

STATE ESTABLISHMENT 'DNIPROPETROVSK MEDICAL ACADEMY OF MINISTRY  
OF HEALTH OF UKRAINE'

Chair of physical rehabilitation, sport medicine and valeology

**«Is confirmed»**

At methodical meeting of physical  
rehabilitation, sports medicine and  
valeology chair

\_\_\_\_\_ (the chair name)

**The head of the chair**

\_\_\_\_\_ Nekhanevich O. B.

« \_\_\_\_ » \_\_\_\_\_ 20 \_\_\_\_ p.

**METHODICAL INSTRUCTIONS**

TO STUDENTS OF  IV  course  medical  faculty

FOR INDEPENDENT WORK

BY PREPARATION FOR THE PRACTICAL TRAINING

**MODULE № 1: PHYSICAL REHABILITATION, SPORT MEDICINE**

**Thematic module 1: Physical rehabilitation**

***Theme № 8: Physical rehabilitation in internal diseases  
treatment.***

## MODULE I. PHYSICAL REHABILITATION, SPORT MEDICINE

### Thematic module 2: Physical rehabilitation

#### Theme № 8: Physical rehabilitation in internal diseases treatment.

##### 1. Theme urgency:

Acute and chronic heart dysfunction cause fatal work and social disability. That is why rehabilitation in internal disease is necessary. Heart-vascular diseases treatment includes drug therapy, keeping a diet, psychotherapy, moving activity mood recovery and of course physical rehabilitation. The premature moving activity in cardiovascular patients improves co-lateral circulation, enhances functional state and mood, shortens the time of hospitalization and reduces lots of complications.

##### 2. Theme duration: 4 hours.

##### 3. The educational aim:

###### Concrete aims:

###### *To know:*

- Rehabilitation phases in heart attack;
- Moving moods in heart attack;
- Rehabilitation programs in heart attack;
- Forms of physical rehabilitation in heart attack;
- Indications and contraindications to physical rehabilitation in patients with heart attack.

###### *To be able:*

- To choose the moving activity mood;
- To compose the rehabilitation program;
- To indicate forms and methods of rehabilitation;
- Change patient's activity mood.

###### *To develop practical skills:*

- Estimate the moving mood according to complications;
- To estimate physical rehabilitation efficiency;
- Improve patient's moving activity;
- To choose the moving mood in case of complications.
- To evaluate the level of physical exertion.

##### 4. Basic knowledge, skills (intradisciplinary integration) – (table 4.1):

Table 4.1

The names of previous disciplines	Practical skills
Normal physiology	To be able to registrate main physiologic features, to know the loading test methodic.
Pathologic physiology	To define the development process of prepathologic and pathologic organic changes, non-adequate physical exertion impact
Propedeutics of internal disease	To take blood pressure, heart rate, describe pulses. To be able to take electrocardiography, to hold the loading test. To evaluate the medical data.
Pediatric Propedeutics	To know the specifics of physical development in children according to different age.

## 5. Students advice.

### 5.1 Theoretic questions:

1. Indications and contraindications for therapeutic massage appointment.
2. Accounting effectiveness rate of physical rehabilitation.
3. Indications and contraindications for the purpose of physical rehabilitation in diseases of the circulatory system.
4. Assessment of motor capabilities and identify functional class in patients with coronary artery disease. Select the amount of motor activity, forms and methods of exercise therapy in patients with coronary artery disease at different stages of physical rehabilitation.
5. Objectives and methodology FR features in acute myocardial infarction with a list of specific exercises.
6. Objectives and features techniques FY ischemic heart disease to the list of special exercises.
7. Objectives and features techniques FY hypertension, hypotension and autonomic dysfunction with a list of specific exercises.
8. Indications and contraindications for the purpose of physical rehabilitation in bronchopulmonary pathology.
9. Objectives and features techniques FY acute bronchitis, pneumonia and pleurisy with a list of specific exercises.
10. Objectives and methodology FR features in chronic bronchitis, asthma, emphysema, bronchiectasis, pulmonary tuberculosis with a list of specific exercises.
11. Indications and contraindications for the purpose of DF in diseases of the digestive system.
12. Objectives and methods FR features of chronic gastritis, gastric ulcers and duodenal ulcers, diseases of biliary tract and intestines, splanchnoptosis with a list of specific exercises.

### 5.2 Practical part:

### 5.4. Theme content:

### 5.3 Self-control materials:

#### 1) *self-control questions:*

1. Indications and contraindications for therapeutic massage appointment.
2. Accounting effectiveness rate of physical rehabilitation.
3. Indications and contraindications for the purpose of physical rehabilitation in diseases of the circulatory system.
4. Assessment of motor capabilities and identify functional class in patients with coronary artery disease. Select the amount of motor activity, forms and methods of exercise therapy in patients with coronary artery disease at different stages of physical rehabilitation.
5. Objectives and methodology FR features in acute myocardial infarction with a list of specific exercises.
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7. Objectives and features techniques FY hypertension, hypotension and autonomic dysfunction with a list of specific exercises.
8. Indications and contraindications for the purpose of physical rehabilitation in bronchopulmonary pathology.
9. Objectives and features techniques FY acute bronchitis, pneumonia and pleurisy with a list of specific exercises.
10. Objectives and methodology FR features in chronic bronchitis, asthma, emphysema, bronchiectasis, pulmonary tuberculosis with a list of specific exercises.
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12. Objectives and methods FR features of chronic gastritis, gastric ulcers and duodenal ulcers, diseases of biliary tract and intestines, splanchnoptosis with a list of specific exercises.

#### 2) *Tests:*

- 1) . Class of myocardial infarction severity at the hospital stage of rehabilitation depends on:

- A. Depth and extensiveness of damage, complications, coronary insufficiency,
- B. Depth and extensiveness of damage, age of the patient, coronary insufficiency,
- C. Depth and extensiveness of damage, concomitant disease, age of a patient,
- D. Complications of coronary insufficiency, age of a patient, concomitant diseases,
- E. Subjective condition of a patient.

2. Patient I., 56 years old, arrived at a cardiologic department of a hospital with diagnosis coronary artery disease, acute not Q myocardial infarction of left ventricle. During examination I class of severity was diagnosed and 3-week program of rehabilitation was prescribed. When is the turn to the side prescribed?

- A. On the first day,
- B. On the first-second day,
- C. On the third day,
- D. Individually,
- E. On the second-third day.

**literature:**

***the main***

1. Remedial gymnastics and sport medicine: textbook/ Klapchuk V.V., Dsiak G.V., Mutavov V.I.; red. Klapchuk V.V., Dsiak G.V. – K.: Zdorov`e, 1995. – 312 p.
2. Remedial gymnastics and sport medicine: Tests for knowlage control in students of medical and stomatological faculties of universitie IY level of acreditation / Abramov B.B., Klapchuk B.B., Magl`ovanuy A.V., Smirnova O.L.,; red. Ph. Klapchuk V.V., Ph. Magl`ovanuy A.V. – Dnipropetrovsk: medical academy, 2006. – 124 p.
3. Remedial gymnastics and sport medicine (Lectons) / Abramov B.B., Klapchuk V.V Smirnova O.L.,; red. Ph. Klapchuk V.V.,– Dnipropetrovsk: medical academy, 2006. – 179 p
4. Medical control in physical training and sports: medical recommendations for students of medical and stomatological faculties of universitie IY level of acreditation / V.S. Sokolovskyy, N.A. Romanova, V.S. Vladova, I.I. Bondarev. – Odessa: osmu, 2001. – 93p.
5. Sport medicine. textbook / Makarova G.A. – M.: Soviet sport, 2003. – 480 p.
6. Textbook «Remedial gymnastics and medical control» red. Epifanova and G. L. Apanasenko – p.14-16, 25-37.
7. Functional tests in sport medicine (methodical recomendations) /Mychaluk E. L. –Kyiv. –2005. – 37p.

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The head of the cathedra, Phd. \_\_\_\_\_ O.B.Nekhanevich

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