MINISTRY OF EDUCATION AND SCIENCE OF THE KYRGYZ REPUBLIC
"SALYMBEKOV UNIVERSITY" INSTITUTION

INTERNATIONAL FACULTY OF MEDICINE

Natural Sciences Department

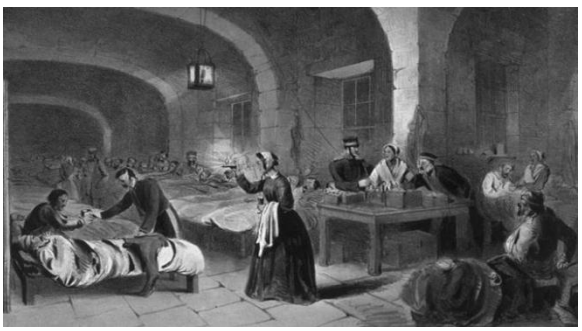
AGREED
Head of Department
Kasymalieva K.K._____
«____» _____20____г.

APPROVED
Rector «SU»
Zhumadilov E.Zh. _____
«_____» _____20____г.

Educational-methodical complex of discipline

HISTORY OF MEDICINE

Educational program (specialty) "General Medicine"



Compiled by: Teacher Umetalieva M.N.

Bishkek

MINISTRY OF EDUCATION AND SCIENCE OF THE KYRGYZ REPUBLIC
"SALYMBEKOV UNIVERSITY" INSTITUTION
INTERNATIONAL FACULTY OF MEDICINE

Medicine Faculty
Natural Sciences Department
HISTORY OF MEDICINE Discipline
Educational-methodical complex of discipline HISTORY OF MEDICINE
"General Medicine" Educational program (specialty)
Graduate Qualification Doctor
Full-time education form

Compiled by (s): Teacher Umetalieva M.N.

The working program was reviewed and approved at a EMC meeting of the Salymbekov University
№_____ от_____20____

The work program was reviewed and approved at a department meeting « Salymbekov University »
№_____ от_____20____

Head EMD
Akmatova A.T. _____

Head of Department
Kasymalieva K.K. _____

Compiled by
Teacher Umetalieva M.N. _____

CONTENTS

MINISTRY OF EDUCATION AND SCIENCE OF THE KYRGYZ REPUBLIC
"SALYMBEKOV UNIVERSITY" INSTITUTION
INTERNATIONAL FACULTY OF MEDICINE

Department of Natural Humanitarian

WORKING PROGRAM
"HISTORY OF MEDICINE"

Discipline type Humanitarian, social and economic cycle

Direction of preparation General Medicine

Course___1_____ Semester __2_____

Number of study weeks __20_____

Number of credits___2____

Total hours on the curriculum:

- Lectures_____12ч._____
- Practical (seminar)_____18ч._____
- Laboratory _____
- Self work_____30_____
- Self work with Teacher _____15_____

The working program is developed in accordance with the requirements of the State educational standard for the "General Medicine" specialty.

The working program was developed by: Teacher Umetalieva M.N.

The working program was reviewed and approved at the meeting of the Department

_____

Protocol no. _____ from "_____"_____20_____.

Agreed with the Educational and Methodological Committee (EMC) of the "Salymbekov University» institution. Protocol no. _____ from "_____"_____20____.

Head of Natural Humanitarian Department _____ _____

Бишкек

ANNOTATION

The discipline "History of Medicine" is a discipline of the basic part of the humanitarian cycle of disciplines of the curriculum of Salymbekov University for the specialty "General Medicine".

1.1. AIMS AND OBJECTIVES OF DEVELOPMENT OF DISCIPLINE

The purpose of the discipline is the development of the logical thinking of future doctors and an understanding of the laws of the historical development of medical science

The tasks of the discipline are:

- Disclose the general laws of the world-historical process
- Formation and development of medicine and medicine from ancient times pre-modern;
- Show the achievement of each new era in the field of medicine in the context of the spiritual culture of mankind;
- The relationship of medical science and practice in different regions of the world;
- Development of the main provisions of medical ethics in different periods of time in different countries of the world.

1.2. PLACE OF EDUCATIONAL DISCIPLINE IN THE STRUCTURE OF EDUCATIONAL STANDARDS

The discipline "History of Medicine" belongs to the basic part of the humanitarian, social and economic disciplines specializing in "General Medicine" of higher professional medical education.

Prerequisites of the discipline is mastering school program of “History”

For studying this discipline student should

know:

- historical personalities of Ancient Greece and Rome
- historical periods

be able:

- to participate in discussions
- to analyse given information

to master:

- skills of making notes and abstracts
- skills of enlarging scope independently and selfstudy
- skills of searching information and performing it

As a result of studying the academic discipline, students should:

To know:

- Achievements of each new era in the field of medicine.
- Difference between folk, traditional and scientific medicine.
- Life and work of outstanding doctors and medical scientists, their scientific achievements.
- History of the most important discoveries in medicine.
- History of the development of medical ethics.
- Analyze the information value of the most important stages in the development of medicine.

be able to:

- Use educational, scientific, popular science literature, the Internet for professional activities.
- Independently work with educational, scientific, reference literature and prepare abstract reports, knowledge in the history of the development of medicine in Kyrgyzstan and in the world.

A post requisite of this discipline is “Bioethics”, this discipline gives first notions of medical ethics and teach students to be careful with general medical achievements of the world.

1.3. REQUIREMENTS TO THE RESULTS OF THE DEVELOPMENT OF DISCIPLINE

The program on the discipline "History of Medicine" is compiled in accordance with the requirements of the Educational Standard for specialty of "General Medicine", which ensures the high competitiveness of the institute in the internal and external markets providing high-quality educational services, this program provides:

The study of this academic discipline is aimed at

- achievement of the following learning outcomes:

Learning outcome 1: Ability to take basic knowledge of natural-humanitarian, social, fundamental biomedical and clinical disciplines in the diagnosis

Learning outcome 2: Treatment

Learning outcome 3: Prevention and rehabilitation of patients of different ages within their competence

Learning outcome 4: Ability to participate in research work using basic research skills

Learning outcome 5: Possession of skills in moral and cultural behavior, critical thinking and aspiration for self-improvement

- the formation of the following general cultural (GC), professional (PC), instrumental (IC) and social-personal (SPC) competencies in students:

GC-1 - is able to analyze socially-significant problems and processes, to use in practice the methods of humanitarian, natural-science, medical-biological and clinical sciences in various types of professional and social activities;

GC-3 - is capable of analyzing significant political events and trends, mastering the basic concepts and laws of the world historical process, respectful and careful attitude to the historical heritage and traditions, evaluation of state policy; owns knowledge of historical medical terminology;

GC-5 - is capable of logical and reasoned analysis, public speech, discussion and controversy, editing of professional texts, cooperation and conflict resolution, tolerance;

GC-6 - is ready to carry out its activities taking into account the moral and legal norms accepted in society; comply with the rules of medical ethics, laws and regulations for working with confidential information, keep medical confidentiality

IC-4 - readiness to work with information from various sources.

SPC-2 - is able to identify the natural science of the problems arising in the course of the professional activities of the doctor;

PC-27 - is ready to study scientific medical information, domestic and foreign experience on the research topic.

For successful achievement of above mentioned aims and results, in teaching process communicative methods of teaching are widely used:

- cross questioning
- brainstorming
- group discussions (buzz groups)
- different games for checking understanding or remembering material
- individual and group work cards
- feedback questions

For improvement of teaching process and wide usage of modern teaching methods video-lessons are provided for students.

1. The disciplines content and complexity

Type of work	hours	
	2 semester	Total
Total labor intensity	60	60
Total auditory hours	30	30

Lectures	12	12
Practical lesson	18	18
Independent work	30	30
Type of final control	Final testing	Final testing

2.1. THEMATIC PLAN OF LECTURES

№	Theme	Hours
	Module I	
1.	Introduction to the history of medicine. Healing in a primitive society	2 h.
2.	Healing in the countries of the ancient East and West	2 h.
3.	Healing in the Ancient World. Medicine of the Middle Ages	2 h.
	Total	**6 h.**
	Module II	
1.	Modern medicine: anatomy, physiology, histology	2 h.
2.	Modern medicine: clinical disciplines: hygiene, epidemiology	2 h.
3.	Medicine of modern times (after 1918). History of development of medicine in Kyrgyzstan	2 h.
	Total	**6 h.**
	Total in semester	**12 h.**

4. CONTENT OF PRACTICAL CLASSES

№	Theme	Lesson content	Hours
1.	Introduction to the history of medicine. Healing in a primitive society.	Definition of the history of medicine. History of medicine as a science and as part of the general history of culture. The main stages of the development of medicine in connection with the development and change of socio-economic formations. Periodization of the world history of medicine. Sources of study of medicine and pharmacy. Healing in a primitive society.	2 h.

2.	Healing in the countries of the ancient East.	Characteristic of the era. Features of the development of healing in countries of the ancient world. Healing in ancient Messopotamia, Doctoring in ancient Egypt, Healing in ancient India, Doctor in Ancient China	2 h.
3.	Medicine and medicine in the countries of the ancient Mediterranean (in the ancient world).	Medicine and medicine in ancient Greece. Stages of healing, medical schools in ancient Greece. Medicine of Ancient Rome. Hippocrates, Galen their merits in healing.	2 h.
4.	Medicine of the Middle Ages	Medicine in the Byzantine Empire. Medicine in medieval Russia (IX-XV cc.) Medicine of the peoples of the medieval East (VII-XVII centuries.) Medicine in Western Europe during the early and developed Middle Ages (V-XV centuries).	2 h.
5.	Medicine of modern times, biomedical disciplines: anatomy, physiology, histology.	Medico-biological directions in modern medicine. The development of normal anatomy in Europe and Russia. Development of histology. Development of general pathology. Development of microbiology and methods of combating infections. Physiology and experimental medicine.	2 h.

6.	Modern medicine, clinical disciplines: hygiene, epidemiology and public medicine.	Development of clinical medicine in Western Europe and Russia: advanced medical centers in Western Europe. Development of internal medicine and medical education in Russia in the XIX century, the development of surgery and pediatrics. Development of epidemiology, hygiene and public medicine.	4 h.
7.	Medicine of modern times (after 1918).	Development of medicine in foreign countries. Development of medicine and public health in Russia and the USSR. International organizations: ICRC, CP, WHO. Nobel Prizes in the field of medicine.	2 h.
8.	History of the development of medicine in Kyrgyzstan.	Stages of development of medicine in Kyrgyzstan. Doctoring in Kyrgyzstan until reunification with the Russian Empire (1863). Medicine in the period of the tsarist empire (1863-1917). Medicine of Kyrgyzstan in the Soviet period (1917-1991), health care of the sovereign Kyrgyz Republic (since 1991), health system reforms, state and national programs of the KR, laws of the Jogorku Kenesh on public health protection.	2 h.
		Total	**18 h.**
		Total in one semester	**30 h.**

5. THEMATIC PLAN OF STUDENT'S SELF-WORK

№	The topics of work	Type of work	Methodological maintenance	Type of report	Hours for final control
1.	The struggle of materialism and idealism in medicine.	Making notes	Recommended literature	Report on a practical or demonstrating	3

	Ayurveda is the doctrine of a long life.			notes	
2.	Greek mythology about healing and healers. Temple and folk medicine in ancient Greece.	Making notes	Recommended literature	Report on a practical or demonstrating notes	3
3	Islam and medicine in the Middle Ages. Ibn Sina - an outstanding physician-encyclopedist of the medieval East.	Making notes	Recommended literature	Report on a practical or demonstrating notes	4
4.	History of the development of ideas about the circulation of blood (Miguel Servetus, William Garvey, Marcelo Malpighi). The development of medicine in the aborigines of America	Making notes	Recommended literature	Report on a practical or demonstrating notes	6
5.	Medicine in the Middle Ages (later (XV-XVII centuries.) Middle Ages)	Making notes	Recommended literature	Report on a practical or demonstrating notes	8
6.	A modern medicine. Development of dentistry in Russia	Making notes	Recommended literature	Report on a practical or demonstrating notes	6
					Total: 30 hours

4. Valuation fund for current, mid-term and final controls according to the results of mastering the discipline Current control and final testing.

Student's knowledge, his rating is estimated on a 100 - point scale. The rating of current and module is 80 points (40 points for 1 module and 40 points for 2 module), the remaining 20 points is the rating score obtained at the final testing.

Carrying out of the current control assumes the systematic control of the student's work at each lesson during the semester:

- attendance of studies by a student;
- student activity in class;
- preparation for classes;
- students' individual work (SIW)
- students' possession of the studied volume of theoretical material, etc.

Twice per semester, according to the approved schedule two modules are carried out.

The final testing at the end of the semester is conducted in the form of an MCQs in the presence of the dean.

Criteria for assessing students' knowledge in the exam (test) out of 20 points.

scale (from 20point)	**Academic mark**
0-9	**«2»** ***(unsatisfactory)***
10-13	**« 3 »** (***satisfactory***)
14-17	**« 4 »** ***(good)***
18-20	**« 5 »** (***excellent***)

Final testing is conducted on tickets, which, as a rule, should consist of three questions (tasks). Each question is estimated from 20 points. It is recommended to use the following criteria for assessing students' knowledge during testing:

Criteria for assessing students' knowledge during testing out of 20 points

Oral testing	
Grading criteria of one question (20 points)	**Points**
Having an oral response plan	0 – 4
Execution of the plan with an oral reply	0 –4
Completeness of the answer	0 – 4

Culture of speech using professional terminology. Confidence in the answer	0 – 4
Citing examples	0 – 4

The time allotted for the preparation of an oral response is 15-20 minutes. The response time is 10 minutes.

The student who has gained on the current testing and on the results of two modules:

- less than 40 points - receives an unsatisfactory evaluation and is not allowed to final control;
- from 30 points and more - must undergo final control;
- the final modular rating for the discipline is set according to the results of the two control modules and the final control of knowledge:
- the first module, which is assigned 40 points out of 100 point scale of the students' knowledge assessment;
- the second module, which is assigned 40 points out of 100 point scale of the students' knowledge assessment.
- final testing, which is given 20 points from 100 point assessment of students' knowledge.

The integral estimate.

Current / Module testing				Final test
Module I		Module II		20 points
Current score	Test score	Current score	Test score	
20 points	20 points	20 points	20 points	
Total score - 100 points				

Interval recalculation of the 100-point rating in the academic mark

Grade rating (100 points)	**pass**	**Academic grade**
85 – 100	***Passed***	« **5** » (***excellent***)
76 – 84		« **4** » (***good***)
60 – 74		« **3** » (***satisfactory***)
0 – 59	***Not passed***	« **2** » (***unsatisfactory***)

4.2. DIDACTIC MATERIALS FOR CURRENT, MODULE AND FINAL TESTING

List of questions for the 1st module

1. Definition of the history of medicine
2. The basis for the periodization of the history of medicine laid _____
3. From the whole history of mankind the duration of the primitive era is _____
4. The superstitious fear of man before the terrible nature caused a desire to propitiate it. The man began to worship the earth, water, fire, inhabiting nature with peculiar "spirits". This form of religion is called _____
5. At the dawn of the formation of human society, a special class of people dedicated themselves to healing. They were called _____
6. Belief in the supernatural properties of inanimate objects is called _____
7. To expel the evil spirit, primitive people conducted an "operation" _____
8. The average life expectancy of primitive people was _____
9. What is the name of a person's belief in the presence of a kinship between his genus and a certain kind of animal or plant?
10. Features of medicine of the slave system
11. Anatomical knowledge in Ancient Egypt was _____
12. In what country did the Ancient people use mercury for treatment?
13. The top of the art of diagnosis in ancient China was the teaching _____
14. Mummification in ancient Egypt involved special people, whom the Greeks called _____
15. In ancient China, it was believed that a real doctor is not someone who treats the sick, but _____
16. The aqueducts are not an invention of the Romans, they borrowed this idea.
17. After graduating, the future Indian doctor said _____
18. A characteristic feature of traditional Chinese medicine is _____
19. The medical ethics of ancient India forbade the doctor to demand compensation
20. Military medicine was born in _____
21. Which medical school belonged to Hippocrates?
22. Healing God of the Ancient Greek Pantheon
23. What was the name of the sanctuary in honor of the god of healing in Ancient Greece?
24. What was the name of the military institutions for the wounded and sick in ancient Rome?
25. Where was Claudius Galen born?
26. Describe four signs of inflammation
27. What is the most popular remedy in ancient Rome?

28. What is the contribution of Hippocrates to medicine?

29. Sanitary and hygienic structures of Ancient Rome

30. What historical event marks the end of the era of the Ancient World and the beginning of the Middle Ages?

31. Who wrote the Canon of Medical Science?

32. Where housed the lepers?

33. An infectious disease widely spread in Europe during the time of the Crusades?

34. The centers of medieval medicine in Western Europe were _____

35. Where and when the world's first pharmacy was opened?

36. What is the name of physician, physiologist, embryologist who mathematically calculated and experimentally substantiated the theory of blood circulation?

37. A doctor who gave a new idea of the dose of medicinal substances, believing that "everything is poison and everything is a medicine" is _____

38. The main merit of Harvey is _____

39. The founder of evolutionary doctrine is _____

40. The first anatomical museum was created in _____

41. The founder of vaccination?

42. The first who showed that the processes of fermentation and decay are related to the vital activity of microorganisms was _____

43. The main discoveries of L. Pasteur

44. The founder of bacteriology, winner of the Nobel Prize in 1905

45. Who has improved and introduced into widespread practice the method of questioning a patient for the diagnosis?

46. The founders of antibiotic therapy?

47. When is plaster cast suggested?

48. The use of a solution of bleach for antiseptics first applied in _____

49. Where was the first school in the world opened for the training of dentists?

50. According to N.L. Bidloo in the works of the Manual for the students studying surgery in the anatomical theater (1710) testimony to the removal of teeth in the XVIII century included _____

51. The general name of representatives of traditional medicine from Kyrgyz

52. Representatives of traditional medicine from Kyrgyz

53. In what year is smallpox outburst occurred in Kyrgyzstan?

54. In what year is the Kyrgyz State Medical Institute open?

55. What is the average life expectancy in Kyrgyzstan?

56. First Rector of the Kyrgyz State Medical Institute?

5. Control tasks or other materials necessary for assessment of knowledge, abilities, skills and (or) experience

List of questions for

Module 2

1. The founder of scientific anatomy in the Renaissance in Europe is _____
2. Name the doctor of the Renaissance, who proposed as a symbol of medicine a burning candle and the motto "Shining Others, Burning"
3. In which year and where the Republican Diagnostic Center was opened?
4. In what field of medicine was specialized care provided in 1955?
5. From 1980 to 1990, the system was improved in the form of _____
6. The onset of pathological anatomy in Europe is associated with the name: _____
7. In what year was the first vaccine against smallpox in Russia carried out?
8. What V. Semmelweis suggested as a method of antiseptic "postpartum fever"?
9. Merit of Louis Pasteur is _____
10. Which scientists were awarded the Nobel Prize in 1908?
11. In what period of Russia was the Moscow State University opened with a medical faculty?
12. What Russian doctor of the XIX century is the founder of military field surgery?
13. What are the main achievements of the Italian physician B. Ramazzini?
14. The Apothecary Order in the Moscow State is _____
15. In what year under the Aptekarsky order was opened the first medicine school in Russia?
16. Who first applied methods of clinical examination in Russia?
17. What are the main achievements of the scientist-encyclopedist M.V. Lomonosov related to medicine and pharmacy?
18. What does the term "political arithmetic" introduced by W. Petty mean in modern understanding?
19. The science of the preservation of public health, the prevention and treatment of diseases is _____
20. Who is the founder of occupational pathology and occupational health as a branch of scientific medicine?
21. Which doctors of the Renaissance corrected more than 200 errors of Galen?
22. Determine the contribution of the Italian artist and naturalist Leonardo da Vinci to the development of medicine and anatomy
23. Name the English naturalist, the founder of evolutionary doctrine
24. Who owns the statement "You can learn only by visiting patients"
25. In what year Fahrenheit proposed a thermometer?

26. What are the main achievements of the French doctor R. Laennec?

27. The principles of Soviet health care are _____

28. Epidemiology is _____

29. In what year did the first medical clinic open?

30. In what years the consolidation of polyclinics with a hospital began?

31. What document did the General Assembly of the Council of Europe adopt in 1997?

32. Public health of Kyrgyzstan during the Union Republic (1937-1991) is divided into 3 periods, list them

33. Who and in what year were awarded the Nobel Prize for the discovery of reversible phosphorylation of protein as a regulating mechanism of cellular metabolism

34. Who is the founder of the first in the Russian Empire scientific pathoanatomical school?

35. What event occurred on August 22, 1864 in Geneva

36. In what year was the first World Health Assembly, WHO?

37. Who suggested a thermometer with a centigrade scale in which 0°C corresponded to the boiling point of water, and 100°C to the melting point of ice?

38. What is the main achievement of the Austrian doctor L. Auenbrugger?

39. Who gave the first description of percussion in Russia?

40. Name the functions of the Pharmaceutical Order

41. Thanks to which teacher in Russia, birth and death rates began to be recorded

42. Which institution was opened in the second half of the XVII century by the orders of Peter I in 1654?

43. What scientists are associated with the introduction of thermometry in the clinic?

44. The Red Cross on a white background serves as an emblem of _____

45. A vertically placed rod, entwined with a snake, depicted against the background of the globe lined with laurel branches, is an emblem of _____

46. In the world historical science, as a conditional line between the new time and modern history, which of the scientists discovered the theory of the constancy of the internal environment of the organism?

47. What are the main achievements of the Russian physiologist I.M. Sechenov?

48. Who introduced thermometry into the practice of a physician?

49. Name the outstanding anatomists of the Renaissance.

50. Determine the contribution of the Italian physician M. Malpighi to the development of medicine?

51. Name the medical emblem accompanying the emergency medical service.

52. Determine the main achievements of the Dutch naturalist-self-taught A. Levenguk

53. The Kyrgyz State Medical Academy bears the name of _____

54. How many regional hospitals are there in Kyrgyzstan?

55. Law regulating issues of public health protection in Kyrgyzstan

6. EDUCATIONAL AND METHODOLOGICAL SUPPORT OF THE DISCIPLINE RECOMMENDATIONS FOR THE USE OF THE MATERIALS OF THE EDUCATIONAL - METHODOLOGICAL COMPLEX

The educational plan of the working program by History of medicine mainly divided 3 stages.(5 periods)These periods can be distinguished in this educational methodical discipline complex. Each period follows a previous one in the chronological order.

1) **Medicine of the ancient time (Medicine of the primitive society)**
2) **Medicine of the middle ages (Arabic medicine)**
3) **Medicine of the modern time (Medicine of the Renaissance period)**

1. Medicine of the primitive society (2 million years ago - 1 000 BC) is the very first time period in the World History and in the History of medicine. It was the time of so-called primitive community and primitive culture when no states and civilizations yet emerged.

2. Medicine of the ancient time (4 000BC - 4th century) refers to the time period when the first states and civilizations were established. It was the time when the medicine was developed in China,India and Greece,

3. Medicine of the middle ages. (4th - 15th centuries) arecharacterized by the fall of the Roman Empire marked the beginning of the Dark Ages in Europe. The later stages of the Roman Empire were a period of epidemic disease and population decline. Medicine was not to escape the general decline of learning which accompanied the fall of the Roman Empire and the arrival of Christianity. There was a return to the belief that the cause of much illness was supernatural. Illness was a punishment from God for people's sins.

4. Medicine of the Renaissance period (16th - 18thcenturies)A revolution was to take place in medicine at the time of the Renaissance. It was to involve the breaking of the stranglehold classical and Arabic thought, especially Galen and Avicenna, had on medicine and its replacement by a belief in observation and experiment.

5. Medicine of the modern times (18th - 21th centuries). The ending of the taboo on human dissection resulted in vastly improved knowledge of anatomy and physiology, this, and the discovery of anesthesia and the realization of the importance of antiseptics, formed the basis of modern surgery. Only when these developments came together, was it possible for modern surgery, with its sophisticated and intricate operations, to become a reality.

Before beginning the tasks for independent work, students need to study the literature recommended for each topic. A general list of educational, methodological and scientific literature is presented in a separate section of the educational methodical discipline complex.

DESCRIPTION OF THE SEQUENCE OF STUDYING THE EMC

The special feature of **the first stage** is that it deals with the origin and development of the medicine and historical achievements of medicine from primitive society to Middle ages. About the historical stages in the development of medicine.

The special feature of the **second stage** is that it deals with the origin and development of religion and its role in medicine. Religion plays important role in the human life.

The special feature of the **third stage** is that it deals with the development of medical researches and most important discoveries in medicine. Tendencies of development of the modern medicine.

RECOMMENDATIONS FOR STUDYING SEPARATE TOPICS OF THE DISCIPLINE

In the learning of the theme **№ 1 "Introduction to the history of medicine",** particular attention should be paid to thehistorical stages in the development of medicine,formation and development of medicine from primitive society to modern times. Periodization of the world history of medicine. Sources of studying of medicine and pharmacy. Healing in the primitive society.

In the learning of the theme **№2 "Ancient Greek medicine",** particular attention should be paid to the ancient classical medicine – Greek and Roman medicine: Stages of healing, medical schools in ancient Greece, medicine of Ancient Rome. Hippocrates, Galen their merits in healing.

In the learning of the theme **№3 "Ancient Indian medicine",** particular attention should be paid to the features of the development of healing in countries of the ancient East. Indian medicine began with the belief that illness was caused by the Gods or by demons and was a punishment for bad behavior. Over time however other beliefs arose such as that which considered good health required a balance being kept between the elements of air, bile and mucous. And we should know that India developed surgery to a higher standard, than any of the other ancient civilizations. This was because the prohibition on human dissection which existed in Europe, China and the Arab

world did not exist in India. This enabled the Indian physicians to obtain a good knowledge of human bones, muscles, blood vessels and joints.

In the learning of the theme **№4 "Ancient Chinese medicine",** particular attention should be paid to the earliest Chinese medicine, in common with most other ancient civilizations, assumed disease and illness were caused by the gods or by demons. The correct remedies for illness involved ritual exorcisms and appeals to the Gods. A more naturalistic explanation of illness developed with the belief in Yin and Yang. The Yin and Yang principles were considered to control everything and their interaction controlled the functioning of the human body. Yin was feminine, soft, cold, moist, receptive, dark, and associated with water, while Yang was masculine, dry, hot, creative, bright, and associated with fire. Human health depended on a balance between Yin and Yang.

In the learning of the theme **№5 "Medicine of the Middle ages",** particular attention should be paid to the historical conditions and basic ideas of the Middle ages. Origin of the world religion Christianity. The fall of the Roman Empire marked the beginning of the Dark Ages in Europe. The later stages of the Roman Empire were a period of epidemic disease and population declineThere was a return to the belief that the cause of much illness was supernatural. Illness was a punishment from God for people's sins. The curing of such disease by medical practices was contrary to Gods will. The only appropriate treatment was prayer and penitence. Diseases might also be caused by witchcraft, possession by demons or spells made by elves and pixies. Some of the old learning did survive, ironically in Christian monasteries where monks copied and translated classical writings. Their work mixed superstition and religion with classical learning and knowledge.

In the learning of the theme **№6 "Arabic medicine",** particular attention should be paid to thehistorical conditions and basic ideas of the Golden ages. Origin of the world religion - Islam. The Moslem prophet Mohammed was born in 570 CE and he and his successors were to conquer an empire extending from Spain to India. The early Moslems had a tolerant attitude to Christian and Jewish minorities who were allowed to freely practice their religions. The origins of Arabian medicine lay with a heretical Christian sect known as the Nestorians. The Nestorians under threat of persecution from orthodox Christians fled eastwards toward present day Iraq andIran. They brought with them classical texts from a range of authors including Hippocrates, Aristotle and Galen which they proceeded to translate into Arabic. At this time the Arab world had a positive attitude to new ideas and was happy to adopt the ideas of classical scholars like Aristotle and Galen. Surgery in the Arab world was not respected and surgeons were usually craftsmen. The great Arab medical authorities were Al – Razi and Avicenna

In the learning of the theme **№7 "Renaissance medicine",** particular attention should be paid to the specialfeatures and culture of the Renaissance period. A revolution was to take place in medicine at the time of the Renaissance. It was to involve the breaking of the stranglehold classical and Arabic thought, especially Galen and Avicenna, had on medicine and its replacement by a belief in observation and experiment. One of the principal proponents of the new beliefs was Paracelsus who attacked academic learning, especially Galen and Avicenna and advocated learning from experience.

The study of anatomy was to undergo a revolution at the hands of Vesalius. Vesalius was able to dissect human corpses and this enabled him to provide a generally accurate picture of the human body.

Previously anatomy had suffered from the prohibition on human dissection that extended back to classical times, so that knowledge of human anatomy was based on animal dissections. Before Vesalius the accepted authority was Galen whose anatomical studies were based on animal dissection and whose work had acquired such a status that to question it could involve accusations of heresy.Vesalius was able to obtain human corpses for dissection, as public authorities were prepared to allow the dissection of the corpses of executed criminals.

In the learning of the theme **№8 "Modern medicine",** particular attention should be paid to thedifference between folk, traditional and scientific medicine. Life and work of outstanding doctors and medical scientists, their scientific achievements.History of the most important discoveries in medicine.History of the development of medical ethics and analyzing the information of value of the most important stages in the development of medicine.

EXPLANATIONS ON WORKING WITH THE DISCIPLINE TEST SYSTEM

For successful finishing of the course students are expected to attend all the lessons, be attentive, write essential ideas of the lectures; make regular weekly journal entries from the recommended and by self find additional literature followed with composing a glossary of historical and medical terms and categories, topics of SIW will be discussed in the classes and meditated over readings; be active and demonstrate activity and knowledge during the class discussions.

After the completion of 4 classes there will be planned testing.Preliminary grades will be pat cither according to how students have worked over required tasks, to what level have they completed them during the passed time or in addition to the latter according to the results of a specially prepared test.

The current control and test-examination session.

Students' knowledge, its rating is assessed on a 100 - point scale. The rating of current and boundary control is 40 points (20 points for 1 module and 20 points for 2 modules), the remaining 60 points is the rating score obtained at the final control.

Carrying out of the current control assumes the systematic control of the student's work at each lesson during the semester:

- attendance of studies by a student;
- student activity in class;
- preparation for classes;
- Student's possession of the studied volume of theoretical material, etc.

Boundary control of students' progress is carried out twice a semester in accordance with the approved schedule of modules. Boundary control is carried out by the Independent Inspection of the AsMI, in order to implement the program of cleanliness of education. During the boundary control, the results of the current monitoring are summed up, and the boundary control is carried out from the remaining 10 points in the form of written testing on the subjects of the curriculum of the current module.

The final exam will be in oral forms.

Tips for preparing for tests

The purpose of the exam is to complete the course on a particular discipline and check the degree of knowledge that has been developed by the student.

In preparing to an exam particular attention should be paid to following moments:

- to learn the training materials, to remember the definition of concepts, to understand certain categories and problems, it is necessary to have a reasonable combination of memorization and understanding, simple reproduction of educational information, to prepare in advance and write abstractly and to learn not only to understand the history of medicineabstractively, to reproduce and transfer knowledge, but to be able to link history of medicine with the life of modern society.

To be able to demonstrate logical thinking of future doctors and understanding of the laws of the historical development of medical science from ancient time to contemporary

The syllabus of History of medicine is based on books:

1. The History of medicine Rochelle Forrester 2016
2. History of Medicine 1997 Dr. Jenny Sutcliffe, Nancy Duin
3. Oxford handbook History of Medicine 2011

For preparing to practical classes and for self-studing, use the literature recommended as additional literature for each topic, listed below:

1. A History of medicineby Douglas Guthrie
2. History of medicine Philip Rhodes, Robert G. Richardson, William Archibald Robson Thomson, E. Ashworth Underwood, Douglas James Guthrie
3. History of Medicine Cecilia C. Mettler
4. Exploring The History of Medicine John Hudson Tiner

Internet resources.

Online literature:

1. www.britannica.com/topic/history-of-medicine
2. www.amazon.com/Exploring-History-Medicine-Hudson

6.1. THE LIST OF QUIDLINES

MAIN LITERATURE:

1. Oxford handbook on history of Medicine 2011
2. History of Medicine 2012 Dr. Jenny Sutcliffe, Nancy Duin

ADDITIONAL LITERATURE:

1. A History Of Medicine by Douglas Guthrie
2. History of medicine Philip Rhodes, Robert G. Richardson, William Archibald Robson Thomson, E. Ashworth Underwood, Douglas James Guthrie
3. History of Medicine Cecilia C. Mettler
4. Exploring The History of Medicine John Hudson Tiner

Internet resources.

Online literature:

1. www.britannica.com/topic/history-of-medicine
2. www.amazon.com/Exploring-History-Medicine-Hudson

7. LOGISTICS DISCIPLINE

EDUCATIONAL-METHODICAL MATERIALS TO PRACTICAL LESSONS

THEME № 1

"INTRODUCTION TO THE HISTORY OF MEDICINE. HUMAN RIGHTS IN THE FIRST SOCIETY "

Purpose of the topic:

The student should know:

- the content of the subject of the history of medicine.

- Development of healing in a primitive society.

Plan for studying the topic

Analysis of the topic on control issues

1. Definition, purpose, objectives, principles, sources of studying the history of medicine.

2. Periodization of the world history of medicine.

3. General and private history of medicine.

4. Doctoring in the period of the formation of primitive society.

5. Doctoring in the heyday of primitive society.

6. Doctoring in the period of decay of the primitive society.

Smooth work of students.

• Discussion of reports

Recommended topics for the next lesson

1. Medical ethics in ancient Messopotamia, Egypt, and India.

2. Hygienic traditions in the traditions of ancient Messopotamia, India and China.

3. Ayurveda is the teaching of a long life.

4. Chinese traditional system "zhen-chiu", its past and present.

Literature:

• Basic

1. Materials of the lecture

2. Sorokina T.S. History of Medicine. - M 1994. -382 p.

3. Multanovsky M.P. History of Medicine .- M., 1967. -267 p.

4. Gribanov E.D. Development of medical ethics. - M., 1987. - 24 sec.

• Additional

1. Sorokina T.S. Atlas of the history of medicine: Primitive society. Ancient world. Tutorial. - M., 1987. - 168 p.

2. Sorokina T.S. History of medicine. A short course of lectures. - M., 1988. -69 p.

3. The Internet.

THEME № 2

"DOCTOR IN THE COUNTRIES OF THE ANCIENT EAST"

Purpose of the topic:

The student should know:

- Features of the development of healing in countries of the ancient world.

Plan for studying the topic

Analysis of the topic on control issues

1. Characteristic of the era.

2. The healing in ancient countries of Mesopotamia (Babylonia and Assyria 2nd millennium - mid-1st millennium BC)

- Two directions of healing, the disclosure of the causes of diseases, the laws of Hammurabi on the legal status of healers, hygiene prescriptions.

3. Doctoring in ancient Egypt (3-1 millennium BC)

- Features of the development of medicine, ideas about the causes of diseases, ancient Egyptian papyri, hygienic traditions.

4. Doctoring in ancient India (3rd millennium BC - 4th century AD)

- The art of healing: Ayurveda (the doctrine of a long life), hygienic traditions (prescriptions of MANU), the high development of surgical methods of treatment, the teaching of "yoga."

5. Doctoring in ancient China (mid-2nd millennium BC - 3rd century AD)

Scientists on the pulse, the system of traditional healing "zhen-chiu", medicinal medicine and surgical treatment.

Independent work of students

• Discussion of reports

Recommended topics for the next lesson

1. Greek mythology about healing and healers.

2. Temple and folk medicine in ancient Greece.

3. Life and activity of Hippocrates.

4. Medical ethics in ancient Greece.

5. Sanitary facilities in the possessions of the Roman Empire.

6. Galen is an outstanding physician of the ancient world.

Literature:

• Basic

1. Materials of the lecture.

2. Sorokina T.S. History of Medicine. - M 1994. -382 p.

3. Multanovsky M.P. History of Medicine .- M., 1967. -267 p.

4. Zabludovsky PE The history of medicine. - M., 1981. - 351 p.

• Additional

1. Sorokina T.S. Atlas of the history of medicine: Primitive society. Ancient world. Tutorial. - M., 1987. - 168 p.
2. Petrov B.D. From Hippocrates to Semashko: continuity of ideas (essays and portraits). - M .: Medicine, 1990.
3. Galen Claudius. On the appointment of parts of the human body. M .: Medicine, 1971.
4. The Internet.

THEME № 3
"DOCTOR AND MEDICINE IN THE COUNTRIES OF ANCIENT MEDITERRANEAN (IN THE ANCIENT WORLD) »

Purpose of the topic:

The student should know:

- History of the development of medicine of the ancient world.

Plan for studying the topic:

Analysis of the topic on control issues

1. Medicine and medicine in ancient Greece (3 millennium BC - 1 century AD)

- stages of the formation of healing in ancient Greece, medical schools of Ancient Greece. Hippocrates: merit.

2. Medicine of Ancient Rome.

- stages of development of medicine, doctoring in the tsarist period, medicine of the republic period, medicine of the period of the empire.
- Galen: merits, mistakes and dualism.

Self-employed students

• Discussion of reports

Recommended topics for the next lesson

1. Christianity and medicine in the Middle Ages.
2. Arabic-speaking culture of the Middle Ages and medicine.
3. Islam and medicine in the Middle Ages.
4. Ibn Sinnah - an outstanding physician-encyclopedist of the medieval East.
5. Epidemics of disease in medieval Europe, its causes and consequences.
6. Medieval higher medical schools and universities.

Literature:

- Main Literature
- Recommended literature
- Material from Lectures

THEME №4

MEDICINE IN THE MIDDLE AGES

(Early (V-X centuries) and developed (X1-XV centuries), the Middle Ages)

Purpose of the topic:

The student should know:

• features of the development of medieval medicine in different regions of the globe.

Plan for studying the topic

Analysis of the topic on control issues

• Medicine in the Byzantine Empire (395-1453).

• Medicine and medieval Russia (IX-XV centuries).

• Medicine in the Old Russian State (IX-XHV centuries).

• Medicine of the peoples of the medieval East (the 12th-17th centuries).

• Medicine in the Arabic-speaking caliphates (VII-X cc.), Medicine in the states of Central Asia (X-XII вв.), Medicine in the states of East and South-East Asia (IV-XVII centuries).

• Medicine in Western Europe during the early and developed Middle Ages (V-XV centuries).

Independent work of students

• Discussion of reports

Recommended topics for the next lesson

1. Anatomical sketches of Leonardo da Vinci.

2. Andreas Vesalius - the founder of modern scientific anatomy.

3. History of the development of ideas about blood circulation (Miguel Servet, William I bright, Marcello Malpighi).

4. Girolnamo Frakastoro and the development of the doctrine of contagious diseases.

5. The beginning of state medicine in the Moscow state.

6. Development of medicine in the aborigines of America.

Literature:

- Main Literature
- Recommended literature
- Material from Lectures

THEME № 5

"MEDICINE OF NEW TIME: MEDICOBIOLOGICAL DISCIPLINES »

The student should know:

- history of development of biomedical sciences.

PLAN FOR THE STUDY OF THE TOPIC

Analysis of the topic on control issues

1. Medico-biological direction in medicine of modern times.
2. Development of normal anatomy in Europe and Russia.
3. Development of histology (domicroscopic and microscopic periods)
4. Development of general pathology (pathological anatomy and pathological physiology).
5. Development of microbiology and methods of combating infections (empirical and experimental periods)
6. Physiology and experimental medicine (empirical and experimental periods).

Independent work of students

- discussion of reports

Recommended topics for the next lesson

1. History of the discovery and introduction of methods of percussion and auscultation.
2. Opening and introduction of anesthesia.
3. M.Ya. Mudrov is the founder of clinical medicine in Russia.
4. S.P. Botkin and the scientific direction of his school.
5. AP Chekhov and medicine.
6. H, AND. Pirogov - the founder of topographic anatomy and surgery.
7. The founders of hygiene in Russia (AP Dobroslavin, FF Erisman).
8. M.V. Lomonosov in medicine.

Literature:

- Main Literature
- Recommended literature
- Material from Lectures

THEME № 6

"MEDICINE OF NEW TIME, CLINICAL DISCIPLINES: HYGIENE, EPIDEMIOLOGY AND PUBLIC MEDICINE"

Purpose of the topic:

The student should know:

• History of the development of clinical medicine, hygiene and public medicine.

Plan for studying the topic

Analysis of the topic on control issues

1. Development of clinical medicine in Western Europe and Russia.

• Advanced medical centers in Western Europe, the development of medicine and medicine in Russia in the XVII-XVIII centuries, the first methods and instruments of physical examination, the development of internal medicine and medical education in Russia in the XIX century, the development of surgery and pediatrics.

2. Development of epidemiology, hygiene and public medicine.

• State measures to combat plague, the role of DS. Samoilovich in the elimination of the plague epidemic in Moscow, the development of hygiene, (social) medicine.

3. Development of dentistry.

Independent work of students

• Discussion of reports

Recommended topics for the next lesson

1. N.A. Semashko is an outstanding organizer of health care.
2. N.N. Burdenko is the founder of neurosurgery.
3. Heroism of doctors and the Second World War.
4. Veresaev is a doctor and a writer.
5. I.P. Pavlov is a great physiologist of the 20th century.
6. N.A. Semashko is an outstanding organizer of health care.

Literature:

- Main Literature
- Recommended literature
- Material from Lectures

THEME № 7
"MEDICINE OF CONTEMPORARY HISTORY (AFTER 1918)"

Purpose of the topic:

The student should know:

- content of the history of modern medicine.

Plan for studying the topic

Analysis of the topic on control issues

1. Development of medicine in foreign countries.

- Advances in biomedical sciences and clinical disciplines, development of hygiene and public health.

2. Development of medicine and public health in Russia and the USSR.

- The creation of the People's Commissariat of Health of the USSR, the principles of Soviet health, scientific medical schools.

3. International organizations.
- International Committee of the Red Cross, Red Crescent, WHO, the movement "Doctors of the world for the prevention of nuclear war".
4. Nobel Prizes in the field of medicine and physiology and related sciences.
- Nobel Prize winners in the field of medicine.

Independent work of students
- Discussion of reports

Literature:

- Main Literature
- Recommended literature
- Material from Lectures

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THEME № 8

HISTORY OF MEDICINE DEVELOPMENT IN KYRGYZSTAN

Purpose of the topic:

The student should know:

Features of the development of medicine in Kyrgyzstan.

- Medicine of Kyrgyzstan in the first years of Soviet power, pre-war and post-war years.

Plan for studying the topic

Analysis of the topic on control issues

1. Stages of development of medicine in Kyrgyzstan.

2. Doctoring in Kyrgyzstan before reunification with the Russian Empire (1863)

3. Medicine in the period of the tsarist empire (1863-1917).

4. Medicine of Kyrgyzstan in the Soviet period (1917-1991), health care of the sovereign Kyrgyz Republic (from 1917-1991), health system reforms, state and national programs of the Kyrgyz Republic.

Independent work of students

• Discussion of reports

Literature:

- Main Literature
- Recommended literature
- Material from Lectures

8. LIST OF MID-TERM AND FINAL CONTROL QUESTIONS

1. Who is known as the world,s first physician?

1) Imhotep (Egyptian 2650 BC)

2) Babylonians

3) Hippocrates

4) Romans

2. What kind of textbooks did the Egyptians Surgeons produce?

1) Fractured bones

2) Clean teeth

3) Hygiene

4) Burns

3. What concepts did the Babylonians produce?

1) Diagnosis and prognosis

2) Physicians

3) Nurses

4) Prevention

4. Who is considered to be the Father of Western Medicine?

1) Imhotep

2) Romans

3) Hippocrates

4) Harvey

5. What did Hippocrates emphasize the importance of with the patient?

1) Diet and Exercise

2) Hippocratic Oath

3) Sanitation

4) Observing the Patient

6. Hippocrates taught the prevention of disease through a regimen of what?

1) Diet and Exercise

2) Hippocratic Oath

3) Sanitation

4) Observing the Patient

7. What did the Romans recognize as important for good public health?

1) Sanitation

2) Prevention

3) Hygiene

4) Religion

8. What were the Romans able to construct throughout their empire?

1) Hospitals

2) Restaurants

3) Pharmacies

4) Baths

9. What epidemic during the Dark Ages killed upwards of 100 mil people in Europe (30-60% of population)?

1) Black Plague

2) Black Death

3) Middle Plague

4) Middle Death

10. Who controlled medicine during the Dark Ages?

1) Government

2) Caesar

3) Religion

4) Obama

11. During the Dark\Middle ages which term came into use?

1) Hospital

2) Doctor

3) Paramedic

4) Nurse

12. Who demonstrated the function of the heart and circulation of blood?

1) Leeuwenhoek

2) Withering

3) Jarvis

4) William Harvey

13. Who is considered to have laid the foundation of modern Physiology?

1) Leeuwenhoek

2) Withering

3) Jenner

4) Harvey

14. Who worked on improving the microscope and came up with a description of bacteria?

1) Harvey

2) Pasteur

3) Withering

4) Anton Van Leeuwenhoek

15. When did surgery become and experimental science?

1) 15th century

2) 16th century

3) 17th century

4) 18th century

16. Who discovered Digitalis could be used as a treatment for heart disease?

1) Harvey

2) Jarvis

3) Wiliam Withering

4) Florence Nightingale

17. Who introduced a vaccine to prevent smallpox (1796)

1) Koch

2) Edward Jenner

3) Nightingale

4) Banting

18. What field did the invention of the vaccine smallpox lead to?

1) Microbiology

2) Physiology

3) Immunology

4) Hystology

19. Who proved that germs caused diseases?

1) Koch

2) Lois Pasteur

3) Withering

4) Jenner

20. What did Pasteur encourage doctors and their assistants to do?

1) Sanitize clothes

2) Sanitize equipment and hands

3) Never wash their hands

4) To do nothing

21. Who developed a vaccine for Rabies and Anthrax?

1) Jenner

2) Koch

3) Lois Pasteur

4) MacLeod

22. Who discovered the bacterium causing Tuberculosis?

1) Pasteur

2) Robert Koch

3) Jenner

4) Withering

23. What war did Florence Nightingale care for the wounded?

1) Civil

2) Cold War

3) World War I

4) Crimean War (1853-1856)

24. What did Alexander Flemming discover?

1) Insulin

2) Penicillin

3) Digitalis

4) Tuberculosis

25. Who discovered the «Secret life» DNA? (1953)

1) Francis Crick, James Watson

2) Alexander Fleming

3) Jenner

4) Pasteur

26. Which Muslim doctor significantly affected the ideas of Medieval doctors in western Europe?

1) Avenzoar

2) Avicenna

3) Rhazes

4) Nobody

27. What stimulated Medieval developments in surgery?

1) Government

2) Religion

3) War

4) All

28. What were the four humours?

1) Blood, phlegm, yellow bile and black bile

2) Water, air, earth and fire

3) A Greek acapella group

4) All

29. What were the Greeks excellent at?

1) Resetting joints

2) Bandaging

3) Cautery

4) Hygiene

30. What, according to the ancient Greeks was the best Healer?

1) Nature

2) Medicine

3) Prevention

4) Religion

9. TECHNICAL SUPPORTING OF DISCIPLINE

1.Educational-methodical complex of discipline

2. MCQs to topics.

3. Laptop

10. LECTURE NOTES

Theme № 1

Introduction to the history of medicine. Healing in a primitive society.

Lecture plan:

1. Definition, purpose, objectives, principles.
2. General and private history of medicine.
3. Periodization of the history of medicine.
4. The treatment of primitive society

5. Folk hygiene is the earliest division of medicine.

6. Matriarchy as a stage of development of primitive society

Control questions:

1. Definition of medicine in general.

2. History of medicine as a science and subject of teaching.

3. Sections of the history of medicine.

4. The main goal of the subject.

5. Methods of research and principles of the subject history of medicine.

Theme # 2

Healing in the countries of the Ancient East and West (Egypt, China, India, Ancient Greece, ancient Rome).

Lecture plan:

1. Characteristics of the era and periodization.

2. Medicine in the countries of ancient Mesopotamia (Babylonia and Assyria).

3. Medicine in ancient Egypt, China, India,

4. Medicine and medicine in Ancient Greece, Rome.

Control questions

1. The main directions of healing.

2. The art of healing Ayurveda (the doctrine of a long life).

3. Hippocrates: his merits

4. Galen: his merits.

Theme content

In the previous topic, we reviewed the history of healing in the primitive community. The next stage in the healing of history is connected with the transition of humanity from the primitive communal system to the slave system.

The first civilizations, the stratification of class societies and the formation of states took place in the countries of the Ancient East.

One of the outstanding achievements of the culture of that time was the invention of a letter, at first a simple one - drawing (pictography) - then more complex (hieroglyphs and cuneiforms). Thanks to this, the peoples of the Ancient East left a significant number of literary monuments, which constitute the basis of our knowledge of the material and cultural life of the peoples of this remote era.

Characteristics of the era

For the first time the class stratification of society occurred in Sumer and Egypt (4

millennium BC). In other parts of the world this process developed at a later date: in India - in the middle of the 3rd millennium BC, in China - in the 2nd millennium BC, among the peoples of the Eastern Mediterranean - in the 3-2 millennium BC In Western and Central Europe - in the 1st millennium BC, in America - in the 1st millennium AD.

The development of empirical knowledge in the field of healing in the countries of the ancient world, on the one hand, had common features, and on the other hand

- in each region of the globe had its own characteristics associated with the historical and cultural development of the region.

The main features of the development of healing in the countries of the Ancient World are:

- the invention of writing (from 4 thousand BC) and the creation of the first tests of medical content (from the end of 3 thousand BC);
- the formation of two areas of therapeutic practice: empirical healing, based on the practical experience of the people, and cult (theurgic), based on religious beliefs;
- development of ideas about the origin of diseases (associated with nature, morally ethical, religiously mystical);
- Training of doctors (family tradition, training in general schools in the temples);
- Creation of the oldest sanitary-engineering constructions, development of hygienic skills and traditions;
- development of the class approach to healing and the formation of the foundations of medical ethics;
- the development of mutual influences and receptivity in the field of healing between different ancient civilizations.

Doctoring in countries of ancient Mesopotamia (Babylonia and Assyria)

The term "Mesopotamia" (Greek word - Mesopotamia is translated as interfluve or two-rivers) is introduced by the Greek historian Herodotus (450 BC)

The oldest Sumerian city-states (Eridu, Uruk, Lagash, Ur, Nippur, etc.) formed in the lower Euphrates valley at the turn of the 4th and 3rd millennia BC.

Since the beginning of the 2nd millennium BC. Begins the Istrian empire of the Babylonian kingdom, which existed for 15 centuries (20-16 centuries BC - the Old Babylonian period, 16-17 centuries BC - the Middle Babylonian (Kassite) period, 11-6 centuries BC The New Babylonian period In 538 the Babylonian kingdom was captured by the Persians and ceased to exist.

In the period of Mesopotamia from the 15th to the 7th centuries. BC. There was an Assyrian kingdom that was destroyed in 614-605. BC. As a result of the invasion of the Medes.

- The Babylonian kingdom reached its peak in the Old Babylonian period in the time of Hammurapia (1792-1750 BC), the great ruler of antiquity.
- Assyrian kingdom of the highest power reached under Ashurbanipal (668-about 626 BC).

Ancient Mesopotamia has achieved great success in agriculture, pottery, fabrication and the production of metals, in the development of architecture, linguistics, mathematics, astronomy (the whole world uses segolnya by dividing the circle into degrees, minutes and seconds, sundials and dividing the day by 12 Parts, the year consists of 12 months, etc.), healing.

Sources of medicine:

- texts of medical content (on clay tablets, objects from clay, stone, metal);
- data of archeology;
-descriptions of historians (Herodotus, Beros)

Development of medicine

Medical knowledge was passed on from generation to generation orally. Medical texts on clay tablets began to be recorded in the Stratovravilian period (2 millennium BC). The collection of tablets was selected according to the signs of disease or by the names of the affected parts of the body.

By the middle of the 2nd millennium BC. In ancient Mesopotamia two main directions of healing were formed:

- the art of healers;
- The art of spellcasters.

The art of healing was practiced by the doctors empiri-asu. Representatives of the other direction were called ashipu - conjurer.

The healer - acu more often associated the occurrence of diseases with natural causes, the caster - the ashipu with supernatural powers by the "hand" of a particular god, demon or ghost, etc.

The acu treatment was aimed at alleviating the manifestations of the disease. The goals of his treatment were quite real (to leave a fever and fever, to remove swelling, etc.), he used various medicinal herbs that he collected himself.

Unlike the ace, the main thing in the ritual of the doctor of the aspus was the reading of spells.

Both traditions remained almost unchanged until the second half of the 1st millennium BC.

The reports on the causes of diseases were divided into 3 main categories.

1. Associated with the violation of the ritual, legal, moral precepts adopted in the community (for example: he approached a married woman);
2. Associated with the phenomena of nature and the ways of life of people (the use of unhealthy

food, bathing in a polluted river, contact with dirt and impurities);

3. Associated with religious beliefs ("the hand of God," the second evil spirit, "etc.)

One of the healers of ancient Mesopotamia was Mukallim (14th century BC), who treated the sick in the temple. He successfully cured injuries, skin diseases, fever and inflammation of the respiratory organs. Patients were under his care throughout the illness. In the 14th century. BC. At the temples there were rooms for patients (clinics).

In ancient Mesopotamia, texts do not mention the removal or sealing of teeth, it is reported only about the use of anesthetics and therapeutic pastes.

The structure of the human body in ancient Mesopotamia was not studied. An autopsy was not performed, and the dissection of sacrificial animals gave only a general idea of the internal organs: the liver, heart, kidneys, intestines, stomach.

The obstetrics was handled by women. According to the legal texts, after the death of the woman in childbirth, it was permitted to save the live baby by a cesarean section.

None of the text mentions surgical intervention and trapanation of the skull.

In 1901, during the excavation of the city of Susa (in the territory of modern Iran), a basalt column was found on which the cuneiform laws were carved out the laws of the ancient Babylonian kingdom, published by the king of Hammurapia in the 18th century BC. According to the description of historians, King Hammurabi was a wise and highly educated ruler. He paid much attention to economic, financial, judicial and military fields of state activity. Some paragraphs of its laws concern the legal aspects of the activities of healers:

- If the healer fused the broken bone of the patient or cured the sick joint, the patient should pay the medic to 5 shekels of silver.
- If the son of Mushkenum appealed to the doctor (the royal people), he had to pay 3 shekels of silver.
- If the slave was sick, then the master of the slave had to pay the medic to 2 shekels of silver.
- In the time of Hammurabi, one sicle (about 8.4 grams) could buy 300 liters of grain. Thus 5 shekels of silver were a large sum: they could be fed for a whole year by several people.

A high fee to the healer for treatment was associated with a high risk of his profession. In case of a dysfunctional outcome, the healer was cut off.

The laws of Hammurabi belong to the most ancient legislation of the world and clearly reflect the social relations of the period of early slavery in the East.

Hygienic regulations. Priests followed the purity of the body, wore thin white linen clothes. They also watched the person of the king; If they noticed that the king touched an unclean person, then immediately the washing of the entire palace and the adjacent part of the city was carried out, after which numerous sacrifices were made (wine, animals, butter, honey).

In the cities of Mesopotamia for a long time there were no sewage systems, they appeared in the 2nd millennium BC. (There is evidence that there were water and sewage pipes)

The transfer of medical knowledge was carried out in a narrow circle of dedicated (knowledgeable).

Thus, the Babylonian-Assyrian culture exerted a great influence on the development of scientific knowledge in the whole of the Near East, where the Mesopotamian medical texts were widely distributed with cuneiform writing.

Doctoring in Ancient Egypt

The history of ancient Egypt has more than three millennia: from the end of 4 thousand. BC. Until 395 AD, when, after the collapse of the Great Roman Empire, ancient Egypt became part of Byzantium.

Sources of medicine:

- archaeological data (including the study of Egyptian mummies);
- records and images on the walls of tombs, sarcophagi, pyramids;
- texts of papyrus scrolls;
-descriptions of historians and writers (Manetho, Herodotus, Diodorus, Strabo, etc.)

Development of healing. The methods of healing were born in Egypt for 4000 years BC. It arose from the practical experience of the people.

The Egyptians received the first ideas about the structure of the human body (anatomy) from the practice of embalming, which also attests to the achievements in the field of chemistry (the word "chemistry" came from the ancient name of Egypt - "Kemet")

The knowledge of the ancient Egyptians in the field of anatomy was quite high for its time. They knew large organs: the brain, heart, blood vessels, kidneys, intestines, muscles, etc.

The Egyptians have a description of the brain. They noticed that brain damage causes the painful condition of other parts of the body (for example, limb paralysis).

The causes of illnesses were associated with both natural phenomena (unhealthy food, intestinal parasites, weather changes), and with supernatural representations (the evil spirit of the deceased entered the body and was expelled by medicines, conspiracies and spells).

The Egyptians were convinced that "all human diseases come from food." Their stomach they cleaned every month for three days in a row. The invention of the enema is attributed to the Egyptians.

The most extensive information on internal diseases and medicinal medicine in ancient Egypt contains a large medical papyrus. Ebers (16 in BC) "The book of preparation of medicines for all parts of the body." It contains 900 medicines for the treatment of the digestive system, respiratory tract, ear, throat and nose, burns and bleeding, eye, skin and parasitic diseases, etc. A

separate section of the papyrus is dedicated to cosmic means. (For example: prescribing drugs to smooth wrinkles, removing moles, changing skin color, coloring hair and even correcting strabismus.)

In ancient Egypt, the oldest surviving texts on the structure of the human body and surgical treatment (surgery) - a surgical papyrus of the 16th century BC, named after the researcher Edwin Smith, who described 48 cases of traumatic injuries of various Parts of the body and ways to treat them without magic and mysticism, ritual circumcision and castration of eunuchs for the harems of the pharaohs (Greek Rerao is a big house, hence the pharaoh).

The medical ethics of Egypt at that time required that the doctor, having examined the patient, openly informed him of the proposed outcome of the treatment in one of three phrases: 1) "This is a disease that I can cure" 2) "This is a disease that I, perhaps, can Cure "3)" This is a disease that I can not cure. "

Development of dentistry

The profession of a dentist has long existed in Egypt. Diseases of teeth and gums are described in the papyri of the middle and new kingdoms. Toothache and tooth decay Egyptians explained the presence of a "worm that grows in the tooth." Dental surgery was not performed, but only conservative treatments were performed (therapeutic toothpaste and solutions were applied to the aching tooth or gums). In the papyrus of Ebers, 11 prescriptions of such medicines were given, which contributed to the improvement of the oral cavity and strengthening of the teeth, treated the inflammation of the gums and relieved the toothache, but did not stop the further development of the disease.

Great importance in ancient Egypt was attached to the observance of hygienic requirements and the closely related prevention of diseases. Traditions and customs prescribed tidiness to life and moderation in food: "Egyptians ..... Drink only from copper vessels that are cleaned daily. The fee is plain, always freshly washed. Crop themselves for the sake of purity, preferring to bat neat rather than beautiful. They are washed twice a day and twice a night "- wrote Herodotus 5 century BC.

The transfer of medical knowledge in ancient Egypt was carried out in special schools at temples and higher schools - "houses of life" in large cities. Students studied m rewrote ancient papyri, mastered the art of calligraphy of stylistics. At the same time, medical knowledge continued to be inherited from father to son. Houses of life were also a place of storage of ancient papyri.

The activity of doctors was subject to strict moral rules. Violation of the rules was punishable, up to the death penalty.

Egyptian doctors enjoyed universal recognition in the ancient world. The rulers of many

countries invited them to serve to the court. The medicine of ancient Egypt had a great influence on the medicine of the Greeks, Jews and Arabs.

Doctoring in Ancient India

Ancient and original civilization of India was formed in the 3rd millennium BC. The word "India" of Greek origin. It goes back to the name of one of the rivers in the north-west of the country - Sindhu.

Sources of medicine:

- the code of laws "Manu" (1000-500 years BC);
- "Vedas" - collections of domestic and religious regulations;
- "Ayurveda" - "knowledge of life," the study of a long life "(9-3 centuries BC) 4
- data of archeology and ethnography;
- material monuments, folk epic.

Under the laws of "Manu", the doctor for the unsuccessful treatment was subject to a fine. The strength of medicine in ancient India was the elements of hygiene. The laws of "Manu" cover many issues of hygiene:

- the impact of the climate and seasons on health;
- rules of personal hygiene (early getting up, gymnastics, oral hygiene, body, bathing, neatness in clothes, hair and nails cutting);
- food hygiene (moderation in food, restrictions on eating meat, recommendations on the use of plant foods, milk and honey);
- Women's hygiene (food remains, dirty water, urine and experiments were supposed to be taken away from home).

Along with personal hygiene, there were elements of public hygiene. During the excavations, traces of the beautification of a large ancient Indian city were found: workshops, granaries, sanitary facilities: wells, baths, swimming pools, sewerage system. Each house had a swimming pool.

Development of medicine

Three versions of Ayurveda are known in history. The most complete version was written by the doctor of Sushrut.

In "Ayurveda" signs of more than 150 acute and chronic, general and local diseases of the brain, heart, intestines, urinary and genital organs are described.

In the Sushurta tract, three stages of local inflammation (which later became part of the European medicine with the name of Celsus) are described, which he considered signs: in the first period - minor pains; In the second - shooting pain, swelling, a feeling of constriction, local heat and disruption of function; In the third - a decrease in swelling and the formation of pus. For

the treatment of inflammation, local medicines and surgical methods were suggested.

The knowledge of the Indian healers about the structure of the human body was the most complete in the ancient world. They distinguished 7 membranes, 500 muscles, 900 ligaments, 90 tendons, 300 bones, 107 joints, 40 main vessels and 700 branches (for blood, mucus and air), 24 nerves, 9 sense organs 3 substances (prana, mucus and bile). Some zones (palm, soles, testicles, inguinal areas) stood out as especially important. Their damage was considered dangerous for life.

The man was considered in close connection with the surrounding world and consisted of five elements: earth, air, fire, water and ether. The vital activity of the organism was considered through the interaction of three substances of the external environment: air, fire and water (the carriers of which were prana, bile and slime in the body). Health was understood as the result of a balanced balance of the three substances, the normal interaction of the senses and the clarity of the mind, and the disease as a violation of these correct relationships and the negative impact on the human of the five elements.

Diagnosis of diseases was based on the patient's detailed porosity and studies of body heat, skin color and language, secretions, and noise in the lungs.

When choosing a method of treatment, the time of the year, age, sex, temperament and constitution, the nature of the disease and other factors were taken into account. Diet, medications and surgical methods of treatment were prescribed.

The art of surgical treatment (surgery) in Ancient India in its skill and effectiveness was the highest in the ancient world.

Still unaware of the antiseptic and aseptic, the Indian healers achieved careful maintenance of cleanliness during operations. They were distinguished by courage, agility and excellent command of tools. They were able to perform limb amputations, bloodletting, stone cutting, hernia repair, laparatomy, plastic surgery on the face to compensate for ear, nose and lip defects (the "Indian way"), knew a number of obstetric techniques.

Development of medical business

In ancient India, strict rules were in force, banning the release of sewage into the streets of the city and regulating the place and methods of burning the dead bodies; In doubtful cases of human death, an autopsy was prescribed; The body of the deceased was examined and covered with a special oil in order to protect against decomposition.

The appearance of medical institutions. In Ancient India earlier than in Western Europe there were almshouses (with Buddhist temples) and rooms for patients (hospitals). Somewhat later, special "houses" appeared, where material and medical help was rendered to the needy.

An important role in the development of healing in Ancient India was played by

monasteries and monks. All monks had some knowledge of medicine.

The medical ethic of ancient India required that the healer, "who wishes to be successful in practice, was healthy, neat, modest, patient, wore a short-cropped beard, carefully cleaned, trimmed nails, white perfumed clothes."

A special place in healing in Ancient India was occupied by yoga. It united religious philosophy, moral and ethical teaching and the system of exercises - poses (asanas). Much attention in yoga is paid to the purity of the body and a peculiar way of life. The yoga teachings consist of two levels: hatha yoga (physical yoga) and raja yoga (spiritual yoga). In modern India, yoga is practiced by healthy people and patients (in clinics of yoga therapy).

Doctor in Ancient China

The oldest state of Shan in China's history was formed in the middle of the 2nd millennium BC. In the Yellow River valley (yellow river). By this time, the creation of Chinese hieroglyphic writing.

In the history of healing ancient China, two long periods are defined:

- royal (18-3 centuries BC), when the oral tradition prevailed; - the period of the Han empire (3 BC - 3 AD), when the chronicles of the Han dynasty were composed and the medical writings that reached us reached.

Sources of Medical Studies

- monuments of medical writing (from 3rd century BC) 4
- data of archeology, ethnography;
- Monuments of material culture.

Development of medicine

The accumulation of knowledge about the structure of the human body began in China around the 2nd century. BC.

The Chinese considered the human body like a world in miniature, and all processes - the relationship of the five elements: fire, earth, water, wood, metal. Health was understood as the result of the balance of the beginnings of "yang" - active, male (light) "yin" - passive, female (dark), and the disease - as a violation of their correct interaction. The disease was divided into two groups: excess syndromes - yang syndrome and deficiency syndromes - yin-syndrome.

The art of diagnosis was based on four methods of examination:

- examination of the skin, eyes, mucous membranes and the patient's tongue;
- listening to sounds that occur in the human body;
- questioning the patient;
- Pulse feeling, pressure on active points.

The top of the art of diagnostics in ancient China was the doctrine of the pulse. Examining

the patient, they studied the pulse at no less than 9 points and distinguished up to 28 types of pulse; Of these, 10 were considered basic: superficial, deep, rare, frequent, thin, excessive, free, viscous, tense, gradual.

The important meaning of the pulse movement of blood is stated in the treatise "Nei Jing": Without a pulse, the distribution of blood through large and small blood vessels is impossible ... it is the pulse that determines the circulation of blood and "pneuma" ... Look forward, look back - everything comes from the pulse. Pulse is the inner essence of a hundred parts of the body, the most subtle expression of the inner spirit. "

A characteristic feature of traditional Chinese medicine is zhen-chiu therapy (in Chinese Zhen - acupuncture, Jiu - cauterization).

The empirical roots of acupuncture go deep into antiquity when in eastern China it was noticed that injections, cuts or injuries at certain points of the body lead to the healing of some ailments. For example: the compression of the central fovea of the upper lip allows the patient to be withdrawn from the state of dysfunction, and the introduction of needles at the base of the first and second fingers on the back of the hand cures of insomnia.

Based on long-term observations, the Chinese came to the conclusion that there are "vital points", the irritation of which contributes to the regulation of life processes. They believed that through the holes made in the "vital points", the disturbed balance of yin-yang is restored, and as a result of which the illness disappears.

The first needles for acupuncture were stone, and later of metals: bronze, silver, gold, stainless steel. Needles were used to treat and prevent illnesses, to anesthetize during operations, and also to cauterize.

Medicinal medicine in ancient China reached a high perfection. From folk Chinese medicine they entered the world practice: from plants, ginseng, lemongrass, camphor, tea, rhubarb, resin, ginger, Indian hemp, pepper, garlic, etc., from products of animal origin - deer antlers, liver, blood, bone marrow, Gelatin; From minerals - iron, mercury, sulfur, copper acetate, etc.

In 502, the world's first Chinese pharmacopoeia was created, in the 7th book of which 730 species of medicinal plants are described.

The development of surgical treatment in ancient China (as well as the opening of human corpses) was constrained by religious prohibitions.

The strength of ancient Chinese medicine was the prevention of disease. In the treatise "Nei Jing" it was noted: "The tasks of medicine are to heal the sick and strengthen the health of the healthy." Since ancient times, important healing and prophylactic measures in ancient China have been massage, therapeutic gymnastics - a game of five animals based on the imitation of a stork, a reindeer, a deer, a tiger and a bear, respiratory gymnastics that was used by the people to

preserve health and achieve longevity.

In the Chinese chronicles reported on the improvement of ancient cities from the middle of the 1st millennium BC. (Bridge, sewage, water supply).

It is data on the widespread introduction of variolation with the aim of preventing smallpox disease. So, according to legend in the 12th century. BC. During the smallpox epidemic, Chinese doctors tried to prevent the spread of the disease by rubbing the crusts of small pustules into the nostrils of healthy children.

Traditional Chinese medicine has long developed in isolation from other cultures of the globe. So, information about Europe penetrated into Europe only in the 13th century. The scientific study of its heritage is of great importance for the development of modern medicine.

Doctors in Ancient Greece

Sources of medicine:

- written monuments ("Iliad" and "Odyssey" by Homer);
- "History in nine books" of Herodotus;

"Gippikratov collection" and the works of other scientists;

- data of archeology, ethnography, etc.

Stages of development of medicine

There are 5 periods, each period has its own distinctive features.

1 period. Written sources of medical content in the 3-2 millennium BC. not available.

2 period. Healing in the 11th-9th centuries. BC. Long time called Homeric. Because Up to the 19th century. Basic information about him was given by the epic poems "Iliad2 and Odyssey"

In Homer's poems, 141 injuries to the trunk and extremities were described. Both the warriors and the healers were engaged in healing and bandaging the wounds in the army.

3 period. Healing in the period 8-6 centuries BC. Marked by two phenomena6

- the formation of ancient Greek philosophy (natural philosophy);
- the formation of temple healing.

Temple healing developed against the backdrop of empirical healing (the priests were engaged in healing). Along with the temple medicine, folk medicine operated in the form of public doctors who treated poor citizens for free, conducted measures against epidemics.

The premises intended for treatment in the temples were called axlepions. "Akslepeyon" comes from the name of Akslepiya.

Akslepiy (ausculep in Latin), a physician, was subsequently deified and was considered the god of medical art - the son of Apollo "mschelyayuschego." Patrons of certain branches of medicine Hygia - goddess of health (hence the term "hygiene") and drug therapy (Panakeika)

were considered his daughters.

In ancient art, Akslepiy was depicted with a staff (walking stick), entwined with a snake, and Hygia - in the form of a young beauty, in her hand held a bowl and fed a snake.

In the aftermath of the image of the staff entwined with a snake, and the bowl with a snake became emblems of medicine (emblem of wisdom and health).

In ancient Greece the cult of Akslepia was very popular and there are more than 300 glaciers in the territory of ancient Greece. The most majestic was the sanctuary of Asclepius in Epidaurus. Its central structure was the temple of Akslepia (4 in BC).

The doctoring in the axlepions combined empirical and magical techniques. The main means of treatment were: medicinal medicine, hydrotherapy and gymnastic exercises.

The appearance of medical schools. Doctors-professionals opened clinics (hospitals). The hospital at home was called "yatreya". At some clinics, schools were opened (tuition was paid). After the end of the rusty, the city community was given an oath or oath.

Along with the hospital schools there were "family" medical schools.

4 period. Medicine in the period 5-4 centuries. BC. Is characterized by the appearance of medical schools in ancient Greece.

For a long time, doctoring remained a family tradition. By the beginning of the 5th century BC. The scope of family schools has expanded. They began to accept students - not members of this kind.

Croton's medical school reached its heyday as early as the 6th century BC.

Its main achievements are:

- the human body is the unity of opposites;
- A healthy organism is the result of the balance of opposites, but the dominance of one of them is the cause of illness;

The opposite is cured by the opposite.

The Chinese School of Medicine developed:

- the doctrine of 4 bodily juices (blood, mucus, bile light and black) 4
-the study of the signs of disease (symptoms);
-training on the diagnosis of diseases, including listening;
- the discovery of pleural friction.

Sicilian Medical School (5th century BC). Its achievements:

- the healers recognized the heart as the main organ of execution;
- 4 bodily saps were identified with 4 states (hot, cold, dry and wet)

The Cosmic Medical School is the main medical school in Greece, Greece (584 AD). Her

achievements:

- perceived the person, his health and illness in close connection with the surrounding world;
- the disease was considered as a result of the influences of the surrounding world and eating disorders;
- developed the doctrine of 4 bodily juices and body types;
- asserted the basics of medical ethics;
- developed the principles of observation and treatment at the bedside patient - caring for bedridden patients.

The heyday of the Cosmic Medical School is associated with the name of Hippocrates.

Hippocrates (460-377 BC)

Great ancient Greek physician, reformer of ancient medicine. He is considered the successor of Akslepia.

Hippocrates was born in 460-377 years. BC. On the island of Kos, in the family of a doctor. The first teacher was his father - a doctor Heraclitus.

The question of what works he left behind is not known to us. According to the traditions of that time the healers did not sign their compositions, and all of them eventually turned out to be anonymous. The first collection of ancient Greek medical writings was compiled in the 3rd century BC. In the Alexandrian repository of manuscripts under the name "Hippocrates collection". Most researchers believe that Hippocrates owns the most outstanding works of the collection: Aphorisms, Prognostics, Epidemics, On Air, Water, Locations, On the Law, On Fractures, On Wounds of the Head, On Ancient Medicine "," On the Oath "," On the Decent Behavior "," On the Instructions "," On the Ravache "and others.

"Aphorisms" (completed thought) consists of 8 sections. They contain dietary and medical instructions for the treatment of internal diseases, surgery and obstetrics.

"Prognostics" (Greek Pro - before, gnosis - knowledge) is an outstanding work on ancient Greek therapy. It details the elements that make up the prognosis of the disease at that time (observation, examination and questioning of the patient) and outlines the basics of observation and treatment at the patient's bedside. Many of the sayings in the "Prognostics" have become classic, for example, the description of the face of a dying patient: "The nose is sharp, the eyes are sunken, the temples are depressed, the skin on the forehead is firm, stretched and dry, and the color of the whole face is green, black or pale, or leaden.

Hippocrates divided the causes of the onset of diseases in two sections on air, water, and localities:

1. Causes of diseases common to all people of the area, depending on the specific environmental conditions;

2. Individual causes, determined by the way of life of everyone.

Hippocrates formed the doctrine of the four temperaments, each of which was associated with the predominance in the body of one of the four bodily blood juices (sanguine), mucus (phlegmatic), yellow bile (choleric) and black bile (melancholic).

Works on surgery "On fractures", "On the wounds of the head", "On the adjustment of the joints" give a presentation about the high development in ancient Greece of the doctrine of bandages, surgical apparatus, the treatment of wounds, fractures, dislocations, head injuries, including the facial skull . In the essay "On the Direction of the Joints", the "Hippocrates bench" is described - a lever device for correcting dislocations. A complex surgical dressing known as the "Hippocrates cap" is still used in surgery.

In the "Hippocratic Compendium", descriptions of dental and gum diseases (pulpitis, alveolar abscess) and oral cavity (gingivitis, stomatitis, and language diseases) are also given. When dental pains were used as general (bleeding, laxatives and vomit, a strict diet), and local drugs (drugs, rinses infusions of herbs, poultices of lentil broth, astringents, etc.). The removal was resorted only when, when the tooth was loosened.

The " Hippocrates collection" describes the condition associated with teething (fever, diarrhea, cramps, coughing), bringing recommendations to eliminate bad smell from the mouth.

"Hippocrates collection", combining the works of various medical schools, is an encyclopedia of ancient Greek medicine. It contains more than 250 herbal remedies and 5 animal products.

Medical Ethics in Ancient Greece

"Hippocrates collection" contains five works on the subject of medical ethics ("Oath", "Law", "On the doctor", "On decent behavior" and "Instructions"). Together with other works of the collection, they give an integral idea of the doctrine and moral education of the healers and those requirements that are imposed on them in society.

In the process of training, the future healer should be educated in himself and constantly improve "contempt for money. Conscientiousness, modesty, determination, neatness, abundance of thoughts, knowledge of all that is useful and necessary for life, aversion to vice, denial of superstitious fear of the gods, for the doctor-philosopher is like God. "

While healing the patient, it is necessary to remember the first commandment: "First of all, do not harm."

Completing his training, the future doctor gave the "Oath".

During this period, doctors of ancient Greece did not open corpses and did not have special knowledge of anatomy. Their ideas about the structure of the human body were empirical.

5 period. Medicine in the 4th century. BC. - 1 in. AD During this period, the centers of

Greek science moved to the East - to Alexandria, Pergamum.

Medicine has made significant progress, especially in the field of descriptive anatomy and surgery.

Anatomy (from Greek dissection) has become an independent branch of medicine. The founder of anatomy is Herophilus (end 4 - first sex of the 3rd century BC) from Chalcedon. In his work Anatomy, he described the hard and soft membranes, parts of the brain, his ventricles, nerve trunks, he described the internal organs: liver, 12 duodenum, etc. he is considered the first Greek to open human corpses.

Another outstanding physician of this period, Erazistratus (4th-3rd centuries BC), also dealt with the opening of corpses. His merits:

- studied the structure of the brain;
- first divided nerves into sensory and motor nerves, and showed that they all come from the brain;
- first described the lymphatic vessels of the mesentery;
- believed that all organs are connected by means of nerves, veins and arteries;
- He directed the treatment of the disease to eliminate the causes of stagnation, applied a strict diet, vomiting, diaphoretic remedies, gymnastics and massage.

Theme # 3

Healing in the Ancient World. Medicine of the Middle Ages.

Lecture plan:

1. Medicine of the Middle Ages in the East.
2. Characteristic of the era and periodization.
3. Medicine in Byzantium, the Arab Caliphates, Central Asia, East and Southeast Asia.
4. Medicine of the Middle Ages in the West and in Russia.
5. Periodization of medicine in Western Europe.

Control questions:

1. Medicine of the Middle Ages in the East.
2. Characteristics of the era and periodization.
3. Medicine in Byzantium, the Arab Caliphates, Central Asia, East and Southeast Asia.
4. Medicine of the Middle Ages in the West and in Russia.
5. Periodization of medicine in Western Europe.

Theme content

The term "middle age" arose in Italy in the XV-XVI cc. Among the humanists who separated their time from the history of the ancient world, the main characteristic of which is the feudal mode of production.

In history, three periods are conventionally distinguished: the early Middle Ages (XI-XV centuries), the developed or classical Middle Ages (XI-XV centuries), later the Middle Ages (XV-XVII centuries).

Medicine in the Middle Ages developed in close relationship with the socio-economic development of peoples. Great influence on it was recalled: the development of related sciences, world and national religions, epidemics and pandemics of disease, and much more.

Medicine in the Byzantine Empire (395-1453)

The great Roman emperor Constantine (306-337) introduced Christianity as a state religion and is known for the creation of a new capital, which he transferred from Rome to the small Greek cities; Byzantium (now Istanbul). In 395 the Great Roman Empire was divided into two parts: the Western Roman Empire (Italy) and the Eastern (Byzantium).

Development of medicine. Sources of medical knowledge; "Hippocrates collection" and the writings of Galen, ie. Preservation of the traditions of antiquarian medicine.

One of the most outstanding physicians of Byzantium was Oribasy of Pergamum, a Greek by birth. Oribasy in 361 made the encyclopaedic work "Medical meeting" in 72 books, compiled a shortened version of his extensive arch "Synopsis" (review) in 9 books, which became a tool for studying medical sciences.

Like Oribasia, Aetius from Amida and Alexander from Thrall (VI century) who worked in the Byzantine Empire, Paul from Aegina (VII century) were encyclopaedists, in which they collected and systematized the rich heritage of ancient medicine. Pavel from Aegina composed two great works: work on women's diseases, medical and surgical collection of 7 books (small surgery, the doctrine of fractures, dislocations and amputation? Cavity, military and plastic surgery).

Hospitals

Hospitals for civilians first appeared in the Middle Ages in the East. The emergence and development of monastic hospitals and hospital business is closely connected with Byzantium. The history of the formation of monasteries is rooted in the beginning of the fourth century, when the territory of Egypt originated desertification - the first form of monasticism. His ascetic Antony the Great, expressing his protest against the injustices of human society, distributed his property and went into the desert and became an example for numerous imitators. The first deserters - anachoretics (Greek anachretes-hermit, desert) wandered hermits one by one,

Difficulties of life forced them to unite (desert monks). So there were monasteries, later monastic priyuty for mutilated and sick travelers. The first "common monastery" of cinematography (Greek Kinovios-common and vios-life) was founded in Egypt in 320. The first Christian hospital was built in Caesarea in 370. In the Byzantine Empire hospitals were common.

Medical education

In the early Byzantine period, Alexandria's medical school was more popular. In late Byzantium, large schools of medical education have become schools in Constantinople and Ohrid (Macedonia).

For the centuries of its history, Byzantium (on its vast territory nowadays Greece, Bulgaria, Yugoslavia, Romania, Turkey, Hungary, Italy, Egypt and other Mediterranean countries) managed to preserve and systematize the ancient heritage and created an original medieval culture.

Medicine in medieval Russia (IX-XV centuries);

The history of the Russian people of the epoch of feudalism is divided into 3 periods:

* The period of Kievan Rus (IX-XIII centuries);
* The period of north-eastern Russia (XIII-XVI centuries);
* The period of Moscow Rus (XVI-XVIIвв.).

Medicine in the ancient Russian state (IX-XIII centuries).

The oldest state of the Eastern Slavs, known in history as Kievan Russia, was formed in the first half of the IX century. For about two thousand years, there was folk medicine. Ancient Russia knew several forms of medical care:

* Handicraft medical practice of a private nature,
*Medical care,
* Hospital care.

Physicians were mainly engaged in monks in monasteries after the adoption of Christianity (988). In the 11th-10th centuries in Russia, native medicine practitioners were the carriers of medical knowledge. Practice of doctors-artisans was paid for and therefore their help was available only to the propertied layers of the population.

The first hospitals in the monasteries were built in Kiev in the XI century (Kiev-Pechersk Lavra).

From all over Russia the wounded and painfully infectious, nervous, mental and other diseases went to the Kiev-Pechersk Lavra and many people found healing there. For those who were seriously ill, there were special rooms at the monastery, where monks were constantly on duty, taking care of the sick.

Sanitary depot. In terms of the level of development of sanitary business, the Old Russian state

in the X-XIV centuries. Ahead of the countries of Western Europe.

According to archeology in the territory of ancient Novgorod found in hygienic items. Pottery and wooden drainage and water collectors are uncovered.

For a long time an integral part of the medical and sanitary life of Ancient Rus was the Russian steam bath (11th century). In the baths, the genus was administered to dislocate and bleed, massage, years of common cold and joint diseases and skin diseases.

Plague epidemics and other infectious diseases in Russia were called moraines or disease. For the period from XI to XVIII centuries. In chronicles more than about 50 moras are mentioned. They began in the border towns of Novgorod, Pskov, Smolensk, through which drove foreign caravans. Anti-epidemic measures were carried out (when the epidemic covered all the villages and the city, on the roads leading to it, organized outposts, in the woods zasekas were arranged). The ancient Russian state of Kievan Rus existed for three centuries. In the middle of the XIII century, Rus was exposed to the Tatar invasion.

Medicine of the peoples of the medieval East (VII-XVII cc.)

Medicine in Arabic-speaking caliphates (VII-X cc.)

The most ancient area of settlement of Arab tribes was the peninsula of Arabia (now the territory of Yemen).

The desire to overcome tribal dissociation, to resist external conquerors, and to create a single Arab state led to the emergence of Islam (Arab.Italian - obedience). The Islamic religion was founded in 622. Its founder Muhammad s.v. (About 570-632) and Mecca created a Muslim community (an Islamic state). As a result of subsequent Arab conquests, this state has turned into a vast Islamic state feudal Muslim state (Arab khlifat) - caliphate. The Arabs conquered Palestine, Syria-Egypt, Iran, Armenia, Georgia, Central Asia, north-western India, the northern coast of Africa and the Iberian Peninsula.

The domination of the Arabs and their state - caliphates existed up to the XII-XIII centuries.

Development of medicine

During the IX-X centuries. All available literature has been translated into Arabic. The most famous interpreter of the caliphate era was Hunayna ibn Ishaq. He translated the works of the three greatest authors: Hyppekrates, Dioscorides and Galen.

Arab-speaking medicine for 8 centuries occupied a leading place in the Mediterranean region. In the treatment of internal diseases, the first attention was paid to establishing the correct regime and only then were medications simple and complex, in the preparation of which the Arabs achieved high perfection.

An outstanding philosopher, physician and chemist of the early Middle Ages was Abu Bakr Muhammad ibn Zakariya Ar-Razi (850-923). He was engaged in medicine relatively late - when he

was about 30 years old. His merits:

• application of cotton wool in medicine, threads from the intestines of the ram for wound sewing and the invention of a tool for extracting foreign bodies from the mountains;

• was the first in the Arabic literature encyclopedic work on medicine "Comprehensive book on medicine" in 25 volumes, which was translated into Latin, and then in many European languages and constantly reprinted in medieval Europe, for several centuries was one of the main sources of medical care ¬ knowledge;

• compiled the "Medical Kniga" in 10 volumes, where he summarized knowledge in the field of the theory of medicine, pathology, medicinal medicine, diet, hygiene and cosmetic, surgery, toxicology and infectious diseases and was translated into Latin, and in 1497 Published in Venice;

• compiled a treatise on smallpox and measles, which even today has not lost its scientific value, where it clearly formulated the idea of the infectiousness of smallpox and measles, described their differential diagnostics, treatment, food, and protection measures. Published in Venice in 1498, after it was repeatedly published in Europe in Latin, Greek, French, English languages (1766).

Hospitals

The first known hospital in the Muslim world was built in 707 and was intended for patients with leprosy. Medieval hospitals, founded by Muslims, were of three kinds.

The first group is large hospitals for the general population. The most famous hospital in the Arabic-speaking world was Al Mansouri Hospital in Cairo, founded in 1282 and functioned up to 1915 year. In the porridge of the ancient is the eye hospital for 8 thousand patients.

Medicine in the states of Central Asia (10th-11th cc.)

In the 19th and early 19th centuries, Central Asia became one of the most important centers of scientific thought in the East. The peoples of Central Asia in the early medieval period were nominated by many scientists and artists whose work was an important contribution to the development of world culture.

Abu Ali ibn Sta (lat. Auyuepa, 980-1037) was born near Buhara in the village of Afshan. Al-Shaykh ar-Raiss (Arab, Az-Bai-al-ra's-the head of the scientists) called ka East Ibn Sina, the great scientist-encyclopaedist who succeeded in 12 sciences, as evidenced by 12; Walls, over his mausoleum in Hamadan (territory of Iraq). Ibn Sina lived in the fruitful period of the history of the Middle East, who grew up such scientists and thinkers as the physician Abu Bakr ar-Razi, the astronomer Abu Mahmud Khojendi and Ulugbek, the encyclopedist Al-Farabi and al-Biruni, the poets Rudaki and Firdausi.

By the age of 16, Ibn Sina became a recognized physician. This is how Ibn Sina himself writes about

this in his Biography. "Medicine is not from difficult sciences, and so in a short time I have mastered it so much that even the most excellent men of medicine began to learn from me the science of medicine. At that time I was a boy of 16 years. During the illness of the ruler of Bukhara Nuh ibn Mansur, which none of the doctors could not cure, I took part in his treatment and distinguished himself at the same time. One day, I asked the ruler permission to go to his library to study the books on medicine available there. He allowed me, and I saw books there, the names of which many people have never heard, and I myself have not seen them either before or since. I read those books, learned all the useful things that were in them ... When I reached the age of 18, I completed the study of all sciences. "

Ibn Sina devoted more than 20 of his works to the questions of medicine. His main medical composition is the Canon of Medical Science. He wrote it for about 20 years and graduated in 1020. "Canon" is an encyclopedic set of medical knowledge of the ancient world, the result of the vision and experience of ancient Greek, Roman, Indian and Central Asian enemies. The Canon is divided into 5 books:

• 1st book contains 4 large sections:

1. Introduction, anatomy, physiology;
2. Causes of diseases;
3. Symptoms of diseases;
4. Diet, prevention, general principles of treatment.

• 2nd book describes the doctrine of simple drugs with an indication of their actions, methods of application, rules for collection and storage.

• 3rd book contains a description of individual diseases "from head to toe," their diagnosis and treatment.

• 4th book is devoted to surgery and general diseases of the body (fever, infectious diseases, cosmetics, doctrine of poisons).

• 5th book describes complex medicinal substances, poisons and anti-drugs. In general, 811 medicinal products of plant (526), animal (125) and mineral (85) origin are described in the "Canon".

In the 10th century the Canon was translated into Latin. After inventing printing by the number of publications, he competed with the Bible and was the most studied work in the history of mankind. In the XV century it was published 16 times, in the 16th century - 20, not counting the publication of its individual parts. The burden of the "Canon" of scholars of different eras is explained by the fact that his author summarized the entire experience of antiquity and the early Middle Ages and, using his numerous observations, gave an exhaustive account of medical theory and practice.

Medicine in the states of East and South-East Asia.

China. In China, the feudal system began to be approved in XI century. And remained until the XX century. The traditional medicine was very developed. This is a harmonious religious and philosophical teaching, connected with the empirical experience of people's healing of this ethnos. Originating in ancient China, they reached their peak in the Middle Ages (during the feudal period). One of them is zhen-tszyu (kitten, knee-jn), needle-piercing, moxibustion, and others-the theory of the pulse, and so on.

Education in China

The first in the history of China, the state medical school - ImPerer Medical Academy was founded in 618. By the middle of the VII century it consisted of two departments: medicine and medicine.

7 disciplines were studied: internal diseases (7 years), childhood illnesses (5 years), surgery (5 years), ear, nose, throat and nose diseases (4 years), mental illness (3 years), Acupuncture and massage.

On the drug department: the art of cultivating medicinal plants in the botanical garden, the ways of preparing medicinal products from them.

For the training of acupuncture in medieval China began to create color tables that depicted channels and points on the surface of the human body in three proportions for acupuncture.

The first higher medical schools in Western Europe appeared in Italy. The oldest among them is the Salerna medical school, whose foundation is dated to the 9th century. It was a secular school. At the behest of the Emperor Frederick II (1212-1250), She was given the right to confer the title of doctor: it was forbidden to practice medicine without the license of this school. In 1213 the Salerne School was transformed into a university. The training lasted for 5 years, after which there was compulsory medical practice for 1 year.

In the Middle Ages, the unification (community) of people of one profession was called *universitas* (lat. - aggregate, community). As a rule, there were 4 faculties in medium-universal universities (1 - preparatory, 3 - basic). The term faculty (Latin facuitas, ability, talent) was introduced in 1232 to designate various specialties at the University of Paris.

The word student came from the Latin *studere* - to learn. The number of students was small, and within the same specialty the elders were beaten by a group of students (there were not more than 10 of them) - the dean (*ten*). At the head of the university stood the rector (Latin governor).

The term professor (Latin professor - *connoisseur*). In the medieval universities of Europe (in the 15th century) professors were called teachers-masters (lat.*magister* - chief, mentor) and doctors (lat. Doctor-*teacher*, docer-*teach*). The chair (Greek *Kathedre* - bench) places from which the rhetoricians (teachers) delivered a speech.

Teaching in medieval universities was dogmatic. The works of Galen, Hippocrates and Avicenna. Memorized by heart. Practical training was not.

The views of students about the structure of the human body were superficial. The Christian

religion forbade the opening of corpses.

The first autopsy of the deceased in Western Europe began to be made only in the XIII-XIV centuries in the most progressive universities (in Salerno and Montpellier, France) with the special permission of the monarchs. So, in 123 Friedrich II allowed the medical faculty in Salerno to uncover one (!) Corpse in five years. In 1376, Ludovig, the Duke of Anjou, ordered his court to give the university in Montpellier one corpse per year.

In the universities, surgery was not taught and in the number of medical disciplines was not included. It was done by bath attendants, barbers and surgeons who did not have university education and were recognized as doctors.

On the whole, medieval science and education in Western Europe, however, were of a scholastic nature, it stood with its back to the patient.

Epidemics of general diseases

The influenza pandemic during the First World War (Spaniard) struck 500 million people, of which 20 million died.

During the Crusades, the leprosy most widely spread (Greek: Ierga). The leper was expelled from society into a leper colony (a shelter for lepers).

Another common disease of the period of the classical Middle Ages was the plague. In the history of the plague, three colossal pandemics are known. The first is the "plague of Justinian", which, coming out of Egypt, devastated almost all the countries of the Mediterranean and stayed about 60 years. The second and most evil in the history of Western Europe is the "black death" of the mid-14th century. The third is the plague pandemic, which began in India in 1892 (where about 6 million people died) and reflected in the twentieth century. On the Azores, in South America and other regions of the globe, where her funeral ring for a long time did not stop. Total on the globe in the XIV century. More than 50 million people died from the plague.

Medicine in Western Europe during the late Middle Ages - the eras) Renaissance (XV-XVII centuries)

In the 15th century, a new capitalist mode of production was born in the depths of the feudal socio-economic formation. It required a new influx of knowledge, and scientists turned to the study of nature. Culture and science acquired a secular nature The mathematics and related sciences became the queen of sciences.

During this period, measuring instruments and instruments were invented and improved. Galileo Galilei designed a telescope and created the first thermoscope. Nikolai Copernicus developed a heliocentric theory. In the field of literature and art, too, had their achievements.

Therefore, this period of the late Middle Ages in Western Europe called "Revival" (i.e. the revival of ancient culture).

The formation of anatomy as a science

In the Renaissance, the main features of natural science were: the approval of the experimental method in science, the development of mathematics and mechanics. All these features were clearly manifested in the period of the formation of anatomy as a science. One of its founders was a brilliant Italian scientist and artist Leonardo da Vinci (1452-1519). His merits:

- inventions in the field of physics, geometry, mechanics, astronomy, botany and anatomy;
- One of the first in Europe began to open corpses and systematically study the structure of the human body;
- introduced new methods of anatomical research: washing the bodies with running water, injecting wax with the ventricles of the brain and vessels, cutting the bones and organs;
- Described and sketched many muscles, bones, nerves and internal organs.
- Andreas Vesalius (1514-1564) studied at 3 universities. In 1537, at the age of 23, he received a doctorate in medicine and became a professor at the University of Padua (Italy). His merits:
- translated the works of Galen and corrected more than 200 of his mistakes;
- correctly described the skeleton of a person, muscles and many internal organs, established the absence of a hole in the cardiac septum;
- described the heart valves;
- published a short textbook of anatomy "Extraction" and work "On the structure of the human body" in 7 books.
- The works of Vesalius opens the "golden age" in the history of anatomy. Miguel Servetus (1509-1553) is a Spanish philosopher and doctor. In 1553, for the first time in Europe, described the small circle of blood circulation in his book Restoration of Christianity. Many provisions of this work were in conflict with the dogmas of the church, the book was declared heretical, and Servetes were burned alive at the stake along with a book (in Switzerland). In books, he described the passage of blood from the right ventricle to the left, through a long and miraculous bypass through the lungs, while noting that "its color changes". This was an important discovery, because at that time the doctors had the most confusing idea of the movement of blood in the vessels of the human body. But to establish this, Servetus had to open the corpses, which was strictly forbidden by the church.
- After Servetus, blood flow studies continued.
- Thus, the efforts of many Renaissance scientists laid the foundation for scientific anatomy. On the basis of its development is the development of physiology, therapy and surgery.

- The formation of physiology as a science
- The birth of physiology as a science is associated with the name of the distinguished English physician, physiologist and embryologist William Harvey (1578-1657). Seven years after Servetus 's death Garvey published his work Anatomical Studies on the Movement of Blood in Animals, in which he described the law of circulation that he had discovered. Merit:
- created a harmonious theory of blood circulation;
- experimentally substantiated the theory of blood circulation in small and large circles.
- Research Harvey continued Italian physician Marcello Malpighi (1628-1694). With the help of a microscope (4 years after the death of Garvey) he described capillaries in the lungs, red blood cells, liver, spleen and kidneys. In 1673 he discovered a layer of skin (later named after him). Renaissance achievements in the field of physics and medicine The beginning of microscopy.
- The invention at the end of the XVI century. Thermometer by the Italian scientist Galileo Galilei.
- The Dutch merchant and lens grinder Antony Leuvenuk (1632-1723) produced more than 200 microscopes of primitive design. He described tooth enamel, the structure of the lens and microorganisms.

Development of clinical medicine

- Paracelsus (1493-1541). The founder of the experimental method in science. He was both a theorist and a practitioner. He described the diseases of ore miners and casters associated with poisoning with sulfur, lead, mercury, antimony. He laid the foundations of the future science of occupational diseases.

Development of pharmacies and pharmacy business

- In Europe, the first pharmacies appeared in the XI century in the Spanish cities of Toledo and Cordoba. By the 15th century, they had spread widely throughout the continent.
- Pharmacists occupied a great position in society, their activities were regulated by the state. In the middle of the XVI century the first appeared! Pharmacopoeia, which listed the medicines used in the city or the state, their composition, application and cost (official regulation of prices for medicines in Europe).

Epidemics of the triode of the late Middle Ages

- During this period there is a decrease in leprosy and plague, but other new diseases appear: typhus, smallpox and others. At the end of the XV - the beginning of the XVI century, the whole Europe was affected by the epidemic of syphilis, in connection with this, the baths were closed.

- The causes of epidemics in the Middle Ages were not yet known. The first] scientifically based concept of the spread of infectious diseases was put forward by Girolamo Fraccastoro (1478-1553) - an Italian scientist-physician, physicist, astronomer, poet, one of the prominent figures of the Renaissance. His merits:

1. wrote a work on "Contagiya, contagious diseases and treatment" in 3 books;
2. introduced the terms "infection", "disinfection";
3. established 3 ways of transmission of the infectious onset:

✓ at direct contact with a sick person;
✓ through the contaminated objects;
✓ through the air at a distance;
✓ about the development of surgery

- In the Middle Ages (as mentioned above), surgeons were not considered to be doctors. They were considered artisans and united in their professional corporations. Among the surgeons, there was a professional gradation. The higher position was occupied by surgeons who wore long clothes, they were called "long-sexed". They had the right to perform the most complex operations, for example, stone cutting or grating.
- Surgeons of the second category - "Short-haired", were, basically, tsi-ryulnikami and were engaged in "small" surgery: bleeding, removal of teeth, etc.

The lowest position was occupied by surgeons-bath attendants, which you raised the simplest manipulations, like the removal of calluses.

Surgeons were forbidden to cross the boundaries of their craft, perform medical manipulations (for example, do enemas) and prescribe prescriptions. They were not admitted to universities. They studied inside the corporation, the surgical schools began to open in the chat room. In 1731 (this is already the new time) in Paris, the King's decision opened the first surgical Academy. In 1743 she was equated with the Medical Faculty.

Surgery in Western Europe did not have scientific methods of anesthesia until the middle of the XIX century. All operations in the Middle Ages caused the worst sufferings for patients. There were no correct ideas about wound infection and methods of disinfection of wounds. Therefore, the majority of operations in Western Europe (up to 90%) resulted in the death of the patient. Gunshot wounds were burned with a boiling composition of resinous substances.

Only in the middle of the XVI century the French surgeon Ambroise Paré (1510-1590) showed the harmfulness of such treatment with gunshot wounds. He had no medical education, he was a barber surgeon. Merit:

• introduced into practice oily bandages;

• in 1545 published a book "on the treatment of gunshot wounds";

• published a number of works on anatomy, surgery, on the management of dislocations, on obstetric care and the treatment of fractures;

• improved the technique of amputations and hernia operations;

• suggested complex orthopedic devices - artificial extremities, joints and other;

• in midwifery, he applied the rotation of the fetus to a pedicle (known to ancient non-Russian doctors).

Medicine in the Moscow State (XV-XVII centuries)

After the overthrow of the Mongol-Tatar yoke (1480) and the unification of Russian lands around Moscow during the reign of Ivan III, the Moscow Grand Duchy became a large and powerful state of Europe. By the end of the XVI century. The territory of the principality has almost doubled. There were more than 220 cities in the country. The population reached 7 million people.

Since that time, the revival of many aspects of the inner life of Russian society, Russian national culture, and, together with them, folk, secular and monastic medicine, has begun.

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Features of the development of medicine and medical affairs In the XVI century, in Moscow Rus, there was a division of medical professions: there were healers, herbalists, rudometers (cunts), teeth, bones, midwives. Medical care consisted in the organization of shelters and is bogey for maimed, crippled and other chronic patients. The poorhouses in Moscow Rus were kept by the population, the role of the church was less than in Western Europe.

In Russia, traditional medicine occupied a leading position until the middle of the XVII century, when the state began to develop state forms of training doctors.

Combating epidemics of disease

• separation of patients from healthy;

• cordon of foci of infection;

E burning out infected houses and neighborhoods;

• Burial of the dead far from home, outposts, bonfires on the roads.

The medicine of that time was still powerless before epidemics, therefore state quarantine measures were conducted.

The beginning of the state organization of public health in the Moscow state was established by the establishment under Ivan IV at the end of the 16th century of the Apothecary Chamber, renamed in the XVII century. In the Aptekarskiy Prikaz in 1620.

Functions of the pharmacy order:

• He was in charge of the royal pharmacy, collecting and breeding medicinal plants, buying them in other countries;

• watching the court doctors serving the royal family and boyars;

• supervised the work of foreign doctors, checked the knowledge of these enemies when entering the Russian service, etc.

The first pharmacy in Russia appeared in 1581 on the territory of the Moscow Kremlin. They called her "Sovereign" because She served only the king and his family.

The second pharmacy "new" was opened in 1673 at the behest of Tsar Alexei Mikhailovich. This pharmacy supplied the troops with medicines. From this pharmacy drugs were sold to all citizens.

There is information about the opening in the XVII century of pharmacies also in Novgorod, Pskov, Kazan, Kursk and Kiev.

Preparation of Russian doctors 1

The training of physicians for a long time was of a craft-like nature: the student had been trained by one or several healers for a number of years, then he served in the regiment as an assistant to the physician, sometimes passed examinations.

In 1654, during the war with Poland and the plague epidemic under the Pharmacist's order, the first Russian medicine school was opened.

The first civil hospitals in Russia appeared around 3652. The first doctors of medicine from Russian people appeared in the XV century. Among them, George Drohobych and Francis Skaryna from Polotsk.

Thus, the XVI-XIII centuries In Russia there were the time of the establishment of pharmacies and chemist's business, the beginning of the training of physicians from inborn russians, the creation of the first hospitals in the cities - the time of the birth of the state medical organization in Russia.

Medicine of the peoples of the American continent before and after the conquest

The indigenous population of the American continent passed in its development of two periods:

• The first, lasting more than 30 thousand years (original history of aboriginal people);

• The second begins in 1492 (Columbus) and is associated with the discovery and colonization of Europeans.

Aborigines of ancient America created 3 main centers of high cultures:

• Maya - in Central America (from II millennium BC);

• Aztecs - in the territory of modern Mexico (from the XIIth century AD);

• Incas - in the territory of modern Peru (from the 14th century AD).

Creator One of the most ancient civilizations of America is the Maya people. The Maya created a hieroglyphic script (the only one on the continent to the period of the conquest). Mathematics developed (the principle of zero, the number P), astronomy (invented the calendar - the most accurate until the era of space flights), architecture, philosophy and medicine.

In the late I millennium AD. They died because of reasons that have not yet been fully clarified.

Aztecs, whose state existed for less than a hundred years. They used the solar calendar, knew pictography (picture writing), achieved high art in the construction of cities, developed philosophy and medicine.

In the years 1519-1521. The Aztec state was conquered by the Spanish conquistadors.

The largest state on the territory of North America was the Inca Empire, which was formed in 1438 on the territory of modern states of Peru and partly Ecuador, Chile and Bolivia. In 1532, the Inca empire was captured by the Spanish conquistadors.

Sources of Medical Studies

- written monuments, testimonies of participants and eyewitnesses of the conquest events (military leaders, soldiers, monks, local residents, scribes for years);
- Archeology data: Mayan pyramids, Inca mummies, works of art and tools;

Data of ethnography: the study of cultural traditions and life of tribes, from those stored in the territory of America after the conquest.

Development of medical knowledge

In pre-Columbian America there was no single medical tradition. Every nation, every civilization or cultural group has developed its own methods and means of healing, its ideas about diseases and their treatment.

The notion of the structure of the human body

The Aztecs knew a few hundred terms in their language for the designation of parts of the human body, and the Mayas had about 150 anatomical terms in their language, and the Incas - about 60.

'The pagan religions of the Incas, Aztecs, Maya and other peoples were closely related to the belief in life after death. This led to the worship of the dead and the practice of embalming the dead.

The study of the burials of Maya and Aztecs showed that the customs of these peoples included deliberately changing individual parts of the body of people: the sharpening of the upper teeth, the incrustation of teeth by jade, obsidian, yashmoy and gold, changing the shape of the skull, piercing the nasal passage, tongue For the purpose of sacrificial bleeding).

The concept of beauty in Maya included a flat forehead, elongated skull and squint. In this connection, after the birth, the head of the child was fixed between two boards, and a prominent bead hung between the eyes.

The causes of illnesses were bad deeds and sins, especially the calendar year, not the performance of sacrifices, sudden and magical powers that are not dependent on a person.

At the same time, all the peoples recognized and quite natural causes of diseases associated with the nature and life of the patient himself. There were also ideas about infection from a sick person.

The treatment of diseases was carried out by folk healers - healers. Medicinal healing was based on the empirical experience of peoples and at the same time was closely associated with magical rituals. Aztec physicians knew about 3000 medicinal plants. There were gardens of medicinal plants, and at that time Western Europe did not yet know the pharmacy gardens and vegetable gardens. The Code of Badiano describes 285 medicinal plants, 185 of which are depicted in color drawings. All of them are

arranged in a strict order with instructions for collection rules, preparation of medicines and their use in all sorts of diseases.

The obstetrics in pre-Columbian America was the subject of a special cult, The women who had already given birth gave birth. They were invited to the family immediately after the marriage, in order to give necessary advice on hygiene and rules during the forthcoming pregnancy. At the same time, there were special women who had abortions.

A few months before the birth, the pregnant woman was given a steam bath, during which she felt her stomach, determined the position of the fetus and, if necessary, corrected it. With the appearance of the first signs of pregnancy, the mother was given a medicine to prevent ruptures and watered the plants with the decoctions and decoctions that helped to anesthetize and stimulate labor. They gave birth in a squat position. As a rule, two women supported the woman: one supported her from behind, and the other took her newborn baby. There was also a horoscope of the newborn, according to the day and hour of his birth. Breastfeeding was done from the 2-3rd day after birth and lasted up to 3-4 years. To stimulate the allocation of milk, special medicinal agents were used.

Treatment of female diseases was very effective due to many-numbered medicines. Some pre-Columbian medicine is used today in obstetric and gynecological practice. However, most of them are unknown to modern science. In particular, it concerns the means of contraception and regulation of pregnancy. So, if a woman of the modern Indian tribe of Brazil decides to abstain from procreation, she drinks the infusion from the local herb known to her, after which she ceases to give birth. It may take several years, and if a woman again wants to have a baby, she looks for another herb that removes the effect of the first. The secret of these herbs is strictly preserved within the tribe and passed down from generation to generation.

Operative medicine

The greatest successes in the field of operative healing were achieved by the Incas: they treated wounds and fractures, using tires from the feathers of large birds, performed amputation operations of upper and lower extremities, and performed trephination of skulls;

Surgical instruments for trepanation were made of obsidian, gold, silver and copper.

For anesthesia, infusions of herbs with a narcotic, intoxicating and hallucinogenic effect, as well as juices of cacti and other plants (and at the same time in Western Europe, did not yet know the painkillers) were used.

Organization of medical business

In the states of pre-Columbian America (the Aztecs and the Incas), clear forms of organizing medical affairs were developed. In the Aztec state there was a special body that dealt with the regulation of the activities of healers.

In the Aztec army there were special people for the removal of the wounded battlefield. Military

hospitals were created. During the mass diseases, measures were taken to limit the focus of a dangerous disease, and the families of the ruler and the nobility immediately left the disaster area.
In the Inca Empire there were also strict rules that can be defined as elements of state regulation. It:
• organization of shelters for patients
• a ban on seriously ill people living in cities
• Do not marry and be injured from birth.

The centers of pre-Columbian America differed from their modern Western European cities. Thus, in the capital of the Aztecs, special teams followed the purity. On the streets of this city was so clean, clean water came from the mountains along two stone water pipes.
Baths were used in hygienic, medical and ritual purposes. In the baths were preparing for childbirth and washing the newborn, doing massage and treating skin diseases.
Thus, the medicine of pre-Columbian America was brilliant for its time. A significant part of her achievements was lost during the conquest. However, what survived was one of the sources of the formation of American, European, and world medicine.

Theme # 4

Medicine of modern times: biomedical disciplines: anatomy, physiology, histology.

Lecture plan:
1. Periodization of the new history.
2. Socio-economic characteristics of the era.
3. Features of the development of medicine.
4. Development of general pathology, microbiology, physiology.

Control questions:
1. Great scientific discoveries.
2. Differentiation of medical disciplines.

Theme content

The term "new history" ("modern times") was first introduced by humanists in the 16th century.

New time begins with a period of approval and development of capitalist relations, which are divided into two periods:
- 1640-1870 years. - from the English bourgeois revolution of the 17th century to the Paris Commune;
- 1871-1918. - from the Franco-Prussian War and the Paris Commune to the end of World War I and the Great October Socialist Revolution in Russia.

The English bourgeois revolution had a profound impact on the process of breaking down feudal relations throughout Europe. A characteristic feature of the new history is the development and disintegration of the colonial system of capitalism.

Medico-biological direction in modern medicine

The great natural and scientific discoveries of the late 18th and first half of the 19th centuries were of decisive importance for the development of medicine, among which the following were of great importance:

- Theory of the cellular structure of living organisms (Schleiden, Schwann), 1838-1839gg.
- The law of conservation and transformation of energy (Meyer, Joule, Helmholtz), 1841-1847gg.
- Evolutionary teaching (Darwin), 1859.
- The law of heredity and variability (Mendel), 1866.

Natural and scientific discoveries have served the development of medicine and the differentiation of medical disciplines. With the discovery of laws, cytology and histology were developed, anatomy develops very closely with histology.

Development of normal anatomy in Europe and Russia

As already noted, the founder of scientific anatomy is Andreas Vesalius, who not only corrected the errors of his predecessors and significantly expanded his anatomical knowledge, but also generalized and systematized them. After Vesalius, the professors began to publicly dissect corpses in order to study the structure of the human body and teach anatomy to students.

Autopsies, first rare and in unsuitable premises for this, in the 16th and 17th centuries. Turned into solemn demonstrations, which were carried out with the special permission of the authorities in the presence of colleagues and students. For them, they began to build special rooms, according to the type of amphitheatres (in Padua, 1594, in Bologna, 1637, etc.).

In the 17th century, the center of anatomical research from Italy moved to France, England and the Netherlands.

The largest anatomical school of that time was formed within the walls of Leiden University. His pupil was a Dutch anatomist and surgeon from Amsterdam Nicholas Tulp. Merit:

- for the first time he studied the structure of an anthropoid ape in comparison with a human organism;
- the emergence of the symbol of a burning candle and the motto "Shining Others, Burning Itself" is associated with the name of N. Tulpa.

Frederick Ruysch (1638-1731) - Dutchman, the largest anatomist of the time. He received his medical education at the University of Lenden.

Merit:

- perfectly mastered the technique of preparing anatomical preparations and the method of injecting blood vessels with colored hardening fluids;
- invented the original way of embalming corpses;
- created the first anatomical museum in the world.

In Russia, the beginning of anatomical studies is associated with the name of Peter 1, who showed great interest in the development of medicine and medical affairs. While in Amsterdam, Peter 1 attended lectures and an anatomical museum of F. Ruysch, attended operations and anatomical autopsies. During his first stay, Peter the Great also visited A. van Leeuwenhoek in Holland, listened to the lectures of Burkhava at Leiden University, visited Oxford University and spoke with I. Newton.

The acquaintance of the Russian Tsar with the works of Ruysch had a fruitful impact on the development of anatomy in Russia. In 1717 Peter bought the Ruysch anatomical collection (about 2000 exhibits) for 30,000 Dutch guilders, which laid the foundation for the foundations of the first Russian museum - the Kunstkamera (from Kunstkamera, from kunst - art), now the Museum of Anthropology and Ethnography of the Russian Academy of Sciences in St. Petersburg . Peter 1 established in Moscow a course of lectures for boyars on anatomy with demonstrations on corpses. Under his decree, the first hospital school in Russia was founded in Moscow, and autopsies were also conducted in which the tsar was present and often even helped and skillfully managed to anatomize the body.

Teaching of anatomy in Russia from the first steps was conducted on a natural scientific basis. At first, when teaching students used textbooks of foreign authors, and then began to translate into Russian.

The first domestic atlas of anatomy "Dictionary or an illustrated index of all parts of the human body in Latin" was compiled in 1744 by M.I. Shein. He laid the foundations of the Russian scientific medical terminology, translated "The Reduced Anatomy" of Geister into Russian, which became the first in Russia practical guide to anatomy.

Despite the hostile attitude experienced by young Russian science at the time of its formation on the part of some foreign scientists, Russia in a short time became the birthplace of outstanding anatomical scientists. Among them, K.I. Shchepin (1728-1770) - the first Russian professor of anatomy, who began teaching the anatomy in Russian, and A.P. Protasov (1724-1796) - the first Russian anatomist-academician (1771), a student of MV. Lomonosov.

The first in Russia scientific anatomical school was formed in the St. Petersburg Medical-Surgical Academy under the leadership of PA. Zagorsky, he created the first in Russia original guide to anatomy "Reduced Anatomy" in 2 volumes.

Anatomy in the flesh prior to the beginning of the 19th century did not stand out as an

independent science. It combined with physiology and was studied in close connection with surgery.

Thus, the outstanding anatomists of the time were simultaneously brilliant surgeons, therapists, physiologists. Among them, SG. Zybelin (1735-1802) - the first Russian professor of Moscow State University, A.M. Shumlyansky (1748-1795), Ye. O., Mukhin (1766-1850) - lecturer at the Moscow State University, author of the "Course of Anatomy" and many others. Deep trace in the Russian and world anatomy was left by academician I.V. Buyalsky (1798-1866) - a student of P.A. Zagorsky. In 1828, he compiled the "Anatomico-Surgical Tables," consisting of 36 drawings and 14 tables depicting organs in full size. Table Buyalsky combined the data of topographic anatomy and operative surgery and were the first in the history of Russia domestic atlas for operative surgery.

The highest flowering of surgical anatomy is associated with N.I. Pirogov - a great anatomist and surgeon, the creator of topographic anatomy as an independent science, an innovator of the methods of "ice" anatomy and cuts of frozen corpses.

At the end of the 19th century large scientific anatomical schools were formed in the leading scientific centers of Russia: the school of D.N. Zernova; In Kiev University - the school of VA Bets.

The introduction of new research methods has expanded the possibilities of scientific anatomy and even more brought it closer to clinical medicine.

Development of histology

Histology (Greek Histologia from histos - tissue, logos - doctrine) - the science of the structure, development and vital activity of tissues of living organisms.

The development of histology is closely related to the development of microscopic techniques and research, the creation of a cellular theory of the structure of organisms and the theory of the cell.

There are two periods:

- domicroscopic;
- microscopic.

Domicroscopic period

Until the 18th century, the first ideas about tissues were formed macroscopically - on the basis of anatomical studies of corpses, and the first scientific generalizations were made without using a microscope.

At the same time, it was during this period that the microscopic technique (the use of magnifying glasses and the creation of the first microscopes) originated and was created, and the

first fragmentary information about the microscopic structure of individual cells and tissues accumulated.

Development of general pathology (pathological anatomy and pathological physiology)

Patanatomy (Greek Hathus - disease) is a science that studies the structural basis of pathological processes. Pathanatomy as an independent science emerged in the 18th century.

There are two periods:

- macroscopic;
- microscopic

Macroscopic period

The beginning of pathological anatomy is associated with the name of the Italian anatomist and physician Giovanni Battista Morgagni (1862-1771). At the age of 19 he became a doctor of medicine, at the age of 24 he headed the Department of Anatomy of the University of Bologna. He showed that every disease causes certain changes in a particular organ, and determined the organ as the site of localization of the painful process. He created a scientifically justified classification of diseases.

The French anatomist, physiologist and physician Marie Francois Xavier Bisha (1771-1802), developing the position of Morgagni, showed that the vital activity of an individual organ is composed of the functions of various tissues, that the pathological process affects not only the entire organ but only its individual tissues (tissue pathology).

Microscopic period

The scientific principles of the morphological method in pathology were laid by Rudolf Vikhrov (1821-1902) - a German physician and pathologist. Guided by the theory of the cellular structure, Vikhrov first applied it to the study of a sick organism and created the theory of cellular (cellular) pathology. He made a great contribution to the development of anatomy as a science using the method of microscopy. He first described and studied the pathological anatomy of inflammation, leukocytosis, embolin, thrombosis, phlebitis, leukemia, investigated amyloidosis of the kidney, fatty degeneration, tubercular nature of lupus. He created the terminology and classification of the main pathological conditions.

In Russia, the development of pathological anatomy is associated with the name of Peter 1. According to his decree, autopsies of those who died by violent death were mandatory and they also uncovered all dead in hospitals.

The founder of the pathological anatomy school in Russia is A.I. Polunin. He headed the department, which opened in 1849 in Moscow State University.

Pathological physiology

The founder of the first school of pathophysiologists in Russia is Viktor Vasilyevich Pashutin. In 1874, he revised the course of general pathology, giving him an experimental-physiological focus. He investigated the metabolism, gas exchange, digestion and the activity of endocrine glands.

The development of microbiology and methods of combating infections

Microbiology (Latin, Greek - small and - teaching) - the science of microorganisms, their structure and vital activity, as well as the changes caused by them in the organisms of humans, animals, plants and inanimate nature. It originated in the second half of the 19th century.

Medical microbiology is divided into bacteriology, virology, mycology, immunology and protozology.

There are two periods:

- empirical (before the second half of the 19th century;
- experimental, the beginning of which is related to the activities of Louis Pasteur.

Empirical Period

The creation of the first optical devices in the early 17th century opened a new era in the history of microbiology. Antony van Leeuwenhoek was the first researcher who discovered living organisms, and described them in his work "The Mysteries of Nature" (1695).

Vaccination. English doctor Edward Jenner noticed that peasants, milking cows, sick with cowpox, on their hands formed bubbles, similar to pustules of pustules. A few days later, the bubbles were suppressed, dried up and cicatrized, after which the peasants never suffered from smallpox.

After these observations, Jenner publicly conducted an experiment in 1796 on the method of vaccination (Latin Vacca - cow). Encouraged 8-year-old boy contents of pustules from the hand of a peasant woman, infected with cowpox. After 1.5 months he repeated the experience - the boy was not sick. A second attempt to infect a small child with smallpox five months later did not yield any results, i.e. The child was immune to this disease.

After this incident, he conducted the experiment 23 more times. Vaccinations were conducted in the British Army and the Navy, mortality from smallpox decreased more than three-fold. In 1808, the vaccination in the UK became a state event.

The first vaccination against smallpox by the method of Jenner in Russia was made in 1802 by Professor EO Mukhin.

Antiseptic and aseptic. The empirical principles of antiseptics (Latin Antiseptica, Greek Anti-against, septica-putrid) are associated with the name of the Hungarian scientist I. Semmelweiss (1818-1865). He studied the causes of postnatal fever and huge mortality after it and found that the true cause of maternal fever is in transferring the contagious beginning with

the hands and instruments of midwives. In 1847, at the Viennese obstetric clinic, he proposed a method of protection - washing hands with a solution of bleach, since dirty hands were the cause of the development of sepsis (blood poisoning).

As a result, mortality in the maternity ward decreased to 1-3%.

English surgeon Joseph Lister (1827-1912) gave a scientific justification for the surgical infection, developed methods of antiseptic (destruction of microbes in the wound) and asepsis (destruction of microbes from the hands and surgical instruments).

Experimental period

Medical microbiology as a science took shape in the second half of the 19th century. Its formation and the first major discoveries are related to the activities of the French scientist, chemist and microbiologist Louis Pasteur, the founder of scientific microbiology and immunology. His main services are:

- discovery of the enzymatic nature of lactic acid, alcohol and oil-acid fermentation;
- refuted the hypothesis of spontaneous infection of microorganisms;
- studied the basics of ideas about artificial immunity (on the example of chicken cholera);
- created the vaccine against anthrax (1881) and rabies vaccine (1885);
- organized in Paris the world's first anti-rabies (anti-rabies) station.

The discoveries of Pasteur were the basis for the development of medical microbiology and the fight against infectious diseases.

Ilya Ilyich Mechnikov (1845-1916), an outstanding Russian biologist, pathologist, immunologist and bacteriologist, creator of the phagocytic theory of immunity, the founder of embryology, was the organizer of the first Pasteur station to combat rabies in Russia (opened in 1886 in Odessa). He discovered leukocytes, spleen cells, bone marrow, which he called phagocytes (from the Greek Phagein - eat, eat and kytos - cavity, cage), perform the functions of protecting the body from pathogens. In 1908, I.I. Mechnikov and Paul Erlich were awarded the Nobel Prize for the doctrine of immunity.

Robert Koch (1843-1910) - German scientist, the founder of bacteriology, Nobel Prize winner, 1905. He discovered the causative agents of tuberculosis and cholera, established the etiology of anthrax.

The successes of microbiology in studying the causative agents of infectious diseases made possible their specific prevention.

Physiology and experimental medicine

Physiology (Greek Physiologia, from physis-nature and logos-teaching) studies the vital activity of the whole organism, its parts, systems, organs and cells in close relationship with the surrounding nature. The history of physiology includes two periods:

- empirical;
- experimental (divided into two stages - before and after Pavlova)

Empirical Period

The first ideas about the work of individual organs of the human body began to take shape in the extreme antiquity, and are set forth in the writings of the philosophers of the ancient East, Ancient Greece and Rome.

In the Middle Ages, when church scholasticism prevailed, stagnation was observed in the development of natural science.

In the Renaissance the anatomical and physiological and natural-scientific studies carried out by Vesalius, Servetus, Galileo and others prepared the ground for future discoveries in the field of physiology.

Experimental period

A major role in the development of physiology was played by the Swiss naturalist and physician Albrecht Galler (1708-1777). He tried to understand the essence of the process of breathing in the lungs, established three properties of muscle fibers (elasticity, contractility, irritability), first noticed that the heart is contracting involuntarily under the action of force, which is in the heart.

An outstanding achievement of the 18th century. Was the discovery of bioelectric phenomena in 1791 by the Italian anatomist and physiologist Luigi Galvani (1737-1798), which marked the beginning of electrophysiology.

Johannes Müller (1801-1858) - German naturalist, the founder of physiology and experimental medicine. He owns fundamental research and discoveries in the field of physiology, pathological anatomy, embryology. In 1833, he formulated the main provisions of the reflex theory, which were further developed in the works of I.M. Sechenov and I.P. Pavlova.

The founders of the physiological school in Russia are Ivan Mikhailovich Sechenov Ivan Petrovich Pavlov.

THEM. Sechenov (1829-1905) in 1856 graduated from the Medical Faculty of Moscow State University. In 1860 he defended his doctoral dissertation "The physiology of alcoholic intoxication." His work on the physiology of breathing and blood, gas exchange, dissolution of gases in liquids and energy exchange laid the foundations for future aviation and space physiology. He discovered the processes of excitation and inhibition. He created the work "Reflexes of the brain." He created a major physiological school in Russia. His students were B.F.Verigo, N.E. Vvedensky, V.V. Pashutin and others.

I.P. Pavlov (1849-1936) - the creator of the theory of higher nervous activity, the founder of the largest physiological school in Russia. He was the first among Russian scientists and the

first among the physiologists of the world was awarded the Nobel Prize in 1904 for the work "physiology of digestion."

Theme # 5

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III. The first methods and instruments of physical examination

The first mercury thermometer was proposed in 1714 by D.G. Fahrenheit (Holland) with a scale of 0 to 600 C, but larger dimensions made it much more difficult to use.

The Swedish astronomer and physicist Anders Celsius in 1742 proposed a mercury thermometer for measuring body temperature.

In 1860, he was admitted to the clinic in Russia. (SP Botkin)

Percussion

Auenbrugger-Austrian physician is the author of the method of percussion (tapping), i.e. Percussion.

For 7 years, he studied the sounds produced by tapping the chest in a healthy and sick body.

In Russia, the first description of percussion was made by professor of the Medical and Surgical Academy F. Uden

Mediastinal auscultation

• Rene Laennec (1782-1826) - French doctor, the founder of modern clinical clinical medicine and patanatomy, the inventor of the stethoscope and the method of mediated auscultation.

• The first stethoscopes (Greek-stethos-chest, scope-look, explore), he glued from thick paper.

Laennec described:

• Symptoms of heart defects

• Studied the clinic and pathomorphology of portal cirrhosis

• Has established the specificity of the tuberculosis process, believed that this is a contagious disease.

IV. Development of internal medicine and medical education in Russia in the XIX century.

2 educational institutions:

1. MSU-developed issues of general pathology, therapy and physiology

2. Petersburg Medical and Surgical Academy - was engaged in the issues of anatomy, topographic anatomy and surgery.

The largest therapist in Russia in the first half of the XIX century. Was a graduate of Moscow State University Matvey Yakovlevich Mudrov (1776-1831).

First applied methods:

• Palpation,

• percussion,

• Ascultation.

Sergei Petrovich Botkin (183- 1889) created the largest scientific and therapeutic school and laid the foundation for a functional clinical and experimental direction in medicine in Russia.

He organized several laboratories:

• General clinical

• Chemical

• Bacteriological

• Physiological

Development of epidemiology, hygiene and public medicine

• Epidemiology - (from the Greek Epidemia - mass disease and logos - teaching) - the science of the causes and laws of the mass spread of infectious diseases, methods of their prevention and elimination.

• Pandemic (from the Greek Pandemia - the whole people, in general) - unusually strong epidemics, covering several countries and continents.

In the XVI-XVII centuries. In the world widespread pox prevailed. Brought to the American continent.

In 1817, cholera was imported from India to Europe.

In Russia cholera appeared in the XIX century.

1. The first - "Justinian Plague", coming out of Egypt, devastated almost all countries of the Mediterranean and stayed about 60 years. At the height of the epidemic in 542, thousands of people died daily in Constantinople.

2. "Black Death" - the second pandemic of the plague was the most devastating (1346-1348). A third of Europeans were killed

3. In 1892, in Southeast Asia, the third pandemic of the plague.

State measures to curb the plague in Moscow:

• State planning, financing, control

• Daily record of morbidity and mortality

• Methods of health education (printed sheets, explanatory work, financial incentives)

• Systematic treatment of the city after the epidemic

• Publication of the fundamental work on the diagnosis of plague

Hygiene and public medicine

Hygiene (from the Greek Hygienos - healthy) is a science of preserving and improving health.

Independent science became in the second half of the XIX century.

• The founder of occupational pathology and occupational hygiene is Italian physician Bernardino Ramazzini (1633-1714)

He wrote a scientific paper "On the disease of artisans" (1700).

• The founder of experimental hygiene Max Pettenkofer (1818-1901) developed objective research methods for hygienic assessment of air, clothing and soil, water, and established hygienic standards for nutrition.

In Russia, the development of scientific hygiene took place in the second half of the XIX century.

One founder was

AP Dobroslavin (1842-1889)

He headed the first in Russia department of hygiene at the St. Petersburg Medical and Surgical Academy (1871).

His merits:

• Created an experimental laboratory for research and practical training

• Participated in the improvement of St. Petersburg

• The author of the first in Russia textbooks on hygiene

• Founder of the magazine "Zdorovie"

The second department of hygiene was founded in 188 at the Moscow University.

He was headed by F. F. Erisman (1842-1915), a Swiss hygienist.

I paid much attention to

1. School hygiene

2. Hygiene of dwellings

Public (social) medicine (from Latin Socialis - public, comradely) is the science of preserving public health, preventing and treating diseases.

In Russia, public health activities originated in the first half of the XIX century.

In Western Europe (the Netherlands, England, France) originated in the XVI century.

The first analysis of death tables in London for 1603 - 1653 was made by John Grount.He became

The founder of demographic statistics (from the Greek Demos-people, and graph-write, Latin Status-status, position)

In 1662 he published the book "Natural and Political Observations on the Records of the Dead, mainly on their attitude to governance, religion, profession, population growth, air, diseases, London"

• Originally, demographic statistics were called political arithmetic. The term was introduced by William Petty (1623-1877), an English doctor; he was interested in the number of doctors, the number of hospitals and their condition, the impact of epidemics on population decline, and tried to find the dependence of morbidity and mortality on prof. Occupation.

Surgery (Latin Chirurgia- handicraft) is an ancient field of medicine dealing with the treatment of diseases by means of manual receptions, surgical instruments and instruments (ie through surgical intervention).

The first country where the surgeons were recognized on a par with the doctors was France. In 1731 In Paris was opened the first surgical academy, its director was Jean Louis Petit - participated in military campaigns and was known for his work on surgery of bones and joints,

wounds and amputations.

In Russia, the development of surgery is closely related to the name of E. O. Mukhin and N.I. Pirogov. N.I. Pirogov (1810-1881) - anatomist and surgeon, creator of topographic anatomy as an independent science, the founder of military field surgery.

His merits:

• application of the method of "ice" anatomy and cutting of frozen corpses;

• composed the work "Surgical Anatomy of Arterial Stems and Fascia";

• took part in the fight against cholera;

• gave a scientific justification for the use of ethereal anesthesia;

• Sorting of wounded, postoperative patients on "clean" and "purulent";

• For the first time in the world, women were attracted to care for the wounded. Pediatrics

Treatment of childhood illnesses has long been associated with the practice of obstetric care, the treatment of female diseases and the development of ideas about contagious diseases. This is evidenced by the works of outstanding physicians of the ancient world (Galena), the Middle Ages (Ar-Razi, Avicenna), special works on the diseases of children began to appear in the late XV-early XVI centuries.

In the XVI-XVII centuries. The greatest contribution to the study of childhood diseases was made by the English physician Thomas Sidengam, who described a number of diseases: scarlet fever, rheumatism, gout, whooping cough, rubella, erysipelas, promoted the classification of diseases.

All diseases Sidengam divided into acute (from God) and chronic (from ourselves). He regarded the disease as "the effort of nature to restore health by removing the invading pathogen" and strived to learn the healing powers of the organism itself, advocating practical training for medicine at the patient's bedside.

In Russia, the first works on the diseases and education of children were made by SG Zybelin (1775) and N.M. Maksimovich - Ambodik. His book, The Art of Obedience, or the Science of Women's Affair, is entirely devoted to childhood diseases (smallpox, measles, rickets, helminthic invasions, and the characteristics of a full-term and premature fetus, nursing, feeding).

In the XIX century. Pediatrics (from Latin-Pediatria, Greek Paidos-child, iatria-treatment) began to form as an independent science. The first hospital for children was opened in Paris in 1802. It became the leading center of Europe in the first half of the XIX century. On training specialists in the field of childhood diseases.

The second in Europe (and the first in Russia) special children's hospital for 60 beds was founded in St. Petersburg in 1834 (now the Children's Infectious Disease Hospital No. 18 named after NF Filatov). In the year 1842. The first Moscow Children's Hospital was opened for 100 beds, the first hospital in the world for young children (now the Collective Farm № 13 named

after NF Filatov). Both were kept for charity.

The founder of scientific pediatrics in Russia is N.F. Filatov (1847-1902) - the creator of the scientific school, for the first time singled out and described chicken pox, scarlet fever rubella, discovered an early sign of measles-pancreatic peeling of the epithelium on the oral mucosa.

Development of dentistry in Russia

Stomatology (from the Greek Stoma - mouth) - the doctrine of diseases of the oral cavity and the maxillofacial region about the methods of their diagnosis, treatment and prevention.

Dentistry distinguishes: surgical dentistry, orthopedic, therapeutic and dentistry of children.

Since 1654g. In Russia (when the first drug school was opened in the Moscow State), dentists also began to teach future healers. This was due to the fact that a significant part of the doctors was sent to serve in the army, where knowledge was required on operative dentistry and to combat scurvy. As antiscorbutives in military garrisons, all ranks were given malt, beer, wine vinegar, sbiten.

For the first time the right to engage in dentistry in Russia was given to the Frenchman F. Dyubrel in 1710 in the same year in Russia the title of dentist was introduced. Skills of dentistry began to be taught in the course of surgery. As an independent field of medicine, dentistry was singled out only at the end of the XVII-beginning of the XVIII century. To a large extent this was facilitated by the activity of the French surgeon P. Fochard (1678-1761), went from a barber to a surgeon.

He described about 130 diseases of teeth and diseases of the mouth, studied the causes of their origin and course. Based on his research was one of the first classifications of dental diseases. His work "Dental surgery or treatment of zubov" was the first guide to dentistry. P. Foshar made a significant contribution to dentistry, was engaged in the correction of defects in abnormal growth of teeth and jaws and is rightly considered the founder of orthodontia (orthodontia, from Greek orthos - direct, odontos - tooth) - a section of dentistry devoted to the prevention and treatment of dentoalveolar anomalies with orthopedic Means.

In the first half of the XIXI century. Translation and original works on dentistry and maxillofacial surgery began to be published in Russian.

In 1829 "Diagnostics or Dental Art" was published. Sobolev, which was an encyclopedia of the latest knowledge for dentistry (therapeutic and surgical dentistry, orthopedics and orthodontics, prevention of dental diseases). The second part of this book is devoted to preventive measures and recommendations for caring for children of different ages, aimed at strengthening the health of children in general and dentoalveolar system in particular.

In the first half, dentists were mainly engaged in healers who had the right to treat all diseases and perform all operations without exception. Specialization in dentistry was a rare occurrence. So, in 1908 there were only 18 dentists in Russia; Most of them were foreigners, often without any general medical or dental education.

Since 1838, dentists have been called dentists. Right to independent. They received dental practice after passing special examinations at the medical-surgical academy and at the medical faculty of the university (on the anatomy of the maxillofacial area, dental diseases, gums and medicinal substances used in dental practice). In addition, it was necessary to do several dental operations and demonstrate the ability to insert artificial teeth.

The first private dental school in Russia was opened in 1881. In St. Petersburg F.I. Vazhinsky. In order to obtain a knowledge of the dentist with the right to prescribe medications, those who graduated from this school took examinations at the military medical academy or at the medical faculty of the university. In connection with this, dental schools were opened only in university towns. In Moscow, the first dental school was organized in 1882. THEM. Kovarsky. In the year 1898, In Russia, there were 9 dental schools.

Theme number 6

Medicine of modern times (after 1918).

Lecture plan:

- History of modern medicine.
- Development of medicine in foreign countries.
- Development of medicine and public health in Russia and the USSR.
- International organizations.
- Nobel Prizes in the field of medicine and physiology and related sciences.
- Features of medicine in Kyrgyzstan before reunification with Russia.
- The main epochs of medicine in Kyrgyzstan.
- Medicine of Kyrgyzstan after the victory of the Great October Socialist Revolution.
- Medicine of Kyrgyzstan after the Great Patriotic War.
- Laws on public health protection.
- Implementation of the new program "Manas Taalimi".

Control questions:

Control questions:

• Advances in biomedical sciences and clinical disciplines, development of hygiene and public health.

• The creation of the People's Commissariat of Health of the USSR, the principles of Soviet public health, scientific-medical schools.

• International Committee of the Red Cross, Red Crescent, WHO, Movement "Physicians for the Prevention of Nuclear War".

• Nobel Prize winners in the field of medicine.

- History of Kyrgyzstan.
- The emergence of elements of medicine in Kyrgyzstan
- Communication of medicine with religion.
- Characteristics of medicine in the first years of Soviet power.
- Establishment of the management of Soviet health care.
- Principles of Soviet health.
- Scientific medical schools.

Theme content

The historical boundary between the new time and modern history is 1918 - the year of the end of the First World War, and in Russia in October 1917 (the victory of the Great October Revolution). Modern history is the shortest period in the history of mankind. However, the achievements of this period in all spheres of social activity (including in medicine) in many respects exceed the one created by the human mind during many preceding centuries.

Development of medicine in foreign countries

Medico-biological sciences, clinical medicine, hygiene and practical healthcare have received new features. American physiologist U, B. Cannon discovered homeostasis (constancy of the internal environment of the body), found that with emotional states there is an increased adrenal secretion of adrenaline into the blood.

Canadian physiologist F. Bunting in 1921 discovered a hormone - insulin, which is used in the treatment of diabetes mellitus.

English microbiologist A. Flegming in 1922 discovered the antibacterial enzyme lysozyme, and in 1929 discovered penicillin.

Vaksman S.Ya. In 1943 he discovered streptomycin, an effective remedy against tuberculosis infection.

In 1932 - 1934 G. Krebs created the theory of the cycle of urea generation (Krebs cycle). In

1937 he created the theory of lemon-acid cycle of cellular respiration.

The French microbiologist and hygienist A. Calmette created the first living anti-tuberculosis vaccine (BCG vaccine). For the first time it was applied in 1931.

English virologist Andrews in 1933, together with other scientists discovered the causative agent of the flu.

The spouses F. Joliot-Curie and I. Joliot-Curie in 1934 discovered the phenomenon of artificial radioactivity, which is used in biology and medicine for experimental research, diagnosis and treatment.

Development of clinical disciplines

The development of clinical disciplines was greatly influenced by the emergence of a number of diagnostic tools, instruments, including fluoroscopy and radiography (1895), an electrocardiograph (1903), and an encephalograph (1929).

American clinician R. Bing studied the physiology and pathology of the myocardium, the pathogenesis of hypertension, made a catheterization of the coronary sinus.

The Finnish scientist A. Ilppe studied the physiological characteristics of premature infants, the incidence of childhood morbidity and measures to prevent them.The Romanian surgeon N. Hartolomey carried out experimental work in the field of organ transplantation.

The transplantation of the heart from a human corpse was carried out by the South African surgeon H. Bernard.

Development of hygiene and public health

At the end of the 19th century, favorable conditions for the development of hygiene, the formation of separate links in public health, developed in the capitalist countries. The Hygiene Commission of the League of Nations was established, which collected and published information on morbidity and demographic processes, scientific development of hygiene issues, and advice to national health authorities.

Medical statistics developed. In 1906, the first work "Textbook on Medical Statistics" by F.Prinsinga appeared. German specialist of sanitary statistics E. Resle dealt with issues of natural movement of the population, including children.

Public health officer of Norway K. Eveng devoted his scientific works to the issues of social hygiene, organization of public health services and occupational diseases.

Development of medicine and public health in Russia and the USSR

In the early years of Soviet power, epidemics of typhus, cholera, typhoid fever and other infectious diseases were rampant in Russia. The government's primary task was to fight epidemics.

The organizers of medical care in Moscow were M, V. Vladimirsky, Z.M. Soloviev, I.A., Semashko, V.A.Obukh, L.S. Bogolepova and others.

The first decrees of the Soviet government in the field of health, published by the Council of People's Commissars:

- "On an eight-hour day";
- "On the free transfer of all medical institutions and enterprises to sickness funds";
- "On insurance in case of illness";
- "On the abolition of payment for the provision of medical care" and others.

Lenin signed more than 100 decrees and decrees of the young Soviet public health.

After the October Revolution, the structure of the management of the medical service in Petrograd and other cities changed. Stages of the development of the health management system in the RSFSR:

- October 26, 1917 created the first in Russia medical and sanitary department (with Barsukov).
- Since November 1917, the establishment of health departments on the ground.
- November-December 1917, the organization of medical colleges with individual people's commissariats (internal affairs, roads, etc.).
- January 24, 1924, the establishment of the Council of Medical Colleges.
- June 16-19, 1918 All-Russian Congress of Health Departments.
- June 11, 1918 the creation of the People's Commissariat of Health of the RSFSR (led by NA Semashko, deputy ZP Soloviev).

Nikolai Alexandrovich Semashko (1874-1949). His merits:

- headed the People's Commissariat for Health until 1930;
- in 1922 he opened the first in the country department of social hygiene at the Medical Faculty of Moscow State University;
- was the initiator and editor-in-chief of the BME (1927-1936);
- for ten years (1927-1937) he headed the children's commission of the All-Russia Central Executive Committee (VTsIK);
- after the Second World War, on his initiative, the study of the sanitary consequences of the war began;
- participated in the creation of the Academy of Medical Sciences of the USSR (1944), became one of the first of its academicians;
- established the Institute of Health Organization and History of Medicine of the Academy of Medical Sciences of the USSR (now the All-Russia Research Institute of Social Hygiene, Economics and Health Management named after Semashko RAMS), whose director he was in 1947-1949.

Scientific heritage of NA. Semashko - more than 250 scientific works on organizational and theoretical health issues.

Creation of the People's Commissar of the USSR

In 1936, the resolution of the CEC and the Council of People's Commissars of the USSR was established by the USSR People's Commissar of Health.

The first person was Grigory Naumovich Kaminsky (1895-1938)

His merits:

- showed special concern for scientists, on the development of research institutes, higher and secondary medical education;
- participated in the construction and development of VIEM (All-Union Institute of Experimental Medicine) in Moscow and Leningrad;
- contributed to the establishment of international cooperation in the field of science.

Principles of Soviet Health

The emergence of public health in the RSFSR and the USSR in the first years of Soviet power was based on four organizational principles:

- state character;
- preventive direction;
- population participation in health care;
- the unity of medical science and practice.

The state character is the basic principle of public health in the RSFSR and the USSR in the period of its formation. Its main content are:

- centralization of management;
- state financing;
- state planning of health programs;

Public health provides for free (that is, at the expense of the state) and public health care for the entire population of the country.

Today the principle of statehood is preserved, but other forms of medical and social assistance to the population are being further developed.

The second principle - the preventive direction has been consistently implemented since 1918. This is evidenced by the first decrees:

- on measures to combat typhus;
- on measures to combat epidemics;
- On the sanitary protection of dwellings;
- on providing the population with baths.

Over five years (1918-1922) typhus was ill with 20 million people. More than 100 decrees of

the Council of People's Commissars were devoted to combating epidemics and preventing diseases.

Among them was the decree "On Sanitary Bodies of the Republic" (1922), which outlined the range of tasks and the rights of the Sanitary and Epidemiological Service as a state sanitary control body. In those years, the notion of "sanitary business" included not only sanitary and anti-epidemic measures, this included the protection of motherhood and infancy, the fight against tuberculosis, the protection of children and adolescents, physical culture and health education. The decree "On Sanitary Bodies of the Republic" formulated the rights of sanitary authorities in the field of preventive sanitary supervision; Categories of sanitary doctors, their rights and duties were established.

The third principle is the participation of the population in health care. During the years of the revolution and after it there were not enough qualified medical workers, many of them died in the fight against epidemics. Many medical workers were killed on the fronts during military operations or in the rear of hunger and disease. That's why it was necessary to involve the population (workers, peasants, intellectuals) in everyday medical-sanitary work.

After the civil war, new forms of medical and sanitary work emerged: the commission for the improvement of work and life; Sanitary courts; Mass staging and sporting events that promote a healthy lifestyle and cleanliness.

At the same time, work was carried out to train qualified doctors in medical schools, the number of which was constantly increasing. By 1922, in addition to 13 medical faculties, 16 new ones were opened.

The unity of medical science and healthcare practice is a principle directly related to the state nature of health care.

During the civil war and intervention, science developed under extremely difficult conditions. There was no new equipment, there was not enough writing paper, the laboratories were not heated, there was no access to foreign scientific literature.

Outstanding scientists of Russia - N. N. Burdenko, N.V. Gamaleya, V.M. Bekhterov, D.K. Zabolotniy and many others took part in the restoration and development of Soviet science. In August 1918, under the People's Commissariat for Health of the RSFSR, a scientific medical council was created, which included the largest scientists of various branches of medicine. Among his tasks was the development of areas of scientific, scientific, practical and educational activities in the field of medicine and sanitation.

In 1920, at the initiative of the People's Commissariat for Health of the RSFSR, the State Institute of Public Health was established, which included 8 research institutes: Institute for Vaccine and Serum Control, Sanitary and Hygienic Institute, Tropical, Microbiological Institute,

Nutrition Institutes, Biochemistry , Tuberculosis and experimental biology. In the 30s, the institutes of GINZ became independent scientific institutions. In the period from 1918 to 1927, 40 research institutes were organized. Among them: the Institute of Microbiology and Epidemiology in Saratov (1918), bacteriological in Tiflis (1918), the State Venerological Institute (1921), the Institute for the Protection of Motherhood and Infancy (1922) and others.

Scientific developments of research institutes were used in healthcare practice. Conversely, a successful fight against mass diseases made it possible to check in practice and consolidate scientific conclusions and put forward new scientific tasks.

Scientific medical schools

At various stages of the development of human society, the idea of a scientific school changed. In the time of Hippocrates, there also existed a kind of scientific schools. In the era of feudalism and the Renaissance, there were practically no scientific schools in medicine, although famous scientists had followers. And only in the era of capitalism is the emergence of a large number of scientific schools and directions. The distinguishing features of the scientific school were the presence of a prominent scholar-head of the school and his students, followers of the direction that the teacher was developing.

School I.P. Pavlova is the largest in the world. She united over 250 students. The main direction of this school is the study of higher nervous activity, 500 works were performed.

School of KI. Scriabin-created a doctrine of de-worming and devastation, that is, the physical destruction of pathogens.

School of NA. Semashko is known for her work on the creation of scientific foundations of social hygiene, for the first time the basic principles of Soviet public health were formed and applied in practice.

School G.F. Langa-developed the technique of intravital electrocardiographic diagnosis of myocardial infarction, the doctrine of the pathogenesis (neurogenic origin) of hypertensive disease. Great merit of this school in the creation of a new section of internal medicine - cardiology. Lang proposed a new classification of diseases of the cardiovascular system. In the post-war period, the student Lang Myasnikov created a new large cardiology school.

School of M.P. Konchalovsky - marked the beginning of new directions in medicine: gastroenterology, hepatology, nephrology, rheumatology. His student E.M. Tareyev created the largest therapeutic school in the USSR.

School N.N. Burdenko developed problems of neurosurgery, military field surgery, traumatic shock treatment, oncology, pulmonary surgery, blood transfusion.

School A.V. Vishnevsky-developed a method of local anesthesia. Wisnevsky oily-balsamic ointment is widely known for the treatment of purulent processes, for prophylaxis of shock, a

vagosympathetic blockade.

Formation and development of medicine in Kyrgyzstan.

History of medicine and public health of Kyrgyzstan.

Provision of medical assistance before joining Russia and in the years of tsarist Russia.

Before joining Russia (until 1863).

The state of public health was unsatisfactory. The population was sick with smallpox, plague, cholera, trachoma and other diseases. There were no medical facilities. Medicine was popular and religious.

Traditional medicine: the population was treated by representatives of traditional medicine - tabibs. The Tabibs played a positive role for their time, because Have used the accumulated experience of traditional medicine. Tabibs themselves prepared infusions, decoctions, powders, ointments. In the treatment of tabiba, plant, animal and mineral agents, as well as physiotherapeutic and other methods of treatment were used. The wrapping of the patient with the skin only was used, that of the killed animal, the contents of the intestine of the animal.

Tabiba

1. Tamyrchy (pulsoviki) - diseases were divided into two types (intense pulse "hot disease", weak pulse "cold disease." They were treated with a diet rich in drink.
2. Sinykchy (bone caries).
3. Cans (blood grooves).
4. Darynchy (wounds of wounds).
5.Byuby (midwives, midwives).
6. The general profile.

Infectious diseases, such as anthrax (burnt with stained iron), were known to isolate the old woman who had been ill with this disease for caring for a smallpox. Bathing was used in the hot springs of Issyk-Ata and Dzhety-Oguz. In addition to traditional medicine, there was a religious-mystical (healers, shamans). At this time, there are elements of religion, such as totemism, fetishism, the cult of spirits and ancestors. Treated by conspiracies, rituals, etc.

Thus, medicine was popular and religious.

In the years of tsarist Russia (from 1863-1917).

Became a scientific medicine. There were medical institutions:

• In the military units of the tsarist army, hospitals (hospitals) in Pishpek, Osh, Karakol, and Naryn were provided with honey. Assistance to the local population.

• Medical facilities for civilians appear:

-1885-1896 years. Hospitals with an outpatient clinic in Osh, Pishpek and Karakol were opened.

• Medical facilities for immigrants from Russia were opened:

- feldshersky point in 1908 (in the town of Pishpek);

- Migrant hospital in Pishpek in 1911 (for 12 beds).

There is a resettlement medicine (on the road the movement of immigrants and on the places of the device new settlers were created dispensaries, pharmacies.

The first doctors were: F. Poyarkov. V. Vyshpolsky, P. Bespalets, V. Kuleshovsky, N. Barsov, K. Frunze, medical assistant M. Frunze, Pervakov and others.

On the eve of the Great October Revolution in Kyrgyzstan it was.

Medical care

• 7 hospitals (4 - urban, 3 - rural);

- urban (Pishpek, Tokmak, Przhevalsk)

- rural (Kara-Balta, Alexandrovka, Belovodsk)

• 100 hospital beds;

• 15 doctors;

• 21 paramedic posts.

2 the question. Public health in the first years of Soviet power, in the period of the autonomous region and the republic.

The first years of Soviet power (1917-1923 gg.).

Characterized by the fact that civil war and devastation contributed to an even greater spread of epidemics (cholera, typhus).

Organization of medical care

• Health authorities are established. A. Ivanitsyn was the first People's Commissar of Health of the Pishpek county.

• Emergency commissions, sanitary commissions and sanitary police work to combat epidemics.

• Combating social diseases (tuberculosis, venereal diseases).

• Providing general, free, qualified medical and medicinal assistance.

A large anti-epidemic and sanitary-educational work was carried out.

• 7 infectious barracks (40 beds each) were organized to treat infectious patients.

• In 1921, the Resolution "On Mandatory Response" was adopted.

In 1921, 9 doctors worked in Kyrgyzstan.

In the Pishpek district there were:

• Doctors - 9;

• Midwife - 1;

• Pharmacist - 1;

• County Hospital - 1;

• Hospital beds - 50;

• District hospitals - 3;

• FAP - 12.

Autonomous Region (1924-1926).

In these years honey. Help to the population has improved. There were specialized types of honey. Assistance. By 1924, there were 5 resorts and sanatoriums: Arashan, Jalal-Abad, Dzhety-Oguz, Ak-Suu, Koy-Sary.

In 1924, medical and caravan detachments were organized whose duties included acquaintance with the sanitary condition of settlements, hygienic skills were introduced to the population, treatment was carried out (63% of the population suffered from scabies, 10% syphilis, 37% trachoma).

In 1925, the city of Pishpek opened:

• Maternity hospital;

• Children's consultation;

• Dental offices;

• Venereological dispensary.

In 1925 in the city of Osh:

- Sexually transmitted disease clinic;

In 1925 in Tokmak and with. Kochkorq:

- Venereological station;

In 1925 a unified system of the pharmacy network was created:

In 1926 in Frunze were opened:

- malarial station;

- tuberculosis dispensary;

- Pasteur vaccination point;

- The point of preparation of midwives.

In these years, 3 medical and research detachments from the center of the country are being created and are working. They were engaged in treatment, sanitary-educational work among the population. They found that the population suffers from cutaneous (scabies), venereal (syphilis) and eye diseases (trachoma).

In 1926, medical personnel and a network of hospital facilities were represented.

• Number of doctors - 19

• Number of hospitals - 16

- Including urban - 4

- rural - 12

• Number of beds - 445

- Including urban 195

- rural - 250

Autonomous Republic (1927-1936 gg.). Characterized by the further development of health care.

• In 1927, the People's Commissariat of Health was formed (headed by Sh. Ibragimov);

• In 1928 a medical assistant and midwifery school was opened in Frunze;

• In 1929, an electric light therapy clinic was opened in Frunze with X-ray rooms in Osh, Jalal-Abad and Przhevalsk.

• At industrial enterprises health posts are organized (meat processing plant, leather factory, garment factory, printing house).

In 1935, expeditions were sent to Kirghizia consisting of 23 doctors for fighting veins. Disease and trachoma.

The first cadres of doctors are beginning to work: ZI I. Igemberdiev, MM Malyshev, M. Shamiev, I.Kh. Akhunbaev.

These years are significant because in 1936 smallpox was eradicated.

Medical staff and the network of hospital facilities have increased:

Number of doctors 1928

The number of paramedics 200

Number of hospitals

- urban

- rural 29

Number of beds

- urban

-Self 955

3 question. Health care of Kyrgyzstan in the pre-war, post-war and years of peaceful development.

The Union Republic (1937-1991).

1. Pre-war years (1937-1941)

• In 1938:

- Research Institute of Epidemiology, Microbiology and Hygiene was opened;

- Republican medical journal is issued;

- There is a mountain-climatic sanatorium in the village. Cholpon-Ata.

• In 1939 there were opened:

- Kyrgyz State Medical Institute (Director Elbert);

- Republican psychiatric hospital in with. Chym-Korgon;

• Hospitals have been opened in Chon-Alai, Toguz_Toruz, Ala Bukin, Chatkal districts;

• Medical schools have been established in Karakol, Jalal-Abad, Osh, Tokmok.

The number of medical personnel and the network of hospital establishments has grown considerably: the number of doctors is up to 600, the average medical staff is 2552, the number of hospitals is 111, the number of beds is 3486.

Years of the Great Patriotic War (1941-1945).

A number of important tasks were solved.

• Health-care services are rebuilt taking into account wartime conditions.

• The sanitary well-being of the Republic has been preserved.

• Manufacture of medicines, disinfectants.

• Provision of medical services for the evacuation population.

• Medical assistance to the wounded is organized.

• Creation of military hospitals.

At the beginning of the war, students and faculty of the Kharkov, Kiev and Moscow institutes joined KGMI.

Despite the difficulties of wartime, new sanitary and epidemiological stations were re-established (control over the sanitary epidemiological situation).

Doctors - Kyrgyz people provided honey. Assistance to the wounded and sick at the fronts: Aydaraliev AA, Igemberdiyev ZI etc.

In 1945, medical staff comprised:

The number of doctors - 768, the average medical staff - 2816, the number of hospitals - 124, the number of beds - 5541.

Postwar years (1945-1955 gg.).

Public health of this period has received considerable development.

• Since 1947, the association of polyclinics with a hospital has begun;

- the precinct principle of service is established;

• in 1955, specialized care is provided - dispensaries are opened in all regions and district centers:

- anti-tuberculosis;

- Oncological;

- psychiatric;

In these years they work.

• 5 regional hospitals;
• 28 city hospitals;
• 58 district ones;
• 90 rural precincts
• 6 maternity hospitals;
• 4 children's hospitals;
• 2 psychoneurological hospitals;
• 77 SES.

Years of Peaceful Development (1956-1991)

• All types of specialized assistance in 35 specialties have been developed.
• A number of research institutes (maternity and childhood protection, oncology, tuberculosis, nutrition, etc.) were opened.
• From 1980 to 1990, the improvement of the primary health care system.
• The organization of medical aid to individual continents has been strengthened: disabled people, participants of the Second World War, villagers, children, students, women.
• For the first time in the USSR, a polyclinic for invalids of the Second World War was put into operation.
• In 1990, the Republican Diagnostic Center was opened in Bishkek.
• The number of doctors was - 10600, the average medical staff - 31500, the number of hospitals - 264.

During the years of the sovereignty of the Kyrgyz Republic, the first laws on the protection of public health in 1992 were adopted.

• Law on Public Health Protection
• Law on Sanitary and Epidemiological Wellbeing;
• The Health Insurance Act;
• The Law on Blood Donor and Its Components

Issues of health protection in the Constitution of the Kyrgyz Republic.

Citizens of the Kyrgyz Republic have the right to:

• Health protection, free use of the network of state and municipal health institutions;
• environmentally friendly and healthy environment;
• social security at the expense of the state in old age, in case of illness and disability, loss of breadwinner
• labor protection and social protection against unemployment.

Health care reform in the Kyrgyz Republic.

• In 1996-2005, In the republic the program of public health reform "Manas" functioned.

• Since 2006, a new health reform program, Manas-Taalimi, has been adopted, which is a continuation of the Manas program.

11. Glossary

Alchemy is the precursor of chemistry, its essence is in the transformation of matter.

Alchemists were engaged in the production of gold from base metals, Sought the recipe for the "elixir of immortality", which in turn facilitated

Accumulation of practical experience and further development of chemistry.

Anamnesis is a collection of information about the development of the disease, conditions of life, Transferred diseases, etc., collected by the healer, and in medical worker for diagnosis, choice of method treatment or preventive measures.

Anatomical theater - a room built to open corpses before students. The first anatomical theater appeared in the Italian city Padua in the year 1490.

Animism (spirit, soul) - belief in spirits and in souls

Amputation - clipping, removal of an organ or part of the body as a result surgical operation, trauma.

Aseptic - a set of measures aimed at preventing ingress of microorganisms into the wound.

Antiseptic - a system of measures aimed at the destruction of microorganisms

In the wound.

Anthropogenesis is part of the biological evolution that led to the the origin of Homo sapiens, to the formation of species.

The pharmacy order is the central government body that is all medical work in the country. In his department there were apothecaries, doctors, healers, medicines, anti-epidemiological measures,

Doctor's tales (medical history), medicine school and everything that had to this relation. Organized in the period between 1581 and 1620. In 1714 was renamed the Chancellery of the main pharmacy, and then to the Drugstore Office.

The Archdiocese is a state-paid doctor's office in the Roman Empire. There were different city and provincial architets.

Asutu - the art of healers in Babylonia and Assyria, based on the empirical experience, whose representatives were called "asu". Reason Diseases were explained by natural causes; medications.

Atomistic concept is the concept formulated in the Ancient Greece Erasistratus in the VI - III centuries. BC. E. The human body consists of sets of solid indivisible particles (atoms) that move

along the channels of the body. Violation of this movement, blockage of blood vessels or their overflow is the cause of the disease.

Ashiputu - art of spellcasters in Babylonia and Assyria, based on belief in the irrational causes of diseases, the representatives were called "Ashipu". For treatment along with medicines widely practiced conducting magical rites, using spells, magical circles, numbers, amulets, etc.

Ayurveda - the science of longevity in India, created in the Vedic era

Embalming - ways to protect the corpses from decomposition for what The corpse was treated with substances that prevent decay. Embalming was already known in Assyria and Persia, but the greatest Art in this matter reached the ancient Egyptians. Bath - a room equipped for washing the body with a simultaneous Exposure to water and hot air or steam.

Bipedia - upright walking, movement on two lower extremities, one From features that distinguish man from anthropoid apes.

Valletuninarium - a medical institution in ancient Rome, intended For the treatment of soldiers. One of the earliest forms of aid organization

Wounded, appeared around the 1st c. BC. E., Which were serviced Professional doctors. Also in some large estates Were organized vletudinariy for the treatment of slaves.

Votive offerings are images of healed bodies and body parts, Made of marble, gold and silver, which were presented to the gods in A token of gratitude for healing in asclepiones.

Healing is healing, healing. Has arisen spontaneously simultaneously with Man as a response to a trauma or illness. Initially Doctors did not anticipate preventive measures that

Appear with the accumulation of empirical experience. Includes both Empirical knowledge, and idealistic ideas.

Galenism - the scholastic direction in medicine, canonized Catholic Church, prevailing in Western Europe in the middle Century. The basis of Galenism was one-sidedly interpreted

Idealistic concepts of Galen. Hygia - Greek mythology of the goddess of health, daughter of Asclepius. Hence the word "hygiene".

Hospital School - (histor.) Educational institution under general Hospitals for the training of doctors, mainly for the army and navy, Existing in Russia from 1707 to 1786; Predecessor of the medical- Surgical schools.

Humoral theory - human health depended on the balance in the body Four liquids - body juices: blood, mucus, black and light bile. They corresponded to four elements: air, water, earth and fire.

Doctor's task - restore the lost balance. This theory was formulated in

Ancient Greece in about V - IV centuries BC. E.

Desmurgy - (Greek desmos leash, tie, bandage + ergon case, performance) Section of medicine, dedicated to bandages and their use.

Dietetics - the science of nutrition of patients, studying and substantiating Principles of nutrition in various diseases.

Yoga - a system of philosophical representations, moral and ethical rules and Physical exercises that have arisen in ancient India. Aim – connection Man with a source of cosmic energy by abstaining from Pleasures, upbringing of mental and physical perseverance, various

Postures (asanas) that promote concentration of thought, breathing exercises And meditations.

The Indian (Harappan) civilization - existed in the IV - middle of the II millennium BC.

N. E. In the valley of the Indus River. In excellent condition, Technical facilities.

Injection - (years injectio throw-in) in the form of parenteral administration Physiological and diagnostic means, Iivobemyedo20ml By controlling various organisms using Kaalidrugiinovators.

Contagii -, contagia, husband. (Lat.contagium - infection) (honey.). Differently, Cancondensubstituted a condylosis of one to the next. The concept of the "golden age" - the notion that a primitive man Was absolutely healthy, and the disease arose later as a result of civilization.

The Kos school - was established in Kos, on the island of the same name off the coast Asia Minor, located north of the Cnid Peninsula and not far off From him. The Kosmic school, like the one in Cnidia, is characterized primarily by its serious Achievements in the field of practical medicine, especially in surgery.

Cloaca is a covered channel for sewage drainage in Ancient Rome, built in VI century. BC. E.

Lazaret is a military medical institution directly The composition of military units intended for the provision of medical assistance And inpatient treatment of patients, injured and wounded

Military personnel. The Lekar School was established in 1654 under the Aptekarsky Order. Was engaged Preparation of mecedical personnel

Leprosy - chronic granulomatosis (chronic infectious Disease) caused by mycobacteria Mycobacterium leprae and Mycobacterium lepromatosis, proceeding with primary lesion

Skin.

Leprazorium is a specialized treatment and prevention institution, Engaged in the active detection, isolation and treatment of patients with leprosy (Leprosy).

Magic (witchcraft) is a belief in a person's ability to be supernatural Way to influence other people, objects, events or phenomena Of nature

Maceration is lat. Maceratio, from lat. Macero - soften, soak) - Separation of plant or animal cells in tissues. Natural Maceration is the result of dissolution of the intercellular substance.

Miasma - (from other Greek - μίασμα - contamination, contamination) - obsolete

Medical term, which until the end of the XIX century were designated The "contagious beginnings" in the environment

Mummification - the process of creating a mummy from the body of a deceased person (Animal).

Medicine (Latin "medico" - I fly, heal) - a system of scientific knowledge and Practical activities aimed at preserving and strengthening Health, prevention and treatment of diseases

Anesthesia - artificially induced reversible state of inhibition Central nervous system, in which there is a dream, loss of consciousness And memory (amnesia), relaxation of skeletal muscles, decrease or Switching off some reflexes

Traditional medicine - a combination of means and methods of healing, Developed throughout the history of mankind as a result of Empirical experience.

Scientific medicine is a set of knowledge, techniques and methods of treatment and Prevention, which rely on a scientific experiment.

Neanthropus - a man of the modern species (or Homosapiens) appeared about 40 Thousand years ago.

Oracles are ministers of worship, priests who interpreted dreams that had dreamed of During a rite in the temple in ancient Egypt, ancient Greece.

Circumcision is circumcision of the foreskin of the penis, which was performed in the ancient World with a hygienic purpose.

Paleanthropus - ancient people, ancestors of modern man, who lived 200 - 40 thousand years ago.

Paleopathology - a science that studies pathological changes in tissues Primitive man.

Pictography is the oldest type of writing, drawing writing.

Pneuma - an invisible substance contained in the air, the presence of which

Provides vital activity of the body. Some life force of the ancient Egyptians, like the Chinese "Tsi" or the Indian "Prana".

A midwife or midwife is an experienced woman taking birth. One of the most ancient branches of traditional medicine, which was Is widespread until the onset of obstetrics as a science.

Fetal turn on leg or head - method in obstetrics for extraction Fetus with an incorrect presentation. First mentioned in Indian

The treatise "Sushruta Samhita." The method was known to Soran, but was forgotten in middle Ages. Prana is the vital energy of man, the basis of everything living according to

The Indian doctrine of the universe, set forth in the Vedas.

Leprosy is a chronic infectious disease caused by bacteria. It affects the skin and the peripheral nervous system. The first Mention is found in Egyptian papyri and dates from the 3rd millennium BC. E. Leprosy takes on the character of an epidemic in medieval Europe due to

Almost complete lack of hygiene.

Rhinoplasty is a plastic surgery to restore a lost nose In ancient India, when for these purposes a flap of skin was taken from the forehead or cheek, Leaving a vascular pedicle. European doctors adopted this method in the XVIII Century.

Sanitary facilities - facilities designed for Implementation of hygienic and sanitary standards. In the ancient world, they were Already widespread. These are wells, toilets, water pipes, sewage Systems, swimming pools, etc.

Solidarity concept - the cause of the disease in the wrong location Atoms in the body, originated in Ancient Greece Tarihihets are priests engaged in embalming in ancient Egypt.

Theory of cell structure - The theory, according to which the cell is The basic unit of any organism, formulated by M. Schleiden and T. Schwan.

Traditional medicine is based on religious-philosophical teaching, in Which organically includes the empirical experience of folk healing Of this ethnos

Totemism (faith in the relationship of the genus and a particular animal; zoomorphic

Totemism - worship of animals)

Wu Shu is a term used to refer to both Chinese combat Arts, and modern sports created on their basis.

Pharmacopoeia is a collection of official documents (set of standards and Provisions), setting standards for the quality of medicinal raw materials - Medical substances, excipients

Feteshism (amulet, talisman) - belief in supernatural properties Of inanimate objects

Qigong is the ancient Chinese art of self-regulation of the body, Traditional health-improving system, the basis of internal styles of combat Arts.

The Barber - (from the Latin chirurgus) - the prototype of the medical assistant's class

Consider medieval bathhouse attendants (balneatores) - barbers who Were a special workshop and had the right to engage in small surgery, Twist

Black death - (from Latin atra mors) - pandemic of plague

Mainly in the bubonic form, which took place in the middle of the 14th century Asia, Europe (1346-1353), North Africa and the island of Greenland.

Shamanism is the direction of cult practice.

Schistosomiasis is a common name for helminthiases. Genitourinary and intestinal Schistosomiasis were widespread in ancient Egypt. In the kidneys

Mummies found a large number of calcified eggs of his The pathogen. In papyri there are descriptions of schistosomiasis: the presence Worms in the body, the appearance of blood in the urine, damage to the rectum and diarrhea.

Embryology is a science that studies the development of the embryo: embryogenesis.

The embryo is called any organism in the early stages of development to Birth or hatching, or, in the case of plants, until germination.

Jatrochemistry - (from other Greek - ἰατρός - physician) - rational direction

Alchemy XVI-XVII centuries, endeavoring to put the chemistry in the service Medicine and set as its main goal the preparation of medicines.

Jatrophysics - (from the Greek iatr ós - physician and physicist) referral in medicine

16-18 centuries, reducing all the phenomena of the life of a healthy and sick organism to

Laws of physics (mechanics).

People

Arhagat (3rd century BC) - is considered the first free practitioner A doctor in Rome.

Ashurbanipal (VII century BC) - Assyrian king, by order of which was Collected the world's oldest library of cuneiform tablets, including And medical texts.

Imhotep (XXVIII century BC) - the very first physician, which has been preserved Was considered in Ancient Egypt by the author of the most ancient medical Texts and the patron saint of the healers.

Car Titus Lucretius (98-55 BC) is the author of the encyclopedic Works on the nature of things. Issues of medicine are considered from the point of view View of the atomistic concept. A characteristic of some Diseases, the exact symptoms of certain diseases are given.

Manu is the ruler of India around the 2nd c. BC. E. During his reign, there were

Laws that contain hygienic and medical Prescriptions.

Fleming Alexander - in the 1920s. Isolated penicillin from mold, Broad spectrum antibiotic.

12. **Sources and works "Historical notes"**

("Shi Ji") - the first multi-volume history

Ancient China, compiled in the I century. BC. E. Outstanding Chinese scientist

Sima Qian. The "Historical Notes" reports on the successful The application of the zhen-chiu method and pulse diagnostics. In the chapter "The Great Principle "contains the first reliable information about the philosophical The views of the ancient Chinese: the harmony between man and the universe; about Five primary elements, of which the universe and man are composed.

"The Yellow Emperor's Treatise on the Inner" ("Huangdi Nei Jing") - Treatise on healing, written in the III century. BC. E. In ancient China. Treatise Is made according to tradition in the form of a dialogue between the legendary The Emperor Huangdi, who asks questions, and his court wise man And the doctor Qi-Bo, who responds to them. The subject of their talks was The relationship between man and nature, the concept of the substances yang and Yin and five primary elements, reasoning about the causes of human diseases and their Treatment. The author

of the treatise is not known. Probably a long time his text Was transmitted in oral tradition.

According to researchers, the treatise "Nei Jing "is the result of the collective creativity of many authors Different epochs from the 5th to the 1st centuries. BC. E. The treatise is divided into 18 books. In nine First - "Su-wen" - "Simple Questions" outlines the notion of Structure and life of the organism in close connection with the surrounding Nature and the universe, the recognition and treatment of individual symptoms and Diseases. Great attention was paid to the study of the locality where a sick man.

The treatise describes five regions of China: East, West, North, South and Center in the light of the most likely diseases there. For, In all cases, to succeed, the healer was recommended Take into account all kinds of "terrain characteristics". For example: "North - This is the place where the preservation takes place in the shelter. Here, dwellings are arranged On high mountains. Cold winds blow, cold winters rage. …

The result of the cold acting on the internal organs is easy here There are diseases associated with edema and filling. " In nine The last volumes - "Ling shu" - "Wonderful points" describes the ancient The zhen-chiu method. In the XII century. Liu Yunshu reworked the treatise "Nei Jing" in light of Achievements of the modern era: corrected a large number of errors; Reduced the number of diseases 700 to 371; Removed from the text of superstition and Related obsolete provisions. In this form, the treatise "Nei Jing" Remained in the following centuries. "Si Ci Zhuan" is an anonymous natural philosophical treatise written in IV - III centuries. BC. E. in China. In the treatise it is told about a single matter of Tai Chi, Which generates two opposite substances - yin and yang, which Are one and indivisible, and the interaction and struggle of which generate five Elements (primary elements): water, fire, wood, metal and earth. Five elements, Being in constant movement and harmony, generate ten thousand Things and including man.

The objective world is cognizable. Man is a part Nature and develops in harmony with the surrounding world. "Critical judgments" ("Lun Han") - a materialistic treatise, Which in the I century. N. E wrote in China philosopher and physician Wang Chun. In the treatise Wang Chun recognized the unity, eternity and materiality of the world, developed the doctrine of Granular (atomistic) structure of matter, struggled with superstitions and Prejudices of his time, opposed the Confucian cult Ancestors and Taoist ideas of immortality. "Among the beings carrying in their veins Blood, "he wrote," there are none who would not die. " ...

The dead do not Turn into spirits, do not have the capacity for cognition and can not Do harm to people. " Wang Chun denied innate knowledge and mystical Intuition and argued that "among the beings born of Heaven and Earth, The person is the most valuable, and this value is determined by his Ability to knowledge ". Vedas are religious literary works that were created in

The period from the 12th to the 6th centuries. BC. E in India. In the "Rigveda" (the veda of the hymns and Mythological plots) mentioned only three ailments: leprosy, consumption and Bleeding, and once it is said about the healer: "Our desires Different, the carter yearns for firewood, healer - diseases, and the priest – sacrificial Libations. Also in the Rigvedas there are rites of mythical healing.

In the "Arharvaved" (spells and conspiracies) is seen Empirical experience on the use of medicinal plants, action Which was understood as a healing power, counteracting evil spirits. However, diseases are associated with evil spirits or regarded as The punishment of the gods, while the cure of illnesses is explained by the action Sacrifices, prayers and spells. In "Yajurveda" (the Veda of sacrificial Formulas and spells) mention the body's juices.

In the Vedas, along with Good deities, who were asked for well-being, health and Healing, there were evil spirits and demons: the asuras and rakshasas are enemies of the gods and People, as well as pichasha, who were believed to bring misfortunes, illnesses, Ruin and deprived of offspring.

Laws of Manu (Manu-smriti) - laws made around the 1st-2nd c. N. E. Laws of Manu (Manu-smriti) - laws made around the 1st-2nd c. N. E. at India, which have hygiene and medical prescriptions and Recommendations empirically obtained. "You should never eat
Food ... of the sick, neither on which were hair or insects, nor Touched intentionally with his foot ... neither pecked bird, nor touched Dog. " "Let not bathe after eating, neither ill, nor in the middle of the night ... nor In an unchecked pond. " "We need to draw away from the house urine, water, Used for washing feet, food remnants and water used With purification rites. " "In the morning you have to dress, swim, clean Teeth, rubbing eyes with a collyum and honoring the gods. " "Having shaved Hair, nails and beard, humble in white clothes, clean, albeit always
Is engaged in the study of the Vedas and works, useful to him. "The laws of Manu
Provided for a fine for unscrupulous doctors.

The laws of Hammurabi - compiled by the ruler of Babylonia Hammurabi in XVIII century. BC. E. The laws reflect the legal aspects of activities Doctors in ancient Babylonia. In case of successful treatment, healer He received a high reward: "If the healer has integrated a broken

Bone or cured a sick joint, (that) the patient must pay the doctor Five shekels of silver (Sikl - monetary unit, which was equal to 8, 5 Grams of silver. This amount was enough to feed the family from 2-3 people during the year.) ... If (this is) a slave of the person, (then) the master should Pay two silver shekels to the doctor. " In case of an unfavorable outcome
The healer was severely punished: "If the healer Made a strong incision with a bronze knife and (that) killed this man, Or made an incision in the area (eyebrows or temple) of this man bronze

Knife, and (that) ruined the eye of this man, he must cut off his hand. " AT Case of a favorable outcome with similar manipulations

"The healer Should receive ten shekels of silver. ... If the sick someone's slave, then The master of the slave pays the healer two shekels of silver. " Different fees To the healer for the same treatment indicates a social Inequality and the class approach to medical activity. Cuneiform plaque from the city of Nippur - compiled at the end of the 3rd millennium BC. E. The plate contains 15 recipes for preparing recipes and is

The oldest surviving texts of medical content. AT The tablet lists the medicines primarily of the vegetable Origin: grasses, mustard, thyme, pears, figs, figs, fir, pine and Etc. The composition of medicines included also the mineral Origin (crude oil, river bitumen, tar, table salt) and

Products of animal origin (milk, snake bodies, shell Turtles, wool, etc.). Medicines were prepared on beer, wine and vegetable Oil. The tablet says nothing about gods or demons, spells Or conspiracies.

However, the plate does not contain instructions for any These medicines should be used. Papyrus medical - to date, 21 papyrus are known, in Which contain texts of medical content written in Ancient Egypt in the period from the II millennium BC. E. Until the III century. BC. E. . Papyri from Kahuna and the Remesseries are the oldest surviving Papyri, which date back to 1850 BC. E. And 1700 BC. E. respectively.

The papyrus from Kahuna contains a description of the early and Late birth, methods are given to determine the sex of the unborn The baby. In the papyri from the Craft, rational and magical Methods of healing. Contain sections on the definition of symptoms Pregnancy, maternity care, neonatal care and methods Contraception. Edwin Smith's patyrus is one of the oldest Surviving medical texts, written around 1550 BC. E.

The text is devoted to the structure of the human body and surgical treatment. The so-called "Surgical papyrus". The papyrus contains the first A description of the brain that has come down to us: the movement of the brain with open trauma The skull is compared with "boiling copper". In papyrus 48 cases are described Traumatic injuries of the bones of the skull, brain, cervical vertebrae, cl avicles, forearms, chest and spine, and their treatment without elements of idealistic healing. The author of papyrus gives Name for each traumatic event, describes the symptoms Damage, makes a conclusion and prescribes treatment. In custody Determines the severity of each case and the possibility of healing it:

"This disease that I will cure" or "This disease, with which Fight "or" This disease is incurable. " The papyrus contains clear Recommendations to the healer: "You will tell the one who has a gaping wound on Head ...: "This disease, which I will treat." After you sneesh He

wound, on the first day put on her fresh meat and do not bandage it. ... Lechi Her (the wound) with honey, fat, lint, until he (the patient) is well. " AT Smith's papyrus described 16 hopeless cases of traumatic

Damage. It is indicated that brain damage causes paralysis Extremities. A description of paralysis of the upper and lower extremities, with Loss of speech and hearing in a patient who has fallen from a high altitude as a result of Which the head went into the shoulders, the spine is broken in three places, the vertebrae Pushed one into the other. In the treatment of fractures superimposed "tires" Using for these purposes cane and strips of cloth moistened in resin or Alabaster. Papyrus of George Ebers - one of the oldest extant Medical texts, written around 1500 BC. E .. Gives the very Comprehensive information on internal diseases and medicinal medicine Among the Egyptians. Papyrus is dedicated to preparing medicines for all parts of the body.

The so-called "therapeutic papyrus". Papyrus contains 900 Prescriptions of medicines for the treatment of digestive organs, Respiratory tract, ear, throat and nose, burns and bleeding, eye

Diseases, skin, parasitic and many other diseases. When Preparation of medicines widely used plants (onions, garlic, lettuce, Beans, dates, aloe, pomegranate, grapes, papyrus), minerals

(Antimony, sulfur, iron, lead, soda, alabaster, clay, saltpetre) and body parts Many animals. Some medicines were extremely complex and Included up to 37 components. The basis for the drugs were milk, honey, beer. A separate section in the papyrus of Ebers is dedicated to cosmetic Means. Means for smoothing wrinkles, removing Moles, skin discoloration, eyebrow and hair color, increased growth hair. To protect the eyes from the scorching sun and some infectious diseases The Egyptians covered the eyelids with a green paste containing antimony salts and Malachite. The papyrus contains a description of urogenital schistosomiasis, The characteristic features of which were the presence of worms in the body, The appearance of blood in the urine, damage to the rectum and diarrhea. Many Recipes The Ebers papyrus is accompanied by references to magical spells and Conspiracies that were supposed to enhance the effect of medicines And frighten off evil spirits.

To scare off evil spirits in the composition of medicines Often included unpleasant to taste substances: parts of the tail of a mouse, Discharge from the ears of a pig, excrement of animals, etc.