

EXPLANATORY NOTE

Outpatient therapy – the discipline, which contains systematized scientific knowledge and techniques for outpatient therapeutic aspects of the disease (diagnosis, treatment, medical tactics, medical and social examination, active counseling, rehabilitation) and primary prophylaxis of diseases.

The basis of the work program of the discipline "Outpatient treatment" on the following regulations:

- Educational standard in the specialty medical education first stage 1-79 January 1 Medicine (RB 1-79 01 OS 01-2008), approved and promulgated by Decree of the Ministry of Education of the Republic of Belarus of 02.05.2008 № 40;

- A standard curriculum for higher medical education in the specialty of the first stage 1-79 01 01 "Medicine" (registration № L 79-005/tip.) Approved by the Ministry of Education, the Republic of Belarus 16.04.2008

Feature of the new work program is the formulation of problems of learning and teaching of discipline, aimed at developing the students' academic, social, personal and professional competence.

The goal of teaching and learning of the discipline "Outpatient therapy" is to systematize and consolidate knowledge of internal medicine, ambulatory aspects of medical practice and the skills available to use them in practice of general medicine.

Tasks of the subjects studying are the acquisition by students of academic competence, which is based on the ability to independent searching of training and information resources, acquiring of methods to finding and understanding of knowledge:

- principles of organization of outpatient therapeutic care for the urban and rural population and the amount of work of the district general physician;
- advanced features of outpatient diagnosis of diseases often encountered in district general physician practice;
- differential diagnosis of the most common syndromes in the therapeutic practice at preadmission stage;
- issues of medical tactics (the indications for hospitalization or day-care department, referral to specialists of narrow profile for consultation, the special methods of diagnosis);
- issues of modern therapeutic treatment of patients with diseases in polyclinic, including those involving other professionals;
- issues of pre-hospital emergency medical care to patients;
- the principles of primary and secondary prevention (including active counseling), medico-social expertise and rehabilitation of major therapeutic diseases.

Tasks of teaching of subject consists in the formation of social and personal and professional competence, which is the basis of the knowledge and application of:

– research methods and ways to treat patients in the outpatient environment while respecting the norms of medical ethics and deontology, contributing to the formation of the clinical thinking;

– syndrome diagnosis, differential diagnosis, principles of treatment in an outpatient setting and prevention of diseases of internal organs.

The structure of the work program of the discipline "Outpatient treatment" includes six sections.

Requirements for the preparation of students at the end of the study subjects.

The student should know:

- Principles of outpatient medical care in the Republic of Belarus;
- The principles of organization of the urban health centers and district general physician;
- The content of the rights and duties of district general physician;
- The principles of interaction and continuity in the work of the district general physician, medical specialists of "narrow" profile of health care institutions;
- Procedure and indications for hospitalization of patients in the hospital;
- Indications to the direction to the Department of day care (DDC) and the organization of outpatient hospital at home;
- The types of temporary disability;
- Rules for the sheet and certificate of temporary disability delivering, renewal in case of diseases and other types of temporary disability;
- Functions of sheet of temporary disability;
- Structure and function of medical-advisory commission (MAC);
- Structure, types and basic functions of the medical rehabilitation expert commission (MREC);
- Criteria for determining disability groups;
- Indications for referral to the MREC, terms of re-examination;
- Types of medical rehabilitation;
- The principles of rehabilitation of sick and disabled persons on an outpatient basis;
- Methods of outpatient rehabilitation treatment in a day hospital, hospital at home;
- The main directions of prevention work of district general physician;
- Types of preventive check-ups;
- The concept of the active counseling;
- Groups of active counseling;
- Criteria for assessing the quality and effectiveness of the active counseling;
- General indications, contraindications, and the order of referral to a treatment at health resort;
- Sanatoriums and resorts in the Republic of Belarus;
- A research program for a particular patient's disease and therapeutic mandatory minimum of laboratory and instrumental investigations;

- The basic principles of therapy for uncomplicated and complicated disease course of therapeutic profile and of concomitant diseases on outpatient stage;
- Criteria for acute, recovery and remission in major therapeutic diseases;
- Diagnosis, tactics, and emergency care in hypertensive crisis at preadmission stage;
- Diagnosis, tactics, and the provision of emergency care in cardiac asthma and pulmonary edema at preadmission stage;
- Diagnosis, tactics, and the provision of emergency care in cardiogenic shock at preadmission stage;
- Diagnosis, tactics, and emergency care in anginal attack and acute coronary syndrome at preadmission stage;
- Diagnosis, tactics, and emergency care in paroxysmal arrhythmias at preadmission stage;
- Diagnosis, tactics, and emergency care at in a attack of asthma and status asthmaticus at preadmission stage;
- Diagnosis, tactics, and the provision of emergency care in gastro-intestinal bleeding at preadmission stage.

The student should be able to:

- perform quality interview and physical examination of a patient, to identify objective symptoms of disease in a limited time;
- Make a rational plan for an examination of a patient diagnosis, using necessary minimum of laboratory and instrumental investigations;
- Interpret the results of laboratory tests (blood, urine, sputum, gastric juice, bile, feces) and instrumental methods of diagnostics (radiology, endoscopy, ultrasound, ECG, etc.);
- To formulate a diagnosis of the disease according to current therapeutic classifications;
- Make a rational treatment plan, rehabilitation and prevention of major therapeutic disease;
- Draw up basic medical documentation:
 - Form 025/u-07 - outpatient medical records;
 - Form 025-2 / y - a statistical card;
 - Form 131/u-D - Card record of active counseling;
 - Form 058 / y - emergency notification of infectious diseases, food, occupational poisoning, unusual reactions to the vaccine;
 - Form 2-mse/u-09 - direction to MREC;
 - Form 070 / y - certificate to get sanatorium voucher;
 - Form 072 / y - health resort chart;
 - Form 1 zdr/u-10 - medical certificate of health;
- Prescribe basic medications used in outpatient settings;

- To determine the indications for hospital treatment of patients in hospitals and polyclinic's DDC and to implement hospitalization;
- Determine the types and causes of temporary disability of therapeutic patients, the criteria for disability restoration;
- To issue documents certifying temporary disability under the current "Instructions on the procedure for issuing sick list and certificates of disability" and "Instructions for completing sick list, and certificates of temporary disability";
- Detect the presence of symptoms in patients with permanent disability (invalidity), to appoint the necessary research and consultation for referral to MREC;
- To carry out medical examinations of the population, to determine groups of active counseling and implement appropriate treatment and preventive work with patients in each group;
- Make a plan of diagnostic and therapeutic interventions for groups of active counseling of therapeutic patients, evaluate the effectiveness and quality of their medical examination;
- taking swabs from throat and nose for bacteriological examination;
- To carry out anti-epidemic and preventive measures in the infectious focus;
- To carry out various forms of health education among the population;
- To provide emergency care on an outpatient basis under the following conditions:
 - hypertensive crisis;
 - attack of cardiac asthma and pulmonary edema;
 - cardiogenic shock;
 - anginal attack and acute coronary syndrome;
 - paroxysmal arrhythmias (supraventricular and ventricular tachycardia, atrial fibrillation);
 - gastrointestinal bleeding.

Specificity of training for doctors on the subject "Outpatient treatment" on a specialty 1-79 01 01 "Medicine" is in compliance with the continuity of learning. Mastering all aspects of district general physician work should be done with the 4th year, continue on 5th and end on the 6th course.

At the same time the students get acquainted with the practical organization of outpatient therapeutic care to the population, its diagnostic and other features.

On the fifth course continues teaching students of polyclinic medical aspects of diagnosis and therapeutic tactics in a number of diseases (as planned), with obligatory clinical analysis of patients with the teacher and the clinical decision of situational problems. The main attention is paid to the early symptoms and syndromes, their importance in the diagnosis, features patients' examination at outpatient basis, interpretation of research results, the formulation of the diagnosis,

treatment characteristics, active counseling of patients and the medical and social expertise.

Characteristics of the recommended methods. When training is used as traditional methods of teaching the subject: lectures, practical classes, and elements of the controlled independent work of students.

Independent work is organized as a student in the practice sessions, and during independent extracurricular work with use of the following forms:

- Conduct admission of ambulatory therapeutic patient independently;
- Clinical analysis of patients under the supervision of the teacher;
- Preparation and execution of the training of patient's medical cards;
- The decision of situational problems;
- A independent planning for laboratory and instrumental investigations of patients and therapeutic procedures on an outpatient basis;
- Preparation of abstracts for learning, consolidating and deepening the knowledge of each section of discipline that involves collecting, processing, analysis and systematization of scientific information;
- Participation in student research and educational research: in-depth study of literature, the achievements of foreign science and participation in research under the guidance of a teacher involved in the formation of the Bank of visual teaching aids and other forms of creativity;
- Make presentations in study groups and student conferences.
- The use of distance learning

Training is conducted using traditional and modern teaching and information resources (computer presentation of lectures, visual materials on CD-and DVD-ROM, computer testing for all sections and topics demonstrate ECG), as well as online resources in the local high school computer network and Internet.

Practical training is provided by the participation of students in the clinical analyzes of patients in the rounds in the DDC, work at a reception with the district general physician, participation in the adaptation games and decision of situational clinical problems.

In practical classes students under the supervision of a teacher conducting a patient examination, trained up a rational plan for further research to establish the diagnosis and interpret the results, formulate a diagnosis of the disease according to current therapeutic classifications; make a rational plan of treatment, rehabilitation and prevention of major therapeutic diseases. Learn to properly execute the basic medical records, and documents certifying temporary disability and recipes. Learn the specifics of working with patients in an outpatient setting, learn about safe working conditions, international standards and ethics in research.

Monitoring of training of students, the quality of teaching is done by an oral interview and performs written tests tasks (prescriptions, hospital sheets, certificate to get sanatorium voucher, filling health resort charts and directions to the MREC) during the practical sessions. Current certification is carried out in the form of a computer test of students' knowledge.

Content of educational material

1. Differential diagnosis of internal diseases

1.1. Bronchial obstruction syndrome: differential diagnosis. Diagnosis and treatment of bronchial asthma and chronic obstructive pulmonary disease (COPD) in an outpatient setting, medical tactics, medical and social examination, active counseling, primary prevention. First aid for asthma attack and developing status asthmaticus.

The concept of bronchial obstructive syndrome, major diseases attended with this syndrome. Diagnostic algorithm for finding bronchial obstructive syndrome.

Classification of asthma and COPD. Plan of study patients with asthma and COPD in an outpatient setting. Indications for hospitalization. General principles of treatment of asthma and COPD in an outpatient setting, medical and social examination (terms of temporary disability, indications to rational employment of the patients, for sent to MREC), active counseling.

Prevention of asthma and COPD.

Emergency outpatient care during an onset of developing asthma and status asthmaticus.

1.2. The differential diagnosis of chest pain. Noncoronary heart diseases: diagnosis , treatment guidelines, medical tactics, medical and social examination, active counseling, prevention at preadmission stage

Major diseases and pathological conditions, manifested by chest pain, similar to heart pain (cardialgia).

Features of pain in diseases of the heart (ischemic heart disease, dry pericarditis, myocardial dystrophy, myocarditis, dilated and hypertrophic cardiomyopathy), and somatoform autonomic nervous system dysfunction (neurocirculatory dystonia), mitral valve prolapse. The algorithm of the diagnostic search. Differential diagnosis.

Features of pain in the chest caused by diseases of the abdominal cavity, lung and pleura, peripheral nervous system and muscles of the shoulder girdle (intercostal neuralgia, osteochondrosis of the cervical-thoracic part of spine, herpes zoster). Differential diagnosis of diseases of the heart.

Noncoronary heart disease (myocarditis, pericarditis, myocardial dystrophy, acute rheumatic fever and chronic rheumatic heart disease): examination design of patients in a polyclinic, diagnostic criteria. Indications for hospitalization. General principles of treatment of patients with noncoronary heart disease in an outpatient setting. Medical and social assessment (grounds and terms of temporary disability,

indications for a rational employment of the patients sent to MREC), active counseling.

Primary and secondary prevention of noncoronary heart disease.

1.3. Articular syndrome: differential diagnosis. Diagnosis and treatment of inflammatory (rheumatoid arthritis, reactive arthritis) and degenerative (primary osteoarthritis) joint disease in the outpatient setting, medical tactics, medical and social examination, active counseling, primary prevention

Articular syndrome: the concept of arthritis, arthrosis, arthropathy. Methods for total physical and special studies of the joints and spine. The main diseases accompanied by articular syndrome. Algorithm of diagnostic searching in case of articular syndrome.

Rheumatoid arthritis: examination design, diagnostic criteria. Approach to the patient, indications for hospitalization, general principles for outpatient treatment, medical and social (grounds and terms of temporary disability, indications for a rational employment of the patients sent to MREC), active counseling.

Reactive arthritis: a definition, a plan of study, differential diagnosis, medical tactics, the general principles of treatment on an outpatient basis, medical and social examination, active counseling.

Primary osteoarthritis: diagnostic criteria, the plan of study of patients, medical tactics, treatment on an outpatient basis, medical and social assessment (grounds and terms of temporary disability, indications for a rational employment of the patients sent to MREC), active counseling.

Prevention of inflammatory joint disease and primary osteoarthritis.

1.4. Dyspeptic syndrome and abdominal pain: differential diagnosis and the tactics of the district general physician in the outpatient environment. Colon irritable syndrome: outpatient diagnosis, treatment and rehabilitation of patients. Acute abdomen, medical tactics

Dyspeptic symptoms as a collective term describing the motor dysfunction of various parts of the digestive tract: stomach, intestine, biliary tract infections (symptoms, pathogenesis). Terms of diseases associated with these symptoms, the plan of patient's study in an outpatient setting.

Causes and types of abdominal pain, and their pathogenesis. The concepts of acute and chronic abdominal pain, 'acute abdomen', the range of diseases, causing these kinds of pain.

Malabsorption, maldigestion and malnutrition: concept and pathogenesis. Differential diagnosis of lesions of the intestine level (thin intestine, bowel).

General principles of diagnosis and differential diagnosis of diseases associated with abdominal pain and dyspeptic syndrome.

Study design for suspected bowel disease. Colon irritable syndrome: diagnostic criteria, the general principles of treatment and rehabilitation, prevention.

Symptomatic treatment of dyspeptic syndrome (indications for prokinetic, spasmolytics, laxatives and antidiarrheals).

Emergency and medical tactics in an outpatient setting with the "acute abdomen" and acute abdominal pain.

1.5. The differential diagnosis of jaundice and hepatosplenomegaly. Diagnosis and treatment of liver diseases, gallbladder and bile ducts diseases in the outpatient setting, medical tactics, medical and social examination, active counseling, primary prevention. Emergency care in hepatic colic

Jaundice: definition, classification.

Hepatomegaly, splenomegaly, hypersplenism: definition, causes, diseases, accompanied by hepato-and / or splenomegaly, differential diagnosis.

Clinical and laboratory symptoms of liver damage (cytolysis, mesenchymal inflammation, cholestasis, hepatocellular insufficiency), the clinical significance.

Chronic hepatitis and cirrhosis: differential diagnosis of cirrhosis, chronic hepatitis and primary liver cancer. Plan of patient's study, the general principles of treatment on an outpatient basis, medical tactics, medical and social assessment (grounds and terms of temporary disability, indications for a rational employment of the patients sent to MREC), active counseling.

Chronic cholecystitis, gall bladder dysfunction, and dysfunction of Oddi's sphincter: a plan of study patients, the differential diagnosis. Outpatient treatment, indications for patient consultation with a surgeon, medical and social assessment (grounds and terms of temporary disability, indications for a rational employment of the patients sent to MREC), active counseling.

Prevention of diseases of the hepatobiliary system.

Emergency care in hepatic colic, medical tactics.

1.6. Urinary symptoms: differential diagnosis. Methods of diagnosis of renal disease in the outpatient setting. Treatment of chronic pyelonephritis, glomerulonephritis, and chronic renal failure in an outpatient setting, medical tactics, medical and social examination, active counseling, primary prevention. Emergency care for renal colic

The concept of the urinary syndrome and its features in glomerulonephritis, pyelonephritis, urolithiasis, urethritis, cystitis, bladder cancer, nephropathies.

Methods of diagnosis of renal disease in the outpatient setting. Diagnostic algorithm for searching in urinary syndrome.

Plan of patient's study with chronic pyelonephritis, chronic glomerulonephritis, chronic renal failure in an outpatient setting. Indications for hospitalization of patients. Approach to the patient with chronic renal failure.

General principles of treatment of patients with chronic pyelonephritis, chronic glomerulonephritis and chronic renal failure in an outpatient setting, medical and social assessment (grounds and terms of temporary disability, indications for a rational employment of the patients sent to MREC), active counseling.

Prevention of chronic pyelonephritis, chronic glomerulonephritis and chronic renal failure.

Renal colic: clinical, emergency outpatient care, medical tactics.

Main literature:

1. Harrison's Principles of Internal Medicine / editors: Antony S. Fauci – 2008.
2. Essentials of adult ambulatory care / Ed. L.M. Ruckler. – Baltimore: Williams and Wilkins, 1997.
3. General Propedeutics of Internal Diseases: lecture course/ VSMU, 2006.
4. Bushma K.M. Intensive Care Medicine: short textbook for English-speaking students – Grodno: GrSMU, 2010.