

## **CLINICAL PHARMACOLOGY SYLLABUS**

Medicine 5<sup>th</sup> course

- 1.** Clinical Pharmacology - introduction, subject, aim and tasks. Evidence-based medicine and drug therapy, based on evidence.
- 2.** The role of Clinical Pharmacology in drug development. Clinical trials - phases, designs in clinical research.
- 3.** Clinical and pharmacological approaches for treatment with antimicrobial drugs.
- 4.** Clinical pharmacokinetics - absolute and relative bioavailability and their use in clinical practice. Therapeutic drug monitoring.
- 5.** Clinical and pharmacological approaches for treatment of bronchial asthma.
- 6.** Clinical pharmacokinetics – pharmacokinetic indices, clinical consequences for the efficacy of drug therapy. Regimens of drug dosage - clinical importance.
- 7.** Clinical and pharmacological approaches for treatment with antiulcer drugs.
- 8.** Clinical and pharmacological approaches for treatment with antianginal drugs.
- 9.** Food regimen and drug therapy. Changes in drug pharmacokinetics and pharmacodynamics in alcoholic patients and cigarette smokers.
- 10.** Clinical and pharmacological approaches for treatment of pain.
- 11.** Clinical and pharmacological approaches for treatment of insomnia.
- 12.** Changes in drug pharmacokinetics and pharmacodynamics in patients with liver and heart failure.
- 13.** Clinical chronopharmacology. Circadian rhythms in the functions of the human body and their role in rational pharmacotherapy.
- 14.** Clinical and pharmacological approaches for treatment of arterial hypertension.
- 15.** Clinical pharmacogenetics - subject, aim, tasks, clinical importance.
- 16.** Clinical and pharmacological approaches for treatment of chronic heart failure.
- 17.** Pharmacotherapy in pregnancy and breast feeding.
- 18.** Drug therapy in the elderly. Changes in drug pharmacokinetics and pharmacodynamics in patients with thyroid gland dysfunction.
- 19.** Changes in drug pharmacokinetics and pharmacodynamics in patients with renal failure.
- 20.** Drug interactions – clinical importance.
- 21.** Drug epidemiology and drug safety. Adverse drug reactions (ADRs). Classification, registration, clinical detection of ADRs.
- 22.** Pharmacoeconomics.

## **Bibliography**

1. Basic and Clinical Pharmacology with Toxicology. Eds. N. Boiadjieva, Sofia, 2015.
2. Basic and Clinical Pharmacology 12<sup>th</sup> edition, (LANGE Basic Science) by Katzung, Masters and Trevor, 2011.
3. Introduction to Clinical Pharmacology, 6<sup>th</sup> edition, by Marilyn W. Edmunds, 2009.
4. Principles of Clinical Pharmacology, 2<sup>nd</sup> edition, by Atkinson, Abernety, Daniels, Dedrick and Markey, Academic Press, 2011.
5. Goodman and Gilman's The Pharmacological Basis of Therapeutics, 12<sup>th</sup> edition, by Brunton, Chabner and Knollman, 2010.
6. Color Atlas of Pharmacology by Albrecht Ziegler, Mohr, Bieger and Lullmann, 2000.