

**MINISTRY OF SCIENCE AND HIGHER EDUCATION
RUSSIAN FEDERATION**

**FEDERAL STATE AUTONOMOUS EDUCATIONAL INSTITUTION OF
HIGHER EDUCATION
NORTH-CAUCASUS FEDERAL UNIVERSITY**

Methodological Guidelines
for Students on arranging and performing independent work
in the Discipline of "PUBLIC HEALTH AND HEALTHCARE,
HEALTHCARE ECONOMICS"
for Students majoring (Specialty) in 31.05.01 General Medicine

INTRODUCTION.

The purpose of the discipline is to prepare a specialist who has the knowledge and skills to assess public health and the factors that determine it. The discipline also covers systems that ensure the preservation, strengthening, and restoration of public health in general and in specific homogeneous groups of the population. The discipline also covers organizational and medical technologies and management processes, including economic, administrative, and organizational aspects. The discipline also covers trends in healthcare development in foreign countries.

The objectives of the training program are as follows:

- mastering the analysis of the main ways to improve the efficiency of using healthcare resources;
- studying the basic principles of providing medical care to the population;
- studying the system of organizing medical care for various categories of the population;
- familiarization with the performance indicators of healthcare institutions;
- developing students' professional skills necessary for analyzing the activities of healthcare institutions that provide medical care to various categories of citizens;
- formation of professional skills in students, necessary for carrying out economic analysis of the activities of healthcare institutions, providing medical care to various categories of citizens;
- mastering the basics of healthcare economics and developing a new economic thinking;
- - developing competence in the basic categories of healthcare economics;
- developing skills for operating in a market economy and in a competitive environment;
- mastering the skills of making economic decisions in specific working conditions of medical institutions in order to improve the quality of medical care and the economic effect of medical and preventive measures.

Methodological Recommendations for Studying Theoretical Material

When performing the independent study of theoretical material, the student must follow the rules as set below. The working curriculum of the respective academic discipline shall be recommended to be used as the basis for such activity. According to the schedule of classroom lessons and independent work, a different number of hours is to be allocated for studying individual topics. A significant portion of the student's independent work should be allocated to mastering the material on the covered topic, writing a summary (notes) on the specified theoretical blocks, and searching for additional literature based on the NCFU library and via the Internet system. The lecture material shall not cover all theoretical material; the greater part of it must be mastered through independent work. Given the above, working with the recommended literature is mandatory. Special attention must be paid to the content of the main provisions and conclusions, the explanation of phenomena and facts, and the understanding of the practical application of the theoretical issues under consideration. In the process of this work, the student should strive to understand and memorize the main provisions of the material being considered, the examples illustrating it, as well as to understand the illustrative material. Preparation should be completed by drawing up a plan (summary/notes) on the material (issue) being studied. This allows for the creation of a concentrated, concise representation of the issues being studied. First, studying the recommended literature is to be done. Special attention must be paid to the content of the main provisions and conclusions, the explanation of phenomena and facts, and the understanding of the practical application of the theoretical issues under consideration.

During this work, the student should strive to understand and memorize the main provisions of the material being considered, the examples illustrating it, as well as to understand the illustrative material. Preparation should be completed by drawing up a plan (summary/notes) on the material (issue) being studied. This allows for the creation of a concentrated, concise representation of the issues being studied. If necessary, one should seek (advice) consultation from the instructor. When going to a consultation, it is necessary to thoroughly think through the

questions that require clarification. Keeping records contributes to turning reading into an active process, mobilizing motor memory along with visual memory. The following should be born in mind: a student who systematically keeps records creates their own individual stock of auxiliary materials for a quick review of what has been read and for the mobilization of accumulated knowledge. Records are especially important and useful when they reflect the thoughts that arose during independent work.

It is important to develop the students' capacity to compare sources and to think through the material being studied.

Improving note-taking skills among students is of great importance.

The instructor may recommend the following main forms of recording to students: a plan (simple and detailed), excerpts, and theses (abstracts).

The results of note-taking can be presented in various forms.

- A plan is an outline of the read material, a brief (or detailed) list of questions reflecting the structure and sequence of the material.

- A detailed plan fully replaces a summary.

- A summary (notes) is a systematized, logical presentation of the source material. Four types of summaries are distinguished:

- Outline-summary (Plan-notes) – this is an expanded, detailed plan in which sufficiently detailed records are provided for those points of the plan that need explanation.

- Textual summary – this is the reproduction of the most important provisions and facts of the source.

- Free summary – these are clearly and briefly formulated (stated) main provisions resulting from a deep understanding of the material. It may contain excerpts, quotations, and theses; part of the material may be represented by a plan.

- Theme-based summary – this is compiled on the basis of studying a number of sources and gives a more or less exhaustive answer according to a certain scheme (issue).

Methodological Guidelines for the Preparation for Practical Activities

When preparing for practical activities, the recommendation implies studying the control questions for the given lesson and the theoretical material from one's own notes.

The main form of work during the lessons is an interview (discussion). Each student must be ready to speak on all issues raised in the plan and demonstrate maximum activity during their consideration.

The speech must be constructed freely, convincingly, and with arguments. The instructor ensures that the speech is not reduced to a reproductive level (simple reproduction of the text); simple reading of the summary is also not allowed.

It is necessary for the speaker to show their own attitude towards what they are talking about, express their personal opinion and understanding, substantiate it, and be able to draw the correct conclusions from what has been said. In doing so, the student may refer to the entries in the summary, directly to the primary sources, use knowledge of previously studied disciplines, etc. In addition, to obtain a grade at an advanced level, students solve situational tasks based on the results of the mastered topics.

During the execution of practical works, a defense of practical skills is provided, the full list of which is specified in the fund of assessment tools.

Methodological Recommendations for the Preparation of Presentations and Reports

The report must contain elements of novelty; along with the fundamental aspect, an analysis of the current state of the problem under study must be carried out, as well as inclusion in regional issues. The report must include an introduction, a theoretical part, a conclusion, a list of literature, and a presentation that reveals the essence of the topic in graphs, pictures, diagrams, and formulas.

The report is recommended to be submitted on 1 printed sheet. The text of the work must be printed with 1.5 line spacing on one side of a standard sheet (A4) of white paper.

The text and other printed elements of the work must be black, and the contours of letters and signs must be clear, without halos and shading. The font must be Times New Roman, size 14. The titles of chapters and paragraphs are highlighted in bold. The sheet with text must have margins: left – 30 mm, right – 10 mm, top – 20 mm, bottom – 20 mm.

Page numbering of the text is done in the lower right corner of the sheet. It is necessary to number pages starting from the page where the Introduction is printed, on which the number 3 is placed. After that, all pages, including appendices, are numbered.

A space equal to two intervals is placed between the title of the chapter and the title of the paragraph of this chapter, and the title of the paragraph must not be separated from the text of this paragraph by a space. The titles of paragraphs shall be separated from the text of the previous paragraph by a space equal to two intervals. Each chapter, as well as the introduction, conclusions, appendices, and the list of used literature, begin on a new page. The word Chapter is not to be written. Chapters have ordinal numbers within the entire work, designated by Arabic numerals (for example: 1, 2, 3), followed by a period.

The word **PARAGRAPH** or the paragraph symbol (§) is not placed in the title. Paragraphs have ordinal numbers within the chapters, designated by Arabic numerals (for example: 1.1. and 1.2.).

Headings of chapters and paragraphs in the text must be centered; a period shall not be placed at the end of the title of the chapter and paragraph. It is not allowed to hyphenate (transfer) a part of a word in a heading. 4.5. The numbering of tables and figures can be running (continuous) or relate to the number of the chapter and paragraph. For example, if a table or a figure is included in the text of the first paragraph of the second chapter, the numbering is as follows: Table 2.1.1., Fig. 2.1.1.

The last digit means the ordinal number of the table (or figure) in this paragraph.

The table is to be placed as the next page after the first mention of it in the text.

Recommended Literature.

Main References:

1. Public Health and Healthcare. Part 1. Electronic Resource: Textbook by I. A. Naumov et al.; edited by I. A. Naumov. Public Health and Healthcare. Part 1, 2021–2021-10-06. Minsk: Higher School Press, 2013.336 pp. The book is available in the premium edition on EBS IPR BOOKS. ISBN 978-985-06-2298-3 .

2. Public Health and Healthcare. Part 2. Electronic Resource: Textbook by I. A. Naumov et al.; edited by I. A. Naumov. Naumov. – Public Health and Healthcare. Part 2, 2021–10–06. Minsk: Higher School Press, 2013.352 pages. The book is available in the premium edition on EBS IPR BOOKS. ISBN 978-985-06-2299-0

Additional literature:

1. Matchina, O. I. Fundamentals of Statistical Methods in Public Health and Healthcare Research. Electronic resource: Self-study textbook for students in the medical, pediatric, and dental faculties / O. I. Matchina, D. N. Begun, N. A. Bayanova. – Orenburg: Orenburg State Medical Academy, 2012. – 125 pp. The book is available in a premium edition on EBSC IPR BOOKS. – ISBN 2227-8397.

2. Collection of Test Questions on Public Health and Healthcare. Electronic Resource: Textbook / D.S. Verkoshtantsev / N.A. Bayanova / E.L. Borshchuk / O.I. Matchina / D.N. Begun. – Orenburg: Orenburg State Medical Academy, 2014. – 118 pp. The book is available in the basic version of the IPRbooks electronic database.

3. Supilnikov, A.A.: Clinical Statistical Indicators of Public Health and Healthcare in Russia and Methods for Their Calculation. Electronic Resource: Textbook / A.A. Supilnikov, A.V. Chebykin, M. V., Trifonova. – Samara: REAVIZ, 2012. – 184 pp. The book is available in the premium edition from EBS IPR BOOKS. – ISBN 2227-8397

Internet resources:

1. <http://rudocor.net> / – Medical portal;
2. <http://www.e-reading.club> / – Comprehensive online library;
3. <https://dic.academic.ru> / – Dictionaries and encyclopedias;
4. <https://roszdravnadzor.gov.ru> / – Federal Service for Healthcare Supervision;
5. <https://www.rmj.ru> / – Russian Medical Journal

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Topic 1. Public health and healthcare as a science and a subject of teaching. Medical and social aspects of studying public health. Part 1

1. Public health and healthcare as a scientific discipline about the patterns of public health, the impact of social conditions, environmental factors, and lifestyle on health, ways to protect and improve it.
2. The place of the discipline "Public health and healthcare" among medical, hygienic, and social sciences in the system of medical education.
3. The role of the discipline "Public Health and Healthcare" in the practical activities of doctors, healthcare bodies and institutions, in planning, management, and labor organization in healthcare.

Public health and healthcare as a science and a subject of teaching. Medical and social aspects of studying public health. Part 2

1. The main research methods of the discipline "Public Health and Healthcare": statistical, historical, experimental, sociological, economic and mathematical, modeling, the method of expert assessments, epidemiological, etc.
2. Healthcare as a sector of the social sphere and its role in preserving, strengthening and restoring public health. Fundamentals of domestic healthcare policy. the legislative framework of the industry.
3. Health issues in the most important socio-political and government documents (Constitution of the Russian Federation, legislative acts, decisions, resolutions, etc.).
4. The basic principles of domestic healthcare at the stages of its development. The main directions of healthcare reform.

Topic 2-4. Public health and the factors that determine it.

Demography. Sections of demography. Statics: methods of study. Dynamics: methods of study, main sections. Indicators of natural population movement.*

1. Public health: criteria and indicators. Scheme for studying the health of the population and its individual groups: the most important factors and conditions that determine the level of public health.
2. socio-economic (conditions and lifestyle),
3. environmental and natural-climatic,
4. biological (heredity, ethnic characteristics, age, and gender),
5. level and organization of medical care.
6. Definition of medical demography, main sections. The importance of demographic data for characterizing the health of the population, analyzing and planning the activities of public health bodies and institutions.
7. Population statistics: the most important indicators (population size, population density, age and sex composition, etc.). Population censuses as a source of information about population statistics, history, methods of conducting, results. Characteristics of changes in population size, age and sex composition in the last decade. Types of age and sex structure of the population. Population aging as a modern demographic trend in developed countries. The medical and social significance of this problem.
8. Population dynamics and its types. Population migration: external, internal (urbanization, seasonal, pendulum). Factors that determine it; main trends. The impact of migration on the health of the population; the tasks of health authorities and institutions. The impact of migration on the health of children.
9. Population reproduction (natural movement). General and special indicators, calculation methods, analysis and evaluation. The role of a medical professional in birth and death registration. The procedure for recording acts of civil status.
10. Current state and main trends of demographic processes in the Russian Federation and foreign countries over the last decade, factors. defining features and dynamics of modern demographic processes. Regional peculiarities of population reproduction in different countries due to the level of their socio-economic development.
11. Birth rates and fertility (fertility), methods of study, general and special indicators. The influence of medical and social factors on their level and trends: living conditions and lifestyle, age and sex structure of the population, state of health, level of education and culture, organization of medical care, legislation on marriage and family, etc..
12. Mortality of the population, methods of study, general and age-specific indicators. Infant and perinatal mortality, their main causes. Factors affecting the level and trends of general and special mortality rates.
13. Child mortality: definitions, study methods, dynamics of the level, and changes in the structure of indicators in the country.
14. Infant mortality, age-related infant mortality rates: definitions of "live birth" and "stillbirth," neonatal mortality, early neonatal mortality, late neonatal mortality, and postneonatal mortality: definitions, study methods, dynamics of the level, and changes in the structure of indicators in the country.
15. Perinatal mortality and stillbirth - definitions, research methods, dynamics of the level, and changes in the structure of indicators in the country.
16. Factors influencing mortality rates.
17. Child mortality as a medical and social problem.
18. Maternal mortality. Definition, methodology of study, dynamics of the level and changes in the structure of the indicator in the country. Factors affecting maternal mortality. Maternal

mortality as a medical and social problem. Abortions as a medical and social problem. Infertility as a medical and social problem.

19. Average life expectancy (ALE). Definition, calculation method, and dynamics of the indicator in the country. Dynamics of ALE for men and women in Russia and foreign countries. Factors affecting the expected average life expectancy.
20. The impact of individual causes of death on the average life expectancy of the population.
21. Natural population growth - definition, calculation method, and dynamics of the indicator level in the country.
22. Demographic policy, concept, and main directions in various countries.
23. Family as an object of demographic policy. Medical and social studies of families.
24. Analysis of theoretical concepts of population. Demographic forecasts.

Population morbidity. Methodology for studying morbidity in the work of a general practitioner.*

1. Definition of the concept of morbidity. The role of state morbidity statistics in studying the health status of the population. The role of medical workers in ensuring the completeness and quality of information about morbidity.
2. Methods of studying morbidity and their comparative characteristics. Types of morbidity. Accounting and reporting documentation used for collecting and analyzing information about morbidity.
3. Morbidity based on the number of cases reported to healthcare facilities. Primary morbidity. Total morbidity. Methods of study, accounting documents, and indicators.
4. Population morbidity according to medical examinations. Types of medical examinations (preliminary, periodic, targeted). Research methodology, accounting documents, indicators.
5. Population morbidity according to causes of death, research methodology, indicators.
6. Hospitalized morbidity. Research methodology: observation unit, accounting and reporting documentation, and analysis of indicators.
7. Morbidity from the most important socially significant diseases. Research methodology: observation units, accounting and reporting documentation, and indicators (level, structure, etc.).
8. Infectious morbidity: observation unit, accounting and reporting documentation, and main indicators.
9. Morbidity with temporary disability. Unit of observation, primary accounting documents. Analysis of morbidity with temporary disability according to reports on forms 16-VN and according to police (personal) records. Basic indicators.
10. Current state, trends and features of morbidity of the population in the Russian Federation (regional, age-sex, professional, etc.), factors that determine them.
11. Incidence of diseases in children and adolescents. Age and sex characteristics of the level and structure. Individual characteristics of the incidence of diseases in children.
12. Health groups, criteria for dividing the population of different ages into health groups.
13. The importance of morbidity as the main criterion for the health of the population and its individual groups for analysis and planning of the activities of doctors, health authorities, and institutions, and for assessing the quality and effectiveness of medical care.
14. International Statistical Classification of Diseases and Health Problems (ICD-X). Principles and features of the ICD-X construction. Physical development as one of the criteria for assessing the health status of the population. Definition of the concept. Methods of studying physical development: anthroposcopy, anthropometry, anthropophysiology. Indices of physical development. The main indicators of physical development in different age and gender groups, their features and trends. Factors influencing the dynamics of physical development. Acceleration.

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9. <https://roszdravnadzor.gov.ru> / – Federal Service for Healthcare Supervision;
10. <https://www.rmj.ru> / – Russian Medical Journal