

Catalog of elective subjects

1. **Department: "General practitioner-3"**
2. **Education level: internship**
3. **Educational programs: "General Medicine"**
4. **Course: 6**
5. **Name of elective discipline: outpatient polyclinic cardiology, including children's.**
6. **Number of credits: 5**
7. **Purpose:** to inform a general practitioner in accordance with the principles of evidence-based medicine and modern achievements of therapeutic, diagnostic and pharmacological technologies, as well as taking into account the characteristics of his family, society, patients with cardiovascular pathology within the competence of the DTR in the primary health care system, taking into account his culture, age and gender, as well as preparation for the independent implementation of preventive, diagnostic, therapeutic and rehabilitation measures, regardless of their nature.
8. **Tasks:** outpatient polyclinic cardiology, including the main tasks of organizations providing assistance to children:
 - 1) prevention of diseases in children, including their prenatal stages;
 - 2) Early detection of diseases and timely initiation of treatment, compliance at all stages of treatment and its implementation until recovery;
 - 3) Prevention of disability and prevention of death among children;
9. **The content of the discipline:** "outpatient cardiology, including pediatric cardiology" is a specialized discipline that studies outpatient cardiological care for adults, as well as children in the Republic of Kazakhstan, taking into account the achievements of medical science and practice. The program includes diagnostics, algorithms for first aid, treatment and dynamic follow-up in accordance with clinical protocols and from the standpoint of evidence-based medicine, indications for planned and emergency hospitalization, as well as examination of temporary and permanent disability.
10. **Fundamentals of the choice of discipline:**

Knows the terminology of cardiac diseases in children, knowledge in the field of modern scientific achievements of medicine.

He knows the principles of organizing and conducting scientific and practical research in the field of cardiac diseases in children.

Education (cognitive sphere)	Skills and abilities (psychomotor sphere)	Personal and professional competencies (relationships)
He knows the principles of organizing and conducting scientific and practical research in the field of cardiac diseases in children. Accepts new ideas. Knows the principles of management of the	Feeding children with cardiovascular diseases in accordance with WHO recommendations. He knows the modern classification of congenital and acquired diseases and borderline conditions, clinical symptoms, etiology and pathogenesis of childhood diseases.	The use of objective methods of examination, detection of cardiovascular diseases, differential diagnosis, laboratory examination, determination of indications for hospitalization. Substantiation of the clinical diagnosis, the appointment of

<p>organization and implementation of medical care for children. He knows the rules of using a personal computer, the principles of access to scientific search platforms on the Internet (Googlscolar, Googlacademi, Medline, Pubmed, cochraine).</p>	<p>He knows the principles of anti-epidemic measures in the focus of infection. He knows the basics of diagnosis and emergency care in emergency cases in the clinic of internal diseases in children (with cardiovascular diseases).</p>	<p>necessary laboratory and instrumental examinations, the appointment of therapy in accordance with WHO recommendations in accordance with the protocols of the Ministry of Health of the Republic of Kazakhstan, the provision of qualified assistance in emergency cases.</p>
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11. **Learning outcome:** LO1-knowledge, understanding and application of diagnostics, differential diagnosis and dynamic control of the most common diseases of the cardiovascular system from the point of view of MSEC degree medicine.

LO2-the adult youth, as well as the children of Qatar, have decided to provide emergency medical care in the conditions of life and urgency of cardiological science.

LO3-in a comprehensive assessment of the condition and course of examination of a sick child, effectively interact with the patient, his family members and colleagues, taking into account the specifics, multiculturalism of child psychology, observing the principles of effective mutual ethics and deontology.

LO4-is used when using the health information system to assist the guard of a general practitioner, when preparing medical documentation, including electronic.

12. **Prerequisites:** The basics of general medical practice

13. **Post-prerequisites:** Diseases of children with GTD

14. **Literature:**

1. Intensive therapy of congenital heart defects in children. Priority of the ed. P. Shah; Trans. From English to English; ed. Pshenisnova K. V. GEOTAR-Media, 2023.
2. Cardiology of childhood and adolescence. Monograph by Mutafyan O. A. volume, 2015
3. Pediatric cardiomyopathy. Textbook prakhov A.V. Special Edition, 2022
4. diagnosis and treatment of congenital and hereditary pathology in children. Sukhareva G. E. Special 2021

1. Department: "General practitioner-3"

2. Education level: internship

3. Educational programs: "General Medicine"

4. Course: 6

5. Name of the elective discipline: integration of childhood diseases.

6. Number of credits: 5

7. Purpose: to train an experienced general practitioner, ready for continuous professional development, to independently carry out diagnostic, therapeutic, rehabilitation and preventive measures in children in accordance with the principles of evidence-based medicine using advanced innovative technologies, possessing knowledge, skills and practical skills that meet the requirements of the IMCI program.

8. The content of the discipline: to teach purposefully assess the condition of a sick child, which means a strictly defined sequence of actions of a medical professional (algorithm for consideration and decision-making).

Teaching the sequence of steps of an integrated approach to the management of a sick child:

- assessment of general signs of danger

- Assessment of the 5 main symptoms (cough, diarrhea, fever, throat, ears) (these are 75% of the causes of death in children under 5 years of age)
- assessment of anemia and low weight (background condition).
- assessment of the vaccination status
- assessment of the child's nutrition
- assessment of other problems of the child (this is 25% of the causes of death of children under the age of 5 years)
- Signs determined as of the classification.
- Determination of the treatment (tactics) of the child in accordance with the IMCI program (not only to give a prescription, but also to teach the mother to treat).
- Learn how to give advice to mom (how to eat, how to drink, how to immediately return when the condition worsens)

9. **Tasks:** the IMCI program helps in polyclinics to correctly identify childhood diseases, provide combined treatment of all major diseases, improve counseling for caregivers, and increase the speed of treatment of seriously ill children by appropriate specialists. At home, it stimulates the call for proper care, helps to improve nutrition and prevention, and properly follow medical prescriptions. In the elective discipline "IMCI program", a deeper and more complete mastering of the work of a general practitioner of PHC is expected.

10. **Fundamentals of the choice of discipline:**

Knows the terminology of childhood diseases, knowledge in the field of modern scientific achievements of medicine.

The organization of scientific and practical research in the field of childhood diseases and knows the principles of driving.

Education (cognitive sphere)	Skills and abilities (psychomotor sphere)	Personal and professional competencies (relationships)
<p>Knows the principles of organizing and conducting scientific and practical research in the field of childhood diseases. Accepts new ideas. Knows the principles of management of the organization and implementation of medical care for children.</p> <p>He knows the rules of using a personal computer, the principles of access to scientific search platforms on the Internet (Googlscolar, Googlacademi, Medline, Pubmed, cochraine).</p>	<p>Knows rational (balanced) principles.</p> <p>Feeding children in accordance with WHO recommendations.</p> <p>He knows the modern classification of major diseases and borderline conditions in childhood, clinical symptoms, etiology and pathogenesis of childhood diseases.</p> <p>Knows the principles of IMCI. He knows the principles of anti-epidemic measures in the focus of infection. He knows the basics of diagnosis and emergency care in emergency cases in the clinic of internal diseases in children (for diseases of the gastrointestinal tract).</p>	<p>The use of objective methods of examination, detection of somatic diseases, differential diagnosis, laboratory examination, determination of indications for hospitalization. Substantiation of the clinical diagnosis, the appointment of necessary laboratory and instrumental examinations, the appointment of therapy in accordance with WHO recommendations in accordance with the protocols of the Ministry of Health of the Republic of Kazakhstan, the provision of qualified assistance in emergency cases.</p>

11. **Learning outcomes:** LO1 - to improve the diagnosis, treatment, medical examination and preventive measures of background diseases in young children. Evaluation of the procedure and results of the screening program and pediatric immunoprophylaxis.

LO2 - the development of a universal progressive model program for Antenatal and postnatal care and IMCI.

LO3 - effective interaction with patients, their family members and colleagues during the examination of a sick child, a comprehensive assessment of the condition, taking into account the

peculiarities of child psychology, multiculturalism, in compliance with the principles of effective mutual ethics and deontology, the use of communication skills in medical practice.

LO4-applies knowledge when using the health information system to help children within the competence of a general practitioner, knows how to prepare medical documentation, including electronic.

12. **Prerequisites:** The basics of a general practitioner

13. **Post-requirements:** Childhood diseases with GTD, Outpatient pediatrics.

14. **Literature:**

1. The model chapter of IMCI textbooks for university education is the integration of the management of childhood diseases. WHO UNICEF, 2014.

2. Instructions on the implementation of criteria for live birth and stillbirth, recommended by the World Health Organization for the Republic of Kazakhstan, Almaty, 2015

3. WHO materials on safe perinatal care, UNICEF, 2017

4. Integrated consideration of childhood diseases. WHO. UNICEF. 2016

5. WHO materials on safe perinatal care.- UNICEF, 2015

1. Department: “Microbiology, virology and immunology.”

2. Level of preparation: internship

3. Educational program: “General medicine”

4. Course:6

5. Name of the elective discipline: “Fundamentals of clinical allergology.”

6. Number of credits: 3 credits / 90 hours.

7. Goal: developing in the student in-depth knowledge in the field of clinical allergology, studying the theoretical and methodological foundations of allergology, broad fundamental training in modern areas of medical and biological science.

8. Tasks:

- to form an extensive and deep volume of basic, fundamental medical knowledge that forms the professional competencies of a specialist capable of successfully solving his professional tasks in the field of allergology;

- develop skills in mastering the latest technologies and techniques in the field of allergology.

9. Contents of the discipline: Fundamentals of modern innovative technologies in the diagnosis and treatment of allergic diseases. Development of diagnostic and treatment algorithms when providing medical care to patients with allergic diseases. Long-term monitoring of the course of the disease, medical examination, rehabilitation of patients with allergic diseases. Use of information technology.

10. Justification for choosing the discipline: Increased attention to allergology in recent years is associated with the significant prevalence of allergic diseases among the population. Particular attention is paid to early diagnosis and modern etiopathogenetic therapy of allergic diseases and immunodeficiencies. Recent years have been marked by major discoveries in the field of theoretical and practical allergology, which has made it possible to form new approaches to the diagnosis of diseases based on immunopathological processes, to develop new methods of therapy and to evaluate the effectiveness of treatment. These achievements have created a real basis for early detection and timely adequate treatment and rehabilitation of patients, which leads to the need for constant improvement of knowledge.

11. Learning results (competencies).

LO1: Patient supervision: able to formulate a clinical diagnosis based on the etiology and pathogenesis of an allergic disease, prescribe a rehabilitation plan and evaluate its effectiveness based on evidence-based practice at all levels of qualified care;

LO2: Communication and Collaboration: Ability to communicate and collaborate productively with the environment and medical personnel in order to optimize the overall well-being of the patient and treatment results;

LO3: Safety and Quality: Able to assess risks and use the most effective methods to ensure a high level of safety and quality of qualified care;

LO4: Public health: able to act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan when providing allergy care, provide basic care, work as part of interprofessional teams to implement policies to improve the health of the nation;

LO5: Research: able to formulate adequate research questions, critically evaluate professional literature, effectively use international databases in professional activities, participate in the work of a research team.;

LO6: Training and development: able to learn independently and train other members of a professional team, actively participate in discussions, conferences and other forms of continuous professional development.

12. Prerequisites: Microbiology and immunology, pathophysiology.

13 Postrequisites: Internal diseases. Scientific information

14.Literature:

Main

1. Clinical allergology. Selected lectures by Goryachkina L.A., Terekhova E.P., Sebekina O.V. Russian, 2017 Publishing house MIA

2. Allergology and clinical immunology. Khaitov R.M. Year of publication: 2019

Additional:

1. Clinical immunology and allergology: Oxford reference book/ Spikett G.; Per. from English; Ed. N.I. Ilina M: GEOTAR-MEDIA 2019 - 832 s

2. Tactics for diagnosis and treatment of allergic diseases and immunodeficiencies: a practical guide / Khaitov R.M. M: GEOTAR-MEDIA 2019-152s

.Khaitov, R.M. Immunology [Text]: Atlas / R.M. Khaitov, A.A. Yarilin.- M.: GEOTAR-MEDIA, 2011.- 624 p.

4. Kolkhir, P.V. Evidence-based allergology-immunology / P.V. Kolhir. - M.: Practical Medicine, 2010. - 528 p.

5. Clinic allergology. Tandamal lecturer Goryachkina L.A., Terekhova E.P., Sebekina O.In the year 2017

1. Department: “Microbiology, virology and immunology.”

2. Level of preparation: internship

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