

**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 "HISTORY OF MEDICINE".
for Students majoring (Specialty) in 31.05.01 General Medicine

INTRODUCTION

- Aim of mastering the discipline- training future specialists in the history of the formation and development of global medicine.
- Objectives of mastering the discipline
 - formation of a scientific worldview;
 - formation of ethical and moral principles.

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 literature:

1. Bachilo, E. V. History of Medicine [Electronic resource]: a textbook / E. V. Bachilo. – 2nd ed. – Electronic text data. – Saratov : Nauchnaya kniga, 2019. – 158 p. – 978-5-9758-1733-4. – Access mode: <http://www.iprbookshop.ru/80985.html>
2. Kashnikova, K. V. History of Medicine and Pharmacy [Electronic resource] : textbook / K. V. Kashnikova. – 2nd ed. – Electronic text data. – Saratov: IPR Media, 2019. – 119 p. – 978-5-4486-0413-3. – Access mode: <http://www.iprbookshop.ru/79769.html>

Additional literature:

1. Altsina, A. Medicine for the Body and Soul [Electronic resource] / A. Altsina. – Electronic. text data. – M. : New Acropolis, 2017. – 246 p. – 978-5-91896-090-5. – Access mode: <http://www.iprbookshop.ru/71250.html>
2. Kostyukova, E. I. History of Medicine [Electronic resource] : textbook / E. I. Kostyukova. – Electronic. text data. – Samara : REAVIZ, 2011. – 58 c. – 2227-8397. – Access mode: <http://www.iprbookshop.ru/10155.html>
3. Fundamentals of the General History of Russian Medicine and Pharmacy [Electronic resource]: a study guide / A. A. Devyatkin, O. Yu. Zhuk, A. A. Supilnikov, and A. V. Chigareva. – Electronic. text data. – Samara : REAVIZ, 2009. – 48 c. – 2227-8397. – Access mode: <http://www.iprbookshop.ru/10153.html>

Internet resources:

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

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Practical lesson 1

Introduction. Medicine in primitive society.

Task No. 1. Read an excerpt from the book M. Lindemann (Lindemann M. Medicine and Society in Early Modern Europe. – Cambridge University Press, 1999. – 249 p. (Translation I. K. Cheremushnikova). Answer the following questions:

1. What was the iatrogenic approach in the history of medicine? What are its disadvantages?
2. What changes have occurred in the study of the history of medicine since the 1960s and 70s?
3. What aspects of society should be studied in the study of the history of medicine?
4. Explain the difficulties in defining the concept of "disease".

Task 2. Read an excerpt from the monograph by the Volgograd anthropologists M. A. Balabanov and E. V. Pererva (Balabanov M. A., Pererva E. V. Mayachny Bugor – the burial ground Krasnoyarskogo gorodishcha of the Golden Horde time. – Volgograd: Publishing House of the Volgograd branch of the Russian Presidential Academy of National Economy and Public Administration, 2013. – Pp. 83–91). Answer the following questions:

1. Which aspects of the life of the population of Mayachny Hill have been reconstructed anthropologists studying the structure of bone remains?
2. What can be said about the health of the population of the Lighthouse Hill? Give examples of how pathological changes in bone remains make it possible to judge typical diseases.
3. How complete, in your opinion, is the picture of diseases reconstructed from bone remains?
4. What reconstructions of the economic life of the population of Mayachny hillock have been made Anthropologists? What was the impact of farming practices on health? Give examples.
5. Determine the role of anthropological data in the history of medicine.

Task 3. Read the excerpt from the WHO report "On the state of health care in Europe" (2015) (Report on the state of health care in Europe, 2015. –157 p). Answer the questions:

1. How do you understand the term "cultural contexts of health"?
2. What is the usefulness of studying cultural contexts of health for the formation of accessible and high-quality medical care?
3. What is the expression of an interdisciplinary approach in solving the problems facing modern healthcare?

Task 4. Read the article by T. S. Sorokina, "Did Primitive Man Get Sick?" (T.S. Sorokina. Did Primitive Man Get Sick? // Lechebnik. Info-electronic medical library. URL: <http://lechebnik.info/513/23.htm>). Answer the following questions in writing:

1. What is the subject of paleopathology? What misconceptions about the life of primitive people, which existed until the end of the 19th century, did she refute?
2. What was the importance of the findings discovered in the Shanidar Cave? What medicines, according to these findings, did ancient people use?

Task 5. Read the excerpt from the book by the Soviet paleopathologist D. G. Rokhlin (Rokhlin D. G. Diseases of Ancient People. – M.: Nauka, 1965. – Pp. 180–189). Answer the following questions in writing:

1. What diseases of ancient people were discovered as a result of the expeditions of Soviet paleopathologists?
2. What diseases were the most dangerous and caused high mortality rates?

Task 6. Read an excerpt from E. Taylor's book "Primitive Culture" (E. B. Taylor, Primitive Culture, translated from English, Moscow: Politizdat, 1989, 573 pages). Complete the tasks and answer the following questions:

1. Compare the ideas about diseases among primitive tribes described by E. Taylor with the materials provided by J. Frazer. What conclusions can be drawn?
2. Based on E. Taylor's work, determine the influence of early forms of religion (animism, fetishism, and magic) on medical knowledge. What "medicines" did primitive healers use?
3. According to E. Taylor, what elements of primitive healing have been preserved among European nations? What are these elements?

Practical Lesson 2

Medicine in the countries of the ancient East.

Task 1. Read the passage from the "Smith Papyrus" (Anthology on the History of Medicine: Textbook / Edited by D. A. Balalykin. – M.: Littera, 2012. – Pp. 16-17.). Answer the following questions in writing:

1. What manipulations could the ancient Egyptian healers perform?
What manipulations did they consider unsuccessful? Why do you think the words "This is a disease that I will treat" or "This is a disease that I will not treat" were used?
3. What medicines (according to the Smith Papyrus) were used in ancient Egypt?

Task 2. Read an excerpt from S. M. Marchukova's book "Medicine in the Mirror stories" (Marchukova S. M. Medicine in the mirror of history. – St. Petersburg.: European House, 2003. – 272p. URL:<http://lechebnik.info/421/9.htm>). Answer the questions:

1. What types of medicines used by the Egyptians are mentioned in the Ebers Papyrus? Give examples.
2. What characteristics of ancient Egyptian medicine mentioned in the text allow us to classify it as a traditional healing system? Why is the dating of ancient Eastern medical texts difficult?
3. Give examples of the combination of rational and irrational (magical) techniques in ancient Egyptian medicine.

Task 3. Read about the ancient Indian treatise Charaka-samhita (Charaka-samhita / New Philosophical Encyclopedia //Institute of Philosophy of the Russian Academy of Sciences [Official website]. URL: <http://iph.ras.ru/elib/3370.html>). Answer the following questions:

1. Does the Charaka-samhita treatise belong to the system of traditional medicine? Explain your answer.
2. What are the sections of the treatise? What is their content?

Practical exercise 3.

Medicine in the countries of the ancient Mediterranean

Task 1. Read an excerpt from the work of the ancient Greek historian Thucydides on the plague epidemic in Athens during the Peloponnesian War (A textbook on the history of Ancient Greece).

Greece. – M.: Publishing house of socio-economic literature "Mysl", 1964. – pp. 259-261.). Answer the questions:

1. What were the social and political consequences of the plague epidemic in Athens?
2. Based on the text, describe the level of medical development in Athens in the 5th century BC.
3. How can we explain the fact that, although he was not a doctor, Thucydides was familiar with the symptoms and transmission routes of infectious diseases?

Task 2. Read the following passages from the Hippocratic Corpus (Hippocrates.

Selected Books / Translated by V. I. Rudnev. – Moscow, 1994. // URL: http://publ.lib.ru/ARCHIVES/G/GIPPOKRAT/_Gippokrat.html#004). Answer the following questions:

1. Based on the content of the treatise "On Medicine," comment on the instructions given to those who "wants to acquire a real knowledge of medicine".
2. Read the treatise "On the Physician". What external and internal characteristics should the physician have from the point of view of the "Hippocratic"? Why were these characteristics necessary? Assess the setting of the ancient Greek hospital described in the treatise "On the Physician". List the diseases, medical manipulations, tools, mentioned in the treatise "On the Physician".
3. Read the treatise "On the Airs, Waters and Localities". Highlight the author's rational judgments and misconceptions in these passages. What do you think is the problem? the significance of this treatise for the subsequent development of medicine?
4. Evaluate the content of the treatise "On the Sacred Disease". Compare the ideas of the "Hippocratics" about epilepsy with the primitive ideas about nervous diseases and mental disorders. Why did this treatise become particularly famous later?
5. What did the examination of the patient include according to the teachings of Hippocrates? Does the examination of the patient illustrate the idea of the disease that developed in the Hippocratic school? Why?
6. What was the meaning of the "Hippocratic Oath"? Which of its points do you think relevant, and which ones are outdated? What would you add to the "Oath" based on modern realities?
7. What is called the "Hippocratic mask"? From the point of view of Hippocrates, what is the main sign of approaching death? Why is the section of the Hippocratic Corpus that describes this condition called "Prognosis"?

Practical exercise 4.

Medicine of the early periods (5th-10th centuries).

Task 1. Read an excerpt from the work of the French historian Jacques Le Goff

"The Civilization of the Medieval West" (Le Goff J. The Civilization of the Medieval West. – M.: Progress-Academy, 1992. – Pp. 223–225.). Answer the following questions:

1. What diseases were common in medieval Europe? What does the author see as the main cause of these diseases? What are the main reasons for their spread?
2. Are there any indications in the passage of the dominance of traditional medicine in medieval Europe? Give examples.

Task 2. Read the passage from the book "The History of the Body in the Middle Ages" (Le Goff J., Truon N. The History of the Body in the Middle Ages. – Moscow: Tekst, 2008. – Pp. 96–117.). Answer the questions and complete the tasks:

1. Describe the attitude towards pregnant women and children in the Middle Ages. Why do you think it differed from the modern attitude?
2. What was the contradictory attitude towards the body in the Middle Ages? What factors it was determined by?
3. Describe the attitude towards doctors in the Medieval world. Show how during the Middle Ages the arsenal of medicinal means and methods of healing changed and was replenished.
4. What assessment do French historians give to medieval medicine. Do you agree with

their point of view?

Practical exercise 5.

Medicine of the late Middle Ages (15th-17th centuries)

Task 1. Read the passage from "The History of the Indians of New Spain" (Anthology on the history of medicine: a textbook / Ed. by D. A. Balalykin. – M.: Littera, 2012. – P. 181–182.). Answer the following questions in writing:

1. What role did Great geographical discoveries play in the spread of infectious diseases?
2. What, according to the author of the text, are the causes of the rapid spread of smallpox and measles in A new World? Is it possible to agree with him?

Task 2. Read an excerpt from M. Lindemann's book "Medicine and Society in Early Modern Europe" (Lindemann M. Medicine and Society in Early Modern Europe. – Cambridge University Press, 1999. – 249 p.). Answer the following questions:

1. What is commonly referred to as the "Columbian Exchange" in the history of medicine?
2. What were the health consequences of the intensification of connections between the continents for the populations of the Old and New Worlds?
3. What is commonly referred to as "environmental imperialism"?
4. What are the biological and social causes of the emergence of syphilis? List all the known names of syphilis that existed in different countries. Consider why no country wanted to recognize it as their own disease.

Practical exercise 6-7.

Modern medicine (1640-1918): medical and biological disciplines

Task 1. Read an excerpt from René Descartes' work "Discourse on the Method" (Descartes, R. Discourse on the Method // Gumer: electronic. library. URL:http://www.gumer.info/bogoslov_Buks/Philos/dekart/rass_met.phpwww).

Write the tasks and answer the questions:

1. Read the section "Basic rules of the method." What provisions put forward by Descartes allow to evaluate his views as the beginning of scientific thinking?
2. What English doctor is discussed in the section "Order of physical questions"? For what reasons does Descartes support the theory of blood circulation?
4. What assessment does Descartes give to the level of modern European medicine? How does it feel his attitude to ancient science, as well as to his contemporaries, supporters of the authority of ancient authors?

Task 2. Read an excerpt from Joseph Lister's work on the basics of antiseptics in surgery (Skorokhodov L. Ya. Joseph Lister: a century of antiseptics // VIVOS. VOCO! (Non-profit educational library). URL: <http://vivovoco.astronet.ru/VV/BOOKS//LISTER.HTM>). Answer the questions:

1. What role does Lister assign to the discoveries of Louis Pasteur in the development of antiseptic methods?
2. What was the so-called "Lister's method"? What successes in surgery did it allow to achieve?

Task 3. Based on the text about Louis Pasteur's experiments (Anthology on the History of Medicine: A Textbook / Edited by Prof. D. A. Balalykin. – Moscow: Littera, 2012. – Pages 349–366), answer the following questions in writing:

1. How was the rabies vaccine developed? Under what circumstances was it first used?
2. Can the rabies vaccine be classified as an attenuated (weakened) vaccine? What are its characteristics? Who was its first developer?
3. Find information about the current use of the rabies vaccine. Are there any significant differences between it and the Pasteur vaccine?

Practical exercise 8.

Modern medicine (1640-1918): clinical disciplines, hygiene and public medicine

Task 1. Read an excerpt from the work of M. V. Lomonosov "On the preservation and multiplication of the Russian people" (Lomonosov M. V. On the preservation and multiplication of the Russian people // M. V. Lomonosov. For the benefit of society / Compiled by A. S. Eleonskaya. – Moscow: Sovetskaya Rossiya, 1990, pp. 160–172). Answer the following questions:

1. List the factors that, according to M. V. Lomonosov, affect the birth rate and the death rate.
2. What are the ways that M. V. Lomonosov suggests for increasing the birth rate and reducing the death rate? Evaluate his suggestions.

Task 2. Read the excerpt from I. I. Mechnikov's work "Immunity in Infectious Diseases" (Anthology on the History of Medicine / Edited by P. E. Zabludovsky. – Moscow: Medicine, 1968, pp. 65-71). Answer the following questions:

1. What was the cellular theory of immunity proposed by I. I. Mechnikov? What theories preceded it?
2. What were the differences between the two groups of phagocytes first described by I. I. Mechnikov? What names did the scientist give them? What is the significance of describing the properties of different groups of phagocytes for modern medical practice?
3. Based on the text, determine I. I. Mechnikov's attitude to the theory by natural selection, Darwin. Is there any indication in the text of the connection between the theory of cellular immunity and evolutionary theory?
5. Determine the significance of I. I. Mechnikov's research for medical science.

Practical Exercise 9.

Modern Medicine (since 1918): Healthcare and Medicine in the USSR and Russia

Task 1. Read the article about the scientific activities of Academician Z. V. Ermolyeva (Medvedeva L. M. Z. V. Ermolyeva – Metamorphoses of Fate // Bulletin of the National Research Institute of Public Health named after N. A. Semashko. – Moscow, 2014. – Pp. 139–141.). Answer the questions and complete the tasks:

1. What were Z. V. Ermolyeva's scientific interests? How relevant were they in the middle of the 20th century?
2. What role did Z. V. Ermolyeva play in the life of the war-torn city of Stalingrad in 1942?
3. Find additional information about Z. V. Ermolyeva. Highlight the most significant, in your opinion, works of Z. V. Ermolyeva in the field of microbiology.

Task 2. Read the lecture by the Soviet scientist P. V. Makarov (Makarov P. V. New Principles in the Cell Theory of Unveiling the Reactionary Essence of Virchowianism // VIVOS. VOCO! (Non-Commercial Educational Library).

URL: <http://vivovoco.astronet.ru/VV/PAPERS/BIO/VLADALEX/MAKAROV.HTM>).

Answer the following questions:

1. What was the "discovery" of the Soviet biologist O. B. Lepeshinskaya? How does it relate to the data of modern science? Why do you think it was supported by other Soviet scientists?
2. For what reasons Rudolf Virchow's teaching about the cell was criticized in The Soviet Union? Please comment on the author's "transfer" of the postulates of cellular theory to social relations.
3. What is the author's attitude towards the new science of genetics? Why were genetic scientists persecuted in the USSR? Comment on T. D. Lysenko's theory of "the generation of new species within the old ones" (the transformation of wheat into rye).

4. Consider how the ideologization of society and the desire for isolation from the "hostile Western world" affected Soviet science.

Task 3. Read the WHO report on the problems and achievements of healthcare in the Russian Federation (Public Health in the Russian Federation: Main Problems and Achievements // World Health Organization [Official website].

Access mode <http://www.who.int/countries/rus/profile/ru>). Answer the questions:

1. Name the diseases that are the main causes of death in the Russian Federation. What trends can be observed in the mortality statistics for 2000-2014?
2. What WHO programs were implemented in the Russian Federation in 2000-2014? What were their goals?
3. What measures would you suggest to address the issues of morbidity and mortality in modern Russia?

Recommended literature.

Main literature:

1. Bachilo, E. V. History of Medicine [Electronic resource]: a textbook / E. V. Bachilo. – 2nd ed. – Electronic text data. – Saratov : Nauchnaya kniga, 2019. – 158 p. – 978-5-9758-1733-4. – Access mode: <http://www.iprbookshop.ru/80985.html>
2. Kashnikova, K. V. History of Medicine and Pharmacy [Electronic resource] : textbook / K. V. Kashnikova. – 2nd ed. – Electronic text data. – Saratov: IPR Media, 2019. – 119 p. – 978-5-4486-0413-3. – Access mode: <http://www.iprbookshop.ru/79769.html>

Additional literature:

1. Altsina, A. Medicine for the Body and Soul [Electronic resource] / A. Altsina. – Electronic. text data. – M. : New Acropolis, 2017. – 246 p. – 978-5-91896-090-5. – Access mode: <http://www.iprbookshop.ru/71250.html>
2. Kostyukova, E. I. History of Medicine [Electronic resource] : textbook / E. I. Kostyukova. – Electronic. text data. – Samara : REAVIZ, 2011. – 58 c. – 2227-8397. – Access mode: <http://www.iprbookshop.ru/10155.html>
3. Fundamentals of the general history of Russian medicine and pharmacy [Electronic resource] : textbook / A. A. Devyatkin, O. Yu. Zhuk, A. A. Supilnikov, A.V. Chigareva. – The electron. text data. Samara : REAVIZ, 2009. - 48 p. - 2227-8397. – Access mode: <http://www.iprbookshop.ru/10153.html>

Internet resources:

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