

**List of questions
on educational discipline “Social medicine, public health”
(content module No 1 "Biostatistics") for the 3-year English-speaking students
of the second / master level of the higher education
of the branch of knowledge 22 "Health care" specialty 222 "Medicine"**

1. Theory and concept of statistical observation, stages of its carrying out.
2. Design of clinical and epidemiological researches.
3. Sources of statistical information.
4. Grouping of statistical data.
5. Statistical tables, their characteristics, types, rules of construction.
6. Selective observation as a source of statistical information.
7. Types of statistical observation by time and completeness of accounting.
8. Methods of collecting of statistical material.
9. Absolute data. Types of relative values.
10. Graphical methods for data analysis. Types of diagrams, rules of their construction.
11. Average values in clinical and epidemiological studies, their types, practical value, methods of calculation.
12. Concept of variation, its meaning. Variability of aggregate parameters, methods of estimation.
13. Assessment of the probability of the results of the study. Parametric criterion for assessing the probability of the Student's t-test.
14. Substantiation of cases of use of nonparametric methods for estimating probability. The notion of related and independent aggregates.
15. Functional and correlation connection. Types of correlation coefficients.
16. Regression analysis, regression coefficient, regression equation.
17. Methods of standardization, stages of the direct method of standardization.
18. Basic rules for constructing and analyzing dynamic series. Methods of aligning dynamic series, the concept of extrapolation and interpolation.
19. Notion of risk in epidemiological studies. The main risk factors which affect health.
20. Indicators of risk, odds ratio, method of calculation and assessment.
21. Basic principles and provisions of clinical epidemiology. The hierarchy of evidence of clinical studies.
22. Notion of a null hypothesis. Checking the statistical hypothesis. Errors of the first and second type.
23. Screening. The main characteristics of screening tests. Specificity and sensitivity of the screening test.
24. Empirical and experimental epidemiological studies. "Gold standard" of researches.
25. Evidence-based medicine. History, main provisions, principles, areas of application.
26. Types of data. The concept of the scale of measurement.
27. Concept of systematic reviews and meta-analysis.
28. Subject and tasks of medical statistics. Organization of the medical statistics service in Ukraine. Electronic document flow.
29. Task of the information and analytical department of the health care institution. The concept of accounting and reporting documentation.
30. Fundamentals of scientific publication preparation.