

# **ABSTRACT**

## **OF THE ACADEMIC DISCIPLINE**

### **"METHODOLOGY OF EVIDENCE MEDICINE"**

#### **CONTENT OF THE DISCIPLINE**

The discipline "Methodology of Evidence-Based Medicine" includes information on basic concepts and terms of evidence-based medicine, the history of formation and development of evidence-based medicine, the concept of randomization, the preconditions for the emergence and foundation of evidence medicine, purpose, objectives of evidence-based medicine, basic principles and importance of evidence-based medicine for medical practice; features of the organization and conduct of epidemiological research, study of the prevalence and natural course of certain diseases in groups population, identifying the scale of problems associated with these diseases; definition external and internal environmental factors that contribute to or hinder the occurrence and spread of these diseases; identification of priority issues in the industry public health; development of measures to eliminate or as much as possible mitigation of adverse factors, as well as the study of epidemiological types research: descriptive, analytical, experimental. Acquaintance with the Convention on Protection human rights and human dignity in connection with the application of advances in biology and medicine and with such concepts as: errors of epidemiological researches, pseudorandomization, positive effects of the intervention.

#### **COURSE OBJECTIVE**

Mastering by applicants of higher education modern knowledge of the basics of evidence medicine and on its basis optimization of the quality of medical care to the population from the point of view in terms of safety, efficiency, cost and other important factors, as well as mastery skills of using this knowledge in carrying out professional activities in public health

#### **INFORMATION SCOPE OF THE COURSE**

The study of the discipline is given 90 hours, 3 ECTS credits.

Topic 1. Introduction to evidence-based medicine. History of formation and development of evidence medicine.

Topic 2. Modern epidemiology and biostatistics as a science and ideology of evidence medicine.

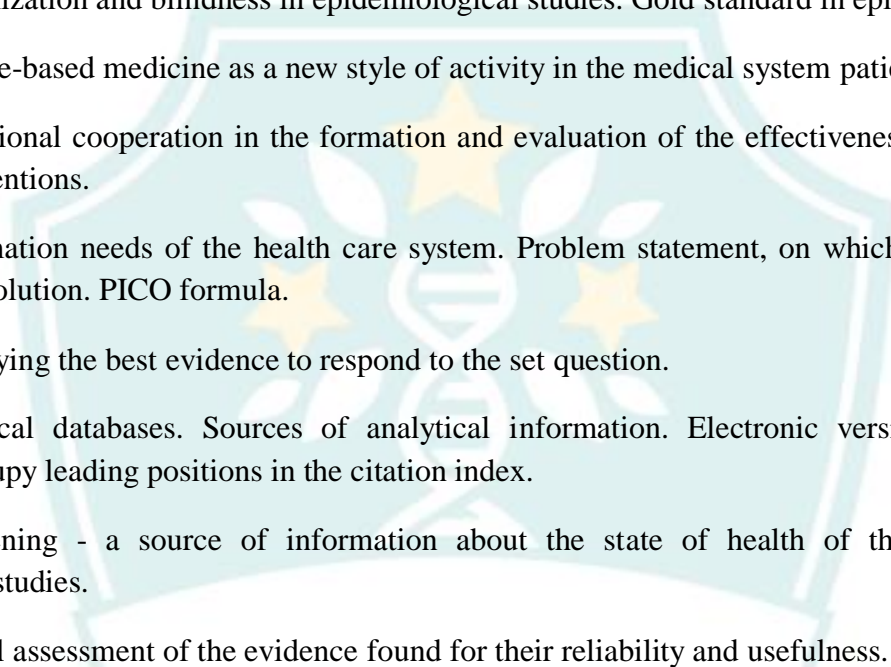
Topic 3. Design of epidemiological research. Types of design and their characteristics.

The purpose and objectives of epidemiological research. Possibilities of epidemiological designs research.

Topic 4. Empirical (empirical research methods) methods of observation epidemiological studies. Features of descriptive studies. Description case reports and case series descriptions.

Topic 5. Analytical (analytic study) methods of epidemiological surveillance research. Case control study, cohort study study) and environmental research.

Topic 6. Experimental epidemiological studies. Uncontrolled and controlled research. Randomized and non-randomized Pseudorandomization study.

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- Topic 7. Randomization and blindness in epidemiological studies. Gold standard in epidemiology.
- Topic 8. Evidence-based medicine as a new style of activity in the medical system patient care.
- Topic 9. International cooperation in the formation and evaluation of the effectiveness of medical and social interventions.
- Topic 10. Information needs of the health care system. Problem statement, on which must find a reliably proven solution. PICO formula.
- Topic 11. Identifying the best evidence to respond to the set question.
- Topic 12. Medical databases. Sources of analytical information. Electronic versions medical journals that occupy leading positions in the citation index.
- Topic 13. Screening - a source of information about the state of health of the population epidemiological studies.
- Topic 14. Critical assessment of the evidence found for their reliability and usefulness.