ANNOTATION

work program of the discipline

"Clinical pharmacology"

Speciality	05/31/01 General medicine
Number of credits	In accordance with the RUP
Interim certification form (test/test with assessment/exam)	test

1. The purpose of studying the discipline.

To train the student in the selection of effective, safe and affordable drugs for modern individualized pharmacotherapy using basic data on pharmacokinetics, pharmacodynamics, pharmacogenetics, interactions, adverse drug reactions, as well as the provisions of evidence-based medicine.

2. Briefcontent of the discipline.

1. General clinical pharmacology.

The main stages of the formation of clinical pharmacology into an independent medical discipline. The contribution of domestic scientists to the development and establishment of clinical pharmacology.

Clinical pharmacology: definition, subject and objectives; relationship with other disciplines. Main sections of clinical pharmacology.

Clinical pharmacokinetics. Basic questions of pharmacodynamics. Mechanisms of action, selectivity of drug action. Doses of drugs. Drug interactions. adverse reactions when using drugs. Routes of drug administration and their features. Clinical pharmacogenetics.

System of rational use of medicines in Russia. Federal and territorial lists of vital and essential medicines (VED). Formal lists of hospitals. Patient management protocols. Pharmacotherapy standards. Analogue replacement form.

2. Private clinical pharmacology.

Assessment of clinical effectiveness and safety of drugs. Types of research. Absolute risk. Relative risk. Case-control study. Cohort studies. Studying the frequency of drug use. Selection of dosage regimen in patients with insufficient liver and kidney function. Medicines that should be excluded or used with caution in liver disease. Medicines that should be avoided or used with caution in renal failure.

Stages of clinical trials of new drugs. Preclinical and clinical studies (pharmacological, pharmacokinetic and toxicological). Phases of clinical trials, principles of conducting clinical trials, selection of subjects,

endpoints and exposure parameters, typical clinical trial models. Ethical aspects of clinical research. Bioequivalence studies (principles of conduct and research methods). Generics.

Evidence-based medicine. Types of evidence. Systematic reviews and meta-analysis. Formal system. Methods for selecting medicines. Principles of constructing a formulary system.

Clinical pharmacoeconomics. Assessment of the economic effectiveness of medicines. Evaluation of treatment methods. Pharmacoepidemiological studies. Study of the effectiveness and safety of drugs. Studying the frequency of drug use.