methodological approaches and characteristics of exercise with periodontitis, parodontopatiyah, surgical treatment of inflammatory processes (abscesses, abscesses), maxillofacial area. Features of massage techniques (digital, hardware) and self-massage gums. Motor mode patients use exercise periods. Evaluating the effectiveness of the use of FR.

## Theme 5. Physical Rehabilitation at kinks jaws and bones of the facial skeleton. Physical rehabilitation in reconstructive and plastic surgery in the maxillofacial area.

Clinical and physiological study the use of RF lesions in the maxillofacial area: kinks jaws and bones of the facial skeleton. Clinical and physiological study the use of exercise therapy, indications and contraindications for exercise purpose. Key features of the methodology and approaches of TE at kinks jaws and bones of the facial skeleton, depending on the method of fixation of bone fragments. Exercise period of application, their task. Profiles motor activity of patients with stages FR. Features of the application of mechanical therapy and massage. Evaluating the effectiveness of the use of FR. Clinical and physiological study the use of RF in reconstructive and plastic surgery in the maxillofacial area. Indications and contraindications for appointment of exercise. Methodological approaches and characteristics of exercise in reconstructive and plastic surgery in the maxillofacial area about scarring after injuries of soft tissues, burns, removal of tumors. Exercise period of application, their task. Profiles motor activity of patients with stages FR. Features of the use of FR.

### Theme 6. Physical rehabilitation in diseases and contractures TMJ. Physical Rehabilitation in neuritis facial and trigeminal nerves.

Clinical and physiological study the use of RF in diseases and contractures temporal-mandibular joint. Clinical and physiological study application of exercise. Indications and contraindications for exercise purpose. Basic approaches and methods of exercise features in diseases and contractures temporalmandibular joint. Motor mode patients. Exercise period of application, their task. Profiles motor activity of patients with stages FR. Features of the application of mechanical therapy and massage. Evaluating the effectiveness of the use of FR. Clinical and physiological study the use of RF with neuritis of the facial and trigeminal nerves. Clinical and physiological study the use of exercise. Indications and contraindications for exercise purpose. Key features of the methodology and approach of exercise therapy for functional disorders of the teeth-jaw system due to neuritis of the facial or trigeminal nerves. Exercise period of application, their task. Profiles motor activity of patients with stages FR. Features mechanical therapy electrical stimulation, mechanical therapy and massage in complex restorative treatment. Evaluating the effectiveness of the use of FR.

## Theme 7. Physical therapy in congenital anomalies development of the jaws and malocclusion in children.

Clinical and physiological study the use of RF in congenital anomalies of development and malocclusion in children. Indications and contraindications for appointment of DF. Methodological approaches and characteristics of exercise during reconstructive operations on cleft lip, hard and soft palate, with functional disorders and abnormalities of occlusion in children. Period of application of TE in pediatric dentistry, their task. Driving mode. Features of therapeutic massage. Evaluating the effectiveness of the use of FR.

### Theme 8. Application of Physical Rehabilitation for the prevention and correction of professional diseases in dentists.

Clinical and physiological study the use of RF for the prevention and treatment of occupational diseases dentist. The impact of professional activity on the physical condition of a dentist. The value of choosing the optimal working position and its changes in the process for the prevention of occupational diseases dentist. Special exercises for the prevention and treatment of occupational pathology in dentists: diseases of musculoskeletal system (disorders of posture, scoliosis, osteochondrosis); Varicose veins and strain of view; Diseases of the circulatory system, respiratory system, and other diseases. Rational planning of work, recreation, construction job. Application fizkultpauz, industrial and medical gymnastics in the performance of individual recreation and wellness programs physical activity. Features hardening dentist.

### **TEST CREDIT STRUCTURE - Module "Physical rehabilitation, sports medicine»**

N⁰	Торіс	Lecti	Practice	IS W	Individual work
		on			WULK
1.	Complex medical examination during exercise.	2	2	10	
	Research and assessment of physical				
	development. Research and assessment of				
	functional capacity of the organism. Medical				
	conclusion.				
2.	Research and assessment functional state of the	-	2	-	
	dento-alveolar system in the dental clinic.				
3.	General principles of the use of physical	2	2	-	
	rehabilitation in patients with dental profile.				
	Specifics the application of the therapeutic				
	massage in dentistry.				
4.	Physical rehabilitation in purulent-inflammatory	-	2	-	
	processes in the maxillofacial area.				
5.	Physical rehabilitation in fractures of jaws and	-	2	-	
	facial bones the skeleton. Physical rehabilitation				
	in reconstructive and plastic surgery in the				
	maxillofacial area.				
6.	Physical rehabilitation in diseases and	-	2	-	
	contractures temporo-mandibular joints. Physical				
	rehabilitation in neuritis of the facial and				
	trigeminal nerve.				
7.	Physical rehabilitation for violations of congenital	-	2		
	anomalies of bite and jaws development in				
	children.				
8.	Use of physical rehabilitation for the prevention	-	2		
	and treatment of occupational diseases in dentists.		_		
	TOTAL HOURS – 30 / 1 credits ECTS	4	16	10	
Final	control module "Physical rehabilitation, sports n	redicine»		-•	Passed

Thematic plan of practical employments from sporting medicine for the English medium students course of dentistry faculty

N⁰	Торіс	Hours
	Semantic module 1. Sports Medicine	
1.	Complex medical examination during exercise. Research and assessment of physical development. Research and assessment of functional capacity of the organism. Medical conclusion.	2
2.	Research and assessment of functional state of the dento-alveolar system in the dental clinic.	2
3.	General principles of the use of physical rehabilitation in patients with dental profile.	2
4.	Physical rehabilitation in purulent-inflammatory processes in the maxillofacial area.	2
5.	Physical rehabilitation in fractures of jaws and facial bones the skeleton. Physical rehabilitation in reconstructive and plastic surgery in the maxillofacial area.	2
6.	Physical rehabilitation in diseases and contractures temporo-mandibular joints. Physical rehabilitation in neuritis of the facial and rtigeminal nerve.	2
7.	Physical rehabilitation for violations of congenital anomalies of bite and of jaws development in children.	2
8.	Use of physical rehabilitation for the prevention and treatment of occupational diseases in dentists.	2
J	TOTAL HOURS:	16

### Thematic plan of independent work (ISW)

### **III year students of Faculty of Dentistry**

### "Physical rehabilitation and sports medicine"

N⁰	Topic of ISW	Hours
1.	Preparation for practice; Science and instructional materials; formation of practical skills.	6
2.	Writing drug-control card (form $N_{0}$ 061 / o) cards and patient being treated surgical stomatology department, in the office or exercise rehabilitation center (the form $N_{0}$ 42 / o).	1 4
ΓΟΤΑ	L HOURS:	10

# Thematic plan of lections from sporting medicine for the English medium students course of dentistry faculty

N⁰	Торіс	Hours
1.	Complex medical examination during exercise. Research and assessment of physical	2
	development. Research and assessment of functional capacity of the organism. Medical conclusion.	
2.	General principles of the use of physical rehabilitation in patients with dental profile. Specifics the applications of the therapeutic massage in dentistry.	2
	TOTAL HOURS:	4

### 4. Distribution points that get students

Current control is performed during the training sessions and aims at checking mastering educational material. The form of the current control during the classes defined working curriculum subjects.

Evaluation of current educational activity. In evaluating the mastering of each topic for current educational activity the student score for the 4-point scale on the basis of approved evaluation criteria for the relevant discipline. This takes into account all types of work, provided the curriculum. The student must obtain an assessment of each topic. Forms assessment of current educational activity should be standardized and include control of theoretical and practical training. Exhibited the traditional assessment scale are converted into points.

The maximum number of points that a student can collect for current educational activity for credit discipline "Physical Rehabilitation and Sports Medicine" is 200 points.

The minimum number of points that a student must collect for current educational activity for enrollment courses is 120 points.

Calculating the number of points is based on student evaluations received by traditional scale while learning subjects during the semester, by calculating the arithmetic (SA), rounded to two decimal places. The resulting value is converted into points by multi-scale as follows:

#### X= CA x 200 / 5

For convenience, a table conversion 200 - point scale:

Table 1

# Conversion of the average score for current activity in multimark scale for courses, culminating her credits (differentiated credit)

4-point scale	200- point scale	4-point scale	200- point scale	4-point scale	200- point scale	4-point scale	200- point scale
5	200	4.45	178	3.92	157	3.37	135
4.97	199	4.42	177	3.89	156	3.35	134
4.95	198	4.4	176	3.87	155	3.32	133
4.92	197	4.37	175	3.84	154	3.3	132
4.9	196	4.35	174	3.82	153	3.27	131
4.87	195	4.32	173	3.79	152	3.25	130
4.85	194	4.3	172	3.77	151	3.22	129
4.82	193	4.27	171	3.74	150	3.2	128
4.8	192	4.24	170	3.72	149	3.17	127
4.77	191	4.22	169	3.7	148	3.15	126
4.75	190	4.19	168	3.67	147	3.12	125
4.72	189	4.17	167	3.65	146	3.1	124
4.7	188	4.14	166	3.62	145	3.07	123

4.67	187	4.12	165	3.57	143	3.02	121
4.65	186	4.09	164	3.55	142	3	120
4.62	185	4.07	163	3.52	141	less 3	not enough
4.6	184	4.04	162	3.5	140		
4.57	183	4.02	161	3.47	139		
4.52	181	3.99	160	3.45	138		
4.5	180	3.97	159	3.42	137		
4.47	179	3.94	158	3.4	136		

Independent work of students is evaluated during the current control of theme on the appropriate lesson. Mastering of themes which dart out only on independent work is controlled only at the final control.

Final control is carried out to assess learning outcomes at a particular educational qualification level and its individual stages completed national scale and scale ECTS. Final control includes control and certification semester student. Semester control is carried out in the form of offset (differentiated credit) in the amount of educational material defined work program and in the terms established working curriculum, individual curriculum the student.

Semester differentiated offset - a form of final control, which is to assess the mastering of educational material exclusively on the basis of the performance of all types of educational works provided work study program. Semester (differentiated) test results exhibited by current control.

#### 5. Determination of the number of points that a student collected from discipline

Evaluation of discipline, a form of final control which is differentiated credit is based on the current training and calculated in points, according to Table 1.

Evaluation of discipline, a form of which is the final control test is based on current educational activities and expressed dvobalnoyu scale "Passed" or "not passed". To enroll a student must obtain for current learning activity score of at least 60% of the maximum amount of points in the discipline (120 points).

Points Converted regardless of discipline both in scale ECTS, and a 4-point scale.

Score scale ECTS 4-point scale not converted and vice versa.

Scores students studying for another degree, to the number of points gained in the discipline ranked on a scale ECTS as follows:

Estimate ECTS	Statistical index
A	Best 10% of students
В	Next 25% of students
С	Next 30 % of students
D	Next 25% of students
Е	Last 10% of students

Scores of discipline for students who successfully completed the program, converted into traditional 4-point scale by absolute criteria, which are listed in the table below:

Table 3

Table 2

Points of discipline	Estimate a 4-point scale
From 170 to 200 points	5

Fromд 140 to 169 балів	4
From 139 points to the minimum number of points	3
that a student must score	
Below the minimum number of points that a student	2
must score	

### REFERENCES

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### **Review Questions**

1. Determination of physical rehabilitation and sports medicine as a clinical discipline, its purpose and meaning in modern medical practice.

2. Medical control during exercise, the main sections of complex medical examination.

3. Methods and assessment of physical development of man.

4. Methods of functional state of the body with functional tests, functional tests types, the main task of the functional review.

5. Functional tests of breath and with a change in body position in space (orthostatic, klinostatychna), methods of their implementation and evaluation.

6. Functional tests with a standard physical activity (20 squats for 30 seconds), and methods of evaluation.

7. Types of reactions of the circulatory system to exercise, their characteristics and evaluation of the functional state of the circulatory system.

8. Analysis of complex medical examination, medical report.

9. Evaluation of tolerance to physical activity and different degrees of fatigue during exercise.

10. prepathological and pathological conditions arising from the inadequate exercise, the means of prevention and first aid.

11. The scheme of examination of the functional state of muscles and soft tissues located in maxillofacial region. Diagnostic exercise and test systems for the detection of the degree of functional disorders of the teeth-jaw system.

12. Evaluation of contractile ability of the circular muscle of the eye, the circular muscle of the mouth, the muscles of the tongue, chewing muscles, muscles palate-pharyngeal ring and neck.

13. Functional diagnostics of the tooth-jaw system with special chewing samples (for Rubynow).

14. Functional diagnostics of tooth-jaw system using instrumental methods: hnatodynamometry, miotonometriy, electromyography mastikatsyohrafii, measuring lung capacity.

15. Determination of physical rehabilitation (PR), its fixed assets, general principles and stages.

16. Therapeutic exercise (gymnastics) as the main method of rehabilitation, its characteristics and methodological principles.

17. Basic and advanced exercise equipment, forms of exercise, their characteristics.

18. The exercise period of application and modes of physical activity dental patients considering stages of rehabilitation.

19. Physiological mechanisms of therapeutic action of exercise, classification exercise, used during exercise.

20. The anatomic and physiological features of the temporomandibular joint and muscle located in maxillofacial region (facial, masticatory, tongue, palate-pharyngeal muscle ring neck) to consider during exercise sessions.

21. Classification of special exercises for dental patients.

- 22. Indications of PR tools in dental clinic.
- 23. Contraindications to exercise appointment dental patients.
- 24. Basic principles and criteria for the selection of dosage of exercise during physical rehabilitation.

25. Accounting effectiveness of exercise therapy and physical rehabilitation course.

26. methodical application features exercise in treatment of dental patients at various stages of rehabilitation.

27. Making appointments with the exercise of the medical records.

28. Features charting procedures and sets of exercises therapeutic exercises (LH) and self-study for dental patients.

29. Description of breathing exercises, the concept of "sound" gymnastics.

30. Features of mechanical therapy in the treatment of dental patients.

31. The mechanisms of therapeutic effects of massage on the basis of anatomical and physiological characteristics of the soft tissues of the face.

32. Indications and contraindications for the appointment of massage therapy to patients with dental diseases.

33. The main massage techniques and physiological mechanisms of therapeutic effects of massage on the patient.

34. Features of FR in inflammatory processes in maxillofacial area: tasks, tools and forms of exercise in the early postoperative period after cellulitis or abscess incision in the maxillofacial region, the use of special exercises.

35. Features of FR in periodontal disease: exercise techniques, massage (finger and hardware) and self-massage gums.

36. Features of FR in open and closed fractures of the jaw: the basic requirements for the use of exercise methods, objectives and means to exercise in the first, second and third periods of rehabilitation, depending on the method of fixation of bone fragments.

37. Features of special exercises conservative and surgical treatment of fractures of jaws.

38. Features FY burns and soft tissue injuries maxillofacial area.

39. Features FY diseases and contracture TMJ: indications for exercise facilities, special exercises in the first and second periods of exercise classes after surgical treatment of contractures temporomandibular joint.

40. Features in FR neuritis of the facial nerve, tasks, exercise equipment and special exercises at different periods of rehabilitation.

41. The task at exercise facial nerve dysfunction caused by surgical treatment of parotid salivary gland.

42. Features in FR neuritis trigeminal nerve: tasks, tools gymnastics and special exercises at different periods of rehabilitation.

43. Features of FR at reconstructive operations on injuries of soft tissues and bone of the facial skeleton: gymnastics teaching methods in the postoperative period in surgical treatment of defects and deformations of the soft tissues of the face.

44. Features of methods of medical gymnastics and massage in facial plastic surgery.

45. Features of methods of medical gymnastics and massage after removal of tumors in the maxillofacial region.

46. Features of FR at reconstructive operations on cleft lip and soft palate, task forms and basic requirements for teaching methods exercise in pre- and postoperative periods.

47. Sound gymnastics and special exercises that have focused on the functional effect defective in children with congenital cleft upper lip and hard and soft palate.

48. Features FR anomalies and functional disorders of the teeth-jaw system in children: the basic requirements for methods of exercise classes and special exercises for independent exercise of anomalies of bite.

49. Features morning hygienic techniques, production and preventive gymnastics for dentists, recreational and wellness movement modes.

50. Features techniques in therapeutic exercises manifestationsoccupational diseases in dentists.