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PROFESSIONAL EDUCATION
KYRGYZ-RUSSIAN SLAVIC UNIVERSITY
named after the first President of the Russian Federation B.N. Yeltsin

FACULTY OF MEDICINE

Department of “Public health and health care”

PUBLIC HEALTH AND HEALTH CARE

A Training Manual

*Dedicated to 30 years
of Medical Faculty of Kyrgyz-Russian
Slavic University named B.N. Yeltsin*



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The training manual contains information on public health and its drivers, health promotion, health management and marketing, health reform, quality of health services, performance indicators of health organizations, social and health insurance, disability expertise, as well as planning, economics and health financing. This tutorial provides specific questions for future physicians on the organization of medical services to the population.

On each topic, methodological recommendations are given for students with a plan for studying the topic and its summary, as well as tasks as an active teaching method with an analysis of the situation in Kyrgyzstan, Russia and foreign countries.

Intended for foreign medical students.

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INTRODUCTION

A modern doctor must have the knowledge and skills to assess the state of public health, the impact of socio-economic factors, the functioning and analysis of the activities of health authorities and institutions. Radical socio-economic transformations, the transition to a market economy, health care reform, the introduction of a health insurance system, the emergence of new economic relations, the emergence of additional sources of funding increase the importance of training doctors in public health, organization, management, planning, financing, health care economics.

The purpose of the subject is to promote the development of modern social and medical thinking among future doctors, to provide a basis for making organizational decisions in healthcare in a market economy.

The objectives of the course are to highlight the necessary knowledge regarding public health and health issues and the acquisition of skills in this area for the practice of a doctor.

During the study of the subject, the concepts of the foundations of public health and public health are given with a discussion of the main approaches to solving some specific problems of public health and public health. The study of public health and health care is based on the preparation of term papers by students, followed by discussion and defense of them in a group. The practical part of the subject is based on solving situational problems, working with the International Classification of Disease (ICD-10), determining the results of self-testing, analyzing the activities of healthcare institutions, analyzing examples of clinical protocols, studying accounting and reporting documentation, calculating the healthcare budget, and determining the healthcare system of a particular country.

The goals of mastering the discipline

The goals of mastering the discipline are to contribute to the development of modern socio-medical thinking among future doctors, to provide a basis for making organizational decisions in healthcare in a market economy.

The objectives of the course are to highlight the necessary knowledge regarding public health and health issues and the acquisition of skills in this area for the practice of a doctor.

Competences of the student, formed as a result of mastering the discipline

A specialist in the direction of “General Medicine”, “Pediatrics” must have the following general cultural competencies (GCC): – the ability and willingness to analyze social problems and social processes, use the methodology for calculating statistical indicators, know the market mechanisms of management, consolidating financial indicators that characterize the degree of development healthcare and public health and its factors, health promotion service, healthcare management and marketing, indicators of the quality of medical services and the activities of healthcare organizations, mechanisms of compulsory and voluntary insurance, economics and financing of healthcare, the basics of organizing the health care system in foreign countries.

The student must have professional competencies (PC): to identify medical and social factors that affect the health of the population and their patterns occurring in society.

The student must know:

- the content of the subject of public health and health care;
- legislative framework for public health protection;
- Fundamentals of biomedical statistics;
- health indicators of the population and factors determining them;
- the role of the health promotion service (HPS) in the formation

- of a healthy lifestyle (HLS);
- the main problems and strategies for health promotion (HP) of certain contingents of the population according to WHO;
 - Fundamentals of health care reform;
 - Fundamentals of healthcare management and quality of medical services;
 - definition of health care economy and financing, purpose, tasks and ways of further development in the conditions of health insurance and market economy;
 - the state of the health care system abroad;

The student must be able to:

- plan and conduct statistical research, analyze and interpret their results in practical and scientific activities;
- calculate and analyze the main factors of public health and the activities of medical organizations.
- conduct a situational analysis of the organization and health care departments.

The student must be proficient in:

- methodology for calculating statistical indicators, basic management and marketing skills of health care organizations.

THEMATIC PLAN OF LECTURES

Sr. No.	Themes of lectures (VII semester)	Number of hours
1	Introduction of public health and health care.	2
2	Public health and its conditions.	2
3	Diseases risk factors.	2
4	The state of health of the population of the Kyrgyz Republic and the dispensary method of service.	2
5	Health Promotion Service.	2
6	Health promotion of children and youth.	2
7	Health Promotion of women and the older people.	2
8	Management in health care.	2
9	Marketing in health care.	2
10	Health care reform.	2
11	Fundamentals of family medicine.	2
12	Social and medical insurance.	2
13	The quality of medical services.	2
14	Indicators of the state and activity of health care organizations.	2
15	Medical and Labor examination.	2
16	Health care planning and economics.	2
17	Health care financing.	2
18	The health care system in foreign countries. Risks in health care.	2
Total:		36

THEMATIC PLAN OF PRACTICAL CLASSES

Sr. No.	Themes of practical classes (VIII semester)	Number of hours
1	Introduction of public health and health care.	3
2	Public health and its conditions. Presentation. <i>Information message about the healthcare system in different countries of the world with a discussion (Russian Federation, USA, Western Europe, Southeast Asia).</i>	3
3	Diseases risk factors. Presentation. Information message	3
4	The state of health of the population of the Kyrgyz Republic and the dispensary method of service. Presentation. Information message	3
5	Health Promotion Service. Presentation. Information message	3
6	Health promotion of children and youth. Presentation. Information message	3
7	Health Promotion of women and the older people. Presentation. Information message	3
8	Management in health care. Presentation. Information message	3
9	Marketing in health care. Presentation. Test No.1	3
10	Health care reform. Presentation. Information message	3
11	Fundamentals of family medicine. Presentation. Information message	3
12	Social and medical (health) insurance. Presentation. Information message	3
13	The quality of medical services. Presentation. Information message	3
14	Indicators of the state and activity of healthcare organizations. Methodology for calculating and analyzing the performance indicators of outpatient and inpatient institutions	3
15	Medical and Labor examination. Presentation. Test No.2	3
16	Health care planning and economics. Methodology for calculating and analyzing indicators of economic activity of institutions.	3
17	Health care financing. Presentation. Information message	3
18	The health care system in foreign countries. Risks in health care. Defense of the course work.	3
Total:		54

Course work II unit "Analysis of healthcare indicators"

Theme 1

INTRODUCTION OF PUBLIC HEALTH AND HEALTH CARE

Purpose of the lesson

The student must know:

- content of public health and health care;
- legal framework for health protection;
- content of the public health law.

The student must be able to:

- understand the articles of the public health law.

Topic study plan

1. Analysis of the topic on educational issues

- Definition of public medicine, public health, public health, health policy.
- Definition of public health, public health, public health services.
- Social medicine and health care organization: definition, purpose, tasks.
- Legislative framework for health protection: the constitution, the first laws on health protection, international documents on health protection.
- Modern concept of health protection.
- Law on public health: purpose, objectives, principles, rights and obligations of citizens.

2. Independent work of students

- Public health law study.

3. Consolidation of material on control questions

Public or social medicine is a multifaceted area of medical public activity aimed at maintaining health.

Health care – organizations, institutions, enterprises, etc. involved in the protection and promotion of the health of citizens.

Public health is a system of measures aimed at protecting public health, preventing diseases, prolonging life and improving health.

Health policy – a set of decisions and obligations of the state and its authorized bodies to carry out a course of action in the field of health protection and promotion.

Public health – the health of the population, assessed by demographic indicators, characteristics of physical development, morbidity and disability.

Public health protection is a set of political, economic, legal, social, cultural, scientific, environmental, medical, preventive measures aimed at preserving the health of present and future generations of people.

The public health service is an organization within the structure of the authorized state health authority that carries out activities to protect and promote health and prevent diseases.

Social medicine and healthcare organization is a science that studies the influence of various social factors on the health status of the population.

The goal is to identify the state of public health of the population depending on the conditions of the external, primarily social environment and improve health care services to the population.

Tasks

- Study of the state of health of the population and the impact on it of external, including social conditions.
- Study of the organization of medical and sanitary services to the population.

The first laws on health protection of the Kyrgyz Republic

- Law for the protection of the health of the people.
- Law on Sanitary and Epidemic Welfare of the Population.

- Health Insurance Law.
- Law on donation of blood and its components.

Medicine is mainly concerned with the health of the individual, while public health pays great attention to the health of the population as a whole. Medicine is more interested in the physical condition of a person i.e. disease, and public health - living conditions, i.e. disease prevention.

Public health law

Objective: to improve the health of the population through increased access to high quality public health services, the inclusion and promotion of health issues in the policy and practice of society as a whole.

Tasks:

- protection of public health and the formation of a healthy lifestyle of citizens;
- providing a safe living environment for human health and society;
- prevention of communicable and non-communicable diseases;
- determination of the powers of public authorities, local governments, the authorized state body in the field of healthcare;
- legal regulation of the activities of the public health service in the field of health protection and promotion.

Test questions on the topic

1. Public or social medicine, public health, public health, health policy – definitions.
2. Public health, public health, public health service - definition.
3. Social medicine and healthcare organizations - definition, purpose, tasks.
4. Issues of health protection in the constitution of the Kyrgyz Republic.
5. The first laws on health protection in the Kyrgyz Republic.
6. International documents related to health issues.

7. The essence of the modern concept of health care.
8. Law on public health: purpose, objectives, principles.
9. Rights and obligations of citizens in the Public Health Law.

Theme 2

PUBLIC HEALTH AND ITS CONDITIONS

Purpose of the lesson

The student must know:

- indicators of physical, mental (mental) and social well-being of a person;
- factors influencing the state of health;
- public health indicators and main trends;
- health promotion and assessment technology: principles, resources;
- Health promotion strategies in international documents and Kyrgyzstan.

The student must be able to:

- justify the priority of diseases in Kyrgyzstan in accordance with the WHO policy “Health for all in the 21st century”.

Topic study plan

1. Analysis of the topic on educational issues

- Health: definition, indicators of individual human health.
- Factors affecting human well-being.
- Illness: definition, factors influencing the state of health.
- Public health and its indicators.
- Demographic processes and morbidity, their trends.
- Health promotion: definition, assessment technologies, resources.
- Key themes of the WHO policy “Health for all in the 21st century”.
- Objectives of the WHO policy “Health for all in the 21st century”.

2. Independent work of students

- Work with the tasks of the WHO policy “Health for all in the 21st century” (select the most priority tasks for Kyrgyzstan, give an analysis of the situation to solve this problem).
- Presentations.

3. Consolidation of material on control questions

Health (WHO) is a state of complete physical, mental (mental) and social well-being and not merely the absence of disease or infirmity.

Illness is a new, in contrast to health, qualitative state of the body that occurs in response to damage by environmental influences, through social conditions.

Health promotion (HP) is a process that helps a person to increase control over the determinants of health.

HP is a process that makes it possible to control and improve health.

The main themes of the WHO policy “Health for all in the 21st century”.

Equity – The strategy of equity includes aspects such as improving the living and working conditions of disadvantaged people in order to improve their quality of life.

The quality of life is (this is the qualitative side of meeting material and spiritual needs). WHO recommends that government policies be pursued for the chronically disabled or sick, as well as those in the terminal stage of the disease, in order to ensure that they have the opportunity to die in a dignified manner (organization of hospices).

Health promotion and prevention of diseases – the realization of the full extent of their physical, mental and social abilities.

Primary health care – meeting the basic health needs of each person by organizing appropriate services as close as possible to places of work and residence, ensuring their availability.

The objectives of the WHO policy “Health for all in the 21st century”, aimed at quality of life:

1. Solidarity for health care;

2. Equality in health matters;
3. Aa healthy start of life;
4. Youth health;
5. Maintaining health in old age;
6. Improving mental health;
7. Reduction of infectious diseases;
8. Reduction of non-communicable diseases;
9. Reduction of injuries;
10. Healthy and safe physical environment;
11. Healthier (better) lifestyle;
12. Reducing the damage caused by alcohol and psychoactive drugs;
13. Healthy environment conditions
14. Multisectoral commitments, quality of medical aid, financing, personnel.

Demographic Trends

- There is an accelerated rate of population (for comparison: in 1900 – 1 billion people, in 2021 – 6 billion 692 thousand people), the number of women exceeds the number of men.
- Population growth will continue at the expense of developing countries (Brazil, India, Indonesia, Nigeria and Pakistan), while 45 developed countries will experience population decline.
- In Russia – 147.2 million people, in Kyrgyzstan – 6 million 692 thousand people.
- Stabilization of the population will come by 2150 (the population is 10-11 billion people; the main increase is 97.0 % in the third world countries).
- With the stabilization of the population, a problem will appear – the aging of the population.
- Countries with the largest population (2021): China (over 1.5 billion), India (1.4 billion), USA (over 338 million), Pakistan (234 million) .

Fertility trends (in ‰ per 1000 population) for 2021

The highest birth rate in Africa (Kenya, Nigeria, Sudan) - from 40 to 50.

The lowest birth rate:

- in Italy – 7,99, Denmark – 11,6, Switzerland – 10,97, Belgium – 11,6;
- in Russia – 9,49.
- in Kyrgyzstan (2020) – 24,0, (2021) – 22,4;
- birth rate by regions (Batken region – 23,6; Jalal-Abad region – 22,3; Issyk-Kul region – 18,1; Naryn region – 17,4; Osh region – 20,1; Talas region – 19,1; Chui region – 20,2; Bishkek city – 25,3; Osh city – 42,2).

Mortality trends (in ‰ per 1000 population) for 2021

- **Highest** in Africa, from 6,4 to 15,4 (Botswana 9,05; Lesotho 11,05; Angola 8,01); Germany 11,9; France 9,54; Netherlands 9,24.
- **The lowest level** is in Kuwait – 2,25; Saudi Arabia – 3,42; Jordan – 3,45.
- **Average mortality rate** - in the USA – 8,38; Kazakhstan – 8,11; Austria – 9,85.
- In Russia – 13,36; Kyrgyzstan – (2021) – 5,8.
- Life expectancy in the Kyrgyz Republic for 2021 is 71,8 years (for men – 67,9 years; for women – 76,1 years).
- Life expectancy in Russia is 70,1 years (65,5 years for men and 74,5 years for women).
- The average life expectancy on the globe is 73,3 years, while in industrialized countries – 76,5 years, in developing countries – 65,4 years.

Structure of the main causes of death in the Kyrgyz Republic (2021)

1. Diseases of the circulatory system – 51,1 %.

Trends: Decreasing in the European region, slight increase in the Kyrgyz Republic in recent years.

2. Neoplasms – 10,2 %.

Trends: Increasing (stomach, breast and lung cancer).

3. Diseases of the digestive system – 5,3 %.

4. Diseases of the respiratory system – 4,4 %.

5. COVID-19 – 7,6 %.

Trends: there is an increase in diseases of the circulatory system, neoplasms, a slight decrease in diseases of the digestive system and external causes of death.

Test questions on the topic

1. Health (definition).
2. Factors affecting human well-being.
3. Individual indicators of physical health.
4. Disease (definition).
5. Health promotion (definition).
6. Resources needed to achieve health.
7. Principles of health promotion (HP).
8. The main themes of the WHO policy “Health for all in the 21st century”.
9. Objectives of the WHO policy “Health for all in the 21st century” aimed at quality of life.

Theme 3

DISEASES RISK FACTORS

Purpose of the lesson

The student must know:

- lifestyle of a person: definition, concept;
- healthy lifestyle: definition, concept, spiritual and value orientations, formation of a healthy lifestyle (HLS);
- risk factors: definition, grouping, main risk factors affecting the occurrence of diseases;
- potential health hazard (ICD-10 risk factors);
- prevention of risk factors: definition, types;
- social mobilization of the population.

The student must be able to:

- carry out social mobilization of the population on the formation of a healthy lifestyle for the population.

Topic study plan

1. Analysis of the topic on educational issues

- Man's way of life and his category.
- Types of human activity that affect the state of health.
- Healthy lifestyle: definition, spiritual and value orientations, the formation of healthy lifestyle.
- Risk factors: definition, grouping.
- The main lifestyle factors that influence the occurrence of diseases.
- Genetic risk factors, their prevention.
- Factors of potential danger to health (ICD-10).
- Prevention of risk factors: definition, types.
- Social mobilization of the population: definition, elements.

2. Independent work of students

- Problem solving.
- Presentations.

3. Consolidation of material on control questions

TASKS

An example of solving the problem on social mobilization of the population.

Conduct social mobilization in case of an outbreak of measles rubella in women aged 18 to 25 years.

- Risk of measles rubella and vaccination of women.
 - Rubella measles is a disease that affects the reproductive function of women, causing a change in the fetus of a pregnant woman.
 - Get the vaccine in early pregnancy or before it occurs.
- Vaccination can be obtained at the polyclinic, namely:
 - Family Medicine Center (Family Doctors Group) – contact a general practitioner from 800 to 2000;
 - vaccination room.
- Necessary resources:
 - medical workers (carry out informational work with women from 18 to 25 years old, as well as with girls from 15 years old and older, invite them to be vaccinated);
 - medical students (perform a tour of the site to find out the residence of women of this age);
 - preventive recommendations:
 - get a vaccine;
 - timely visit to the doctor at the first signs of the disease.
 - organizations involved in solving this problem:
 - mass media (mass media) (preparation of news reports);
 - Ministry of Health (information campaign, vaccine procurement, vaccination);
 - Non-governmental organizations (preparation of communication messages, funding);
 - forms of mass media that contribute to a better perception of information:

- television (television screen saver, television commercial);
- radio (short information message);
- newspapers, magazines (information message);
- the role of the state in reducing the spread of the disease:
- immunization days;
- timely vaccination;
- social advertisement.

Task 1

To carry out social mobilization of the population during an outbreak of measles in children from 1 to 3 years old.

Give specific information to the target audience (parents of children) about what they need to know:

- the risk of measles and when children need a vaccine;
- where to go to vaccinate a child (polyclinic), what days and hours;
- resources;
- preventive recommendations;
- what organizations can be involved in solving this problem;
- what forms of mass media are most preferable for the best perception of information;
- the role of the state in reducing the spread of the disease.

Task 2

Conduct social mobilization for the prevention of coronary heart disease for men aged 30–35 years.

- Resources.
- How to change public opinion and policy in order to change behavior in the prevention of coronary heart disease.
- What men aged 35 - 40 need to know about this issue.
- Categories of men at risk of getting the disease.
- Preventive recommendations.
- Which organizations can be involved in solving this problem.
- What forms of mass media are most preferable for the prevention of coronary heart disease.

Task 3

Develop a program for the prevention of regulated infections for children aged 0 to 3 years (diphtheria, poliomyelitis).

- Note the main strategies.
- List the main activities (carried out by health workers).
- Deadlines.
- List the institutions that will directly carry out this work.

Task 4

Evaluate the actions of the doctor, whether he correctly carried out primary and secondary prevention work with the patient.

A 37-year-old patient came to the district clinic for an appointment with a doctor. The doctor examined her and made the correct diagnosis - catarrhal tonsillitis, prescribed medication that meets modern methods, explained in detail how to take the prescribed medications.

At the next appointment, the doctor stated that the patient had recovered and said that she would be able to start work, but the patient said that her son had a sore throat.

A way of life is a way of material and spiritual life of people, implemented in specific conditions of the natural and social environment.

Categories of lifestyle

- Standard of living – the degree of satisfaction of the material and cultural needs of people.
- The quality of life is the qualitative side of meeting the material and cultural needs of people.
- Lifestyle – a certain type of behavior of a person or a group of people (manners, character traits, habits, tastes, inclinations).

A healthy lifestyle is a system of principles of human life that does not contradict universal values, morality and law.

Healthy lifestyle is an active life activity of people aimed at maintaining and strengthening their health.

Risk factors – the general name of factors that are not directly the cause of a particular disease, but increase the likelihood of its occurrence. (Encyclopedic dictionary of medical terms).

WHO identifies four groups of risk factors that determine the formation of public health.

Risk factors

1. Lifestyle, which accounts for 50% of the total impact on health.
2. Heredity – 20–22 %.
3. The state of the environment – 20–22 %.
4. Organization of medical care – 8–10 %.

Major risk factors causing potential health hazards (ICD-10)

1. *Problems related to learning and literacy* (illiteracy or low levels of literacy, lack of learning ability, failing exams).

2. *Problems related to work and unemployment* (lack of work, change of work, threat of losing a job, conflict with the boss and colleagues, unsuitable work).

3. *Problems related to circumstances of a housing and economic nature* (lack of housing, poor housing conditions, conflicts with neighbors, owners).

4. *Problems associated with adaptation and lifestyle changes* (atypical situation with parents, living alone).

5. *Problems associated with adverse life events in childhood* (loss of loved ones, personal upheavals, events leading to low self-esteem in childhood).

6. *Problems associated with raising a child and with loved ones* (excessive guardianship by parents, unfair treatment of a child, emotional abandonment of children, pressure from parents, relationships between spouses, relationships with relatives of a husband and wife, discord in the family, divorce).

7. *Problems associated with certain psychosocial circumstances* (problems of unwanted pregnancy, problems with large families, victims of natural disasters and terrorism).

Social mobilization is a planned process in which all major sectors of society act to achieve a common goal aimed at promoting, maintaining health and preventing disease.

Resource mobilization is the mobilization of human resources (medical workers, NGO representatives, teachers, etc.), as well as various means (equipment, transport) for the dissemination of information messages through the media.

Test questions on the topic

1. Lifestyle: definition.
2. Categories of lifestyle.
3. Healthy lifestyle: definition.
4. Risk factors: definition.
5. Risk factors according to WHO.
6. The main risk factors causing a potential hazard to health (ICD-10).
7. Prevention: definition.
8. Types of prevention.
9. Social mobilization: definition.
10. Resources for social mobilization.

Theme 4

THE STATE OF HEALTH OF THE KYRGYZ REPUBLIC POPULATION AND THE DISPENSARY METHOD OF SERVICE

Purpose of lesson

The student must know:

- International Classification of Diseases (ICD), diagnosis-related group (DRG);
- State of health of the population of the Kyrgyz Republic;
- Content of the dispensary service method.

The student must be able to:

- Use the ICD-10, DRG;
- Calculate and analyze indicators of public health and medical examinations.

Study Plan

1. Analysis of the topic on educational issues
 - International Classification of Diseases: definition, meaning, history, grouping of diseases, content of the ICD-10.
 - Diagnosis-related group: basic concepts, types.
 - The structure of morbidity and the structure of causes of death in the Kyrgyz Republic.
 - Social and medical significance of diseases of the circulatory system, neoplasms, injuries and poisonings.
 - Dispensary service method: clinical examination. Dispensary method: concepts, purpose, tasks, contingents, elements, performance indicators.

2. Independent work of students

- Work with ICD-10, DRG.
- Solving the problems of dispensary service method
- Presentations.
- Completion of term paper.

3. Consolidation of material on control questions

An example of diagnosis related group.

Diagnosis related group (DRG)

Number of DRG	Short list of therapeutic and surgical diagnosis related groups	Weighting factor for the age group > 15 years	Weighting factor for the age group > 15 years
504	Brucellosis	1,7649	1,76603
521	Meningitis	1,0900	1,0900
536	Acute myocardial infarction	1,5280	1,5280
541	Pneumonia	1,1623	1,2778
531	Acute sinusitis	0,8223	0,8303
587	Damage to the eye and its adnexa after medical procedures	0,7488	0,7638
620	Small and large intestine surgery	1,4805	1,8064
621	Appendectomy	0,8932	1,1594
625	Operation for hernia	1,1171	0,9215
616	Ligation and removal of veins	1,2315	1,5621
604	Operation on the endocrine glands	1,0008	1,1205
638	Hip bone surgery	2,0173	1,5950

TASKS

Task 1

Obstetric and gynecological activities of the FMC

Regions	Number of women of childbearing age	Registered pregnant women	Registered up to 12 weeks	Coverage of women of childbearing age with contraception
Kyrgyz Republic	1301906	97456	72897	536952
Batken region	101795	8505	6642	40415
Jalal-Abad region	232114	19383	14847	74261
Issyk-Kul region	99837	9056	6620	44818
Naryn region	58688	5706	3748	27931
Osh region	257532	21117	17063	94828
Talas region	51224	4931	3762	23511
Chui region	204077	12054	9812	84575

Calculate the percentage of pregnant women who are registered in a timely manner, the coverage of women of childbearing age with contraceptives.

Task 2

Information about abortions in the Kyrgyz Republic

Regions	Women of childbearing age	Abor-tions	Number of women of child-bearing age	Of the total number of abortions					
				Spontaneous	Artificial *	For medical reasons	For social reasons	Criminal	not specified
Kyrgyz Republic		12677	1301906	6808	3648	598	352	13	1258
Batken region		1025	101795	753	172	62	29	-	9
Jalal-Abad region		1121	232114	634	254	121	30	-	82
Issyk-Kul region		1297	99837	943	195	45	22	3	89
Naryn region		402	58688	345	24	25	7	1	-
Osh region		1294	257532	1017	133	71	15	-	58
Talas region		551	51224	394	122	23	3	1	8
Chui region		2472	204077	1115	949	171	76	3	158

* Artificial (Latin artificialis) – artificial, artificially created, artificially caused.

Calculate the rate of abortions per 1000 women of childbearing age, calculate the structure of abortions by types.

Task 3

Coverage by periodic medical examinations of those working with harmful production factors by regions 2019–2021 (%)

Name of region	Coverage by medical examinations			Workers of industrial enterprises			State agricultural industry workers		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Kyrgyz Republic	93,5	73,5	90,7	90,4	68,4	90,5	86,1	61,4	86,4
Batken region	93,2	71,1	87,7	85,8	49,8	86,0	78,7	65,5	84,2
Jalal-Abad region	92,4	61,0	88,2	88,2	97,3	85,3	86,6	68,0	80,7
Issyk-Kul region	97,4	83,9	97,7	93,2	91,2	98,8	98,9	5,5	98,8
Naryn region	97,4	85,9	96,6	96,8	94,7	64,7	100,0	98,7	-
Osh region	93,7	92,0	82,7	89,9	99,3	86,4	-	-	97,5
Talas region	92,8	80,3	91,6	95,9	95,0	75,3	76,5	94,5	100,0
Chui region	94,5	71,5	96,1	82,0	39,1	86,2	97,9	66,1	96,2

Analyze the coverage of periodic medical examinations by regions, give specific recommendations to improve this situation.

The classification of diseases is a specific system for the distribution and association of diseases and pathological conditions into groups and classes in accordance with established criteria.

International classification of diseases:

- is the main normative document in the study of the state of health;
- applicable for use by all medical organizations.

Target:

for registration, analysis, interpretation and comparison of data on morbidity, mortality received in different countries at different times.

International Classification of Diseases

- The first ICD was adopted in 1900 in Geneva.
- Reviewed after 10 years.
- The 2000 revision of ICD-10 is currently in use.
- In the ICD-10 total class XXI, of which 19 classes consist of diseases.
- Class XX–XXI – external causes of morbidity and mortality, factors influencing the state of public health and appeals to healthcare organizations.

International Statistical Classification of Diseases – 10th revision

- I. Some infectious and parasitic diseases.
- II. Neoplasms.
- III. Diseases of the blood, hematopoietic organs and individual disorders involving the immune mechanism.
- IV. Diseases of the endocrine system, eating disorders and metabolic disorders.
- V. Mental and behavioral disorders.
- VI. Diseases of the nervous system.
- VII. Diseases of the eye and adnexa.
- VIII. Diseases of the ear and mastoid process.
- IX. Diseases of the circulatory system.
- X. Diseases of the respiratory system.
- XI. Diseases of the digestive system.
- XII. Diseases of the skin and subcutaneous tissue.
- XIII. Diseases of the musculoskeletal system and connective tissue.
- XIV. Diseases of the genitourinary system.
- XV. Pregnancy, childbirth and the postpartum period.
- XVI. Separate conditions arising in the perinatal period.
- XVII. Congenital anomalies of development, deformities and chromosomal anomalies.
- XVIII. Symptoms, signs and abnormal clinical and laboratory findings, not else where classified.
- XIX. Injuries, poisoning and some other consequences of external causes.

XX. External causes of morbidity and mortality.

XXI. Factors influencing the state of health of the population and the appeal to health care institutions.

Morbidity structure (adults and adolescents) for 2021
in the Kyrgyz Republic (%)

Category of diseases	2021
Respiratory diseases	28,4
Diseases of the digestive system	12,7
Diseases of the genitourinary system	9,3
Injury and poisoning	6,4
Diseases of the circulatory system	4,3
Other	38,9
Total	100,0

Structure of causes of death for 2021 in the Kyrgyz Republic (%)

Causes of death	2020	2021
Diseases of the circulatory system	52,3	51,1
Neoplasms	10,5	10,2
COVID-19	6,1	7,6
Diseases of the digestive system	5,2	5,3
Respiratory diseases	6,8	4,4
Other	19,1	21,4
Total	100,0	100,0

Incidence of malignant neoplasms by regions of the Kyrgyz Republic (per 100,000 of population)

Region	2020	2021
Kyrgyz Republic	81,7	85,1
Batken region	43,4	48,8
Jalal-Abad region	56,6	62,0
Issyk-Kul region	100,4	93,0
Naryn region	99,3	113,0
Osh region	74,0	70,0
Talas region	67,9	66,0
Chui region	113,4	126,0
Bishkek city	98,4	104,0
Osh city	92,0	102,0

Dispensary service method

Clinical examination

(French Dispenser – to relieve, release) is an active identification, registration and monitoring of the health status of certain contingents of the population (healthy and sick).

The dispensary method is the constant monitoring of registered persons, the implementation of individual and social prevention measures, the improvement of working and living conditions.

The goal is to preserve and strengthen the health of the population, increase the life expectancy of people and increase the productivity of workers.

Tasks:

1. determination of the state of health by an annual medical examination (periodic, preliminary);
2. active monitoring of healthy individuals with risk factors and patients, elimination of causes;
3. carrying out medical and recreational activities;
4. coordination of the work of all health organizations and doctors of various specialties.

The dispensary method is used in specialized institutions - dispensaries, PHC institutions (FMCs, FDGs).

Medical examination efficiency indicators

- Removal from dispensary registration in connection with recovery.
- Deterioration of the patient's condition.
- The patient's condition is unchanged.
- Improvement of the patient's condition.
- Fatal outcome.

Health groups (A.M. Dyukareva)

I. group – practically healthy, 1–2 times a year suffering from acute respiratory viral infections, acute respiratory infections, influenza and influenza-like diseases for 3–4 days.

II. group – practically healthy, 3–4 times a year suffering from acute respiratory viral infections, acute respiratory infections, influenza and influenza-like diseases for 7–10 days.

III. group – practically healthy, from 1–2 times to 3–4 times a year suffering from acute respiratory viral infections, acute respiratory infections, influenza and influenza-like diseases from 3-10 days, as well as having such diseases as vegetative-vascular dystonia, myopia, dental caries.

IV. group – patients in the stage of compensation.

V. group – patients in the stage of sub and decompensation.

Test questions on the topic

1. Disease: concept, classification.
2. The content of the ICD - 10.
3. Dynamics of coefficients of natural movement in the KR.
4. Dynamics of maternal mortality rates and life expectancy in the Kyrgyz Republic.
5. List the structure of morbidity and causes of mortality in the population of the Kyrgyz Republic.
6. Clinical examination: concept.
7. Dispensary method: concept.
8. The purpose of the dispensary method.
9. Selection of contingents for clinical examination.
10. Elements of clinical examination.
11. Indicators of the effectiveness of clinical examination.

Theme 5

HEALTH PROMOTION SERVICE

Purpose of lesson

The student must know:

- the role of the health promotion service (HPS) in the formation of a healthy lifestyle (HLS);
- health promotion communications;
- international cooperation in health promotion;
- prevention strategies in foreign countries.

The student must be able to:

- solve situational problems.

Topic study plan

1. Analysis of the topic on educational issues

- Health promotion service organizations and levels of government.
- Health promotion centers - tasks, structure.
- Health promotion communications, channels.
- interdepartmental and international interaction of the health promotion center.
- Prevention strategies in foreign countries.

2. Independent work of students

- Problem solving.
- Presentations.
- Completion of term paper.

3. Consolidation of material on control questions

TASKS

Task 1

Has the doctor chosen the right method of information work on health promotion (HP) among schoolchildren? List which communication channels were to be used.

In one of the secondary schools, a discussion was organized on the topic: “Should I smoke?”. During the week, two lectures were given on the topic of discussion. The questionnaire survey showed that schoolchildren have sufficient knowledge on this issue. We managed to collect a fairly large audience – 125 high school students. The discussion was accompanied by a demonstration of visual aids. The medical worker in his speech, and especially with private conclusions, directed the discussion in the “right direction”, made sure that the speakers did not deviate from the topic, and clearly formulated the conclusions.

Task 2

Assess the doctor’s action in this situation, did he choose the right method for conducting information work?

The Family Doctors Group (FDG) doctor of one of the polyclinics, along with other sanitary and educational activities, scheduled a lecture among the employees of one of the enterprises during the influenza epidemic.

Lecture topic: “Influenza Prevention”. The lecture was scheduled to be read after the end of the working day. The head of the enterprise was instructed to ensure the presence of all workers.

The necessary visual materials were prepared for the lecture. The duration of the lecture is 1 hour.

After the lecture, it was supposed to show the sanitary-educational film “Prevention of Influenza”, as well as to give each of those present a memo on the same topic.

Task 3

Did the FDG doctor choose the method of information work with the population correctly?

In the premises of the polyclinic, the FDG doctor read a series of lectures (5) on the topic: "First aid". The choice of topic was not accidental. A preliminary survey showed that many residents of the city were not trained in the rules of first aid, they did not have the necessary skills and abilities. Two weeks before the start of the lectures, announcements were posted around the city indicating the topics of the lectures and the time of their holding. The first lecture was attended by 80 people, then the number of those present gradually decreased. There were 70 people at the second lecture, 56 at the third, 45 at the fourth, and 30 at the fifth. Persons who had not attended previous lectures were not allowed to attend the lecture. The audience is heterogeneous (everyone came to the lectures - by announcement), i.e. among the listeners were people of different ages, professions, with different levels of training. The topics of the lecture cycle were as follows: the first lecture - "Basic rules for first aid in case of accidents"; the second and third - "First aid for traumatic injuries"; the fourth - "First aid for sudden illnesses"; the fifth - "Diseases resulting from the impact of certain physical factors", "Care for the injured and the sick before the doctor arrives."

Task 4

Were the channels of communication with patients chosen correctly?

In one of the city's hospitals, patients from two wards (three gastroenterological patients were in one ward, five suffering from cardiovascular diseases in the other) turned to their doctor with a request to tell them about the disease of each. The doctor decided to meet the wishes of the patients. In order to present the material most fully, he did not limit himself to one conversation, but decided to conduct a series of conversations. Within three days before the start of the interviews, he found out in an individual conversation with each of the patients the level of his preparedness. As it turned out, the level of preparation of the patients were homogeneous. There were no seriously ill patients among them. During the entire cycle of interviews, none of the patients was discharged. The interviews were held in the lobby of the hospital and attended simultaneously by all

patients. The first two topics of the conversations were devoted to issues common to all patients. Then three conversations were related to cardiovascular diseases, and three subsequent conversations were related to gastroenterological patients. After a cycle of conversations, the patients were given leaflets (each was given a leaflet containing practical advice regarding his disease).

Health promotion service levels

Level I – Republican Center for Health Promotion.

Level II – regional centers for health promotion (CHP in Bishkek).

Level III – local district family medicine centers: health promotion room.

Health promotion concept

The goal is to improve the health status of the population of the Kyrgyz Republic through the development and improvement of the KM service in integration with other services.

Tasks:

- the formation of a new preventive thinking of the health workforce;
- increasing the importance of the role of primary health care (PHC);
- social mobilization of the population;
- development of political, socio-economic, cultural conditions and environmental factors favorable for achieving health.

Health communication is the process of exchanging information on health protection and promotion between health professionals and the public (listeners).

Communication channels:

- direct meetings with people (interpersonal communication);
- graphic and audiovisual;
- Mass Media:
 - broadcasting – television, radio;
 - printed editions – magazines, newspapers.

World Health Organization

organizes training seminars with health promotion specialists, doctors of family doctors groups (FDG). Implements the “Healthy

Cities” program, contributes to the creation of the European network of schools of HP.

The World Bank provides training and assistance in the implementation of the prevention program for iodine deficiency conditions.

SCANDINAVIAN COUNTRIES: adopted a national health strategy paper for the next decades, consisting of 19 tasks. The tasks are aimed at eliminating economic inequality and poverty.

United States (2000): Healthy People 2010 strategy adopted with 28 objectives. The objectives of this document are aimed at eliminating differences in health (by gender, race, ethnicity, wages, education, place of residence, sexual orientation), increasing life expectancy and quality of life.

EUROPEAN COUNTRIES

In 2000, a new health strategy aimed at an integrated health sector approach at the community level (2003–2008) was adopted, consisting of three priority areas: improving awareness, increasing the ability to coordinate activities, and preventing diseases by mainstreaming the determinants of health into policy.

SOUTHEAST ASIA

The Declaration on Health Development in the 21st Century has been adapted. The main emphasis was placed on women’s health, environmental protection, organization of assistance to the elderly by strengthening family traditions.

JAPAN – a prevention program (Active Health 80) is being implemented, aimed at the elderly and the elderly to improve their health and increase life expectancy from 80 years and above.

Test questions on the topic

1. Levels of health promotion service (HPS).
2. The concept of health promotion.
3. The main tasks of the Republican Center for Health Promotion (RCHP).
4. Tasks of the regional center for health promotion.
5. Structure of the Republican Center for Health Promotion.

6. Communications in health care: definition.
7. Channels of communication.
8. Interdepartmental interaction on health promotion.
9. Prevention strategies in European countries.
10. Prevention strategies in Southeast Asia.

Theme 6

HEALTH PROMOTION FOR CHILDREN AND YOUTH

Purpose of the lesson

The student must know:

- main problems and strategies for health promotion (HP) of children and youth according to WHO and the Kyrgyz Republic.

The student must be able to:

- analyze the situation and make recommendations to improve the health of children and young people.

Topic study plan

1. Analysis of the topic on educational issues

- Problems of improving the health of children and youth.
- Strengthening the health of children and young people in international documents.
- Morbidity in children and the structure of causes of death among adolescents in the Kyrgyz Republic.
- The spread of bad habits among young people.
- Mental health of youth.
- Key WHO strategies and projects to improve health.

2. Independent work of students

- Introduction to WHO strategies (Health for All).
- Problem solving.
- Presentations.
- Completion of term paper.

3. Consolidation of material on control questions

TASKS

Task 1

According to the specified structure of the incidence of children and adolescents in the Kyrgyz Republic for 2014, provide appropriate recommendations to improve their health.

In doing so, answer the following questions:

- reasons for the growth of respiratory diseases, infectious and parasitic diseases, perinatal pathology;
- how to eliminate the causes of these diseases at the state level;
- What measures can you suggest to improve this situation.

The structure of the incidence of children from 0 to 5 years in the Kyrgyz Republic

Diseases	Proportion (%)
Respiratory diseases.	44,8
Infectious and parasitic.	11,6
Diseases of the digestive system.	9,2
Diseases of the blood and blood-forming organs.	7,2
Injury and poisoning.	3,6
Other	23,6
Total	100,0

Task 2

There is a secondary school in the service area of the polyclinic.

Before carrying out information work on the prevention of bad habits and unwanted pregnancies among schoolchildren, you studied the data of a sociological survey conducted 3 months ago.

In doing so, the following data was obtained:

- 55.0% of high school students smoke, of which 28.0% are girls;
- 15.0% drink alcohol among friends;
- 1.2% used drugs once;
- 16.2% of high school girls are poorly informed about contraceptive methods.

Your actions in this situation, list the main activities (what needs to be done to solve these problems).

Health promotion of children and youth is a system of nationwide, medical, social events aimed at improving the quality of life of the younger generation.

International Documents

- **“Convention on the Rights of the Child” 1989 (UN):**
 - fostering a conscious attitude towards one’s health,
 - awareness, education on health promotion.
- **Goals of the Millennium Declaration (MDT, 2003):**
 - *No. 2 “Reducing extreme poverty”;*
 - *No. 3 “Education”.*
- **WHO policy “Health for all in the 21st century”** – increasing the motivation of young people to make healthy choices (quality of life).
- **ICD-10, XXI class (problems related to education and housing and economic circumstances)**

Low level of education, illiteracy lead to potential threat to health associated with socio-economic conditions of life.

The structure of the incidence of children in the Kyrgyz Republic (from 0 to 14 years)

Class of diseases according to ICD-10	2020 y.	2021 y.
Respiratory diseases	49,7	57,8
Infectious and parasitic	9,6	7,2
Diseases of the digestive system	12,8	11,5
Diseases of the blood and blood-forming organs	4,6	3,9
Injury and poisoning	2,9	2,8
Other	20,4	16,8
Total	100,0	100,0

Structure of causes of infant mortality

Cause of mortality	2020 y.	2021 y.
Conditions arising in the perinatal period	71,3	68,1
Respiratory diseases	7,3	7,2
Congenital anomalies	16,1	16,5
Infectious and parasitic diseases	1,8	2,7
Injury and poisoning	1,7	1,6
Other	1,8	3,9
Total	100,0	100,0

Structure of causes of child mortality (from 0 to 5 years)

Reason	2020 y.	2021 y.
Conditions arising in the perinatal period	60,8	57,1
Respiratory diseases	10,0	8,7
Congenital anomalies	15,6	16,9
Injury and poisoning	5,3	5,1
Infectious and parasitic diseases	2,5	3,6
Other	5,8	8,6
Total	100,0	100,0

Infant mortality (per 1,000 live births) by regions of the Kyrgyz Republic (2021):

- Bishkek (17,8);
- Osh city (30,6);
- Talas region (25,1);
- Batken region (17,2);
- Jalal-Abad region (17,6);
- Naryn region (14,3);
- Osh region (12,9);
- Chui region (13,9);
- Issyk-Kul region (27,1).

Components of the WHO prevention program aimed at:

- prenatal care (prevention of maternal, infant and child mortality);

- postpartum care (prevention of infant and child mortality);
- medical care for children of preschool and school age;
- raising awareness on family planning, tobacco use, alcohol, drugs, nutrition, physical activity (mass media, health organizations, schools).

Test questions on the topic

1. Health promotion of children and youth, definition.
2. International documents, main topics.
3. The main problems of the quality of life of children and youth.
4. The incidence of children in the Kyrgyz Republic.
5. Causes of infant mortality in the Kyrgyz Republic.
6. Reasons for the deterioration of mental health.
7. Major Health promotion programs in the USA, policy.
8. Main prevention programs in the Kyrgyz Republic.
9. Purpose of the project on hygiene and sanitation in the Kyrgyz Republic.
10. Prevalence of bad habits among young people (WHO).

Theme 7

HEALTH PROMOTION FOR WOMEN AND OLDER PEOPLE

Purpose of the lesson

The student must know:

- main problems in the health of women and the elderly, strategies to improve their health.

The student must be able to:

- analyze the situation with the incidence of women and the elderly, offer specific recommendations to improve their health.

Topic study plan

1. Analysis of the topic on educational issues

- Problems of women's health protection depending on age.
- The problem of maternal mortality and its solution in the Kyrgyz Republic.
- WHO strategies to improve maternal health.
- Trends in the spread of tobacco smoking and alcohol consumption among women in the world and the Kyrgyz Republic.
- Major health problems in the elderly.
- WHO and KR strategies to improve the health of older people.

2. Independent work of students

- Introduction to WHO strategies (Health for All).
- Problem solving.
- Presentations.
- Completion of term paper.

3. Consolidation of material on control questions

TASKS

Task 1

The maternal mortality rate for regions (oblasts) in the Kyrgyz Republic is as follows (per 100,000 live births) for 2021

Region	Rate
Naryn region	171,7
Osh region	33,3
Batken region	45,7
Jalal-Abad region	30,5
Issyk-Kul region	103,5
Talas region	37,1
Chui region	32,5
Bishkek city	19,3
Osh city	16,5

Analyze the situation, give specific recommendations for improving this problem at the level of the state and primary health care doctors.

Task 2

The prevalence of smoking in the Kyrgyz Republic tends to increase, especially among women and girls. Thus, the number of smoking women aged 18 to 65 years is 11.6%, among girls from 9 to 17 years old – 20%, and from 18 to 25 years old – 47%.

Specify:

- main reasons;
- implications for the state.

Give recommendations:

- to reduce the rate of tobacco smoking among women (at the state level and at the level of primary health care physicians);
- what organizations can be involved in solving this problem?

Task 3

In Kyrgyzstan, the average life expectancy from 2017 to 2021 was the following:

Years	Both sexes (age)	Men (age)	Women (age)
2017	71,1	67,2	75,4
2018	71,3	67,4	75,6
2019	71,5	67,6	75,8
2020	71,7	67,8	76,0
2021	71,8	67,9	76,1

Analyze the presented data:

- What measures are needed to increase the average life expectancy at the state level?
- what interventions are needed at the primary health care level?

Task 4

In 2014, the elderly had high rates of deaths from diseases of the circulatory system.

Offer key prevention recommendations at the primary health care level.

The main problems of women affecting their health

- Related to reproductive function, socioeconomic status, violence, parenting.
- The economic situation of women is worse than that of men, they often receive a worse formal education than men and are employed in low-paid positions that do not provide a sufficiently high status in society.
- Have limited opportunities to make pregnancy planning choices (due to insufficient education, lack of access to safe abortion methods).

WHO recommendations for improving women's health

- Reduce maternal mortality (up to 15 per 100,000 live births).
- Reduce the number of adverse health effects of sexual harassment and violence in the home.
- Reducing women's health problems related to socioeconomic status.

- Reducing the number of health problems unique to women.

Tasks to improve maternity protection in the Kyrgyz Republic

Reduce by 3/4 maternal mortality to 16 per 100,000 live births.

- Increase the proportion of births attended by skilled health personnel (100%).
- Reduce the proportion of pregnant women with anemia (25%).

In the Millennium Declaration (MD, 2003). Kyrgyzstan has defined the goal “Protection of motherhood” and tasks are being set.

Challenges for Improving Maternal Health in Kyrgyzstan (per 100,000 live births)

- The goal is to reduce maternal mortality by 3/4 by 2015 to 16
– in 2021 – 37,1 (increased by 1.3 times compared to 2020 – 42,4).
- Increase the proportion of births attended by qualified medical personnel (100%), in the Kyrgyz Republic – 40.0%, in Russia – 56.0%.

Reduce the proportion of pregnant women with iron deficiency anemia (to the level of 1990 – 25.2%), in the Kyrgyz Republic – (60.0%) women of reproductive age with anemia, pregnant women – (37,6%).

Maternal mortality rate by regions in the Kyrgyz Republic (per 100,000 live births)

Region	2020	2021
Naryn region	52,6	171,7
Osh region	24,5	33,3
Batken region	42,4	45,7
Jalal-Abad region	53,2	30,5
Issyk-Kul region	100,6	103,5
Talas region	51,9	37,1
Chui region	46,1	32,5
Bishkek city	26,8	19,3
Osh city	33,6	16,5

Major health problems in the elderly

For a number of years, the WHO has set the **goal: “Sustaining health in old age”**, aimed at ensuring that by 2020 people at the age of 65 should be able to realize their full potential in relation to their own health and play an active social role in society. To achieve this goal, Member States in the region should also focus on: (Increased life expectancy without disabilities, 50% increase in the proportion of people aged 80 years who are in a state of health that allows them to be active at home, life expectancy must be at least 75 years of age).

Test questions on the topic

1. The main problems of women that affect their health.
2. WHO recommendations for improving women’s health.
3. Tasks for improving maternal health in the Kyrgyz Republic.
4. The main problems associated with the health of the elderly.
5. WHO strategies to improve the quality of life of older people.
6. Strategies of the Kyrgyz Republic to improve the health of older people through lifestyle.
7. Strategies of the Kyrgyz Republic to improve the health of older people in the environment.
8. International conventions to improve the health of women and the elderly.
9. Average life expectancy in the Kyrgyz Republic and the Russian Federation.
10. Problems of women depending on age.

Theme 8

MANAGEMENT IN HEALTH CARE

Purpose of the lesson

The student must know:

- basic concepts and provisions of management;
- solution and its types;
- management technology.

The student must be able to:

- determine the results of the self-test.

Topic study plan

1. Analysis of the topic on educational issues

- Health care management: concept, subjects and objects of management, purpose, triad, functions, principles, tasks and features of management in health care.
- Methods, style, main role, management skills, requirements for the personal qualities of a health manager.
- Decision: concept, purpose, tasks, factors of effective decision, classification, degrees, factors influencing the result.
- Management technology, types of documents, style of work, lack of time, causes of conflicts, meeting requirements.

2. Independent work

- Self-tests to determine the style and flexibility of the leader.
- Problem solving.
- Presentations.
- Completion of term paper.

3. Consolidation of material on control questions

TASKS

Test to determine the style and flexibility of the leader

Purpose of the test

Assess your understanding of personal leadership using the terms “point”, “lead”, “participate”, “sell”, and determine if this style is appropriate in different situations.

Instructions

Imagine yourself in each of the 12 situations below. For each situation, 4 alternative courses of action are suggested for you to take. Read all options carefully. Think about how you would act in such circumstances. Then put a “+” corresponding to the option that best describes your behavior in this situation. You must select only one answer for each situation. Fold the signs “+” in columns A-D (table 1). Answers are at the end of the table.

Situation 1. Your subordinates have recently avoided friendly conversations with you and your sincere concern for their well-being does not resonate with them. The quality of their work is drastically deteriorating. You:

A. Emphasize the need to perform daily duties, the importance of the tasks facing the team.

C. Without showing much personal initiative, give the group the opportunity to dialogue with you.

C. Explain to subordinates and determine the purpose of further work.

D. Deliberately not interfering.

Situation 2. The productivity of your team increases noticeably. You are trying to make sure that all its members know their functional responsibilities and meet the requirements for them. You:

A. Maintain friendly relations with them, at the same time constantly checking how conscientiously they perform their functional duties.

B. Do nothing definite.

C. Do everything in your power to create in the team an atmosphere of universal involvement and the importance of the tasks being solved.

D. Emphasize the importance of the tasks to be completed by the given deadline.

Situation 3. Your subordinates were unable to solve the problem posed to them. Usually you relied on their autonomy. Work and relationships within the team are good. You:

A. Together with them you will take part in solving the problem.

C. Let subordinates choose their own ways to solve the problem.

C. Show firmness in leadership and quickly respond to the need to reorganize the work of the team.

D. Encourage team members in their work to solve the problem and support their initiative.

Situation 4. You want some changes to be made. Your subordinates have an excellent track record. They understand the need for change. You:

A. Involve team members in designing needed changes without imposing your opinion.

C. Announce the necessary changes and direct the implementation directly.

C. Let the team figure out the direction of the activity.

D. Consider the suggestions of team members, but you will lead the implementation of change yourself.

Situation 5. The quality of your team's work has been deteriorating for several months. Members of the team do not strive to fulfill the tasks assigned to them. In the past, redistribution and redefinition of roles and responsibilities helped to correct the situation. Your subordinates constantly have to be reminded of the need to complete the task by the specified deadline. You:

A. Let the team figure out the direction of the activity.

C. Consider the suggestions of the team, but make sure that they meet the goals of your organization.

C. Redistributing the roles and responsibilities of your subordinates and in the future you will directly manage their activities.

D. Involve the team in defining the roles and responsibilities of its members without imposing your opinion.

Situation 6. You came as a leader to an organization with a well-established management system. Your predecessor exercised tight control over the functioning. You want to create a more relaxed atmosphere in the team without reducing the effectiveness of the management system. You:

- A. You will do everything that depends on you so that each member of the team feels their importance and involvement.
- C. Emphasize the importance of meeting deadlines.
- C. Intentionally will not interfere.
- D. Try to involve the whole group in the decision-making process, but personally see to it that the set goals are achieved.

Situation 7. You want to make changes to the structure of the team. Your subordinates have expressed their proposals for the necessary changes. Your team works efficiently and has demonstrated flexibility in solving problems. You:

- A. Determine what exactly needs to be changed, and personally lead the process of change.
- C. Together with the team members, work out the direction in which the change should take place and instruct them to bring the changes to life.
- C. Accept the proposals of your subordinates regarding the necessary changes, but you will manage their implementation yourself.
- D. Leave things as they are to avoid confrontation.

Situation 8. The work of your team and the relations between its members are good. But it seems to you that you are not managing his activities enough. You:

- A. Take no action.
- C. Discuss the current situation with subordinates and propose the necessary changes.
- C. Take measures to organize the work of subordinates in a clearly indicated direction.
- D. You will support the initiative of subordinates in discussing the problem with them, without imposing your opinion.

Situation 9. Your boss put you in charge of a working group, which, with great delay, completes the task of developing recommendations for the introduction of innovations. It is not entirely clear to the group what tasks and goals have been set for it. Meeting attendance is very low. Meetings are more like evenings of rest. But the members of the group have sufficient potential to carry out the task assigned to him. You:

- A. Let the group work itself out of the situation.
- B. Take into account the suggestions of the team, but make sure that they meet the task facing your organization.
- C. Review the goals and objectives of the group and carefully monitor progress towards achieving them.
- D. Involve all members of the group in defining the goals of its work, without putting pressure on them from your side.

Situation 10. Your subordinates, who are usually able to perform their duties well, do not meet the standards you have recently revised. You:

- A. Involve the group in the process of revising the standards through tight control.
- B. By changing the requirements, you will carefully control their implementation.
- C. You will not use pressure to control their execution.
- D. Take into account the proposals of the team, subject to their compliance with the new standards.

Situation 11. You have been promoted. The previous leader did not interfere in the work of the team, which coped well enough with its tasks and areas of work. Relationships between team members are good. You:

- A. Take measures to organize the work of subordinates in a clearly indicated direction.
- B. Involve subordinates in the decision-making process and support good initiatives.
- C. Discuss with subordinates the work done and then analyze the need for innovation.

D. Like your predecessor, you will not interfere with the work of the team.

Situation 12. You have received information that your team has encountered temporary difficulties. Your subordinates have an excellent track record. They were effective in meeting long-term goals. They worked harmoniously throughout the past year. Your subordinates are highly qualified to perform tasks. You:

A. bring to the team's consideration a variant of your solution to the problem and analyze the need for innovation.

C. Let team members work out solutions.

C. Be quick and firm in making adjustments and directions.

D. Take part in the discussion of the problem, thus supporting your subordinates.

Leadership Style Definition Table

	A	B	C	D
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
Sum				
	Strong style	Persuasion style	Collegiate style	Delegation style
	The authoritarian-directive leader teaches and leads	Directive Coach	Encouragement of initiative, active interaction with the team	Weak interaction with the team

Leader flexibility table

	A	B	C	D
1	3	1	2	0
2	3	0	2	1
3	2	1	0	3
4	2	0	3	1
5	0	2	3	1
6	1	2	0	3
7	0	3	1	2
8	3	1	0	2
9	0	2	3	1
10	2	0	1	3
11	0	3	1	2
12	1	3	0	2
Total	+	+	+	=
Total points				

Assessing responses to flexibility in leadership style

from “0” - “23” - not flexible

from “24” - “29” - moderate flexibility

from “30” - “36” - high flexibility

Health care management (eng. – management) – a set of all types and forms of management of medical organizations and enterprises.

Control sides:

- the subject of management, i.e. leaders;
- control object, i.e. subordinates.

The goal of health care management is to improve the activities of medical organizations and enterprises.

Management function

1. Technical – diagnostics, treatment, prevention, etc.
2. Commercial – purchase, sale, exchange.
3. Financial – to raise funds and dispose of them for the implementation of activities.
4. Insurance – protection of persons and property.
5. Accounting – accounting, statistics, accounting.
6. Administrative – direct management, planning, coordination and control.

Features of management in health care

- Special responsibility of decisions made.
- Difficulties in predicting the consequences.
- Sometimes the impossibility of correcting the consequences of erroneous decisions.

Solution and its types

A decision is a logical, mental, emotional, psychological, legal act deployed in time.

The goal is to achieve the desired end result of the solution.

Tasks – work to achieve the goal of the solution.

Solution classification

- Social (working conditions, promotion, vacation, pension, etc.).
- Medical.
- Administrative – organizational.
- Resource.
- Household.
- On execution control.

Solution Degrees

1. An order is a rigid framework of coercion.
2. Order – less rigid framework of coercion.
3. Recommendations - an analogy of a request, clarification and concretization is allowed.

Management technology is a system of operations and procedures performed in a certain sequence and combination (according to the principle of “stages of statistical research”).

Types of management documents

- Administrative – directive documents.
- Reporting – reports, reviews, reports, certificates.
- General – letters, complaints, statements, contracts, etc.

Test questions on the topic

1. Health care management – a concept, a goal.
2. Triad of management.
3. Management functions.
4. Principles of management.
5. Tasks of management.
6. Stages of control.
7. Features of health care management.
8. Management methods.
9. The main role of management.
10. Management skills.
11. Requirements for a manager.
12. Solution: concept, purpose, tasks.
13. Factors affecting the effectiveness of the solution.
14. Classification of the solution.
15. Degrees of solution.
16. Factors affecting the final result of the decision.

Theme 9

MARKETING IN HEALTH CARE

Purpose of the lesson

The student must know:

- basic concepts of marketing;
- the public health market;
- marketing research and advertising.

The student must be able to:

- Calculate and analyze sections of marketing arithmetic.

Topic study plan

1. Analysis of the topic on educational issues

- Marketing and basic concepts.
- Public health market: concept, subjects and objects, types, characteristics of the medical services market.
- Demand, supply, prices: concepts, factors influencing them.
- Market segmentation and types of competition, types of marketing of medical services, characteristics of patients.
- Marketing research - concept, task, methods, advertising and types.

2. Independent work of students

- Learn the basic sections of marketing arithmetic.
- Problem solving.
- Presentations.
- Completion of term paper.

3. Consolidation of material on control questions

TASKS

Task 1

The multidisciplinary Republican Diagnostic Center has its own marketing service. At one of the meetings, the head of the marketing service brought to the attention of employees that the volume of sales of such a paid service as “diagnosis of secondary infertility by laparoscopy” was declining.

What steps need to be taken to ensure that sales do not decline. List your suggestions.

Task 2

You are the head of the marketing department of the scientific national center of surgery. The Department of Abdominal Surgery is about to introduce a new med. service – removal of the gallbladder by a bloodless method. To study the demand for this honey. service, what method of marketing research should be carried out? What type of segmentation will you perform?

Task 3

You are a marketer for a private cosmetic clinic. When introducing a new service - prevention of wrinkles by conducting complex therapy, what method of marketing research will you conduct? What type of segmentation will you perform?

Task 4

You are in charge of the marketing department of the Institute of Obstetrics and Gynecology. The management of the institute decided to open the “School of Expectant Mothers”. To study the demand for this service, what type of segmentation will you make? What type of marketing do you use?

Task 5

You are a marketer for a dispensary. To expand rehabilitation services, the administration of the institution decided to open a traditional medicine department and a Phyto-bar. To study a group

of patients, what type of segmentation will you perform? What type of marketing do you use?

Business game

“How to organize paid medical activities in public sector health care organizations?”.

List the plan for the introduction of paid services, as the head of the institution.

Marketing (English market – market) is a type of human activity aimed at satisfying needs and requirements through exchange.

Need is a feeling felt by a person of lack of something.

Demand is a need that has taken a specific form in accordance with the cultural level and personality of the individual.

Inquiry is a need backed by purchasing power, i.e. depends on the socio-economic status of the individual.

A product is anything that can satisfy a need, need, and demand and is offered to the market for the purpose of attracting attention, acquisition, use, or consumption.

A market is a collection of existing and potential buyers of a product.

Exchange is the act of receiving from someone the desired object with the offer of something in return.

A transaction is a commercial exchange of value between two parties. It is a unit of measurement in the field of marketing.

Distribution – goods need to be at the right time and in the right place.

Promotion – awareness of the product.

The public health market is a form of relationship, communication between independently decision-making economic medical entities.

Market types

- market of medical institutions;
- pharmaceutical industry market;
- research market;
- market of medical equipment and equipment;
- medical education market;

- the market for sanitary and hygienic education and training;
- market of medical goods;
- patient market;
- The medical services market is a set of technologies, medical equipment products, methods of organizing medical activities, the pharmaceutical industry, implemented in a competitive environment.

The market of medical services is a set of technologies, products of medical equipment, methods of organizing medical activities, the pharmaceutical industry, implemented in a competitive environment.

Demand is the quantity of medical services that patients are willing to purchase.

The offer is the quantity of services that a medical institution is able to provide in a certain period of time at a certain price. The volume of proposals is influenced by:

Price is the cost of a certain type and volume of goods and services sold. Price is a factor that affects the profitability and volume of goods and services sold.

Marketing research – a systematic definition of the range of data required in connection with the upcoming honey. institution marketing situation: planning, data collection, analysis and reporting of results.

Marketing research methods

1. The method of expert assessments – experts are interviewed, i.e. specialists.
2. Method of sociological research: (survey, experiment, observation, consists of 5 stages).

Advertising – information about the consumer properties of goods and services in order to create demand for them.

Types of advertising:

Informative, exhortation, reminder.

Test questions on the topic

1. Marketing is a concept.
2. Need – a concept.
3. Need – a concept.
4. Request – a concept.

5. Goods – concept, types.
6. Market – a concept.
7. Exchange – a concept.
8. Deal – concept.
9. Distribution – a concept.
10. Promotion is a concept.
11. Terms of the deal.
12. Public health market.
13. Types of the market – the concept.
14. The market for honey, services – the concept.
15. Characteristics of the medical services market.
16. Demand is a concept.
17. Offer – concept.
18. Price is a concept.
19. Segmentation of the medical services market.
20. Types of marketing of medical services.
21. Marketing research – definition.
22. Tasks of marketing research.
23. Methods of marketing research.
24. Advertising – concept, types.

Theme 10

HEALTH CARE REFORM

Purpose of the lesson

The student must know:

- system: concept, content;
- main directions of healthcare reform in the Kyrgyz Republic;
- classification and structure of health care institutions.

The student must be able to:

- analyze the activities of health care institutions.

Topic study plan

1. Analysis of the topic on educational issues

- System: concept, purpose, elements.
- Types of system: input and output.
- National health care reform program: reform, Manas program, goal, objectives, principles, main achievements.
- Health care reform program “Manas Taalimi”, main directions.
- Den Sooluk Health care Reform Program.
- Classification of healthcare institutions: types, types, levels.
- Levels, types of medical services.

2. Independent work of students

- Acquaintance with the statistical data of the network of medical institutions of the Kyrgyz Republic.
- Presentations.
- Completion of term paper.

3. Consolidation of material on control questions

A system is a set of interrelated elements that are aimed at fulfilling specific goals and objectives.

The purpose of the system is a concept that expresses the final results of the system.

System types

- Real
- Abstract
- Open
- Closed

Reform – transformation, change, reorganization of something in any system.

National program “Manas” (1996–2005)

The goal is to improve the health of the population by improving the efficiency and quality of medical care.

Tasks:

- Reform of the health management system;
- Reform of medical services;
- Training reform;
- Funding reform.

National health care reform program “Manas Taalimi” (2006–2011)

Manas Taalimi program

The goal is to improve the health status of the population

Tasks:

- achieving fairness and accessibility of medical services;
- reduction of the financial burden;
- improving the efficiency and quality of medical care;
- increase in responsiveness and transparency (formation of a database of health care organizations).

National health care reform program “Den Sooluk” (2012–2016)

The goal is to improve the health of the population by providing universal (universal) coverage of the population with quality medical services.

Tasks:

- Ensuring universal coverage of the population with quality medical services, regardless of social status, gender differences and insurance status in the CHI system;
- mitigation and subsequent overcoming of inequalities in health care and in the level of health of the population, based on an in-depth analysis of the social determinants of inequality;
- creation of favorable social and economic conditions for a gradual transition to the provision of quality free medical services to poor citizens of the Kyrgyz Republic.

Test questions on the topic

1. System: concept.
2. Purpose of the System.
3. Elements of the system.
4. Types of system.
5. System entry and exit.
6. “Reform”: the concept.
7. Purpose and objectives of the “Manas” program.
8. Principles of the “Manas” program.
9. The main achievements of the Manas reform.
10. The main directions of the program “Manas Taalimi”.
11. Types of health care institutions.
12. Types of health care institutions.
13. Purpose and objectives of the “Den Sooluk” program

Theme 11

SOCIAL AND MEDICAL INSURANCE

Purpose of the lesson

The student must know:

- essence of social insurance, provision and health insurance;
- the content of health insurance in the Kyrgyz Republic.

The student must be able to:

- apply the acquired knowledge of health insurance in daily activities.

Topic study plan

1. Analysis of the topic on educational issues

- Social insurance, social security: definition, types.
- Health insurance models; health insurance in the Kyrgyz Republic: definition, types, principles.
- Subjects, contingents of the insured.
- Mandatory Health Insurance Fund: definition, purpose, objectives, funding sources.

2. Independent work of students

- Problem solving.
- Presentations.
- Completion of term paper.
- Study of the law “On health insurance in the Kyrgyz Republic”.

3. Consolidation of material on control questions

Social insurance, social security.

State social insurance is a system of guaranteed state types of provision for insured persons in case they lose their earnings.

Source - contributions from employers and citizens.

Types of social insurance

- Pension
- For temporary disability
- On pregnancy and childbirth
- Unemployment
- Ritual allowance (for burial)

State social security is a material support guaranteed by the Constitution of the Kyrgyz Republic for low-income families and citizens, as well as disabled citizens in the absence of the right to pensions.

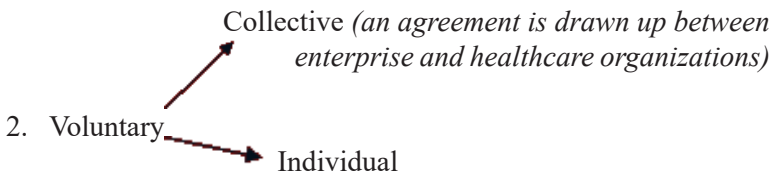
Types of government allowances:

- Unified Monthly Allowance (UMA).
- Monthly social allowance.
- Unemployment benefit (reviewed annually).
- Benefits established for certain categories of persons.

Health insurance in the Kyrgyz Republic is a system of measures for the social protection of citizens, ensuring the receipt of high-quality medical, preventive and other services.

Types of health insurance:

1. Mandatory (citizens of the Kyrgyz Republic).



Mandatory health insurance is a state-guaranteed form of social protection that ensures the right of citizens to health care.

Voluntary health insurance is a form of social protection of citizens based on the principle of voluntary participation of citizens.

Subjects of health insurance: the insured; insurer; insured; supplier.

Mandatory Health Insurance Fund (MHIF) is an independent, self-managed, non-profit insurance organization.

The purpose of MHIF is to ensure the constitutional rights of citizens of the Kyrgyz Republic to receive guaranteed medical care under the compulsory medical insurance program.

Test questions on the topic

1. State social insurance: definition, funding sources.
2. Types of social insurance.
3. State social security: definition, types.
4. Models of the healthcare system.
5. Health insurance in the Kyrgyz Republic: concept, types.
6. Mandatory health insurance: concept.
7. Principles of Mandatory health insurance.
8. Subjects of health insurance.
9. The contingent of the insured and payers of contributions.
10. Mandatory Health Insurance Fund: definition, purpose.
11. Tasks of the Mandatory Health Insurance Fund.
12. Sources of funding for Mandatory health insurance.

Theme 12

BASICS OF FAMILY MEDICINE

Purpose of the lesson

The student must know:

- basics of family medicine;
- principles, structure of Family Medicine Center (FMC), group of family doctors (GFD);
- tasks of emergency medical care and specialized medical care.

The student must be able to:

- analyze the quality of medical services provided by FMC and GFD.

Topic study plan

1. Analysis of the topic on educational issues

- Family Medicine: Primary Health Care: definition, history of family medicine, philosophy, principles.
- Specialists, types of activities, differences between family and local doctors.
- Family medicine center: concept, purpose, principles.
- Structure of the Family Medicine Center.
- Structure, principles of the group of family doctors.
- Ambulance emergency medical care.
- Specialized types of medical care.

2. Independent work of students

- Problem solving.
- Completion of term paper.
- Presentations.

3. Consolidation of material on control questions

TASKS

Task 1

Load per specialist in Primary Health Care (PHC) organizations
(Family Practice Centers FPC, Family Doctors Group FDG),
by regions in 2023

Regions	Total	Therapists	Obstetrician-gynecologists	Pediatricians	General practitioners (incl. Family Doctors)
Kyrgyz Republic	2676	2806	3478	2823	4112
Batken region	2732	1459	4092	983	3835
Jalal-Abad region	3017	6138	3024	2666	4050
Issyk-Kul region	3553	-	2683	-	4907
Naryn region	2156	2058	2676	-	2488
Osh region	3253	7610	2779	1064	5687
Talas region	1451	-	1238	-	2612
Chui region	2259	-	1960	-	2591
Bishkek	2432	2733	3763	2922	-
Osh	2764	-	-	-	3894

Analyze the load on PHC specialists.

Task 2

Some indicators of the quality of medical services in the FDG,
KR 2021–2023

Indicators	Hypertensive disease			Acute respiratory viral diseases		
	2021	2022	2023	2021	2022	2023
Registered patients	145886	153746	151206	433262	447462	435480
Prevalence (per 100,000 population)	2601,6	2687,9	2591,0	7726,4	7822,9	7462,1
Number of outpatient care cases (per 100 patients)	196,4	193,3	192,9	119,2	119,9	117,1
Number of hospitalized (per 100 patients)	10,4	7,5	6,7	12,0	11,3	10,4
Number of cases served by ambulance teams (per 100 patients)	24,0	23,3	25,9	14,1	13,7	13,8

Analyze the indicators of the quality of medical services in FDG by years.

Primary health care (PHC) is one of the primary forms of health care that is essential and accessible both for each person individually and for the entire population, and is provided on an acceptable basis for him, with his active participation and costs. corresponding to the capabilities of the population and the country.

Group of family doctors (*GFD*) is an association of general practitioners, pediatricians, obstetricians and gynecologists. They provide PHC to patients of all ages and gender.

A general practitioner is a specialist who provides primary multidisciplinary care to the adult population at the prehospital level.

A family doctor is a specialist with a higher medical education who provides PHC to a family, regardless of the gender and age of its members.

The Family Medicine Center (FMC) is a state medical institution providing health care to the population at the outpatient level, coordinating the activities of family medicine groups in providing primary specialized health care.

The purpose of the FMC is to preserve and improve the health of the population by organizing a system for providing high-quality primary health care, carrying out work on disease prevention, health promotion, and providing specialized health care at the outpatient level.

Structure of FMC

- Groups of family doctors with FAPs assigned to them.
- Administrative and management personnel.
- Subdivisions (offices) for the provision of specialized assistance.
- Laboratories, treatment rooms and other services for examination and treatment.
- Cabinets of preventive work.
- Dental office (department).
- Cabinets of narrow specialists.
- Department or ambulance team.

Sources of financing

- Funds from the local budget.
- Compulsory medical insurance funds.

- Means of co-payment of the population.
- Funds from extracurricular activities.
- Other means.

The per capita funding standard is the amount of money allocated to Group of family doctors (GFD) on average per one enrolled insured resident.

Test questions on the topic

1. Primary health care: definition.
2. Principles of family medicine.
- 3 Group of family doctors: definition.
4. General practitioner: definition.
5. Family doctor: definition.
6. Activities of a family doctor.
7. Family Medicine Center: definition.
8. Purpose of the Family Medicine Center.
9. Principles of the Family Medicine Center.
10. The structure of the Family Medicine Center.
11. Funding sources.
12. Per capita financing ratio: definition.
13. Spending of Mandatory health insurance funds in Group of family doctors.

Theme 13

QUALITY OF MEDICAL SERVICES

Purpose of the lesson

The student must know:

- the content of the quality of medical services;
- evaluation and management of the quality of medical services;
- essence of licensing and accreditation in medical institutions.

The student must be able to:

- evaluate the quality of medical services.

Topic study plan

1. Analysis of the topic on educational issues

- Quality of medical services: definition, consumers, subjects of medical services.
- Approaches to the quality of medical services, elements of quality.
- Evaluation and quality management of medical services clinical protocol: definition, purpose, objectives.
- Indicator, types of indicators, quality management of medical services, subjects.
- Licensing: definition, purpose, standard, steps, solutions.
- Accreditation, medical accreditation commission: definition, purpose, stages, decisions, supervisory board.

2. Independent work of students

- Analysis of an example of a clinical protocol.
- Repetition of questions on bioethics submitted to the state examination.
- Completion of term paper.
- Presentations.

3. Consolidation of material on control questions

TASKS

Example of a clinical protocol

Clinical Protocol for Level I

PYELONEPHRITIS

Cipher

N 10 Acute pyelonephritis

N 11.0 Chronic pyelonephritis

O 23.0 Pyelonephritis of pregnancy

PYELONEPHRITIS is a non-specific infectious and inflammatory disease of the kidneys, in which the renal pelvis, calyces and parenchyma of the kidney are involved in the process, with damage primarily and mainly to the interstitial tissue.

Risk factors:

1. Hypothermia;
2. Obstructive uropathy (anomalies in the development of the kidneys, urolithiasis, nephroptosis, cystitis, prostatitis, benign prostatic hyperplasia, tumors of the urinary tract).
3. The presence of foci of infection in the pelvic organs, inflammatory diseases of the female genital area.
4. Pregnancy.
5. Metabolic disorders (diabetes mellitus, hypercortisolism, hyperuricemia, hyperuricosuria).
6. Chronic foci of infection in the body.
7. Instrumental research methods (bladder catheterization, the introduction of radiopaque agents).

Criteria for the diagnosis of acute pyelonephritis:

- increased body temperature with chills;
- symptoms of intoxication – weakness, nausea, vomiting, arthralgia, myalgia, headache;
- pain and muscle tension in the lumbar region (often unilateral);
- a positive symptom of tapping along the XII rib on the side of the lesion;

- leukocytosis, increased erythrocyte sedimentation rate (ESR), shift of the leukocyte formula to the left, moderate anemia in the general blood test;
- leukocyturia or pyuria, bacteriuria, possibly micro- and macrohematuria, moderate proteinuria, alkaline urine test in general urinalysis;
- bacteriuria more than 100 thousand microbial bodies in 1 ml in urine culture;
- urea and serum creatinine may be elevated;
- deformation and compaction of the pelvicalyceal system, swelling of the parenchyma, changes in the reno-cortical index during ultrasound of the kidneys;
- absence or delay of contrasting of the urinary tract on the affected side, reflux, obstruction, deformation of the cups, pelvis, blurring of the contours of the kidney on urograms.

Laboratory and instrumental research methods

Laboratory:

- detailed blood test;
- general urine analysis;
- sowing urine for microflora and sensitivity to antibiotics;
- urea, serum creatinine.

Instrumental:

- Ultrasound of the kidneys and urinary tract;
- survey urography.

Criteria for the diagnosis of chronic pyelonephritis

During the period of exacerbation, the clinical picture is similar to acute pyelonephritis.

Out of exacerbation:

- dull, nagging pain and heaviness in the lumbar region;
- increased blood pressure;
- with a decrease in the concentration function of the kidneys of nocturia against the background of polyuria in the analysis of urine according to Zimnitsky;

- leukocyturia or pyuria, bacteriuria, possibly micro- and macrohematuria, moderate proteinuria, alkaline urine test in general urinalysis;
- leukocyturia more than 4000 in 1 ml in the analysis of urine according to Nechiporenko;
- bacteriuria more than 100 thousand microbial bodies in 1 ml in urine culture;
- urea and serum creatinine may be elevated;
- deformation and induration of the pelvicalyceal system, swelling of the parenchyma, changes in the reno-cortical index on ultrasound of the kidneys;
- absence or delay of contrasting of the urinary tract on the affected side, reflux, obstruction, deformities of the cups, pelvis, blurring of the contours of the kidney on urograms.

Laboratory and instrumental research methods

Laboratory:

- general urine analysis;
- general blood analysis;
- urinalysis according to Nechiporenko;
- urinalysis according to Zimnitsky;
- sowing urine for microflora and sensitivity to antibiotics;
- urea, serum creatinine.

Instrumental:

- Ultrasound of the kidneys and urinary tract;
- survey urography.

Indications for referral to a urologist

- acute pyelonephritis;
- exacerbation of chronic pyelonephritis;
- pyelonephritis of pregnant women.

TREATMENT

Anti-relapse treatment:

It is carried out within six months after acute pyelonephritis and within three months after an exacerbation of chronic pyelonephritis.

Antibacterial drugs are prescribed three days a week (according to the antibiogram), replacing them every month, followed by herbal medicine.

Non-drug

- Diet: drink plenty of water (more than 1.5 liters per day), in combination with decoctions of diuretic herbs.
- In the presence of urinary tract obstruction, massive edema - fluid restriction, with arterial hypertension – salt restriction.
- Therapeutic exercises for pregnant women.

Medical

- Amoxicillin 500 mg 3 times a day.
- Sulfamethoxazole + trimethoprim 480 mg, 960 mg twice a day.
- Nitrofurantoin 50 mg 4 times a day.
- Norfloxacin 200 mg 2 times a day.
- Cefalexin 500 mg 3 times a day.
- Ciprofloxacin 250 mg 2 times a day.

For pregnant women, it is preferable to prescribe cephalixin, amoxicillin and nitrofurantoin from medications. Follow-up by family doctor for 6 months.

Examinations: urinalysis, Nechiporenko test 1 time in 3 months.

Task 1

One of the health care organizations in the Batken region carried out accreditation. At the same time, the following shortcomings were identified:

- 30% of doctors did not have the highest category.
- 2% of specialists had a scientific degree - Candidate of Medical Sciences.
- There was no “rest” area in the corridors of the health care organizations.

Is it possible in this situation to give a positive answer on accreditation? If “yes”, then for how long and by what percentage does this organization comply with the standard.

Task 2

In 2023, a number of serious violations were identified in one of the healthcare organizations in Chui region. Accreditation decision less than 60% compliance.

Is it possible to get a certificate of accreditation of this healthcare organization?

Task 3

For how many years a certificate of accreditation of a health care organization is issued with a compliance percentage of 70-79.

Quality is the presence of essential features, properties, features that distinguish one object or phenomenon from others.

A medical service is a set of measures aimed at the prevention, diagnosis and treatment of diseases.

Consumers of medical services

- Patients.
- Healthcare institutions.
- Health care system.
- State.

Subjects of quality of medical services

- Attending doctor.
- Nursing staff.
- Head of medical facility.
- Health authorities and institutions.

A clinical protocol is a regulatory document that defines the requirements for the provision of medical services to a patient with a specific disease, with a specific syndrome, or in a specific clinical situation.

The purpose of the clinical protocol is the normative support of the medical care quality management system.

Tasks

- Choice of optimal technologies.
- Protection of the rights of the patient and the doctor.
- Conducting an examination and assessment of the quality of medical services.

Planning of volumes of medical services.

- Calculation of necessary costs.
- Substantiation of the program of state guarantees.

Indicators are indicators by which the quality of medical services for patients treated according to the clinical protocol is assessed.

Types

- Quantitative.
- Qualitative.

Quality management of medical services is a set of measures aimed at improving the quality of medical services with the achievement of optimal quality results at minimal cost.

Integral indicator of the quality of medical care:

- coefficient of medical efficiency,
- coefficient of social efficiency,
- coefficient of economic efficiency.

The main defects in the quality of medical care:

- failure to provide full assistance in accordance with the clinical protocol,
- denial of admission within 2 days,
- extortion, extortion,
- unsanitary conditions, etc.

A license is an official document giving the right to engage in medical activities.

Licensing is the process of conducting a licensing examination.

The goal is the right to practice medicine.

A standard is a typical species, a sample that something must satisfy in terms of its characteristics, properties, qualities.

Accreditation is a formal procedure for recognizing the competence of a healthcare organization to carry out professional activities in accordance with accreditation standards.

The goal is to ensure and protect the rights of consumers of medical services to receive medical care of the required volume and quality.

Test questions on the topic

1. Quality: definition.
2. Medical service and consumers of medical services.

3. Subjects of the quality of medical services.
4. Approaches to the quality of medical services.
5. Elements of the quality of medical services from a position.
6. Clinical protocol: definition.
7. Purpose and objectives of the clinical protocol.
8. Indicators: definition, types.
9. Quality management of medical services: definition.
10. Subjects of quality management of medical services.
11. License: definition.
12. Licensing: definition, purpose.
13. Accreditation: definition, purpose.
14. Medical accreditation commission: concept.

Theme 14

INDICATORS OF THE STATE AND ACTIVITIES OF HEALTH CARE INSTITUTIONS

Purpose of the lesson

The student must know:

- accounting and reporting in healthcare;
- performance indicators of the general medical network;
- performance indicators of specialized medical services.

The student must be able to:

- calculate and analyze performance indicators of medical services.

Topic study plan

1. Analysis of the topic on educational issues

- Accounting: definition, types.
- Document: definition, types.
- Report: definition, types.
- Activities of the general medical network: sources, medical staff and methodology for calculating the provision.
- PHC (FPC) performance indicators and methods of their calculation.
- Indicators of hospital activity and methods of their calculation.
- Performance indicators of the obstetric and gynecological service and the method of their calculation.
- Performance indicators of the pediatric service and the methodology for their calculation.

2. Independent work of students

- Study of accounting and reporting documentation.
- Problem solving.

- Presentations.
- Completion of term paper.

3. Consolidation of material on control questions

TASKS

Task 1

1. Made visits to the clinic – 1645800.
2. Population – 422,000.
3. Number of hospital beds – 1257.

Calculate the number of visits to the clinic per 1 inhabitant per year and the provision of the population with hospital beds.

Task 2

Registered pregnant women up to 12 weeks of pregnancy – 977.

The number of all pregnant women under observation is 1418.

The number of visits by a pediatrician at home of a newborn in the first three days after discharge from the hospital is 307.

The number of all newborns under observation is 355.

Calculate the timeliness of registering pregnant women and visiting a pediatrician at home in the first three days after a newborn is discharged from the maternity hospital.

Registration is a unified state registration system.

Types of registration

- Operational and technological.
- Signal.

A document is a business paper confirming some fact or right to something.

Kinds

- Operational and technological.
- Control and notification.
- Characterizing the amount of work.

The report is a unified state system for data processing and analysis.

Kinds

- General medical.
- Military medical.
- Forensic.

Performance indicators of Family Medicine Center

- Number of visits per 1 inhabitant to outpatient clinics.
- Load per specialist of group of family doctors.

Hospital performance indicators

- Hospital bed utilization is characterized by the number of bed occupancy days per year.
- Bed turnover is characterized by the ratio of the number of past patients to the average annual number of beds.
- The hospital mortality rate is calculated as the ratio of the number of deaths to the number of discharged patients (discharged and deceased).

Performance indicators of the obstetric and gynecological service

- The timeliness of registration of pregnant women in the antenatal clinic is characterized by the proportion of pregnant women registered before 12 weeks of pregnancy, among all registered pregnant women.
- The completeness of the examination of pregnant women admitted under the supervision of a doctor is characterized by the proportion of those examined (for example, for the Rh factor) out of the total number of those admitted under the supervision of a doctor.
- Birth complications are characterized by the proportion of birth complications (eg anemia) out of the total number of births.

Pediatric Service Performance Indicators

- Coverage of pregnant women with antenatal care by a FGP physician is characterized by the proportion of pregnant women with antenatal care out of the total number of pregnant women who delivered in a given year.
- Visits to a FGP doctor at home for the first time three days after a newborn's discharge from the maternity hospital is characterized by the proportion of visits by a FGP doctor to

a newborn's home for the first time three days after discharge from the maternity hospital among all newborns admitted under observation.

Test questions on the topic

1. Registration: definition, types.
2. Document: definition, types of primary accounting.
3. Report: definition, types.
4. Sources for calculating indicators.
5. Provision of the population with medical personnel: concept.
6. Performance indicators of the Family Medicine Center.
7. Indicators of hospital activity.
8. Performance indicators of the obstetric and gynecological service.
9. Performance indicators of the pediatric service.
10. Performance indicators of the dental service.
11. Indicators of the current supervision of the sanitary and epidemiological service.
12. Indicators of preventive supervision of the sanitary and epidemiological service.
13. Indicators of anti-epidemic measures of the sanitary and epidemiological service.

Theme 15

MEDICAL AND LABOR EXAMINATION

Purpose of the lesson

The student must know:

- essence of medical and labor expertise;
- the content of the examination of temporary disability;
- organization of examination of incapacity for work.
- Government Decree “On the procedure for conducting and terms of temporary disability” No. 576 dated 14.08.2006.

The student must be able to:

- calculate and analyze indicators of temporary and permanent disability.

Topic study plan

1. Analysis of the topic on educational issues

- Medical and labor examination (MLE): concept and tasks.
- Types and concept of disability.
- Criteria for determining work capacity.
- Examination of temporary incapacity for work: institutions that do not have the right to issue documents on Temporary Disability (TD).
- Organization of examination of incapacity for work - Medical Consultative Commission (MCC), Medical and Social Expert Commission (MSEC).
- Rehabilitation.

2. Independent work of students

- Problem solving.
- Presentations.
- Completion of term paper.

3. Consolidation of material on control questions

TASKS

Task 1

In 2014	Factory			
	A	B	C	D
1. Number of employees	473	615	151	78
2. Number of disability cases	275	373	98	41
3. Number of disability days	2910	4010	105	79
4. The number of cases of disability from inflammatory diseases of the genitourinary system	72	101	28	9
5. The number of days of disability from diseases of the circulatory system	1150	1713	451	125

Calculate the number of cases and days of disability, the average duration of disability for all diseases and diseases of the circulatory system.

Task 2

City	A	B	C	D
Number of employees	65117	48321	32223	23715
For the first time recognized as disabled	410	270	163	109
Incl. disabled people of the 1st group	92	58	35	23
Number of people with disabilities registered	1318	1102	617	453
Incl. people with disabilities due to diseases of the circulatory system	371	315	225	148

Calculate the indicators of primary disability, general disability, disability on diseases of the circulatory system.

A medical labor examination is a study of a person's ability to work, conducted by doctors in order to determine the degree and duration of his disability.

Disability

- Ability to work is a state of the body in which the totality of physical and spiritual capabilities allows you to perform work of a certain volume and quality.

- Disability – a condition caused by illness, injury, its consequences or other reasons, when the performance of professional work in whole or in part, for a limited time or permanently impossible.
- Temporary incapacity for work is a condition of the human body caused by disease, injury or other reasons, when it is impossible to perform professional work for a certain period of time.
- Complete incapacity for work - the complete impossibility of performing any work for a certain period.
- Partial Disability – temporary incapacity for work in relation to normal professional work while maintaining the ability to perform other work.
- Persistent disability (disability) - when functional or organic disorders of the body are of a stable and permanent nature and prevent the continuation of work in the main profession (in whole or in part) for a long time or permanently.

Documents on temporary disability

- certificate of incapacity for work;
- certificate of temporary disability;
- certificate of caring for a sick family member;
- help of any form.

Cases of issuing disability certificates

- in case of temporary disability due to illness or injury;
- when caring for a sick family member;
- on quarantine;
- for spa treatment;
- for prosthetics when placed in a hospital;
- in case of temporary transfer to another job due to tuberculosis or occupational disease;
- on pregnancy and childbirth;
- when adopting a child from a maternity hospital.

MLE (Medical and labor examination) tasks

- assessment of working capacity in case of diseases, injuries, mutilations, anatomical defects;

- establishment of the fact of temporary incapacity for work and release from work in connection with the presence of social and medical indications;
- determination of the nature of disability (temporary, full, partial);
- establishing the cause of temporary or unstable disability to determine the amount of benefits, pensions, etc.;
- employment of workers who do not have signs of disability, but who, for health reasons, need to facilitate work in their profession;
- determination of labor recommendations for persons with disabilities;
- studying the causes of morbidity and disability;
- determination of the types of social assistance for those working with temporary incapacity for work and for the disabled;
- carrying out social and labor rehabilitation.

Tasks of MSEC

- establishes a disability group;
- establishes the causes of disability;
- determines measures for rehabilitation.

Test questions on the topic

1. Medical and labor examination: concept.
2. Types of disability depending on the reasons.
3. Disability: concept.
4. Criteria for determining the ability to work.
5. Institutions that do not have the right to certify temporary disability.
6. Documents on temporary disability.
7. Cases of issuing certificates of incapacity for work.
8. Cases of issuing a certificate of temporary disability.
9. Tasks of MLE.
10. Tasks of MSEC.
11. Rehabilitation: concept, types.

Theme 16

HEALTH CARE PLANNING AND ECONOMICS

Purpose of the lesson

The student must know:

- Fundamentals of health planning and economics;
- pricing in health care.

The student must be able to:

- to calculate the need of the population for medical visits, hospital beds, medical personnel.

Topic study plan

1. Analysis of the topic on educational issues

- Health planning: definition, goal, objectives.
- Types of plans, planning methods.
- Sections and indicators of the plan.
- Health economics: definition, issues of health economics and financial management in health care.
- Economic levels, cost growth factors, main directions.
- Types of efficiency.
- Pricing in healthcare, price, cost, purpose, elements.
- Calculation of the cost of medical services, types of prices.
- Tariffs in the system mandatory medical insurance.

2. Independent work of students

- Problem solving.
- Presentations.
- Completion of term paper.

3. Consolidation of material on control questions

Methodology for calculating the population's need for medical visits, hospital beds, medical personnel

The need of the population for outpatient care (medical visits per 1000 population):

$$\Pi = A \times K_o + \Delta + \Pi_p ,$$

where Π is the number of medical visits per 1000 population,

A – incidence (treatment) per 1000 population,

K_o – the coefficient of repetition of attendance per disease,

Δ – the number of dispensary visits due to morbidity,

Π_p is the number of preventive maintenance visits.

B. The need of the population for inpatient care (beds per 10,000 population):

$$K = \frac{A \times P \times R}{\Delta \times 100} ,$$

Where K – the required number of average annual beds per 10,000 population,

A – the level of morbidity (treatment) per 1000 population,

P – the percentage of hospitalization or the percentage of selection for a bed of the number of applicants,

R is the average duration of the patient's stay in bed,

Δ is the average annual bed occupancy.

The need for medical personnel

$$B = \frac{J \times H}{\Phi} ,$$

Where B – the need for medical personnel,

J – the rate of outpatient visits per inhabitant per year,

H is the population,

Φ – function of the medical position.

$$\Phi = B \times C \times \Gamma ,$$

Where B – the load of a doctor of this specialty for 1 hour of work in a polyclinic and at home (5 patients at the reception, 2 patients at home),

C – the number of hours of work separately at the reception in the clinic and at home,

Γ – is the number of working days in a year.

TASKS

Task 1

1. The incidence of the population per 1000 population - 5035.
2. The ratio of the need for attendance per disease is 5.3.
3. The number of dispensary visits due to morbidity per 1000 population - 448.
4. Number of preventive care visits per 1000 population - 1271.
Calculate the population's need for medical visits.

Task 2

1. The incidence rate per 1000 population is 5035.
2. Percentage of hospitalization – 16.3.
3. The average stay of a patient in a bed is 13.7.
4. Average annual bed occupancy – 307.
Calculate the population's need for hospital beds, or how many beds are needed per 10,000 citizens.

Task 3

1. The rate of outpatient visits per 1 inhabitant per year is 7.5.
2. Population – 422000 (Issyk-Kul region).
3. The load of the medical position.
4. Physician workload for 1 hour of work in a polyclinic and at home (5 and 2).
5. The number of working hours in the clinic and at home – 4 and 2.
6. The number of working days in a year – 285.
Calculate the need of the population for medical personnel.

Task 4

Data for calculating the performance indicators of outpatient clinics.

Initial data	Figures
Average annual number of attached population	24 340
Number of doctor visits at the polyclinic and at home	115 700
Number of visits to nurses	6720
Number of medical visits for preventive purposes	45 320
Number of visits to nurses for preventive purposes	3700
Number of persons registered with the dispensary at the end of the reporting year	11 040
Number of patients with chronic bronchitis registered at the dispensary at the end of the reporting year	415
Total number of registered patients with chronic bronchitis at the end of the reporting year	2080

- I. Calculate the performance indicators of outpatient clinics:
1. average number of visits per 1 inhabitant per year;
 2. proportion of visits to the polyclinic;
 3. complete coverage of the population by dispensary observation;
 4. the proportion of patients registered with the dispensary.

Data for the calculation of statistical indicators of the stationary institutions activities

Initial data	Figures
Average annual population	24 340
Number of hospital beds	490
Number of patients admitted to the hospital during the reporting period	10 135
Number of bed-days spent by patients in the hospital during the year	147 370
Number of discharged patients	9675
Number of dead patients	180

- II. Calculate the performance indicators of hospitals:
1. provision of the population with hospital beds;
 2. frequency (level) of hospitalization;
 3. average number of bed occupancy days per year (hospital bed function);

4. the average duration of the patient's stay in bed;
5. hospital mortality.

Task 5

Data for calculating the performance indicators of outpatient clinics.

Initial data	Figures
Average annual number of attached population	32 700
Number of doctor visits at the polyclinic and at home	135 800
Number of visits to nurses	5840
Number of medical visits for preventive purposes	40 120
Number of visits to nurses for preventive purposes	3920
Number of persons registered with the dispensary at the end of the reporting year	10 540
The number of patients with coronary heart disease, registered at the dispensary at the end of the reporting year	780
Total number of registered patients with coronary heart disease at the end of the reporting year	9220

- I. Calculate the performance indicators of outpatient clinics:
1. average number of visits per 1 inhabitant per year;
 2. proportion of visits to the polyclinic;
 3. complete coverage of the population by dispensary observation;
 4. the proportion of patients registered with the dispensary.

Data for the calculation of statistical indicators of the activities of stationary institutions

Initial data	Figures
Average annual population	32 700
Number of hospital beds	600
Number of patients admitted to the hospital during the reporting period	12 340
Number of bed-days spent by patients in the hospital during the year	182 940
Number of discharged patients	12 270
Number of dead patients	142

- II. Calculate the performance indicators of hospitals:
1. provision of the population with hospital beds;
 2. frequency (level) of hospitalization;
 3. average number of bed occupancy days per year (hospital bed function);
 4. the average duration of the patient's stay in bed;
 5. hospital mortality.

Task 6

Data for calculating the performance indicators of outpatient clinics.

Initial data	Figures
Average annual number of attached population	36 100
Number of doctor visits at the polyclinic and at home	147 300
Number of visits to nurses	6120
Number of medical visits for preventive purposes	50 600
Number of visits to nurses for preventive purposes	3250
Number of persons registered with the dispensary at the end of the reporting year	12 645
The number of patients with gastritis, registered at the dispensary at the end of the reporting year	950
The total number of registered patients with gastritis at the end of the reporting year	2179

- I. Calculate the performance indicators of outpatient clinics:
1. average number of visits per 1 inhabitant per year;
 2. proportion of visits to the polyclinic;
 3. complete coverage of the population by dispensary observation;
 4. the proportion of patients registered with the dispensary.

Data for the calculation of statistical indicators of the activities of stationary institutions

Initial data	Figures
Average annual population	36 100
Number of hospital beds	600
Number of patients admitted to the hospital during the reporting period	13 400
Number of bed-days spent by patients in the hospital during the year	191 315
Number of discharged patients	13 140
Number of dead patients	172

- II. Calculate the performance indicators of hospitals:
1. provision of the population with hospital beds;
 2. frequency (level) of hospitalization;
 3. average number of bed occupancy days per year (hospital bed function);
 4. the average duration of the patient's stay in bed;
 5. hospital mortality.

Task 7

Data for calculating the performance indicators of outpatient clinics.

Initial data	Figures
Average annual number of attached population	64 380
Number of doctor visits at the polyclinic and at home	230 100
Number of visits to nurses	22 390
Number of medical visits for preventive purposes	82 040
Number of visits to nurses for preventive purposes	7240
Number of persons registered with the dispensary at the end of the reporting year	43 720
Number of patients with chronic bronchitis registered at the dispensary at the end of the reporting year	1148
Total number of registered patients with chronic bronchitis at the end of the reporting year	1426

- I. Calculate the performance indicators of outpatient clinics:
1. average number of visits per 1 inhabitant per year;

2. proportion of visits to the polyclinic;
3. complete coverage of the population by dispensary observation;
4. the proportion of patients registered with the dispensary.

Data for the calculation of statistical indicators of the activities of stationary institutions.

Initial data	Figures
Average annual population	64 380
Number of hospital beds	540
Number of patients admitted to the hospital during the reporting period	14 600
Number of bed-days spent by patients in the hospital during the year	169 140
Number of discharged patients	14 240
Number of dead patients	280

- II. Calculate the performance indicators of hospitals:
 1. provision of the population with hospital beds;
 2. frequency (level) of hospitalization;
 3. average number of bed occupancy days per year (hospital bed function);
 4. the average duration of the patient's stay in bed;
 5. hospital mortality.

Solution of task I.

1. Average number of visits per 1 inhabitant per year:

$$\frac{\text{Number of doctor visits at the polyclinic and at home} + \text{Number of visits to nursing staff}}{\text{Average annual number of attached population}} =$$

2. The share of preventive visits to the polyclinic:

$$\frac{\text{Number of doctor visits} + \text{Number of visits to nursing staff with prophylactic aim}}{\text{Number of doctor visits} + \text{Number of visits to nursing staff}} \times 100 =$$

3. Completeness of coverage of the population by dispensary observation:

$$\frac{\text{Number of persons on dispensary registration at the end of the reporting period}}{\text{Average annual number of attached population}} \times 100 =$$

4. The proportion of patients with any disease, registered in the dispensary:

$$\frac{\text{The number of patients with any disease, registered at the dispensary at the end of the reporting period}}{\text{Total number of registered patients with any disease at the end of the reporting period}} \times 100 =$$

Solution of task II.

1. Provision of the population with hospital beds:

$$\frac{\text{Number of hospital beds}}{\text{Average annual number of population}} \times 10\,000 =$$

2. Frequency (level) of hospitalization:

$$\frac{\text{Number of people admitted to the hospital}}{\text{Average annual number of population}} \times 100 =$$

3. Average number of bed occupancy days per year (hospital bed function):

$$\frac{\text{The number of bed – days spent by patients in the hospital during the year}}{\text{Average annual number of beds}} =$$

4. The average duration of the patient's stay in bed:

$$\frac{\text{The number of bed – days, spent by patients in the hospital}}{\frac{1}{2}(\text{admitted} + \text{dismissed} + \text{died})\text{patients}} =$$

5. Hospital mortality:

$$\frac{\text{Number of died in the hospital}}{\text{Number of discharged dismissed + died patients from the hospital}} \times 100 =$$

Indicators of economic activity

Task 1

According to f. 2 “Profit and Loss Statement” for 2013, in a conditional healthcare institution, the proceeds (net) from the sale of medical services, rental of premises (net of VAT) for 2012 amounted to 2.4 million soms, the cost of sold medical services – 1,543,400 soms, income tax – 274.8 thousand soms.

Calculate and analyze the indicators characterizing the economic activity of a conventional health care institution for 2012.

Task 2

According to f. 2 “Profit and Loss Statement” for 2013, in a conditional healthcare institution, the proceeds (net) from the sale of medical services, rental of premises (net of VAT) for 2012 amounted to 1.75 million soms, the cost of sold medical services - 958.5 thousand soms, income tax – 84.7 thousand soms.

Calculate and analyze the indicators characterizing the economic activity of a conventional health care institution for 2012.

Task 3

According to f. 2 “Profit and Loss Statement” for 2013, in a conditional healthcare facility, the proceeds (net) from the sale of medical services, rental of premises (net of VAT) for 2012 amounted to 1,542,000 soms, the cost of medical services sold was 728, 6 thousand soms, income tax - 90.7 thousand soms.

Calculate and analyze the indicators characterizing the economic activity of a conventional health care institution for 2012.

Solution

1. Gross profit:

$$\left(\begin{array}{c} \text{Revenue from the sale} \\ \text{of medical goods and} \\ \text{(or) services} \end{array} \right) - \left(\begin{array}{c} \text{Full cost of} \\ \text{medical goods} \\ \text{and (or) services} \end{array} \right) =$$

2. Net profit:

$$\left(\begin{array}{c} \text{The amount} \\ \text{of} \\ \text{gross profit} \end{array} \right) - \left(\begin{array}{c} \text{The amount of taxes paid} \\ \text{and other payment to the} \\ \text{budget and off- budget} \\ \text{funds} \end{array} \right) =$$

3. Special indicator of profitability (profitability of sales):

$$\frac{\text{Net profit}}{\text{Total volume from revenue and sales}} \times 100 =$$

medical goods and (or) services

Health planning is the determination of the optimal volumes of material, financial and human resources for a given period of time.

The goal is to ensure a high level of public health.

Tasks

- Proportionate development of health services.
- Elimination of disproportions in providing the population with personnel and beds.
- Improving the forms and methods of management.

Types of plans

- Industry.
- Territorial.
- Current.
- Promising.

Plan indicators

- Power of medical institutions.
- Activity of medical institutions.
- Medical personnel.
- Finance.

Healthcare economics is an independent scientific discipline that studies the effect of objective economic laws in specific conditions of production and consumption of medical services, as well as the conditions and factors that ensure the most complete satisfaction of society's needs for medical care and public health protection at an acceptable level of resources.

The main directions of health economics

- Calculation of socially necessary costs for the provision of medical care to the population.
- Pricing in healthcare.
- Calculation, planning of profit and profitability.
- Improving the production and economic activities of healthcare facilities.
- Improving the economic analysis of the production and economic activities of healthcare facilities.
- Human resources and remuneration of medical workers.
- Mechanism of taxation of healthcare facilities.

Calculation of the cost of medical services

$$C = C_{\Pi} + C_{\kappa} = 3_{\Gamma} + H_3 + M + \text{II} + O + \text{II}$$

where: C – cost of the service, C_n – direct costs, C_{κ} – indirect costs, 3_m – labor costs, M – expenses for medicines, dressings, etc., II – wear of soft equipment, O – wear of equipment, II – other expenses.

Types of prices for medical services

- Budget estimates or budget targets.
- Tariffs.
- Negotiated prices.
- Free market prices.

Test questions on the topic

1. Health planning – definition.
2. Purpose and tasks of planning.
3. Types of plans.
4. Methods of planning.
5. Sections of the health plan.
6. Plan indicators.

7. Health economics - definition.
8. Types of efficiency.
9. Factors of growth in health care costs.
10. Price elements and types of prices.

Theme 17

HEALTH CARE FINANCING

Purpose of the lesson

The student must know:

- fundamentals of health financing.

The student must be able to:

- Calculate the budget of the healthcare institution.

Topic study plan

1. Analysis of the topic on educational issues

- Health financing: sources, budget execution.
- Methods of payment for medical services at the primary level.
- Methods of payment for inpatient medical services.
- Economic incentives for funding FGPs and hospitals.
- Prerequisites for changes in the health care financing system.
- Single payer system, consolidation of funds.
- Spending of funds by FMCs and hospitals in the CHI system.

2. Independent work of students

- Problem solving.
- Presentations.
- Completion of term paper.

3. Consolidation of material on control questions

TASKS

Task 1

The budget of funds of health care institutions for Chui region

District health care institutions	Total amount of financing, som.
Chui region	39791853
Including Alamudunsky district	2658700
Isyk-Atinsky district	6248976
Jaiylsky district	3958312
Keminsky district	4384561
Moskovsky district	3845946
Panfilovsky district	6582341
Sokuluksky district	4689742
Chuisky district	7423275

Calculate the amount of funds allocated to the hospital, FMC, outpatient diagnostic department (ODD), Family Group Practitioners (FGP), narrow specialists, day hospital and outpatient surgery, laboratory diagnostic department.

Example: 2,658,700 som were allocated to Alamudun district.

A. Hospital funding amount (proportioning and calculation)

$$\begin{array}{r} \text{Total funding} \\ X \end{array} \qquad \begin{array}{r} -100 \\ -70 \end{array}$$

$$X = \frac{\text{Total fund} \times \text{allocated to the hospital}}{100} = \frac{2658700 \times 70}{100} = 1861090 \text{ som}$$

B. Amount of FMC funding (proportioning and calculation)

$$\begin{array}{r} \text{Total fund} \\ X \end{array} \qquad \begin{array}{r} -100\% \\ - \text{percentage allocated to FMC} \end{array}$$

$$X = \frac{\text{Total fund} \times \text{percentage allocated to FMC}}{100} = \frac{2658700 \text{ som} \times 30}{100} = 797610 \text{ som}$$

C. ODD Funding Amount (proportioning and calculation)

Funding amount of FMC -100
 X -percentage allocated to ODD

$$X = \frac{\text{Funding amount of FMC} \times \text{percentage allocated to ODD}}{100} = \frac{797610 \times 40}{100} = 319044 \text{ soms}$$

D. Funding amount of FGP (proportioning and calculation)

Funding amount of FMC -100%
 X - percentage allocated to FGP

$$X = \frac{\text{Funding amount of FMC} \times \text{percentage allocated to FGP}}{100} = \frac{797610 \times 60}{100} = 478566$$

E. Funding for specialized doctors (proportioning and calculation)

Funding amount for specialized doctors -100%
 X -percentage allocated for specialized doctors

$$X = \frac{\text{Funding amount of ODD} \times \text{percentage allocated for specialized doctors}}{100} = \frac{319044 \times 75}{100} = 239283$$

F. Financing of day hospital and outpatient surgery (proportioning and calculation)

Funding amount of ODD -100%
 X - percentage allocated to day hospital and outpatient surgery

$$X = \frac{\text{Funding amount of ODD} \times \text{percentage allocated to day hospital and outpatient surgery}}{100} = \frac{319044 \times 8,3}{100} = 26480 \text{ som 65 tyin}$$

G. Financing of the laboratory and diagnostic department (proportioning and calculation)

Funding amount of ODD -100%
 X -percentage allocated to the laboratory and diagnostic department

Funding amount of ODD × percentage allocated to the
 $X = \frac{\text{laboratory and diagnostic department} = 319044 \times 16,7}{100} = 53280$ som 35 tyin

Task 2

Diagnosis related group (DRG)

№ DRG	Short list of therapeutic and surgical diagnosis related groups	Weighting factor for the age group > 15 years old	Weighting factor for the age group < 15 years old
504	Brucellosis	1,7649	1,76603
521	Meningitis	1,0900	1,0900
536	Acute myocardial infarction	1,5280	1,5280
541	Pneumonia	1,1623	1,2778
531	Acute sinusitis	0,8223	0,8303
587	Damage to the eye and its adnexa after medical procedures	0,7488	0,7638
620	Small and large intestine surgery	1,4805	1,8064
621	Appendectomy	0,8932	1,1594
625	Operation for hernia	1,1171	0,9215
616	Ligation and removal of veins	1,2315	1,5621
604	Operation on the endocrine glands	1,0008	1,1205
638	Hip bone surgery	2,0173	1,5950

Calculate the cost of a treated case, taking into account the weighting factor for age groups, if it is known that the base rate (BR) of inpatient treatment in the country is 240 som.

Example. Cost of a treated case of small and large intestine surgery

$$\Pi C = BC_{\text{бюд.}} \times K_{\text{кзг}},$$

where ΠC is the cost of a treated case, $BC_{\text{бюд.}}$ – the base rate of budget financing, $K_{\text{кзг}}$ – the coefficient of insurance for the clinical group.

$$\Pi C = 240 \times 1,4805 = 355 \text{ som } 32 \text{ tyin}$$

Thus, for one case, the hospital will receive 355 som 32 tyin

The base rate (BRbud.) for each region is calculated according to the volume of approved budget funds for the planned year, taking into account the number of treated cases, which is planned based on the indicators of the previous year.

Task 3

Financing of FGP

Indicator	Group of family doctors											
	№ 1		№ 2		№ 3		№ 4		№ 5		№ 6	
Per capita financing ratio (PFR), som.	20		20		20		20		20		20	
Economic Coefficient (CE)	1		1		1		1		1		1	
Coefficient geographical – (Cg) %	20		30		20		30		20		30	
Coefficient for each sex and age group (Csag)	2-4 year old		20-24 year old		30-34 year old		40-44 year old		55-59 year old		60-64 year old	
	male	fem	male	fem	male	fem	male	fem	male	fem	male	fem
	7,0	3,5	2,6	3,5	2,0	4,0	3,5	5,0	2,0	4,0	7,5	8,5
Number of assigned insured population for each sex and age group (Ni)	144		2006		904		1254		661		524	
	180		1894		1029		986		1840		809	

Calculate the FGP Funding Amount using the formula

$$C = H_{\text{ПФ}} \times \sum K_{\text{э}} \times K_r \times (H_3 \times K_{\text{ПБ}})$$

where C is the amount of financing,

PFR – Per capita funding ratio,

CE – economic coefficient,

Cg – geographic coefficient,

Ni – the number of assigned insured population for each sex and age group,

Csag – coefficient for each sex and age group.

Example of calculating the amount of financing for FGP No. 1

Calculation of the geographical coefficient in soms.

Proportioning

Per capita funding ratio PFR – 100

X – Geographic coefficient

Per capita funding ratio

$$X = \frac{\text{Geographic coefficient}}{100} = \frac{20 \times 20 \%}{100} = 4 \text{ som}$$

From here

$$C \text{ fem.} = 20 \times \sum 1 \times 4 \times (180 \times 3,5) \text{ fem.} = 50\,400 \text{ som}$$

$$C \text{ male.} = 20 \times \sum 1 \times 4 \times (144 \times 7,0) = 80\,640 \text{ som.}$$

$$C \text{ total} = 50\,400 + 80\,640 = 131\,040 \text{ som}$$

Sources of financing

- taxation,
- contributions to the social insurance system,
- premiums for voluntary insurance,
- direct payments from patients.

Types of financing

- budget,
- compulsory health insurance,

- co-payment,
- voluntary contributions.

Methods of payment for medical services at the primary level

- for each detailed service (fee method),
- per inhabitant assigned to medical practice (method of per capita financing),
- at fixed wage rates.

The single payer system is the consolidation of financial resources for health care from the state budget and compulsory health insurance for the purpose of subsequent single-channel financing for payments for health care and pharmaceutical services.

Consolidation of financial resources – a set of funds from the state budget, compulsory health insurance, external borrowings and grant assistance from donors, as well as special funds and funds received from co-payments of the population in the healthcare system.

Test questions

1. Sources of funding.
2. Types of financing.
3. Methods of payment for medical services at the primary level.
4. Methods of payment for medical services of inpatient care.
5. Prerequisites for changes in health care financing
6. Single payer system: definition.
7. Consolidation of funds: definition.
8. Spending funds in the Family Medicine Center.
9. Spending funds in hospitals.

Theme 18

THE HEALTH CARE SYSTEM IN FOREIGN COUNTRIES. RISKS IN HEALTH CARE

Purpose of the lesson

The student must know:

- health systems;
- health care organization in developed countries: Great Britain, France, USA;
- organization of health care in developing countries; international organizations.

The student must be able to:

- on the organization of health care to determine the health care system of a given country;
- carry out an information message on the health care system of various countries.

Topic study plan

1. Analysis of the topic on educational issues

- Health systems, public system, strengths and weaknesses.
- Insurance system, advantages and disadvantages.
- Private enterprise systems, advantages and disadvantages.
- Standardization in healthcare: concepts, stages, standards.
- Risks in healthcare, definition, objects, classification of risks.
- Risks management.
- Safety in medicine.

2. Independent work of students

- Information message about the health care system of various countries with presentations.
- Defense of term paper.

3. Consolidation of material on control questions

There are three health care systems:

- state (national);
- insurance;
- private enterprise.

Positive aspects and disadvantages of the state system

Positive aspects

- cost savings;
- reducing the likelihood of abuse;
- there are fewer cases of imposing unnecessary procedures and drugs on patients in order to generate additional income.

Disadvantages

- lack of money (residual funding principle);
- lower technical equipment;
- Lack of flexibility and responsiveness in expanding healthcare.

Advantages and disadvantages of the insurance system

Positive aspects

- money goes not to the general budget of the state, but is purposefully directed to the needs of healthcare;
- allows you to quickly respond to the expansion of the needs of the population in medical care;
- social solidarity: the rich for the poor, the young for the old, the healthy for the sick.

Disadvantages

- the population also pays for medical services;
- the state can change the payment ratio in its favor.

Advantages and disadvantages of the private enterprise system

Positive aspects

- high competition between doctors, hence the high culture of service, the use of new technology.

Disadvantages

- paid medical services;
- difficulty in acquiring expensive equipment.

Stages of standardization

Stage I – systems were created: classifiers of patients by diagnostically related groups (USA; Western Europe).

The goal is to contain the rising costs of hospital care.

Problems: The application of this method caused a negative reaction from doctors, who, as they believed, were infringed on their “freedom”.

Positive aspects: the use of this method contributed to a decrease in the rate of increase in the cost of hospitalization.

Stage II: development of evidence-based clinical guidelines (CG) – based on an analysis of the effectiveness and safety of medical interventions that are created according to nosological forms, syndromes or symptoms.

Positive aspects: the development of CG is carried out by professional medical associations, transparency, the displacement of ineffective medical interventions.

Classification of risks in health care

1. Socio-legal and economic risks.
2. Risks associated with management.
3. Medical risks associated with civil liability.
4. Risks associated with a threat to the health of medical workers.

Test questions

1. Health systems.
2. Positive sides and shortcomings of the state system.
3. Positive aspects and disadvantages of the insurance system.
4. Positive aspects and disadvantages of the private enterprise system.
5. Countries with a public health system.
6. Countries with a health insurance system.
7. Standards of medical care.

8. Risks in healthcare.
9. Risk management, goals.
10. Reducing the risk of patients.

QUESTIONS FOR CONTROL WORKS

1. Health care management – a concept, a goal.
2. Triad of management.
3. Management functions.
4. Principles of management.
5. Tasks of management.
6. Stages of control.
7. Features of health care management.
8. Management methods.
9. The main role of management.
10. Management skills.
11. Requirements for a manager.
12. Solution: concept, purpose, tasks.
13. Factors affecting the effectiveness of the solution.
14. Classification of the solution.
15. Degrees of solution.
16. Factors affecting the final result of the decision.
17. Marketing – a concept.
18. Need is a concept.
19. Demand is a concept.
20. Request – a concept.
21. Goods – concept, types.
22. Market – a concept.
23. Exchange – a concept.
24. A deal is a concept.
25. Distribution is a concept.
26. Promotion is a concept.
27. Terms of the deal.
28. Public health market.
29. Types of the market – the concept.
30. The market for honey, services – the concept.
31. Characteristics of the medical services market.

32. Demand is a concept.
33. Offer – concept.
34. Price is a concept.
35. Segmentation of the medical services market.
36. Types of marketing of medical services.
37. Marketing research – definition.
38. Tasks of marketing research.
39. Methods of marketing research.
40. Advertising – concept, types.
41. State social insurance: definition, funding sources.
42. Types of social insurance.
43. State social security: definition, types.
44. Health system models.
45. Health insurance in the Kyrgyz Republic: concept, types.
46. Mandatory health insurance (MHI): concept.
47. Principles of MHI.
48. Subjects of health insurance.
49. The contingent of the insured and payers of contributions.
50. Mandatory Health Insurance Fund (MHIF): definition, purpose.
51. Tasks of the MHIF.
52. Sources of funding for Mandatory health insurance.
53. Social: definition.
54. Pediatrics: definition.
55. Social pediatrics: definition.
56. Child health: definition.
57. Protection of motherhood and childhood: definition.
58. Social conditions: concept.
59. Social factors: concept.
60. Legislative documents relating to issues of child protection.
61. Quality: definition.
62. Medical service and consumers of medical services.
63. Subjects of the quality of medical services.
64. Approaches to the quality of medical services.
65. Elements of the quality of medical services from a position.
66. Clinical protocol: definition.

67. The purpose and objectives of the clinical protocol.
68. Indicators: definition, types.
69. Quality management of medical services: definition.
70. Subjects of quality management of medical services.
71. License: definition.
72. Licensing: definition, purpose.
73. Accreditation: definition, purpose.
74. Medical accreditation commission: concept.
75. Accounting: definition, types.
76. Document: definition, types of primary accounting.
77. Report: definition, types.
78. Sources for calculating indicators.
79. Security of the population with medical personnel: a concept.
80. Performance indicators of the Family Medicine Center.
81. Hospital performance indicators.
82. Performance indicators of the obstetric and gynecological service.
83. Performance indicators of the pediatric service.
84. Performance indicators of the dental service.
85. Indicators of the current supervision of the sanitary and epidemiological service.
86. Indicators of preventive supervision of the sanitary and epidemiological service.
87. Indicators of anti-epidemic measures of the sanitary and epidemiological service.

PRESENTATIONS

are drawn up according to the requirements of the department, must be submitted in Microsoft Power Point, the number of 8–10 slides for 4–5 minutes and a written report.

Themes

1. WHO policy “Health for all in the 21st century”.
2. Human health and healthy lifestyle.
3. Risk factors and their impact on human health.
4. Prevention.
5. Social mobilization of the population.
6. Law on public health in the Kyrgyz Republic.
7. Health policy of Kyrgyzstan in the XXI century.
8. Improving women’s health (WHO and KR strategies).
9. Improving children’s health (WHO and KR strategies).
10. Improving the health of young people (WHO and KR strategies).
11. Improving the health of older people (WHO and KR strategies).
12. The latest theory of management of health care organizations.
13. The concept of groups and their significance.
14. Causes of conflicts.
15. Communicative behavior in the organization.
16. Marketing environment (macro, micro) and medical services.
17. Medical service and its features.
18. The life cycle of a medical service and its stages.
19. Competitiveness in medicine.
20. Demand factors and their classification.
21. Advertising in the healthcare marketing system.
22. Questions of SWOT - analysis.
23. Den sooluk health care reform.
24. The results of the reform “Manas”, “Manas Taalimi”.
25. Family medicine in the Kyrgyz Republic.
26. Organization of the work of a family doctor, paramedic, family nurse.

27. History of emergency medical care. Organization of ambulance service in the Kyrgyz Republic.
28. Social and health insurance.
29. Quality of medical services.
30. Pricing of medical services.
31. Types of economic laws.
32. Financing the health care system of the Kyrgyz Republic.
33. Financing of Family Medicine Center (Group of family doctors).
34. Financing of inpatient medical services.

Information messages

on health care systems of foreign countries.

Topics: Germany, Great Britain, France, Scandinavian countries, Holland, China, India, Thailand, Australia, Kazakhstan, South Africa, Egypt, Congo, Argentina, USA, Canada, Mexico, Brazil and other countries by choice.

Exam questions

to the promotion (end-of-year) examinations in Public Health and Health Care for students of Medical care

1. Subject and content of medical statistics: statistics, biostatistics, medical statistics. Tasks and sections of medical statistics.
2. Indicators of health and healthcare. Statistical population, types.
3. Stages of statistical research: and their content (I, II stages).
4. Stages of statistical research: and their content (III, IV, V stages).
5. Relative values and their essence. Intensive and extensive indicators.
6. Relative values and their essence. Ratio and visibility indicator.
7. Variation series and averages: types of averages, methods for calculating the arithmetic average (simple and weighted).
8. Standard deviation (σ), representativeness error (m) for relative and average values. Method of calculation.
9. Sampling method and assessment of the reliability of the results of the study for relative and average values. Method of calculation.

10. Standardized coefficients, stages and their essence. Method of calculation.

11. Correlation coefficient, coefficient of determination. Method of calculation.

12. Regression, concept. Regression coefficient, linear regression equation. Method of calculation.

13. Dynamic series, types of indicators. Method of calculation.

14. Graphic images, types, requirements (linear, pie charts, construction methodology).

15. Demography, medical demography, population reproduction. Demographic sections.

16. General medical and demographic indicators (fertility, mortality, natural population growth, average life expectancy).

17. Special medical and demographic indicators (infant mortality, neonatal, perinatal and maternal mortality), global trends and in the Kyrgyz Republic.

18. Morbidity: concepts, sources of study, indicators. Types of morbidity by negotiability and with temporary disability.

19. Disability, groups, indicators, calculation methods.

20. Dispensary method of service: medical examination, dispensary method, purpose, tasks, selection of contingents, institutions, elements, performance indicators.

21. The content of evidence-based medicine: concept, purpose, causes, elements.

22. Legislative base of health protection: constitution, new laws, international documents, modern concept of health protection.

23. The content of public health and health care: the concepts of public medicine, health care, health policy, public health, public health service. The purpose and objectives of social medicine and healthcare organization.

24. Law “Public health and health care”: purpose, objectives, principles, rights and obligations of citizens.

25. Human health: definition, human well-being (physical, mental, social), factors influencing health status, trends in medical and demographic indicators and morbidity rates.

26. Health promotion (HP): definition, goals, assessment of HP, resources. WHO policy “Health for all in the 21st century”.

27. Human lifestyle: definition, concept, categories, healthy lifestyle, healthy lifestyle (HLS) formation.

28. Risk factors, their definition, classification according to WHO. Lifestyle factors, genetic factors, their prevention. Potential health hazards.

29. Prevention: definition, types of medical prevention.

30. Social mobilization of the population: definition, types, elements.

31. International Classification of Diseases (ICD). Concept, history, grouping, ICD – 10. Diagnosis related groups, principles of formation, types, therapeutic and surgical cases.

32. Socio-medical significance of some chronic non-communicable diseases: the structure of morbidity and the structure of causes of death in the Kyrgyz Republic.

33. Specialized medical care: cardiological and oncological service in the Kyrgyz Republic.

34. Organization of a health promotion service (HPS) in Kyrgyzstan: goals, levels of management. The concept of HP (goals, objectives, strategies), health promotion centers.

35. The problem of health promotion (HP) of children and youth: WHO strategies, the Millennium Declaration (MD), problems of the quality of life of children and adolescents, the structure of morbidity and causes of death.

36. Policies to promote the health of children and youth: WHO strategies, health promotion strategies in the Kyrgyz Republic.

37. Main problems related to women’s health: health problems in modern conditions, WHO recommendations for improving health, strategies for improving health in the Kyrgyz Republic.

38. The main problems associated with the health of older people: health problems in modern conditions, WHO recommendations for improving health.

39. WHO strategies to improve the health of women and the elderly: international documents, strategies, tasks, problems.

40. Management: principles, functions, tasks, methods, stages, features of management in health care, management requirements.

41. Solution and its types: concept, purpose, tasks, factors, classification of solutions, degrees.

42. Management technology: concept, types of documents, style of work, reasons for lack of time, causes of conflicts, meeting requirements.

43. Marketing: meaning, definition, need, need, request, product, market, exchange, deal.

44. Public health market: definition, types, medical services market, demand, supply. Marketing research and advertising: concept, tasks, methods. Advertising, views.

45. "System" and its content: definition, purpose, elements and types of the system. "Entrance" and "Exit" of the system.

46. National health reform program: reform, Manas program, goal, objectives, principles, main achievements, health reform program Manas-Taalimi, Den Sooluk goal, tasks, components.

47. Classification of health care institutions: types, types, levels, levels and types of medical services.

48. Family medicine: primary health care – definition. History of family medicine, principles, specialists, differences between a family doctor and a district doctor.

49. Center for family medicine: concept, purpose, principles, structure. Group of family doctors: principle of formation, tasks, rights, structure.

50. Social insurance, social security: definitions, types.

51. Health insurance: models of the health care system, definition of health insurance, types, principles, subjects, contingent of the insured.

52. Mandatory medical insurance fund: definition, purpose, objectives, sources of funding.

53. Quality of medical services: definition, consumers, subjects of medical services, approaches to quality, elements of quality.

54. Assessment and quality management of medical services: clinical protocol – definition, purpose, objectives, indicator, types of indicators, quality management of medical services, subjects.

55. Licensing and accreditation: definitions, goals, standard-definition, stages, decisions, supervisory board.

56. Accounting and reporting in health care: accounting – definition, types. Document – definition, types of primary accounting, report - definition, types.

57. Performance indicators of the general medical network: availability of honey. personnel, PHC activities, hospitals.

58. Performance indicators of specialized medical services: obstetric-gynecological, pediatric.

59. Medical and labor examination: concept, tasks, types and concepts of disability, criteria.

60. Examination of temporary incapacity for work: documents, organization of examination of incapacity for work, functions of the medical consultative board (MCB) allowance for temporary incapacity for work.

61. Organization of disability examination: Disability Determination Services (DDS), goals, objectives, rehabilitation.

62. Health care planning: definition, purpose, tasks, types, methods, sections, indicators of the plan.

63. Types of healthcare systems: state, insurance, private enterprise.

64. Risks, classification of risks in health care and problems of safety in medical practice.

65. Safety in medicine: definition, concept, types.

66. Health economics: definition, reasons for interest, reasons for rising costs, paid medical services.

67. Main directions of healthcare economics, types of healthcare efficiency.

68. Formation of financial resources: types, budget execution, methods of payment for medical services at the primary level, economic incentives.

69. Financing of health care: “Single payer”, accumulation of financial resources (MHIF), consolidation of financial resources, formation and execution of the budget of health care organizations.

70. Financing of hospitals and FGPs: norm per capita financing, methods of payment for hospital care, spending of financial resources.

GLOSSARY OF TERMS (GLOSSARY)

Public medicine is a multifaceted area of medical public activity aimed at maintaining health.

Social medicine and healthcare organization is a science that studies the influence of various social factors on the health status of the population.

“Health” (WHO) is a state of complete physical, mental (mental) and social well-being and not merely the absence of disease or infirmity.

Disease is a new qualitative state of the body, unlike health, that occurs in response to damage by environmental influences, through social conditions.

A way of life is a way of material and spiritual life of people, implemented in specific conditions of the natural and social environment.

Healthy lifestyle

- it is a system of principles of human life that does not contradict universal values, norms of morality and law (Sakhno A.V.).
- active life of people aimed at maintaining and strengthening their health.

The classification of diseases is a specific system for the distribution and association of diseases and pathological conditions into groups and classes in accordance with established criteria.

Communication in health care is the process of exchanging information on health protection and promotion between health professionals and the public (listeners)

Health care management (eng. management) – a set of all types and forms of management of medical organizations and enterprises.

Marketing (English market – market) is a type of human activity aimed at satisfying needs and requirements through exchange.

Evidence-based medicine is a set of methodological approaches to conducting clinical trials and evaluating results.

A **system** is a set of interrelated elements that are aimed at fulfilling specific goals and objectives.

Primary health care (PHC) is one of the primary forms of health care that is essential and accessible both for each person individually and for the entire population, and is provided on an acceptable basis for him, with his active participation and costs. corresponding to the capabilities of the population and the country.

A **family doctor** is a specialist with a higher medical education who provides PHC to a family, regardless of the gender and age of its members.

Health insurance in the Kyrgyz Republic is a system of measures for the social protection of citizens, ensuring the receipt of high-quality medical, preventive and other services.

Mandatory Health Insurance Fund (MHIF) under the Ministry of Health of the Kyrgyz Republic is an independent, self-managed, non-profit insurance organization.

A **clinical protocol** is a regulatory document that defines the requirements for the provision of medical services to a patient with a specific disease, with a specific syndrome, or in a specific clinical situation.

Indicators are indicators by which the quality of medical services for patients treated according to the clinical protocol is assessed.

Clinical examination (French Dispenser – relieve, release) is an active identification, registration and monitoring of the health status of certain contingents of the population (healthy and sick).

A **medical labor examination** is a study of a person's ability to work, conducted by doctors in order to determine the degree and duration of his disability.

Health care planning is the determination of the optimal volumes of material, financial and human resources for a given period of time.

The Single Payer system is the consolidation of financial resources for health care from the state budget and compulsory health insurance for the purpose of subsequent single-channel financing for payments for medical and sanitary and pharmaceutical services.

Health care economics is an independent scientific discipline that studies the effect of objective economic laws in specific conditions

of production and consumption of medical services, as well as the conditions and factors that ensure the most complete satisfaction of society's needs for medical care and public health protection at an acceptable level of resources.

Risk management is a system of measures, the purpose of which is to reduce the impact on the health and life of the patient.

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