

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE  
Petro Mohyla Black Sea National University  
Medical Institute  
Department of Therapeutic and Surgical Disciplines



COURSE DESCRIPTION

" Pediatrics with children's infectious diseases with in-depth study of pediatric cardiology and nephrology "

Specialty 222 "Medicine"

Developer  
Head-of the Department of Developer  
Guarantor of the educational program  
Director of the institute  
Head of NMV

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## 1. Description of the discipline

Characteristic	Characteristics of the discipline	
Name of discipline	Pediatrics with pediatric infectious diseases <b>with</b> in-depth study of pediatric cardiology and nephrology	
Branch of knowledge	22 "Health care"	
Specialty	222 "Medicine"	
Specialization (if any)		
Educational program	Medicine	
Level of higher education	Master	
Discipline status	Selective	
Curriculum	6th	
Academic year	2021-2022	
Semester numbers:	Full-time	Correspondence form
	11th, 12th	
Total number of ECTS credits / hours	10.5 credits (5.5 / 5) / 315 hours	
Course structure: - lectures - practical training - hours of independent work of students	Full-time	Correspondence form
	- 180 (94/86) 135 (71/64)	
Percentage of classroom load	52%	
Language of instruction	Ukrainian	
Form of intermediate control (if any)	Certification for the 11th semester	
Form of final control	Credit - 12th semester	

## 2. Purpose, tasks and planned learning outcomes

**The purpose of** teaching the discipline "Pediatrics with pediatric infectious diseases with in-depth study of pediatric cardiology and nephrology" is to provide students with knowledge and professional skills in the differential diagnosis of the most common non-communicable and infectious diseases of childhood, dispensary supervision of healthy and sick children first aid for the most common emergencies in children based on knowledge of age anatomical and physiological features of the child's body, etiology, pathogenesis, classification, clinical manifestations, methods of diagnosis, treatment and prevention of the most common non-communicable and infectious diseases of childhood and clinical, laboratory and instrumental skills examination of the child in compliance with the principles of medical ethics and deontology, the acquisition by the student of professional skills in maintaining medical records.

**The main objectives** of the discipline "Pediatrics with pediatric infectious diseases with in-depth study of pediatric cardiology and nephrology" are:

- Assimilation of basic theoretical knowledge on the most common non-communicable and infectious diseases of childhood, dispensary supervision of healthy and sick children in an outpatient setting.
- Mastering the basic practical skills and abilities in diagnosis, differential diagnosis, treatment of complicated and uncomplicated forms of the most common non-infectious and infectious diseases of childhood;
- Mastering the basic practical skills and abilities to provide emergency care in emergencies in the case of the most common non-communicable and infectious diseases of childhood.
- Maintaining medical records.
- Formation of students' moral, ethical and deontological qualities in professional communication with a sick child and persons caring for a child.

**Interdisciplinary links** : in accordance with the curriculum, the study of the discipline "Pediatrics, pediatric infectious diseases with in-depth study of pediatric cardiology and nephrology" is provided in the XI - XII semesters. Prior to that, the student acquired relevant knowledge in the basic disciplines: medical biology, normal anatomy, normal physiology, histology and embryology, bioorganic and biological chemistry, microbiology, virology and immunology, pathomorphology, pathophysiology, pharmacology, and clinical disciplines: propaetripedic, pediatric therapy, surgery, obstetrics, clinical pharmacology, pediatric infectious diseases with which the curriculum is integrated.

In turn, the discipline "Pediatrics with pediatric infectious diseases with in-depth study of pediatric cardiology and nephrology" forms the basis for further training in internship and application in professional activities.

**Expected learning outcomes. As a result of studying the discipline, students have:**

1. To determine the etiological and pathogenetic factors of the most common somatic and non-infectious diseases of childhood, diseases of newborns.
2. Classify and analyze the typical clinical picture of the most common somatic and non-infectious diseases of childhood, diseases of newborns.
3. To determine the features of diseases of newborns .
4. Make a plan of examination and analyze the data of laboratory and instrumental examinations in the typical course of the most common somatic and non-infectious diseases of childhood, diseases of newborns.
5. Demonstrate mastery of the principles of treatment, rehabilitation and prevention of diseases of newborns and the most common somatic and non-infectious diseases of childhood.
6. Diagnose and provide emergency care for major emergencies in newborns and children with the most common somatic and non-communicable diseases of childhood.
7. Carry out differential diagnosis and make a preliminary diagnosis in the typical course of diseases of newborns and the most common children's non-communicable diseases.
8. Assess the prognosis of the most common somatic and non-infectious diseases of childhood, diseases of the newborn.

9. Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in pediatrics.
10. Preliminary diagnosis of the most common infectious diseases of children.
11. Determine the etiological and pathogenetic factors the most common infectious diseases of children.
12. Distinguish the features of the clinical course most common infectious diseases of children.
13. Identify the main areas of treatment the most common infectious diseases of children.
14. Identify preventive and anti-epidemic measures for the most common infectious diseases of children.

According to the requirements of the educational-professional program, students must

**know:**

- definition, epidemiology, classification, etiology and pathogenesis of the most common non-infectious and infectious diseases of children;
- clinical manifestations of uncomplicated and complicated course of the most common non-infectious and infectious diseases of children;
- criteria for establishing a preliminary clinical diagnosis at the most widespread non-infectious and infectious diseases of children;
- laboratory and instrumental plan examination of children with the most common non-infectious and infectious diseases of childhood;
- differential diagnosis of the most common non-communicable and infectious diseases of children;
- criteria for establishing the final clinical diagnosis in the most common non-infectious and infectious diseases of children;
- treatment of the most common non-communicable and infectious diseases of children;
- protocol of first aid for the most common non-communicable and infectious diseases of children
- prevention of the most common non-communicable and infectious diseases of children. Organization of anti-epidemic measures in the center of the most common infectious diseases in children. Calendar of preventive vaccinations;
- prognosis for the most common non-infectious and infectious diseases of children;
- dispensary observation in the most common non-infectious and infectious diseases of children.
- basic principles of medical ethics and deontology in professional communication with a sick child and persons caring for a child;

**be able:**

- Identify different clinical variants and complications of the most common diseases of childhood
- Plan the examination of a sick child and interpret the results of the most common diseases of childhood
- Carry out differential diagnosis and make a preliminary clinical diagnosis of the most common diseases of childhood
- To determine the tactics of patient management in the most common diseases of childhood
- To demonstrate the ability of medical records at the clinic of children's diseases
- Diagnose and provide emergency care for major emergencies in the pediatric clinic

The developed program corresponds to the *educational-professional program (OPP)* and is focused on the formation of *competencies*:

**general (ZK) - ZK1-ZK3 OPP:**

ZK1. Ability to abstract thinking, analysis and synthesis, the ability to learn and master modern knowledge.

ZK2. Ability to apply knowledge in practical situations.

ZK3. Knowledge and understanding of the subject area and understanding of professional activity.

**professional (FC) - FC1- FC 9, FC11, FC16, FC18 OPP:**

- Patient interviewing skills.
- Ability to determine the required list of laboratory and instrumental studies and evaluate their results.
- Ability to establish a preliminary and clinical diagnosis of the disease.
- Ability to determine the required mode of work and rest in the treatment of diseases.
- Ability to determine the nature of nutrition in the treatment of diseases.
- Ability to determine the principles and nature of disease treatment.
- Ability to diagnose emergencies.
- Ability to determine the tactics of emergency medical care.
- Emergency care skills.
- Skills to perform medical manipulations.
- Ability to determine the tactics of management of persons subject to dispensary supervision.
- Ability to keep medical records.

According to the educational-professional program, the expected **program learning outcomes (PRN)** include the skills of **PRN11, PRN13-18, PRN22, PRN25, PRN28, PRN30, PRN32, PRN33, PRN35, PRN41 OPP** :

- Collect data on patient complaints, medical history, life history ( including professional history), in a health care facility, its unit or at the patient's home, using the results of the interview with the patient, according to the standard scheme of the patient. Under any circumstances (in a health care facility, its unit, at the patient's home , etc.), using knowledge about the person, his organs and systems, according to certain algorithms:

- collect information about the general condition of the patient (consciousness, constitution) and appearance (examination of the skin, subcutaneous fat layer, palpation of lymph nodes, thyroid and mammary glands);

assess the psychomotor and physical development of the child;

- examine the condition of the cardiovascular system (examination and palpation of the heart and superficial vessels, determination of percussion boundaries of the heart and blood vessels, auscultation of the heart and blood vessels);

- examine the condition of the respiratory organs (examination of the chest and upper respiratory tract, palpation of the chest, percussion and auscultation of the lungs);

- examine the condition of the abdominal cavity (examination of the abdomen, palpation and percussion of the intestines, stomach, liver, spleen, palpation of the pancreas, kidneys, pelvic organs, finger examination of the rectum);

examine the condition of the musculoskeletal system (examination and palpation);

examine the state of the nervous system;

examine the condition of the genitourinary system;

- to assess the state of fetal development according to the calculation of fetal weight and auscultation of his heartbeat.

In the conditions of the health care institution, its subdivision and among the attached population:

- Be able to identify and record the leading clinical symptom or syndrome (according to list 1) by making an informed decision, using preliminary data of the patient's history, physical examination of the patient, knowledge of the person, his organs and systems, adhering to relevant ethical and legal norms.

- Be able to establish the most probable or syndromic diagnosis of the disease (according to list 2) by making an informed decision, by comparing with standards, using previous history and examination of the patient, based on the leading clinical symptom or syndrome, using knowledge about the person, his organs and system, adhering to the relevant ethical and legal norms.

In the conditions of a health care institution, its subdivision:

- Assign a laboratory and / or instrumental examination of the patient (according to list 4) by making an informed decision, based on the most probable or syndromic diagnosis, according to standard schemes, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms.

- Carry out differential diagnosis of diseases (according to list 2) by making an informed decision, according to a certain algorithm, using the most probable or syndrome diagnosis, laboratory and instrumental examination of the patient, knowledge of the person, his organs and systems, adhering to ethical and legal norms.

- Establish a preliminary clinical diagnosis (according to list 2) by making an informed decision and logical analysis, using the most probable or syndromic diagnosis, laboratory and instrumental examination of the patient, conclusions of differential diagnosis, knowledge of man, his organs and systems, adhering to relevant ethical and legal norms .

- Determine the desired mode of work and rest in the treatment of disease (2 on the list), in terms of health care facility, home of the patient and during medical evacuation in t. H. In field conditions, based on previous clinical diagnosis using knowledge of man, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

- Determine the necessary medical nutrition in the treatment of the disease (according to list 2), in a health care facility, at the patient's home and at the stages of medical evacuation, including in the field on the basis of a preliminary clinical diagnosis, using knowledge about the person, his bodies and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

- To determine the nature of the treatment (conservative, surgical) disease (2 on the list), in terms of health care facility, home of the patient and the stages of medical evacuation in t. H. In field conditions on the basis of previous clinical diagnosis using knowledge of human , its bodies and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

- To determine the principles of treatment of the disease (2 on the list), in terms of establishment health care, home of the patient and on the stages of medical evacuation in t. H. The field, based on previous clinical diagnosis using knowledge of a person of organs and systems , adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

- Establish a diagnosis (according to list 3) by making an informed decision and assessing the human condition, under any circumstances (at home, on the street, health care facility, its units), including in an emergency, in the field , in conditions of lack of information and limited time, using standard methods of physical examination and possible anamnesis, knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms.

- Perform medical manipulations (according to list 5) in a medical institution, at home or at work on the basis of previous clinical diagnosis and / or indicators of the patient's condition, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms, by making informed decisions and using standard techniques.

- To form, in the conditions of a health care institution, its division on production, using the generalized procedure of an estimation of a state of human health, knowledge of the person, its bodies and systems, adhering to the corresponding ethical and legal norms, by acceptance of the reasonable decision, among the fixed contingent of the population. : dispensary groups of patients;

- groups of healthy people subject to dispensary supervision (newborns, children, adolescents, pregnant women, representatives of professions that must undergo a mandatory dispensary examination).

- Organize secondary and tertiary prevention measures among the assigned population, using a generalized procedure for assessing human health (screening, preventive medical examination, seeking medical care), knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision, in a health care facility, in particular:

to form groups of dispensary supervision;

- to organize medical and health-improving measures differentiated from the group of medical examination.

- Carry out in the conditions of a health care institution, its subdivision:

- • detection and early diagnosis of infectious diseases (according to list 2);

- \* primary anti-epidemic measures in the center of an infectious disease.

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- In the health care facility, or at the patient's home on the basis of the obtained data on the patient's health, using standard schemes, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms, by making an informed decision:

- • to determine the tactics of examination and secondary prevention of patients subject to dispensary supervision;

- • to determine the tactics of examination and primary prevention of healthy persons subject to dispensary supervision;

- • calculate and prescribe the necessary food for children in the first year of life.

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- Determine the presence and degree of restrictions on life, type, degree and duration of disability with the issuance of relevant documents in a health care institution on the basis of data on the disease and its course, features of professional activity.

- On the territory of service according to standard methods of descriptive, analytical epidemiological and medical-statistical researches:

- • to conduct screening for the detection of major non-communicable diseases;

- • evaluate the dynamics and in comparison with the average static data of morbidity, including tonic non-communicable diseases, disability, mortality, integrated health indicators;

- identify risk factors for the occurrence and course of diseases;

to form risk groups of the population. In the conditions of the health care institution, its subdivision and among the attached population:

• Be able to identify and record the leading clinical symptom or syndrome (according to list 1) by making an informed decision, using preliminary data of the patient's history, physical examination of the patient, knowledge of the person, his organs and systems, adhering to relevant ethical and legal norms.

• Be able to establish the most probable or syndromic diagnosis of the disease (according to list 2) by making an informed decision, by comparing with standards, using previous history and examination of the patient, based on the leading clinical symptom or syndrome, using knowledge about the person, his organs and system, adhering to the relevant ethical and legal norms.

In the conditions of a health care institution, its subdivision:

• Assign a laboratory and / or instrumental examination of the patient (according to list 4) by making an informed decision, based on the most probable or syndromic diagnosis, according to standard schemes, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms.

• Carry out differential diagnosis of diseases (according to list 2) by making an informed decision, according to a certain algorithm, using the most probable or syndromic diagnosis, laboratory and instrumental examination of the patient, knowledge about the person, his organs and systems,

adhering to ethical and legal norms.

- Establish a preliminary clinical diagnosis (according to list 2) by making an informed decision and critical analysis, using the most probable or syndromic diagnosis, laboratory and instrumental examination of the patient, the conclusions of differential diagnosis, knowledge of man, his organs and systems, adhering to relevant ethical and legal norms

Determine the required mode of work and rest in the treatment of disease (2 on the list), in terms of health care facility, home of the patient and during medical evacuation in t. H. In field conditions, based on previous clinical diagnosis using knowledge of man, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

Determine the necessary medical nutrition in the treatment of the disease (according to list 2), in a health care facility, at the patient's home and at the stages of medical evacuation, including in the field on the basis of a preliminary clinical diagnosis, using knowledge about the person, his bodies and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

Determine the nature of treatment (conservative, operative) of the disease (according to list 2), in a health care facility, at home of the patient and at the stages of medical evacuation, including in the field on the basis of a previous clinical diagnosis, using knowledge about the person , its bodies and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

To determine the principles of treatment of the disease (2 on the list), in terms of establishment of health, home of the patient and during medical evacuation in t. H. The field, based on previous clinical diagnosis using knowledge of a person of organs and systems , adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

- Establish a diagnosis (according to list 3) by making an informed decision and assessing the human condition, under any circumstances (at home, on the street, health care facility, its units), including in an emergency, in the field , in conditions of lack of information and limited time, using standard methods of physical examination and possible anamnesis, knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms.

- In the conditions of a health care institution or its subdivision according to standard methods:
  - • to select and use unified clinical protocols for the provision of medical care, developed on the basis of evidence-based medicine;
  - • take part in the development of local protocols for medical care;
  - • to control the quality of medical care on the basis of statistical data, expert evaluation and sociological research data using indicators of structure, process and results of activities;
  - • identify factors that hinder the improvement of the quality and safety of medical care.

### **3. The program of the discipline**

The educational process is organized according to the European Credit Transfer and Accumulation System (ECTS).

The curriculum of the discipline "Pediatrics, pediatric infectious diseases with in-depth study of pediatric cardiology and nephrology" consists of the following blocks:

#### **BLOCK 1. The most common somatic diseases in children**

*Sections:*

1. Diseases of children of early age



2. Respiratory diseases in children.
3. Cardiorheumatology child's age
4. Gastroenterology of childhood
5. Diseases of the urinary system in children

## **Section 1. Diseases of young children**

### **Specific goals:**

1. To determine the etiological and pathogenetic factors of rickets, spasmophilia, hypervitaminosis D and protein-energy deficiency.
2. Classify and analyze the typical clinical picture of rickets, spasmophilia, hypervitaminosis D and protein-energy deficiency.
3. Make a survey plan and analyze the data of laboratory and instrumental examinations in the typical course of the most common functional gastrointestinal disorders, rickets, spasmophilia and hypervitaminosis D in young children.
4. Demonstrate mastery of the principles of treatment, rehabilitation and prevention of rickets, spasmophilia, hypervitaminosis D, protein-energy deficiency in children.
5. Make a preliminary diagnosis of rickets and protein-energy deficiency in children.
6. To make a life prognosis for rickets, hypervitaminosis D, protein-energy deficiency in children.
7. Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in pediatrics.

## **Section 2. Respiratory diseases in children**

### **Specific goals:**

1. To determine the etiological and pathogenetic factors of acute respiratory diseases of the upper respiratory tract (acute nasopharyngitis, acute pharyngitis, acute obstructive laryngitis, acute laryngopharyngitis, acute tracheitis, bronchitis, acute bronchitis, acute obstructive pulmonary disease). systems in children.
2. Classify acute respiratory diseases of the upper respiratory tract, acute bronchitis and pneumonia, respiratory failure, fever, convulsions, birth defects and chronic diseases of the bronchopulmonary system; analyze the typical clinical picture of acute nasopharyngitis, acute pharyngitis, acute obstructive laryngitis (croup), acute laryngopharyngitis, acute tracheitis, acute bronchitis, acute obstructive bronchitis, acute bronchiolitis, recurrent bronchitis, pneumonia, respiratory failure in children, hyperthermal syndrome and seizures, neyrotoksykozu, congenital malformations and chronic diseases of the bronchopulmonary system in children.
3. Make plans examination and analyze information of laboratory and instrumental investigations at typical course of acute nasopharyngitis, acute pharyngitis, acute obstructive laryngitis (croup), acute laryngopharyngitis, acute tracheitis, acute bronchitis, acute obstructive bronchitis, acute bronchiolitis, recurrent bronchitis, pneumonia, congenital and chronic diseases of the bronchopulmonary system in children.
4. Preliminary diagnosis of acute respiratory infections of the upper respiratory tract, acute bronchitis, pneumonia, congenital malformations and chronic diseases of the bronchopulmonary system in children, to determine emergencies in this pathology.
5. Demonstrate mastery of the principles of treatment, rehabilitation and prevention of acute nasopharyngitis, acute pharyngitis, acute laryngopharyngitis, acute tracheitis, acute bronchitis, acute obstructive bronchitis, acute bronchiolitis, recurrent bronchitis and pneumonia, pneumonia and pneumonia in children.

6. To predict life in acute respiratory infections of the upper respiratory tract, acute bronchitis, pneumonia, congenital malformations and chronic diseases of the bronchopulmonary system in children.

7. To determine the etiological and pathogenetic factors of urticaria, atopic dermatitis, allergic rhinitis, bronchial asthma in children.

8. Classify and analyze the typical clinical picture of urticaria, atopic dermatitis, allergic rhinitis, bronchial asthma in children.

9. Make a plan of examination and analyze the data of laboratory and instrumental examinations in the typical course of urticaria, atopic dermatitis, allergic rhinitis, bronchial asthma in children.

10. Demonstrate mastery of the principles of treatment, rehabilitation and prevention of allergic diseases in children. Provide emergency care for Quincke's edema.

11. Preliminary diagnosis of urticaria, atopic dermatitis, allergic rhinitis, bronchial asthma in children.

12. To make a life prognosis for urticaria, atopic dermatitis, allergic rhinitis, bronchial asthma in children.

13. Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in pulmonology and allergology of childhood.

### **Section 3. Cardiorheumatology of childhood**

#### **Specific goals:**

1. To determine the etiological factors and hemodynamics in the most common congenital heart defects (AF) in children (ventricular septal defect (IBD), atrial septal defect (MPD), Fallot's tetrad, aortic coarctation, pulmonary artery stenosis, arterial stenosis, aortic duct (VAP));

2. To determine the etiology and pathogenesis of carditis, infectious endocarditis, cardiomyopathies, acute rheumatic fever, JRA and other systemic connective tissue diseases, reactive arthropathy, cardiac arrhythmias and conduction in children.

3. Classify and analyze the typical clinical picture of the most common airways in children, carditis, infectious endocarditis, cardiomyopathies, acute rheumatic fever, JRA and other systemic connective tissue diseases, reactive arthropathy, cardiac arrhythmias and conduction in children.

4. Make a plan of examination and analyze the data of laboratory and instrumental examinations in the typical course of the most common congenital heart defects in children (IBE defect, WFP defect, Fallot's tetrad, aortic coarctation, pulmonary artery stenosis, aortic stenosis, transposition of main vessels and vascular infections). endocarditis, cardiomyopathies, acute rheumatic fever, JRA and other systemic connective tissue diseases, reactive arthropathies, arrhythmias and conduction in children.

5. Demonstrate mastery of the principles of treatment, rehabilitation and prevention of the most common congenital heart defects in children (IBE defect, WFP defect, Fallot's tetrad, coarctation of the aorta, pulmonary artery stenosis, aortic stenosis, transposition of main vessels and VAP), cardiopa, cardiopathy, endocarditis rheumatic fever, JRA and other systemic connective tissue diseases, reactive arthropathies, cardiac arrhythmias and conduction in children.

6. Preliminary diagnosis of the most common BBC, acute rheumatic fever, JRA and other systemic connective tissue diseases, reactive arthropathies, carditis, cardiomyopathies, arrhythmias and conduction in children.

7. To make a prognosis for the most common congenital heart defects in children (IBE defect, WFP defect, Fallot's tetrad, aortic coarctation, pulmonary artery stenosis, aortic stenosis, transposition of main vessels and VAP), carditis, infectious endocarditis, cardiac endocarditis, other systemic connective tissue diseases, reactive arthropathies, cardiac arrhythmias and conduction in children.

8. Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in pediatric cardiorheumatology .

## **Section 4. Diseases of the digestive system in children**

### **Specific goals:**

1. To determine the etiological and pathogenetic factors of functional (functional dyspepsia, cyclic vomiting syndrome, functional constipation, irritable bowel syndrome, infantile colic), and organic diseases of the digestive tract, biliary tract and pancreas in children.
2. Classify and analyze the typical clinical picture of functional (functional dyspepsia, cyclic vomiting syndrome, colic, functional diarrhea, functional constipation, irritable bowel syndrome) and organic diseases of the digestive tract, biliary tract and pancreas in older children.
3. Make a plan of examination and analyze the data of laboratory and instrumental examinations in the typical course of functional (functional dyspepsia, cyclic vomiting syndrome, colic, functional diarrhea, functional constipation, irritable bowel syndrome) and organic diseases of the digestive tract, biliary tract and bile ducts .
4. Demonstrate mastery of the principles of treatment, rehabilitation and prevention of functional and organic diseases of the digestive tract, biliary system and pancreas in children.
5. Make a preliminary diagnosis of functional and organic diseases of the digestive tract, biliary system and pancreas in children.
6. To predict life in functional and organic diseases of the digestive tract, biliary tract and pancreas in older children.
7. Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in pediatric gastroenterology.

## **Section 5. Diseases of the urinary system in children**

### **Specific goals:**

1. Determine the etiological and pathogenetic factors of urinary tract infections (cystitis, pyelonephritis); glomerulonephritis, chronic renal failure and dysmetabolic nephropathy in children.
2. Classify and analyze the typical clinical picture of urinary tract infections (cystitis, pyelonephritis); glomerulonephritis, acute and chronic renal failure and dysmetabolic nephropathy in children.
3. Make a plan of examination and analyze the data of laboratory and instrumental examinations for urinary tract infections (cystitis, pyelonephritis); glomerulonephritis, chronic renal failure, dysmetabolic nephropathy in children.
4. Demonstrate mastery of the principles of treatment, rehabilitation and prevention of urinary tract infections (cystitis, pyelonephritis); glomerulonephritis, chronic renal failure, dysmetabolic nephropathy in children.
5. Make a preliminary diagnosis of urinary tract infection (cystitis, pyelonephritis); glomerulonephritis, chronic renal failure and dysmetabolic nephropathy in children.
6. To make a life prognosis for urinary tract infections (cystitis, pyelonephritis); glomerulonephritis, chronic renal failure and dysmetabolic nephropathy in children.
7. Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in pediatric nephrology.

## **BLOCK 2. Children's infectious diseases**

### **Section 1. Differential diagnosis of infectious diseases with exanthema syndrome in children and pediatric respiratory diseases. Emergency care for major emergencies.**

#### **Topic 1. Differential diagnosis of infectious diseases with exanthema syndrome in children.**

Leading clinical symptoms and variants of infections with exanthema syndrome (measles, rubella, chickenpox, scarlet fever, pseudotuberculosis). Differential diagnosis of exanthema

syndrome in various infectious and non-infectious diseases. Tactics of patients management, organization of anti-epidemic measures in the center of infection in diseases with exanthema syndrome.

### **Topic 2. Differential diagnosis and emergencies in pediatric respiratory infections.**

Leading clinical symptoms and variants of pediatric respiratory infections (diphtheria, infectious mononucleosis, mumps, pertussis). Differential diagnosis of various forms of pediatric respiratory infections. Differential diagnosis of sore throat and croup syndromes in various infectious and non-infectious diseases. Tactics of managing a patient with croup syndrome. Emergency care for cereals. Features of the apnea form of pertussis in children. Tactics of treating a patient with pertussis in order to prevent apnea. Emergency care for respiratory arrest in patients with pertussis. Organization of anti-epidemic measures in the center of infection in pediatric respiratory infections.

### **Section 2. Differential diagnosis of acute intestinal infections (ACI). Emergencies at GKI.**

#### **Topic 3. Differential diagnosis and emergencies in GCI in children. Diagnosis and treatment.**

Leading clinical symptoms and syndromes of GCI: local (gastritis, enteritis, colitis) and general (toxicosis, exsiccosis, neurotoxicosis, toxicosis-septic condition). Clinical variants of shigellosis, salmonellosis, Escherichia coli, intestinal yersiniosis, viral diarrhea in children of different ages. Differential diagnosis of GCI among themselves and with diseases of the gastrointestinal tract of non-infectious origin. Tactics of management of children with GKI (examination, indications for hospitalization, treatment). Anti-epidemic measures in the center of infection.

Leading clinical symptoms of toxic-exicosis and neurotoxicosis in GCI in children. Data from laboratory and instrumental studies in toxic-exicosis and neurotoxicosis syndromes. Tactics of a general practitioner in the diagnosis of emergencies in GCI in children, emergency care.

### **Section 3. Differential diagnosis and emergencies in neuroinfections in children.**

#### **Topic 4. Differential diagnosis of neuroinfections in children**

Leading clinical symptoms and variants of meningococcal infection. Differential diagnosis of meningococemia with diseases accompanied by hemorrhagic rash (hemorrhagic vasculitis, thrombocytopenic purpura, etc.). Leading clinical symptoms of bacterial and viral meningitis, their complications and differential diagnosis. Clinical and laboratory characteristics of primary and secondary encephalitis, their complications and differential diagnosis. Tactics of management of patients with meningitis and encephalitis.

#### **Topic 5. Emergencies in neuroinfections in children. Diagnosis and treatment**

Leading clinical symptoms of infectious-toxic shock (ITS) in meningococcal infection and edema-swelling of the brain (NGM) in neuroinfections in children. Tactics of patient management and emergency care in ITS and NGM.

### **Section 4. Differential diagnosis and emergencies in viral hepatitis (HCV) in children.**

#### **Topic 6. Differential diagnosis and emergencies in viral hepatitis (HCV) in children**

Leading clinical symptoms, data from laboratory and instrumental studies in different clinical variants and depending on the pathogen of HCV. Differential diagnosis of typical and atypical forms of HCV in children. Tactics of managing a patient with viral hepatitis. Anti-epidemic measures in the center of infection. Leading clinical symptoms of acute liver failure in HCV in children. Indicators of laboratory and instrumental studies in assessing the severity and prognosis of HCV with acute liver failure syndrome. Tactics of management of the patient with VG with a syndrome of acute hepatic insufficiency. Providing emergency care.

### **Section 5. Differential diagnosis and emergencies in influenza and SARS in children. Immunoprophylaxis of infectious diseases in children.**

#### **Topic 7. Differential diagnosis and emergencies in influenza and SARS in children**

Leading clinical symptoms of influenza and SARS in children. Differential diagnosis of influenza, parainfluenza, adenoviral, respiratory syncytial (MS), rhinovirus infection, etc. Pandemic influenza, its epidemiological and clinical and pathogenetic features. Leading clinical symptoms of

emergencies observed in influenza and SARS (hyperthermic syndrome and acute stenotic laryngotracheitis syndrome). Tactics of managing patients with influenza and SARS. Emergency care in case of emergency. Prevention of influenza and SARS in children.

**Topic 8. Immunoprophylaxis of infectious diseases in children**

Calendar of preventive vaccinations. Vaccination by age. Vaccinations are recommended. Vaccination for health reasons. Contraindications to vaccination. Post-vaccination reactions and complications, their diagnosis and treatment. Anaphylactic shock, diagnosis and emergency care.

**The structure of the discipline**

**Block 1**

	<b>T opi c</b>	<b>Lectur es</b>	<b>Practic al trainin g</b>	<b>CP C</b>
	<b>Section 1. Diseases of young children</b>			
1	Protein and energy deficiency in children		2	2
2	Rickets, spasmophilia, hypervitaminosis "D"		2	2
	<b>Section 2. Respiratory diseases in children</b>			
3	Acute respiratory infections of the upper respiratory tract in children. Neurotoxicosis. Acute bronchitis in children		4	2
4	Congenital malformations and chronic diseases of the bronchopulmonary system in children		2	4
5	Pneumonia in children		2	2
6	Treatment of pneumonia in children, rational antibiotic therapy		4	2
7	Bronchial asthma in children. Urticaria		4	3
8	Atopic dermatitis. Respiratory allergies and allergic rhinitis in children		2	3
	<b>Section 3. Cardiorheumatology of childhood</b>			
9	Non-rheumatic carditis. Cardiac arrhythmias and conduction in children		4	4
10	Heart failure in children, cardiomyopathy		6	4
11	Congenital heart disease in children		4	4
12	Treatment of congenital heart defects in children, prevention of infectious endocarditis in children.		4	4

13	Acute rheumatic fever, chronic rheumatic heart disease in children.		6	2
14	Acquired heart defects in children			
15	Systemic connective tissue diseases and reactive arthritis in children		6	2
<b>Section 4. Gastroenterology of childhood</b>				
16	Functional gastrointestinal disorders of the digestive tract in children		2	2
17	Diseases of the esophagus and stomach in children		2	2
18	Intestinal diseases in children.		4	4
19	Diseases of the biliary system in children		2	2
20	Diseases of the pancreas in children.		2	2
<b>Section 5. Diseases of the urinary system in children</b>				
21	Glomerulonephritis in children. Tubulointerstitial nephritis. ARF		6	3
22	Chronic renal failure in children, the concept of chronic kidney disease		6	2
23	Urinary tract infections and dysmetabolic nephropathy in children		6	4
24	Protection of medical history		4	6
<b>Final control</b>			4	4
<b>Total r one: 165</b>			94	71
<b>ECTS credits - 5.5; Classroom work - 57%, VTS - 43%</b>				

## Block 2

Names of blocks and topics		Number of hours				
		Total	Lectures	Practical training	CPC	
					Individual.	Alone.
<b>Section 1 Differential diagnosis of pediatric respiratory and neuroinfectious diseases in children. Emergency care for major emergencies</b>						
1	Differential diagnosis of infectious diseases with exanthema syndrome in children.	14		8		6
2	Differential diagnosis and emergencies in pediatric respiratory infections	20		10	4	6
3	Differential diagnosis of neuroinfections in children	20		10	4	6
4	Emergencies in neuroinfections	16		10		6

	children. Diagnosis and treatment					
<b>Section 2. Differential diagnosis of acute intestinal infections (ACI) and viral hepatitis (HCV) in children. Emergencies in GKI and VG</b>						
5	Differential diagnosis of GCI in children	16		8	4	4
6	Emergencies in GCI in children. Diagnosis and treatment	12		8		4
7	Differential diagnosis and emergencies in viral hepatitis (HCV) in children	16		8	4	4
<b>Section 3. Differential diagnosis and emergencies in influenza and SARS in children. Immunoprophylaxis of infectious diseases in children.</b>						
8	Differential diagnosis and emergencies in influenza and SARS in children	12		8		4
9	Immunoprophylaxis of infectious diseases in children	12		8		4
	Final control № 2	12		8		4
<b>Total hours from block 2</b>		<b>150</b>		<b>86</b>	<b>16</b>	<b>48</b>
<b>ECTS credits - 5.0; Classroom work - 56%, VTS - 44%</b>						

#### 4. The content of the discipline

##### 4.1 Thematic plan of lectures

Lectures on the program are not provided

##### 4.2 Thematic plan of practical classes

#### BLOCK 1. The most common somatic diseases in children

№	Topic	Several hours
1	Protein and energy deficiency in children,	2
2	Rickets, spasmophilia, hypervitaminosis "D".	2
3	Acute respiratory infections of the upper respiratory tract in children. Neurotoxicosis. Acute bronchitis in children.	4
4	Congenital malformations and chronic diseases of the bronchopulmonary system in children	2
5	Pneumonia in children	2
6	Treatment of pneumonia in children, rational antibiotic therapy	4
7	Bronchial asthma in children. Urticaria.	4
8	Atopic dermatitis. Respiratory allergies and allergic rhinitis in children	2
9	Non-rheumatic carditis. Disorders of heart rhythm and conduction in children	4

10	Heart failure in children, cardiomyopathy	6
11	Congenital heart disease in children	4
12	Treatment of congenital heart defects in children, prevention of infectious endocarditis in children.	4
13	Acute rheumatic fever, chronic rheumatic heart disease in children	6
14	Systemic connective tissue diseases and reactive arthritis in children	4
15	Acquired heart defects in children	6
16	Functional gastrointestinal disorders of the digestive tract in children	2
17	Diseases of the esophagus and stomach in children	2
18	Intestinal diseases in children.	4
19	Diseases of the biliary system in children	2
20	Diseases of the pancreas in children.	2
21	Glomerulonephritis in children. Tubulointerstitial nephritis. ARF.	6
22	Chronic renal failure in children, the concept of chronic kidney disease	6
23	Urinary tract infections and dysmetabolic nephropathy in children	6
24	Protection of medical history	4
	<b>Final control № 1</b>	<b>4</b>
	<b>Total hours: 165</b>	<b>94</b>

### BLOCK 2. Children's infectious diseases

№	Topic	Several hours
1	Differential diagnosis of infectious diseases with exanthema syndrome in children	8
2	Differential diagnosis and emergencies in pediatric respiratory infections	10
3	Differential diagnosis of neuroinfections in children	10
4	Emergencies in neuroinfections in children. Diagnosis and treatment	10
5	Differential diagnosis of GCI in children	8
6	Emergencies in GCI in children. Diagnosis and treatment	8
7	Differential diagnosis and emergencies in viral hepatitis (HCV) in children	8
8	Differential diagnosis and emergencies in influenza and SARS in children	8
9	Immunoprophylaxis of infectious diseases in children	8
1	<b>Final control № 2</b>	<b>8</b>
	<b>Hours in general</b>	<b>86</b>

### 4.3. Tasks for independent work

#### BLOCK 1. The most common somatic diseases in children

№ p / p	See SRS	Number of hours	Types of control
1	Preparation for practical classes and preparation of reports for individual work	51	Current control in practical classes
2	Additional elaboration of topics that are insufficiently considered in the classroom:	12	Final control
3.	Curation and writing a medical history	4	Final control and the last lesson



4.	Preparation for final control № 1	4	Final control
	<b>Hours in general</b>	<b>71</b>	

## BLOCK 2. Children's infectious diseases

№	Topic	Several hours
1	Differential diagnosis of infectious diseases with exanthema syndrome in children.	6
2.	Differential diagnosis and emergencies in pediatric respiratory infections	6
3	Differential diagnosis of neuroinfections in children	6
4	Emergencies in neuroinfections in children. Diagnosis and treatment	6
5	Differential diagnosis of GCI in children	4
6	Emergencies in GCI in children. Diagnosis and treatment	4
7	Differential diagnosis and emergencies in viral hepatitis (HCV) in children	4
8	Differential diagnosis and emergencies in influenza and SARS in children	4
9	Immunoprophylaxis of infectious diseases in children	4
10	Individual work of students	16
11	Preparation for the final control № 2	4
	<b>Hours in general</b>	<b>64</b>

### List of mandatory individual tasks for writing a medical history BLOCK 1. The most common somatic diseases in children

1. Curation and report on the medical history of a child with bronchial asthma.
2. Curation and report on the medical history of a child with pneumonia.
3. Curation and report on the medical history of a child with non-rheumatic carditis.
4. Curation and report on the medical history of a child with cardiomyopathy.
5. Curation and report on the medical history of a child with chronic pancreatitis.
6. Curation and report on the medical history of a child with rheumatic fever.
7. Curation and report on the history of a child with heart disease.
8. Curation and report on the history of a child with pyelonephritis.
9. Curation and report on the medical history of a child with chronic gastroduodenitis.
10. Curation and report on the medical history of a child with biliary dyskinesia.
11. Curation and report on the medical history of a child with obstructive bronchitis.
12. Curation and report on the history of a child with gastroduodenitis

Additional individual work can be done in the form of reports and presentations to highlight topics that are insufficiently studied in practice (**Congenital malformations and chronic diseases of the bronchopulmonary system, infectious endocarditis, dysmetabolic nephropathy, intestinal diseases in children**), topics are provided by the teacher.

### Typical test problems to be solved in practical classes

1 Child 3 days of life. The skin is yellowish. The child is lethargic, does not respond to external contractors. Hyperthermia to 38.3. BH 72 per minute Auscultatory in the lower lungs crepitating rales. Heart rate 178. The liver is enlarged to 5 cm, the spleen - up to 3 cm. Prescribe treatment tactics for the newborn

A Antibacterial, infusion therapy, respiratory support.

- B** Antibacterial, immunocorrective therapy
- C** Antibacterial, glucocorticoid, post-syndrome therapy
- D** Antibiotics, plasma transfusion
- E** Antibiotics, blood transfusions, vitamin therapy

2 Newborn baby from 3 pregnancies, 1 birth At birth, the skin is pink. Hemoglobin of blood 100 g / l, erythrocytes -  $3,6 \times 10^{12} / l$ . Blood bilirubin from the umbilical vein 60  $\mu\text{mol} / l$ . The blood group of the mother O (I) is rhesus negative, the child O (I), rhesus is positive. Coombs' reaction is positive. What kind of jaundice underlies this condition. Determine the tactics of treatment.

- A** Hemolytic
- B** Parenchymal
- C** Mechanical
- D** Bile thickening syndrome
- E** Atresia of the biliary tract.

3 The baby was born weighing 4.5 kg. During childbirth, the weakness of labor and its stimulation. In the analysis of blood erythrocytes  $6,2 \times 10^{12} / l$ , hemoglobin 160 g / l, hematocrit 0,59. After 6 hours, erythrocytes  $3,2 \times 10^{12} / l$ , hemoglobin 100 g / l, hematocrit 0.64. When examining BH 56 per minute., Heart rate - 175 beats per minute. A / T 34/16, average 18 mm Hg. Determine the tactics of treatment.

- A** Blood transfusion, hemostatic therapy
- B** Blood transfusion, proteolysis inhibitors
- C** Vikasol, fresh-frozen plasma.
- D** Refortan, heparin.
- E** Glucocorticoids, dry plasma.

4 At the newborn of 3 days with a respiratory distress syndrome deterioration of a condition is observed: lethargy, suppression of reflexes, diffuse cyanosis, swelling of nostrils, tachypnea 90 per minute, depression of the lower half of a thorax on breath, expressive retraction of a xiphoid sphincter. In the analysis of acid-base balance and gas composition of blood: PaO<sub>2</sub> - 45 mm Hg, PaCO<sub>2</sub> - 70 mm Hg, pH - 7.1. Choose the most optimal method of respiratory therapy.

- A** Forced artificial lung ventilation with a constant positive pressure mode in the respiratory tract
- B** Auxiliary hardware lung ventilation
- C** oxygen therapy through a face mask
- D** SDPPT for Gregory
- E** hyperbaric oxygenation

5 A newborn at the age of 32 weeks of gestation 2 hours after birth had progressive cyanosis, shortness of breath, swelling of the wings of the nose, intercostal involvement. Grade on the Silverman scale 4 points. Chest X-ray revealed nodular-reticular pattern of the lungs, reduced pneumatization, air bronchograms. Which diagnosis is most likely?

- A** Respiratory distress syndrome
- B** Intranatal asphyxia
- C** Congenital pneumonia
- D** Pneumothorax
- E** Congenital heart disease

#### 4.4. Ensuring the educational process

1. Multimedia projectors, computers, screens for multimedia presentations, lecture presentations.

2. Demonstration screens, laptops, files in Power Point and Word with tasks "Step-1" for practical and final classes.
3. Credit cards.

## **5. Final control**

### **The list of theoretical questions to the final control**

#### **BLOCK 1. The most common somatic diseases in children**

1. Acute bronchiolitis in children. Definition, etiology, pathogenesis, clinic, diagnosis, treatment and prevention.
2. Acute respiratory failure in children. Definition, classification, etiology, pathogenesis, clinic, diagnosis, emergency care.
3. Congenital malformations and chronic diseases of the bronchopulmonary system in children. Definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment and prevention. Forecast.
4. Regurgitation in infants: diagnostic criteria, treatment,
5. Rickets. Definition, etiology, pathogenesis, classification, clinic, diagnosis, treatment. Prevention of rickets. Spasmophilia.
6. Hypervitaminosis D. Etiology, pathogenesis, clinic, diagnosis, prevention, treatment, emergency care for acute hypervitaminosis D, prognosis.
7. Protein and energy deficiency in children. Definition, classification, clinic, prevention, prognosis. Removal of the child from the state of malnutrition ..
8. Acute respiratory diseases of the upper respiratory tract (acute nasopharyngitis, acute pharyngitis, acute laryngopharyngitis, acute tracheitis) in children. Etiology, pathogenesis, clinic, diagnosis, treatment and prevention.
9. Acute obstructive laryngitis (croup) in children. Etiology, pathogenesis, clinic and emergency care.
10. Therapeutic measures for fever and convulsions in children with SARS. Neurotoxicosis.
11. Acute bronchitis in children. Definition, etiology, pathogenesis, clinic, diagnosis, treatment and prevention.
12. Acute obstructive bronchitis in children. Definition, etiology, pathogenesis, clinic, diagnosis, treatment and prevention.
13. Functional gastrointestinal disorders in children: etiology, pathogenesis, classification, clinic, diagnosis, treatment, prevention.
14. Recurrent bronchitis in children. Definition, etiology, pathogenesis, clinic, diagnosis, treatment and prevention.
15. Pneumonia in children. Definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment and prevention of pneumonia in children. Forecast. Differential diagnosis with pulmonary tuberculosis. Oxygen therapy.
16. Cyclic vomiting syndrome: definition, diagnostic criteria, treatment, prevention.
17. Infant colic and functional constipation in young children: etiology, pathogenesis, clinic, diagnostic criteria, treatment, prevention.
18. Atopic dermatitis in children. Definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment and prevention, prognosis. Atopic march.
19. Respiratory allergies in children. Allergic rhinitis in children. Definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment and prevention, prognosis.
20. Urticaria in children. Definition, etiology, pathogenesis, clinic, diagnosis, treatment, prevention. Anaphylactic shock, emergency care. Quincke's edema, emergency care.
21. Bronchial asthma in children. Definition. Risk factors and pathophysiological mechanisms of bronchial asthma. Classification, clinic, diagnosis, treatment and prevention of bronchial asthma in children, prognosis.

22. Asthmatic status in children. Etiology, pathogenesis, clinic, diagnosis, emergency care.

23. The most common BBC in children. Etiology, classification of heart defects, hemodynamics in the most common VVS in children (IBE defect, WFP defect, Fallot's tetrad, aortic coarctation, pulmonary artery stenosis, aortic stenosis, arterial vessel transposition and VAP). Emergency care for shortness of breath - cyanotic attack.

24. Diagnosis of the most common BBC in children. Physician tactics and prognosis in the most common BBC in children. Conservative treatment. Indications for cardiac surgery. Secondary prevention of infectious endocarditis.

25. Diagnosis and treatment of acute and chronic heart failure. Digitization methods .

26. Carditis in children: definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, prognosis.

27. Cardiomyopathies in children: definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, prognosis.

28. Cardiac arrhythmias and conduction in children: classification, causes, clinic, diagnosis, treatment, prognosis.

29. Acute rheumatic fever in children. Definition, classification, etiology, pathogenesis , clinic, diagnosis, treatment, primary and secondary prevention, prognosis.

30. JRA: definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, rehabilitation, prognosis.

31. Systemic lupus erythematosus in children: definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, rehabilitation, prognosis.

32. Dermatomyositis in children: definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, rehabilitation, prognosis.

33. Systemic scleroderma in children: definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, rehabilitation, prognosis.

34. Reactive arthropathies in children: definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, prognosis.

35. Infectious endocarditis in children: definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, primary and secondary prevention, prognosis.

36. Functional dyspepsia in children, diagnostic criteria, treatment,

37. Gastroesophageal reflux disease (GERD) in children. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention.

38. Organic diseases of the esophagus and stomach in older children.

Etiology, pathogenesis, clinic, diagnosis, treatment, prevention.

39. Irritable bowel syndrome definition, clinic, diagnosis, treatment, prevention, prognosis.

40. Nonspecific ulcerative colitis and Crohn's disease in children. Etiology, pathogenesis, clinic, diagnosis, treatment, prognosis.

41. Oddi gallbladder and sphincter dysfunction in children. Etiology, clinic, diagnosis, treatment and prevention.

42. Etiology, clinic, diagnosis, treatment and prevention of organic diseases of the biliary system in older children.

43. Exocrine insufficiency of the pancreas in children. Definition, etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis.

44. Acute and chronic pancreatitis in children. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention, prognosis.

45. Urinary tract infections in children. Definition, classification, differential diagnosis of infections of the lower and upper urinary tract.

46. Cystitis in children. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention, prognosis.

47. Pyelonephritis in children. Definition, etiology, pathogenesis, classification, clinic, diagnosis, treatment, prevention, prognosis.

Glomerulonephritis in children. Definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, prevention, prognosis. Acute renal failure.

48. Chronic renal failure in children. Risk factors, etiology, pathogenesis, stages of the disease, clinic, diagnosis, treatment, prevention, prognosis. Indications for kidney transplantation.

49. Dysmetabolic nephropathy in children. Definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, prevention, prognosis.

## **BLOCK 2. Children's infectious diseases**

1. Measles. Clinic of typical and atypical forms. Complication. Differential diagnosis. Treatment. Prevention.

2. Rubella. Differential diagnosis of acquired and congenital rubella. Treatment. Prevention.

3. Varicella. Clinical picture of typical and atypical forms of chickenpox. Complication. Differential diagnosis. Treatment, prevention.

4. Shingles. Diagnosis. Differential diagnosis. Treatment. Prevention.

5. Herpes infection (herpes simplex). Clinical forms. Differential diagnosis. Treatment. Prevention.

6. Scarlet fever. Clinical picture of typical and atypical forms. Complication. Differential diagnosis. Treatment. Prevention.

7. Sore throats in children. Etiological features depending on age. Clinic. Diagnosis. Differential diagnosis. Treatment. Tactics of keeping patients with sore throats at home.

8. Pseudotuberculosis. Differential diagnosis. Treatment, prevention.

9. Diphtheria. Clinical forms. Complication. Differential diagnosis. Treatment. Prevention of diphtheria.

10. Diphtheria laryngotracheitis. Clinic. Differential diagnosis of true and false croup. Emergency care.

11. Infectious mononucleosis. Differential diagnosis. Treatment. Prevention.

12. Whooping cough. Features of the course in infants. Complication. Differential diagnosis. Treatment. Prevention.

13. Apnea form of whooping cough. Clinical and pathogenetic features. Prevention stops breathing in children with whooping cough. Emergency care for apnea.

14. Mumps infection. Clinical various forms of epidemic mumps (mumps, submaxillary, sublingual, pancreatitis, orchitis, meningitis and others.). Differential diagnosis. Treatment. Prevention.

15. Meningococcal infection. Clinical forms. Features of the course in children of the 1st year of life. Differential diagnosis of meningococemia. Treatment. Prevention.

16. Infectious and toxic shock in meningococemia. Diagnosis. Emergency care.

17. Bacterial and viral meningitis in children. Clinical features depending on the age of the child. Differential diagnosis. Treatment. Prevention.

18. Encephalitis in children. Etiological structure. Clinical features. Laboratory and instrumental diagnostics. Differential diagnosis. Treatment. Prevention.

19. Edema, swelling of the main brain with meningitis and encephalitis in children. Diagnosis. Emergency care.

20. Poliomyelitis. Clinical forms. Differential diagnosis. Treatment. Prevention.

21. Enterovirus infection. Clinical forms. Differential diagnosis. Treatment. Prevention.

22. Shigellosis in children. Features of the course in different age groups. Differential diagnosis. Treatment. Prevention.

23. Salmonellosis in children. Features of the course in different age groups. Differential diagnosis. Treatment. Prevention.

24. Escherichia coli in children. Clinical features in children of different ages depending on the pathogen. Differential diagnosis. Treatment. Prevention.
25. Acute intestinal infections in newborns. Etiological structure. Clinical features. Differential diagnosis. Treatment. Prevention.
26. Intestinal yersiniosis. Features of the course in children of different ages. Differential diagnosis. Treatment. Prevention.
27. Rotavirus infection. Differential diagnosis. Treatment. Prevention.
28. Toxic-exicosis in acute intestinal infections. Etiological structure. Types eksykozu. Clinical and laboratory diagnostics. Emergency care.
29. Neurotoxicosis in acute intestinal infections. Etiological structure. Clinical and laboratory diagnostics. Emergency care.
30. Viral hepatitis A. Differential diagnosis. Treatment. Prevention.
31. Viral hepatitis B. Features of the course in young children. Differential diagnosis Treatment. Prevention.
32. Features of diagnosis and course of viral hepatitis C, D, E and others in children. Differential diagnosis. Treatment. Prevention.
33. Acute liver failure in viral hepatitis in children. Clinical and laboratory diagnostics. Emergency care.
34. Flu. Clinical course. Features in young children. Complication. Differential diagnosis. Treatment. Prevention. Emergency care for hyperthermic and convulsive syndrome.
35. The flu is pandemic. Features of epidemiology and clinic at the present stage. Complication. Differential diagnosis. Treatment. Prevention.
36. Parainfluenza. Features of clinical manifestations. Differential diagnosis. Treatment. Prevention.
37. Acute stenotic laryngotracheitis (GSLT) in SARS in children. Diagnosis. Differential diagnosis with real groats. Emergency care.
38. Respiratory syncytial infections in children. Features of clinical manifestations. Differential diagnosis. Treatment, prevention.
39. Adenovirus infection. Features of the course in young children. Differential diagnosis. Treatment. Prevention.
40. HIV / AIDS in children. Clinic. Diagnosis. Differential diagnosis. Treatment. Prevention.
41. TORCH-infections: toxoplasmosis, rubella, cytomegalovirus infection, herpes infection. Clinical manifestations of congenital and acquired forms depending on the route and timing of infection. Laboratory diagnosis of acute, reactivated and latent forms. Principles of treatment and prevention.
42. Immunoprophylaxis of children's infectious diseases. Organization of preventive vaccinations for children. Contraindications to vaccination. Post-vaccination reactions and complications, their diagnosis and treatment.
43. Anaphylactic shock during vaccination. Diagnosis, emergency care.

### **List of practical tasks and works for the final control**

1. Collection of medical history and life.
2. Assessment of the general condition of the child.
3. Objective examination of a sick child.
4. Formulation of a preliminary diagnosis.
5. Appointment of additional examinations.
6. Differential diagnosis.
7. Appointment of a course of treatment.
8. Primary and secondary prevention measures .

9. Medical examination of the patient.
10. Ability to prescribe drugs used in the treatment of the pathology under study. Know the main groups of drugs used for treatment.
11. Providing emergency care for emergencies in children who may accompany the somatic diseases being studied.

**"0" version of the test ticket**

**Petro Mohyla Black Sea National University**

Educational qualification level - master

Field of knowledge: 22 Health care

specialty 222 Medicine

**Course - PEDIATRICS WITH CHILDREN'S INFECTIOUS DISEASES WITH IN-ADVANCED STUDY OF CHILDREN'S CARDIOLOGY AND NEPHROLOGY**

**Option № 0**

1. Carditis in children: definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, prognosis. - **maximum number of points - 20.**
2. Cystitis in children. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention, prognosis - **maximum number of points - 20.**
3. Flu. Clinical course. Features in young children. Complication. Differential diagnosis. Treatment. Prevention. Emergency care for hyperthermic and convulsive syndrome. - **maximum number of points - 20.**
4. TORCH-infections: toxoplasmosis, rubella, cytomegalovirus infection, herpes infection. Clinical manifestations of congenital and acquired forms depending on the route and timing of infection. Laboratory diagnosis of acute, reactivated and latent forms. Principles of treatment and prevention. - **maximum number of points - 20.**

*Approved at the meeting of the Department of "therapeutic and surgical disciplines", the protocol № \_\_\_\_ from " \_\_ " \_\_\_\_\_ 2020.*

**Head of Department**      **s.n.s. Zack M.Yu.**

**Examiner**              **Associate Professor B.Sc. Chernyshov OV**

**Example of final control work**

**Solving problems Step-2**

1 A full-term newborn developed jaundice 10 hours after birth. Diagnosed with hemolytic disease of the newborn by rhesus conflict. After 2 h, the level of indirect serum bilirubin increased by 14 mmol / l. What treatment should be prescribed to this newborn?

- A Replacement blood transfusion
- B Phototherapy**
- C Phenobarbital
- D Enterosorbents

### *E* Infusion therapy

2 In a newborn with perinatal asphyxia during childbirth there were apnea and bradycardia [h.s.s. 70 beats per minute], artificial lung ventilation was immediately started with 100% O<sub>2</sub> with Ambu mask and bag. After 30 seconds the heart rate did not change. What should be the next step in resuscitation ?

- A* Indirect heart massage
- B* Tactile stimulation
- C* Continue ventilation
- D* Soda bicarbonate intravenously
- E* Epinephrine intravenously

3 Newborn 3 hours. The child's condition on the Apgar scale is 9 points. The mother is a carrier of HBsAg. When should I be vaccinated to prevent HBV?

- A* In the first 12 hours of life.
- B* On the first day.
- C* In the first three days
- D* During the week
- E* For a month

4 7 babies were born in the maternity hospital in the last 6 hours. Two - from mothers of HBsAg carriers, the rest - from HBsAg - negative mothers; but 2-5 years ago these mothers were ill with HAV, HBV, HCV. Which children are vaccinated against HBV in the first place for prophylactic purposes ?

- A* Children from mothers of HBsAg carriers.
- B* Children from mothers with HBV
- C* Children from mothers who suffered from CAA
- D* Children from mothers with HCV.
- E* Children from mothers in whom HBsAg was not found.

5 A premature newborn is diagnosed with sepsis, septicemia. There is a suspicion that the disease is caused by gram-negative flora. Which combination of antibiotics is most favorable in this case?

- A* Cefotaxime + gentamicin
- B* Oxacillin + ampicillin
- C* Cefazolin + penicillin
- D* Acyclovir + methicillin
- E* Rovamycin + lincomycin

## **6. Evaluation criteria and tools for diagnosing learning outcomes**

### **Control methods**

- Survey (testing of theoretical knowledge and practical skills).
- Test control.
- Writing a review of scientific literature (abstracts), performing individual tasks, their defense.



**Current control.** Testing in practical classes of theoretical knowledge and the acquisition of practical skills, as well as the results of independent work of students. Supervised by teachers according to the specific purpose of the curriculum. Assessment of the level of students' training is carried out by: interviewing students, solving and analyzing situational tasks and test tasks, interpreting the results of experimental and clinical and laboratory research, monitoring the acquisition of practical skills.

**Intermediate control.** Checking the possibility of students using for clinical and diagnostic analysis of theoretical knowledge and practical skills on all topics studied, as well as the results of independent work of students. Carried out in the last lesson by section by passing practical skills, solving situational problems and testing.

**The final control** is carried out upon completion of the study of all topics of the module at the last control lesson of the semester. Includes theoretical and practical parts.

In order to establish the results of training in pediatrics with pediatric infectious diseases is also a **final control in the form of a test.**

Students who have attended all lectures, classrooms, completed full-time independent work and scored at least **70 points in the fall semester in the fall semester and 40 points in the spring semester** are admitted to the final control . Students who have passed the final tests for blocks 1 and 2 are admitted to the test.

#### **Distribution of points received by students**

**In the autumn semester, a positive assessment in each practical session can be from 2 to 5 points. A score below 2 points means "unsatisfactory", the lesson is not credited and is subject to practice in the prescribed manner.** At the final control of block 1, the student can get a maximum of 80 points. The control is considered passed if the student has scored at least 50 points.

**In the spring semester, a positive assessment in a practical session can be from 4.5 to 9 points. A score below 4.5 points means "unsatisfactory", the lesson is not credited and is subject to practice in the prescribed manner.** At the final control of block 2, the student can get a maximum of 40 points. The control is considered passed if the student has scored at least 30 points.

On the test, a student can get a maximum of 80 points. The test is considered passed if the student received at least 50 points.

#### **Assessment of student performance**

Type of activity (task)	Maximum number of points
<b>BLOCK 1</b>	
Topics of practical classes from the 1st to the 24th	5 points for each topic
<b>In total for 24 topics</b>	<b>120</b>
<b>Final control № 1</b>	<b>80</b>
<b>Together for block 1</b>	<b>200</b>
<b>BLOCK 2</b>	
Topics of practical classes from the 1st to the 9th	9 points for each of the topics
<b>Only 9 topics</b>	<b>80</b>
<b>Final control № 2</b>	<b>40</b>
<b>Together for block 2</b>	<b>120</b>
<b>Test</b>	<b>80</b>
<b>Together for block 2 and credit</b>	<b>200</b>

#### **Criteria for assessing knowledge**

**A score of 5 points in the autumn semester (9-8 points in the spring semester), 71-80 points in the final control in the autumn semester (38-40 points in the spring semester) and 71-80 points in the test (A on the ECTS scale and 5 on national scale) the student's response is evaluated**

if it demonstrates a deep knowledge of all theoretical positions and the ability to apply theoretical material for practical analysis and has no inaccuracies.

**A score of 4 points in the autumn semester (6-7 points in the spring semester), 61-70 points in the final control in the autumn semester (35-37 points in the spring semester) and 61-70 points in the ECTS scale and 4 on a national scale) the answer is evaluated if it shows knowledge of all theoretical provisions, the ability to apply them in practice, but some fundamental inaccuracies are allowed.**

**Score 3 points in the autumn semester (5-6 points in the spring semester), 50-60 points in the final control in the autumn semester (30-34 points in the spring semester) and 50-60 points in the test (D and E on the ECTS scale and 3 on a national scale) the student's response is evaluated provided that he knows the main theoretical principles and can use them in practice.**

## 7. Recommended literature

### Basic

1. Maidannik VG Pediatrics. Textbook (2nd edition, corrected and supplemented). - Харьков: Фолио, 2002. - 1125 с.
2. Children's diseases. For order. VMSidelnikov, VVBerezhny. K.: Здоров'я, 1999. - 734 с.
3. Orders of the Ministry of Health of Ukraine: "On improving outpatient care for children in Ukraine", "On improving the organization of medical care for adolescents" and protocols for specialties: "Pediatric Urology", "Pediatric Neurosurgery", "Pediatric Therapeutic Dentistry", "Pediatric toxicology", "Pediatric anesthesiology", "Pediatric nephrology", "Pediatric infectious diseases", "Pediatric immunology", "Pediatric surgery", "Pediatric ophthalmology", "Pediatrics", "Pediatric pulmonology". K.-2005.- 414 p.
4. Protocols for providing medical care to children in the specialty "Pediatric Endocrinology". -Order of the Ministry of Health of Ukraine of 27.04.2006 No. 254 120 p. in the wording of the order of the Ministry of Health of Ukraine dated 03.02.2009 No 55
5. About the statement of the Protocol of medical care of the newborn child with low body weight at birth.- Order of the Ministry of Health of Ukraine of 29.08.2006 N584 - 42 p.
6. About the statement of the clinical protocol of rendering of neonatologic help to children "Jaundice of newborns". - the Order of the Ministry of Health of Ukraine 27.04.2006N255 - 34 p.
7. About the statement of protocols of treatment of children on a specialty "Children's gastroenterology". - the Order of the Ministry of Health of Ukraine of 10.08.2013 No. 56 - 56 p.
8. About the statement of protocols of rendering of medical care to children on a specialty "Children's hematology". - the Order of the Ministry of Health of Ukraine of 20.07.2005 No. 364-10 p.
9. About the statement of Protocols of diagnostics and treatment of allergic diseases at children. -Order of the Ministry of Health of Ukraine No 767 dated 27.12.2005 -
10. On approval of Protocols for diagnosis and treatment of cardiorheumatological diseases in children. - Order of the Ministry of Health of Ukraine of 19.07.2005 N 362 –35 p.
11. Childhood medicine. Edited by PS Moshchych.- K .: Health, 1994. - Vol. 1 - 4. - 2350 p.
12. Shabalov NP Children's diseases. Textbook.-Peter-Com, St. Petersburg, 2002.-1080p.
13. Shabalov NP Neonatology. In 2 volumes. Спец.л-ра. St. Petersburg, 1996, - Volume I. 492 pp., Volume II. - 505 p.
14. Nelson textbook 18<sup>th</sup> Edition by Robert M. Kliegman, MD, Richard E. Behrman, MD, Hal B. Jenson, MD and Bonita F. Stanton, MD. Publisher: SAUNDERS

## Optional

1. Aryaev ML Neonatology.- Kyiv: "ADEF - Ukraine.", 2006.- 754 p
2. Aryaev ML, Volosovets AP, Kotova NV, Starikova AA, Kononenko NA Pulmonology of children's age - Kiev: Health, 2004.-608p.
3. Balabolkin MI Endocrinology. M.: Meditsina, 1989. - 416 s.
4. Bezrukov LO, Volosovets OP, Shunko EE, Krivopustov SP, Godovanets Yu.D., Mygal VG Neonatology. Chernivtsi, 2000. - 235 p.
5. Belozarov Yu.M. Pediatric cardiology. - M.: Medpress-inform. - 2004. - 600p.
6. Belokon NA, Kuberger MB Cardiovascular diseases in children. In 2 volumes.- M.: Medicine, 1987.- 928 p.
7. Vozianov AF, Maidannik VG, Bidny VG, Bagdasarova IV Fundamentals of pediatric nephrology.- K.: Book plus, 2002.- 348 p.
8. Volosovets AP, Krivopustov SP, Krivoruk IM, Cherniy OF Textbook on pediatric endocrinology - Ternopil: Ukrmedknyha, 2004.-495p.
9. Volosovets AP, Krivopustov SP, Manolova EP, Ershova IB, Boychenko PK Laboratory researches in practical pediatrics - Lugansk, 2003.-131p.
10. Volosovets OP, Krivopustov SP, Nagornaya NV, sang. Tasks in bioethics and medical deontology for pediatricians-Donetsk: Donbass, 2004. - 84 p.
11. Volosovets AP, Nagornaya NV, Krivopustov SP, Ostropolets SS, Bordyugova OV Diagnosis, therapy and prevention of deficiency anemias in children - Donetsk: SPD Dmitrenko LR, 2007. - 38 p.
12. Volosovets OP, Savvo VM, Krivopustov SP Selected issues of pediatric cardiorheumatology - H.: "TNC", 2006 - 256 p.
13. Volosovets AP, Yulish EI Rational antibiotic therapy of respiratory diseases in children-Donetsk: Regina, 2005.-389p.
14. Gusel VA Markova IV Handbook of pediatrician in clinical pharmacology.- L.: Medicine, 1989.- 320 p.
15. Zhukovsky MN Pediatric endocrinology. M ".Medicina", 1982. - 448 p.
16. Zaporozhyan VN, Aryaev NL HIV infection and AIDS. -K, Health, .- 1994.-623 p.
17. Ignatova MS, Veltishchev Yu.E. Pediatric nephrology.-M.: Medicine, 1989.- 456 p.
18. Clinical rheumatology. Ed. H.L.F. Carrey. M.: "Medicine". - 1990. - 448 p.
19. Lasitsa OI, Lasitsa TS, Nedelskaya SM Allergology of childhood. - K.: Книга Плюс, - 2004. - 368 с.
20. Nasonova VA, Ostapenko MG Clinical rheumatology. M: "Medicine", 1990. - 592 p.
21. Maidannik VG Rickets in children: Modern aspects - Nizhyn: LLC "Publishing House "Aspect-Polygraph", 2006.- 116 p.
22. Maidannik VG Glomerular kidney diseases in children.- K.: Knowledge of Ukraine, 2002.- 228 p.
23. Maidannik VG Tubulointerstitial diseases of the kidneys in children.- K.: Knowledge of Ukraine, 2002.- 156 p.
24. Maidannik VG Clinical guidelines for the diagnosis and treatment of acute pneumonia in children. - Kyiv: Knowledge of Ukraine, 2002.- 106 p.
25. Maidannik VG Modern macrolides (Pharmacodynamics, pharmacokinetics and clinical application) .- K.: Pharm Art, 2002.- 296 p.
26. Maidannik VG, Maidannik IV Directory of modern medicines.- M.: AST; Kharkiv: Folio, 2005.-1024 p.
27. Maidannik VG, Mitin Yu.V. Diagnosis, treatment and prevention of inflammatory diseases of the respiratory tract in children.- K.: LLC "IC Medprominfor", 2006.- 288 p.

28. Markevich VE, Maidannik VG, Pavlyuk PO and others. Morphofunctional and biochemical parameters in children and adults.- Kyiv-Sumy: McDen, 2002.- 268 p.
29. Markova IV, Shabalov NP Clinical pharmacology of newborns. Sotis, S.- Petersburg, 1993. - 374 p.
30. Michelson VA, Almazova IG, Neudakhin EV Comatose states in children. L. "Medicine", 1988. - 224 p
31. Moskalenko VF, Volosovets OP, Yavorivsky OP, Bulakh IE, Ostapyk LI, Palienko IA, Mruga MR (ed.) Step 2. General medical training. Part 2. Pediatrics, obstetrics and gynecology, hygiene. -Kyiv: Nova Knyha Publ., 2005.-404p.
32. Moschich PS, Sidelnikov VM, Krivchenya D.Yu. Cardiology of children's age.- K.:Health, 1986.- 550 p.
33. Orders of the Ministry of Health of Ukraine "On improving outpatient care for children in Ukraine", "On improving the organization of medical care for adolescents", and protocols for specialties "pediatrics" and others. Ministry of Health of Ukraine. - Kyiv, 2005 r. - 414 p.
34. Emergencies in pediatrics. Under Ed. VMSidelnikov. K. : Здоровье, 1994. - 601 с.
35. Neonatology. Under Ed. TL Gomel, MD Kannigam. M., Med., 1995. - 636 p.
36. Pediatrics. Ed. J. Gref. M. : Praktika, 1997. - 911 s.
37. Primary arterial hypertension in children and adolescents / Ed. V.G. Maidannika, VF Moskalenko. - K.-2007.-389 p.
38. Textbook of neonatal resuscitation. American Society of Cardiology and Academy of Pediatrics, Svichado, Lviv, 1994. - 6-55 p.
39. Potemkin VV Endocrinology. M. "Medicine", 1986. - 429 p.
40. Prokhorov EV, Volosovets OP, Geleskul LM, co-authors. Gastroenterology of childhood - Ternopil: Ukrmedknyha, 2004. - 160 p.
41. Rachinsky VG, Tatochenko VK A guide to pediatric pulmonology. - M. : Медицина, 1990. - 356 с.
42. Reznik B.Ya., Zubarenko AV Practical hematology of childhood. - K. : Здоровье, 1989. - 400 с.
43. Sidelnikov VM, Migal VG, Bezrukov LG Practical allergology of childhood. - K. : Здоровье, 1986. - 156 с.
44. Situational tasks in pediatrics / Ed. Corresponding Member Academy of Medical Sciences of Ukraine, prof. V.G. Maidannika.- K., 2006.- 204 p.
45. Directory of the district pediatrician. Edited by IN Usova. - Minsk: Belarus, 1991. - 339 p.
46. Sanford J., Gilbert D., Herberding J., Sande M. Antimicrobial therapy. M.: Практика, 1996. - 219 с.
47. Test tasks in pediatrics / Ed. Corresponding Member Academy of Medical Sciences of Ukraine, prof. V.G. Maidannika.- K., 2007.-429 p.
48. Hertl M. Differential diagnosis in pediatrics.- M. : Medicine, 1990. - 1064 p.
49. Bogadelnikov IV Differential diagnosis of the most important infectious diseases in children. - Simferopol. 1999. - 528 p
50. Meningitis in children / IV Bogadelnikov, LH Gorishnyak, GM Kushnir, etc. : Ed. prof. IV Bogadelnikov, MV Loboda.- Crimea-Pharm-Trading Publishing House: Simferopol - Kyiv, 2002.- 448
51. V.G. Maidannik, - Roman Criteria IV (2016): what's new? International Journal of Pediatrics, Obstetrics and Gynecology Volume 10. pp. 8-18
52. Jeffrey S. Hyams, Carlo Di Lorenzo, Migue Childhood Functional Gastrointestinal Disorders: Child / Adolescent, Gastroenterology 2016; 150: 1456–146
53. Marc A. Benninga, Samuel Nurko, Christophe Faure, Paul E.etc Childhood Functional Gastrointestinal Disorders: Neonate / Toddler Gastroenterology 2016; 150: 1443– 1455
54. Unified clinical protocols of medical care for children with diseases of the digestive system From January 29, 2013 № 59

55. V.G. Maidannik, MV Хайтович, В.В. Korneychuk, -Diseases of the esophagus, stomach and duodenum in children- Kiev: WB "Avanpost-Prim", 2008, - 432p

### Information resources

1. Orders of the Ministry of Health of Ukraine: "On improving outpatient care for children in Ukraine", "On improving the organization of medical care for adolescents" and protocols on specialties: "Pediatric nephrology", "Pediatric infectious diseases", "Pediatric immunology", "Pediatrics ", " Pediatric Pulmonology ". К.-2005.- 414 p.

[http://lviv.medprof.org.ua/uploads/media/Про\\_удоконання\\_амбулаторно-поліклінічної\\_допомоги\\_дітям\\_в\\_Україні.pdf](http://lviv.medprof.org.ua/uploads/media/Про_удоконання_амбулаторно-поліклінічної_допомоги_дітям_в_Україні.pdf)

<http://mozdocs.kiev.ua/view.php?id=2111>

2. State form of medicines. State Enterprise "State Expert Center of the Ministry of Health of Ukraine". - Issue seven. - К. 2015 <http://www.apteka.ua/article/322672>

3. International Classification of Diseases and Causes of Death, 10th revision (ICD-10) <http://mkb-10.com>

4. About the statement of protocols of rendering of medical care to children on a specialty "Children's hematology". - the Order of the Ministry of Health of Ukraine of 20.07.2005 No. 364-10 p. [http://www.gov.lica.com.ua/b\\_text.php?base=1&id=564544&type=3](http://www.gov.lica.com.ua/b_text.php?base=1&id=564544&type=3)

5. Protocols for providing medical care to children in the specialty "Pediatric Endocrinology". -Order of the Ministry of Health of Ukraine of 27.04.2006 No. 254 120 p. as amended by the order of the Ministry of Health of Ukraine dated 03.02.2009 № 55 [http://search.ligazakon.ua/l\\_doc2.nsf/link1/MOZ6018.html](http://search.ligazakon.ua/l_doc2.nsf/link1/MOZ6018.html)

6. Order of the Ministry of Health of Ukraine №152 of 04.04.2005 "On approval of the Protocol of medical care for a healthy newborn child".- Kyiv, 2005. - 29 p. <http://ukraine.uapravo.net/data/base21/ukr21220.htm>

7. Order of the Ministry of Health of Ukraine of 29.03.2006 No. 179 "Procedure for registration of live births and stillbirths" <http://zakon4.rada.gov.ua/laws/show/z0427-06>

8. Order of the Ministry of Health of Ukraine 27.04.2006 N255 "On approval of the clinical protocol for neonatological care for children" Jaundice of newborns ". - 34 p. <http://ukraine.uapravo.net/data/base09/ukr09578.htm>

9. Order №584 of 29.08.2006 "Protocol of medical care for a newborn child with low birth weight". <http://ukraine.uapravo.net/data/base05/ukr05859.htm>

10. Order of the Ministry of Health of Ukraine №234 dated 10.05.2007 "On the organization of prevention of nosocomial infections in obstetric hospitals". - Kyiv, 2007. -77 p. <http://zakon4.rada.gov.ua/laws/show/z0694-07>

11. Order of the Ministry of Health №149 of 20.03.2008 "Clinical protocol of medical care for a healthy child under 3 years of age" <http://ukraine.uapravo.net/data2008/base09/ukr09572/index.htm>

12. Order of the Ministry of Health of Ukraine № 484 of 21.08.2008 "On approval of the Clinical Protocol for the care of a newborn child with respiratory disorders" - 58p.

<http://www.uapravo.net/akty/postanova-resolution/akt3dndi3a/index.htm>

13. Order of the Ministry of Health №225 of March 28 , 2014 "Primary, resuscitation and post-resuscitation care for newborns in Ukraine"

<http://document.ua/pro-zatverdzhennja-ta-vprovadzhennja-mediko-tehnologichnih-d-doc190536.html>

14. Protocols for diagnosis and treatment of infectious diseases in children.- Approved by the order of the Ministry of Health of Ukraine dated 09.07.2004, №354 [www.nmu.edu.ua / kaf 34.php](http://www.nmu.edu.ua/kaf34.php); <https://www.moz.gov.ua/ua>.
15. Calendar of preventive vaccinations in Ukraine.- Order of the Ministry of Health of Ukraine №595 of September 16, 2011 (as amended by the order of the Ministry of Health of Ukraine of August 11, 2014 №551) [www.nmu.edu.ua / kaf 34.php](http://www.nmu.edu.ua/kaf34.php); <https://www.moz.gov.ua/ua>.
16. Protocol for the treatment of meningococemia in children Order of the Ministry of Health of Ukraine dated 12.10.2009 № 737 [www.nmu.edu.ua / kaf 34.php](http://www.nmu.edu.ua/kaf34.php); <https://www.moz.gov.ua/ua>.
17. Protocol for the treatment of acute intestinal infections in children Order of the Ministry of Health of Ukraine N 803 of 10.12.2007 On amendments to the order of the Ministry of Health of 09.07.04 N 354; On approval of Protocols for diagnosis and treatment of infectious diseases in children [www.nmu.edu.ua / kaf 34.php](http://www.nmu.edu.ua/kaf34.php); <https://www.moz.gov.ua/ua>.
18. Adapted clinical guidelines based on evidence of influenza and acute respiratory infections [www.nmu.edu.ua / kaf 34.php](http://www.nmu.edu.ua/kaf34.php); <https://www.moz.gov.ua/ua>.
19. Unified clinical protocols of primary care for adults and children with acute respiratory infection - approved by the Ministry of Health of Ukraine on 16 July 2014 r. Number 499 [www.nmu.edu.ua / kaf 34.php](http://www.nmu.edu.ua/kaf34.php); <https://www.moz.gov.ua/ua>.
20. Unified clinical protocols of primary care for adults and children flu - approved by the Ministry of Health of Ukraine on 16 July 2014 r. Number 499. [www.nmu.edu.ua / kaf 34.php](http://www.nmu.edu.ua/kaf34.php); <https://www.moz.gov.ua/ua>; <https://www.moz.gov.ua/ua>.
22. unified clinical protocols of primary, secondary and tertiary care for children of HIV infection - approved by the Ministry of Health of Ukraine on 24 February 2015 r. Number 92 <https://www.moz.gov.ua/ua>.
23. Unified clinical protocol of medical care for children with chronic viral hepatitis B. Order of the Ministry of Health №59 from 29.01.2013 [www.nmu.edu.ua / kaf 34.php](http://www.nmu.edu.ua/kaf34.php); <https://www.moz.gov.ua/ua>.
24. Unified clinical protocol of medical care for children with chronic viral hepatitis C. Order of the Ministry of Health №59 from 29.01.2013 [www.nmu.edu.ua / kaf 34.ph](http://www.nmu.edu.ua/kaf34.php); <https://www.moz.gov.ua/ua>.
25. Industry standard of higher education Educational and qualification characteristics of a specialist in the specialty 7.110104 pediatrics.- Kyiv, 2003.-Publishing house "Book-plus" .- 23 p. [www.moz.gov.ua/ua](http://www.moz.gov.ua/ua).