



SOCIAL MEDICINE, PUBLIC HEALTH AS A SCIENCE AND OBJECT OF TEACHING

*Guidelines to the practical lesson
for students in the specialties 222 “Medicine”
and 228 “Pediatrics” on the course “**Social Medicine,
Public Health (Public Health)**”*

МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
Харківський національний медичний університет

**SOCIAL MEDICINE,
PUBLIC HEALTH AS A SCIENCE
AND OBJECT OF TEACHING**

*Guidelines to the practical lesson
for students in the specialties 222 "Medicine"
and 228 "Pediatrics" on the course "Social Medicine,
Public Health (Public Health)"*

**СОЦІАЛЬНА МЕДИЦИНА,
ГРОМАДСЬКЕ ЗДОРОВ'Я
ЯК НАУКА І ПРЕДМЕТ ВИКЛАДАННЯ**

*Методичні вказівки
до практичного заняття студентів
спеціальностей 222 «Медицина» та 228 «Педіатрія»
з дисципліни «Соціальна медицина,
громадське здоров'я» (Громадське здоров'я)*

Затверджено Вченою радою ХНМУ.
Протокол № 6 від 20.05.2021.

**Харків
НМУ
2021**

Social medicine, public health as a science and object of teaching : guidelines for students to the practical lesson for students in the specialties 222 «Medicine» and 228 «Pediatrics» on the course «Social Medicine, Public Health» (Public Health) / comp. V. A. Ohniev, K. M. Sokol., G. V. Lisova – Kharkiv : KhNMU, 2020. – 16 p.

Compilers V. A. Ohniev
 K. M. Sokol
 G. V. Lisova

Соціальна медицина, громадське здоров'я як наука і предмет викладання : : метод. вказ. до практичного заняття студентів спеціальностей 222 «Медицина» та 228 «Педіатрія» з дисципліни «Соціальна медицина, громадське здоров'я» (Громадське здоров'я) : упоряд. В. А. Огнєв, К. М. Сокол, Г. М. Лісова. – Харків : ХНМУ, 2021. – 32 с.

Упорядники В. А. Огнєв
 К. М. Сокол
 Г. М. Лісова

LESSON METHODS

The purpose of the lesson: to acquaint students with the history of the emergence, formation and development of the subject "Social medicine and healthcare organization".

Need to know:

➤ **program issues:**

- the definition of social medicine and healthcare organization as a science and subject of teaching, its significance for practical healthcare;
- the place and role of social medicine and healthcare organization, as a subject of teaching and scientific discipline among medical sciences in the educational system and in the practice of a doctor;
- the history of the emergence and development of social medicine and the organization of health care in Ukraine and other countries, prominent figures in social medicine, the organization of healthcare and medical statistics;
- methods of social medicine and healthcare organization: statistical, demographic, historical, experimental, epidemiological, sociological, method of expert assessments, modeling and forecasting.

Need to be able to:

- formulate the goal of the subject and the main tasks of social medicine and healthcare organization.

Form of the lesson: practical lesson.

Lesson location: training room of the department.

Methodical support of the lesson:

- methodological developments for classes;
- methodical literature: workbook for students (basic training);
- presentation materials;
- test items.

Recommended literature

Basic literature

1. Little William Chapter 19. Health and Medicine // In: Introduction to Sociology, 1st edition. / W. Little. – Victoria: Rice University, 2014. – 32 p. URL: <https://opentextbc.ca/introductiontosociology/chapter/chapter19-health-and-medicine/>
2. Conrad P, Barker KK The social construction of illness: key insights and policy implications. J Health Soc Behav. 2010;51 Suppl:S67–79. Doi: 10.1177/0022146510383495. URL: <http://www.ncbi.nlm.nih.gov/pubmed/20943584>
3. Fran Baum The New Public Health. 4th edition / F. Baum. Oxford: Oxford University Press, 2016. – 720 p. URL: <https://glouabal.oup.com/academic/product/the-new-public-health-9780195588088?cc=ua&lang=en&>

4. Talbot Lyn, Verrinder Glenda Promoting Health: The Primary Health Care Approach, 6th edition / L. Talbot, G. Verrinder. – Australia: Elsevier, 2017. – 400 p. URL:
<https://elsevier.com/books/promoting-health/talbot/978-0-7295-4257-9>
5. Vivian Lin, James Smith and Sally Fawkes Public Health Practice in Australia. The organized effort / V. Lin et al. – Australia: A&U Academic, 2014. – 560 p. URL:
<https://www.allenandunwin.com/browse/books/academic-professional/health/Public-Health-Practice-in-Australia-Vivian-Lin-James-Smith-and-Sally-Fawkes-9781743314319>
6. Methodical materials on the subject “Public Health”.
7. Summary of lectures in Social Medicine and Public Health / Kharkiv National Meedical University, Department of Public Health and Healthcare Management

Additional literature

1. Gebbie K, Rosenstock L, Hernandez LM Who Will Keep the public Healthy? Educating Public Health Professionals for the 21st Century / K. Gebbie et al. – Washington D.C.: National Academy Press, 2003. – P. 33–144.
2. Last John M. A Dictionary of Epidemiology 4th edition. Ed. by International Epidemiology Association / J. Last – New York, NY: Oxford, University Press, 2001. – 219 p. URL:
https://pestcontrol.ru/assets/files/biblioteka/file/19-john_m_last-a_dictionary_of_epidemiology_4th_edition-oxford_university_press-usa_2000.pdf
3. Lorber, J. Women Get Sicker, but Men Die Quicker : Gender and Health / J. Lorber. / In Phil. Brown ed. Perspectives in Medical Sociology. – Illinois: Waveland Press, 2000. – P. 40–70.

Information Resources

1. U.S. National Library of Medicine – <http://www.nlm.nih.gov/>
2. University of West Florida – University libraries. LibGuides. Public Health. Statistics and Data
<https://libguides.uwf.edu/c.php?g=435443&p=2968919>
3. Scientific Library of Kharkiv National Medical University –
<http://libr.knmu.edu.ua/index.php/biblioteki>
4. Vernadsky National Library of Ukraine –
<http://www.nbu.gov.ua/>
7. National Scientific Medical Library of Ukraine –
<http://www.library.gov.ua/>
8. Korolenko State Scientific Library –
<http://korolenko.kharkov.com>
10. Central Scientific Medical Library of Sechenov State Medical University in Moscow –
<http://www.scsml.rssi.ru>

BASIC THEORETICAL MATERIAL FOR PREPARING FOR THE LESSON

Social medicine and healthcare organization is an independent science that studies the laws of public health and healthcare formation in order to ensure a high potential for public health as a decisive factor in the development of society.

Social medicine studies the health of the population, factors influencing it, justifies and develops measures to maintain and improve public health through the rational and efficient use of health resources, and also develops new forms and methods of organizing and managing the health care system, while emphasizing that social medicine is the scientific and theoretical basis of healthcare. It implements all its tasks in the healthcare system.

The object of study of social medicine and healthcare organization are public health and public healthcare.

The subject of social medicine and the organization of health care in different countries has a different name, in English-speaking countries the subject is called “Public health”, “Public healthcare”, and “Preventive Medicine”; in French-speaking countries – “Social Medicine”, “Medical Sociology”; in Eastern European countries – “Organization of Health Care”, “Theory and Organization of Health Care”, “Social Hygiene”, “Social Hygiene and Organization of Health Care”. In Ukraine, the subject has repeatedly changed its name: "Social Hygiene" – 1923, "Health Organization" – 1941, "Social Hygiene and Health Organization" – In 1966, "Social Medicine and Health Organization"– 1991. The issue of renaming an item called “Public Health” is currently under consideration.

As a subject of teaching, social medicine includes the following sections:

- the history of the subject;
- biological statistics;
- public health;
- healthcare organization;
- healthcare management;
- healthcare economics.

The goal of social medicine and healthcare organization is to study the public health of the population in conjunction with factors of the internal and external environment, the quality and availability of medical care, as well as develop a set of recommendations to eliminate or reduce the harmful effects of risk factors and optimize medical care.

The main tasks of social medicine include:

- 1) study, monitoring and evaluation of the state of public health of the population, as well as the processes of its formation and storage;
- 2) comprehensive study and identification of a set of factors and conditions affecting the health of the population;
- 3) scientific justification and development of a set of recommendations for the prevention and elimination of adverse factors and conditions among the population in order to maintain and strengthen their health;
- 4) development of the theoretical and organizational foundations of healthcare, the regulatory framework, principles and concepts of medical care, as well as other forms of public health support;

5) analysis and assessment of the activities of institutions and health authorities, the development of new forms and methods of their work to provide affordable and high-quality medical care to the population;

6) forecasting and modeling the state of public health and the optimal healthcare system.

The theoretical basis of social medicine and healthcare organization is the best traditions of state and foreign medical science and practice. In particular, the works of outstanding scientists Nikolai Pirogov (1810–1881), Sergei Botkin (1832–1889), Vladimir Bekhterev (1857–1927) And others who made a significant contribution to the development of preventive medicine. They substantiated the influence of the environment on human health, thereby showing that it is necessary to treat not only the patient, but also to heal the conditions in which he lives.

Social medicine and healthcare organization as a scientific discipline in its work uses various research methods, such as:

1) **statistical** (the statistical method is the leading method in assessing the health of the population and the organization of health care. All state and departmental reporting is based on it, and long-term and ongoing health planning is carried out);

2) **demographic** (demography is a population science; demographic data are used by healthcare to determine the population's need for outpatient and inpatient care);

3) **the method of expert assessments** (or the method of examination, is widely used in the practice of medical institutions, in particular when conducting a medical and social examination of a person's health, assessing the quality and effectiveness of diagnosis and treatment, etc.);

4) **historical** (the historical method allows you to evaluate events, facts, phenomena in their connection with space and time. This approach allows you to avoid subjectivity in judgments);

5) **economic** (application of the economic method provides a more efficient and rational use of healthcare resources);

6) **experimental** (on the basis of the experimental method, new, more optimal forms and methods of work of healthcare institutions are sought, medical care models are created, hypotheses, projects are checked, etc.);

7) **sociological** (using the sociological method, the conditions of life and work are studied, risk factors are identified, satisfaction of the population with medical services is assessed, the health of the population is studied in general, etc.);

In addition, methods such as epidemiological, modeling, forecasting, etc. are widely used.

The desire of a person to improve his health through various social events dates back to ancient times. This was facilitated by the research of scientists of all times, fair rulers, who created the conditions for maintaining the health of the population, pursued a social policy, adopted legislative acts, etc.

In the teachings and laws of ancient times, the simplest elements of hygiene, housing and sanitary facilities, the importance of nutrition, the use of plants in treatment, and the choice of water source are given. In the future,

measures to combat infection are developed, and the medical and social policy of states is formed. Wellness activities reached a particularly high development in the era of the ancient Greeks and Romans. This is, first of all, hygiene measures aimed at hardening the body, performing physical exercises, as well as keeping the body clean and tidy.

An important role in the development of socio-hygienic understanding of the nature of health and disease was the collection of medical works "Code of Hippocrates." He believed that the environment plays an important role in the occurrence of diseases: climate, soil, water.

In the history of the formation of social medicine, the appearance of the so-called public (folk) doctors, who were in the service of the state and provided medical care to ordinary people, was significant. They first appeared among the ancient Egyptians, then among the Greeks and Romans.

In the history of the development of social medicine, the work of individual researchers also occupies a place. In 1700, the book of the Italian doctor, professor of medicine at the University of Padua, Bernardino Romacini (Italian), "About the diseases of artisans" was published.

The term social hygiene was first used in the first half of the 19th century. He is found in dissertations (1838) and (1844), dedicated to occupational disease.

But, the separation of social hygiene and the organization of health care into an independent science occurred at the end of the XIX and at the beginning of the XX century, when corresponding historical conditions were created for this.

The fastest social hygiene began to take shape in Germany.

In the 70s of the 19th century, some reforms in the field of healthcare began to be introduced in Germany (social insurance was introduced at the expense of enterprises, the state budget and the workers themselves, outpatient clinics, separate dispensaries, etc. were organized).

In 1903, a magazine on social hygiene began to be published in Germany.

In 1905, Alfred Grotjahn (1869–1931) founded the scientific society of social hygiene and medical statistics in Berlin.



Alfred Grotjahn

Biomedizinische Bild 187-100-1004-208
Foto: o. Aug. | 1929

In 1912 A. Grotjan achieved an assistant professor.

In 1913, Alfons Fischer's first work, *Fundamentals of Social Hygiene*, was published. In 1923, the second edition of this textbook was published.

In 1920 – Alfred Grotjan organized the world's first department of social hygiene at the University of Berlin.



Moise Gurevich

In Ukraine, the department of social hygiene appeared in the second half of 1923. The first in Ukraine was the department of social hygiene of Kharkiv Medical Institute. It was organized on October 27, 1923. The founder and first head of the department was Moise Gurevich (1923–1925), then the department was headed by Sergey Tomilin (1925–1932), then Zinoviy Gurevich (1933–1974). Since 2002 to the present, the department is headed by Viktor Ognev.

In the same year, a similar department was organized at the Odessa Medical Institute, it was headed by Lev Vasilievich Gromashevsky, at the same time heading the Department of Epidemiology.

At Kyiv Medical Institute, the first head of the department of social hygiene was entrusted to Solomon Kagan on December 7, 1923.

In 1924, the Department of Social Hygiene was opened at the Ekaterinoslav (Dnepropetrovsk) Medical Institute, in the formation and development of its great role belongs to the first head, the hygienist scientist Professor M. Donic.

In the years 1920-1930. In Ukraine, the 2-a centers for the development of social hygiene as a science and a subject of teaching were formed: Kharkiv and Kyiv. Prominent scientists who enriched social hygiene with significant research came out of them.

In the Kharkiv center, headed by S.A. Tomilinin, work: M. Gurevich, Z. Gurevich, I. Arnoldi, A. Merkov, P. Petrov (1896-1966), S. Ekel and others.

The Kyiv center was headed by S. Kagan, he trained professors: I. Ovsienko, K. Duplenko, E. Belitskaya, L. Lekarev and others.

In 1934, the department of sanitary statistics was created at Ukrainian Demographic Institute, later the institution was renamed Institute of Demography and Sanitary Statistics.

In 1939, Ukrainian State Institute of Health was created in Kharkiv (since 1933 - All-Ukrainian Institute of Socialist Health). The Institute carried out the theoretical justification of public health measures, and also became a methodological center for medical and social research in Ukraine.

In 30 years, the first Ukrainian textbooks were published, the bulk of which was prepared by employees of Kharkiv Medical Institute: "Essays on the Theory of Social Hygiene" S. Kagan (1932), "Social Hygiene" S. Tomilina and A. Merkov (1933), "General Theory of Sanitary Statistics" A. Merkov (1935), "Workshop on Sanitary Statistics" by L. Abramovich, M. Kaminsky, P. Petrova (1940) and others.

In May 1941, the departments of social hygiene were renamed the departments of healthcare organization, which determined the corresponding range of their tasks.

In 1966, social hygiene was restored as a science and a subject of teaching, and the departments were renamed the departments of social hygiene and healthcare.

In 1990, at the 2nd All-Ukrainian Congress of Social Hygienists and Health Organizers, a decision was made to change the names of departments in order to bring them closer to international terminology. The term social hygiene has been replaced by the term social medicine. Currently, the department is called social medicine, organization and economic of healthcare.

At present, Ukrainian Institute for Strategic Studies of the Ministry of Health of Ukraine is working in Ukraine, 4 specialized protective scientific councils have been created in the specialty 14.00.03 – social medicine (P. L. Shupik National Medical Academy of Postgraduate Education – 2 councils for one council at the National Medical University named after A. A. Bogomolets and Kharkiv National Medical University), at the medical educational institutes, academies, universities, post-graduate education academies there are departments of social medicine, an independent department of medical statistics has been opened in KMAPO.

In Ukraine, 4 specialized journals from public health and healthcare are published, including: since 1999 – "The Bulletin of Social Hygiene and the Organization of Health Care of Ukraine", since 2001 – "Health of Ukraine", and since 2007 – "Ukraine. Health of the nation", since 2008 – "East European Journal of Public Health".

TEST TASKS

1. In 1906, at the University of Kiev at the Department of Hygiene, the course "Fundamentals of Social Hygiene and Public Healthcare" was introduced, which was of great importance for the development of social hygiene in Ukraine. Who of the following among the Ukrainian social hygienists read this course?

A. Igumnov S.

B. Kagan S.

C. Korchak-Chepurkovsky A.* E. Tomilin S.

D. Merkov A.

2. Social medicine and healthcare as a subject of teaching include a number of sections. Determine which of the following provisions is one of the sections of the subject?

- A. *Studying the impact of the work environment on public health.*
- B. *Secondary disease prevention.*
- C. *Environmental parameters.*
- D. *Primary disease prevention.*
- E. *Healthcare system*.*

3. An important section of social medicine and healthcare is the study of public health. Determine whether the following also applies to one of the sections of the subject.

- A. *The study of the quality of medical care to the population or the sanitary and epidemiological well-being of the population.*
- B. *Secondary disease prevention.*
- C. *Population health.**
- D. *Environmental parameters.*
- E. *Primary disease prevention.*

4. Social medicine and the organization of health care in scientific and practical activities uses various methods. Determine which of the following methods is one of the main methods of social medicine and healthcare organization?

- A. *Statistical.*
- B. *Instrumental.*
- C. *Laboratory analysis.*
- D. *Sanitary surveillance.*
- E. *Expeditionary.**

5. A significant role in the further formation of socio-hygienic science was played by the creation, in Berlin in 1905, of the scientific society “Social Hygiene and Medical Statistics”. Which of the following Western European social hygienists founded this society?

- A. *Alphonse Fisher.*
- B. *Alfred Grotian.**
- C. *Emil Reclus.*
- D. *Ludwig Teleki.*
- E. *Friedrich Princeing.*

6. At the 2nd All-Ukrainian Congress of Social Hygienists and Health Organizers, in order to approach international terminology, a decision was made to change the name of the department “Social Hygiene and Health Organization” to “Social Medicine and Health Organization”. Which of the following year was it?

- A. *1987.*
- B. *1990.**
- C. *1993.*
- D. *1996.*
- E. *1999.*

7. In Ukraine, a research institute operates to coordinate research in social medicine and healthcare. Which of the following is its full name?

- A. *All-Ukrainian Institute of Public Health of the Ministry of Health of Ukraine.*
- B. *National Institute for Strategic Studies of the Ministry of Health of Ukraine.**
- C. *Ukrainian Institute of Public Health and Healthcare of the Ministry of Health of Ukraine.*
- D. *Ukrainian Institute of Health, Ministry of Health of Ukraine.*
- E. *Ukrainian Institute of Public Health, Ministry of Health of Ukraine.*

8. By the Decree of the Council of People's Commissars of October 14, 1934, "On the Reorganization of the Work of Research Institutions in the Field of Health and Occupational Health", many research institutes were closed during 1934–1938. The question also arose of renaming the departments of social hygiene. In Which of the following year were the departments of social hygiene renamed to the departments of "Healthcare Organization"?

- A. 1934. B. 1937. C. 1941.* D. 1945. E. 1949.

9. In the history of the formation of social hygiene, the appearance of so-called folk (public) doctors was important. They were in the service of the state and provided assistance to ordinary people. Which of the following nation had the first people's doctors?

- A. *In ancient Egyptians.** D. *In ancient Greeks.*
B. *In ancient Romans.* E. *In ancient China.*
C. *In the countries of the ancient East.*

10. Of great importance in the formation of social hygiene as a science were the work of Dr. J. Roche. For the first time in his dissertation he used the term "Social Hygiene". Which of the following year was that?

- A. 1634. B. 1756. C. 1838.* D. 1912. E. 1920.

11. Social medicine and healthcare organization is a science that studies the patterns of public health and healthcare system. Students receive knowledge on this subject at the appropriate department. Determine in which of the following university the first department of social hygiene in Europe was created.

- A. *At University of Berlin.** D. *At Paris Medical Institute.*
B. *At Kyiv Medical Institute.* E. *At Kharkiv Medical Institute.*
C. *At Moscow Medical Institute.*

12. As a subject of instruction, social medicine and the organization of healthcare include a number of sections. Determine which of the following applies to one of the sections of the subject.

- A. *The study of the quality of medical care to the population or the sanitary and epidemiological well-being of the population.*
B. *Secondary disease prevention.*
C. *Medical statistics.**
D. *Environmental parameters.*
E. *Primary disease prevention.*

13. In Ukraine, for the information support of specialists and the population in the field of social medicine and healthcare organization, the journals "Bulletin of Social Hygiene and Health Care Organization" and "Health Care of Ukraine" are published. Determine in which of the following years these magazines were founded.

- A. 1990–1992. C. 1996–1998. E. 2002–2004.
B. 1993–1995. D. 1999–2001*.

14. After renaming the departments of "Social hygiene" into the department of "Healthcare organization", the medical community for a long time sought to restore the name and the need to study public health. In which of the following year were the departments restored under the title "Social hygiene and healthcare organization"?

- A. 1945. B. 1949. C. 1955. D. 1966.* E. 1973.

15. Social medicine and healthcare organization is a science that studies the patterns of public health and the healthcare system. Students receive knowledge on this subject at the appropriate department. Determine in which of the following university the first department of social hygiene in Ukraine was created.

- A. At Dnipropetrovsk Medical Institute. D. At Lviv Medical Institute.
B. At Donetsk Medical Institute. E. At Kharkiv Medical Institute.*
C. At Kyiv Medical Institute.

CONTROL QUESTIONS

1. Give a definition of what social medicine and healthcare organization are and what sections does it include?
2. The history of the emergence and development of social medicine. Prominent figures in social medicine and healthcare.
3. The formation and development of social medicine and healthcare organization in Ukraine.
4. Methods of social medicine and healthcare organization, its role in the study of public health and the healthcare system.
5. The purpose of social medicine and healthcare organization, its role in the study of public health and the health system.
6. What are the main tasks of social medicine?
7. Sections of social medicine and healthcare organization as a subject of teaching.
8. The current state of the discipline "Social Medicine" as a science and subject of teaching.

CONTENT

Lesson methods	3
Basic theoretical material for preparing for the lesson	5
Test tasks	9
Control questions	12

Навчальне видання

СОЦІАЛЬНА МЕДИЦИНА, ГРОМАДСЬКЕ ЗДОРОВ'Я ЯК НАУКА І ПРЕДМЕТ ВИКЛАДАННЯ

*Методичні вказівки
до практичного заняття студентів
спеціальностей 222 «Медицина» та 228 «Педіатрія»
з дисципліни «Соціальна медицина,
громадське здоров'я» (Громадське здоров'я)*

Упорядники Огнев Віктор Андрійович
 Сокол Костянтин Михайлович
 Лісова Ганна Володимирівна

Переклад Н. Мартиненко

Відповідальний за випуск В. А. Огнев



Комп'ютерна верстка О. Ю. Лавриненко

Формат А5. Ум. друк. арк. 0,8. Зам. № 21-34122.

**Редакційно-видавничий відділ
ХНМУ, пр. Науки, 4, м. Харків, 61022
izdatknmurio@gmail.com, vid.redact@knmu.edu.ua**

Свідоцтво про внесення суб'єкта видавничої справи до Державного реєстру видавництв, виготівників і розповсюджувачів видавничої продукції серії ДК № 3242 від 18.07.2008 р.