Federal state Autonomous educational institution of higher education

**SECHENOV FIRST MOSCOW STATE MEDICAL**

**UNIVERSITY (Sechenov University)**

ABSTRACT OF PROGRAM DISCIPLINE

«Exercise therapy»

(name of discipline)

The direction of education (specialty) 31.05.01 General medicine

The complexity of the discipline \_\_\_\_\_\_\_\_\_\_2\_\_\_\_\_\_\_ credits

THE PURPOSE OF LEARNING

The purpose of the discipline – the formation of students complex competencies associated with the ability to use the basic means of exercise therapy.

As a result of the development of the discipline the student must:

Students should know:

1. The main mechanisms of therapeutic action of exercise therapy

2. Classification of exercise of exercise therapy

3. Biochemical basis of motor activity of different intensity in normal and pathological conditions.

4. Physical development and ways of its definition.

5. Functional state, determination in the process of exercise therapy

6. Indications and contraindications to the appointment of exercise therapy

7. The use of various means of exercise therapy in the most common pathological conditions and injuries

8. Recommendations for those engaged in exercise therapy to choose the optimal mode of motor activity, depending on the morphological status (risk of injury forecast, characteristics of the musculoskeletal system, the harmony of the physical qualities of strength, speed and endurance).

9. Distribution on medical groups, terms of release from exercise therapy after various diseases.

Students should be able to:

1. To assess physical conditions and to appoint a mode of motions

2. Conduct functional tests with dosed physical activity and evaluate test results

3. Conduct a comprehensive assessment of physical condition, draw up a medical report and distribute it to medical groups

Students should possess:

1. Methods anthropometry: definition of the length and mass of body, circumference of thorax, vital capacity of lungs, and carpal dynamometry.

2. Methods of functional tests: test with 20 squats (Martine-Kushelevsky), physical performance (step test), test Rod, Genche test, orthostatic test.

**Place of development of discipline in the structure of the main educational program in the specialty**

Exercise therapy is an integral part of medical rehabilitation. According to the Federal law №323-FZ "On the basics of public health in the Russian Federation" medical rehabilitation is aimed at: full or partial restoration of the disturbed and (or) compensation for lost functions of the affected organ or body system, maintaining the functions of the body in the process of completion of an acute pathological process or exacerbation of chronic pathological process in the body, prevention, early diagnosis and correction of possible violations of the functions of damaged organs or body systems, prevent or reduce possible disability and improve quality of life.

Methods of rational use of means of exercise therapy are used to strengthen health and prevent diseases, improve volitional, psychophysical qualities of the person, physical performance, emotional stability; the most rational hygienic conditions of physical education; systems of medical control over the functional state of persons engaged in physical culture, as well as programs for functional recovery and rehabilitation.

Exercise therapy is engaged in the development of new diagnostic, preventive and curative-restorative technologies for the use of exercise in order to actively maintain and restore health under the influence of adverse environmental factors and activities.

**A place of learning**

The working program of the discipline at the choice of " Exercise therapy", contains a set of teaching materials that allow graduates in the specialty "Medicine" to master the discipline in the required amount. Discipline refers to the variable part of the block of disciplines and has a connection with other disciplines: Sports medicine, Medical rehabilitation.

**Structure and content of the discipline**

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| № | Section of the discipline (module) |
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| 1 | Exercise therapy for various diseases |
| 1.1 | Exercise therapy in diseases of the respiratory system (pneumonia, asthma). |
| 1.2 | Exercise therapy for cardiovascular diseases, myocardial infarction |
| 1.3 | Exercise therapy in endocrine diseases, obesity, diabetes. |
| 1.4 | Exercise therapy in diseases of the digestive system |
| 1.5 | Exercise therapy in diseases of the Central and peripheral nervous system |
| 1.6 | Exercise therapy in diseases of the musculoskeletal system |
| 2 | Forms of exercise therapy |
| 2.1 | Therapeutic gymnastics |
| 2.2 | Dosed walking |
| 2.3 | Sedentary games |
| 2.4 | Path |
| 3 | Exercise therapy |
| 3.1 | Physical exercise |
| 3.2 | Massage |
| 3.3 | Natural factors |
| 4 | Exercise therapy in childhood |
| 4.1 | Quenching |
| 4.2 | Massage |