

NATIONAL BOGOMOLETS MEDICAL UNIVERSITY
Department of pediatrics №1-2, department of infectious diseases



SYLLABUS OK25 "Pediatrics, including children's infectious diseases, medical practice (professional training), children's and children's infectious diseases"

Second educational level (master's)
Field of knowledge 22 "Health care"
Specialty 222 "Medicine"
Educational program EPP Medicine

Discussed and approved on the Cyclic methodical commission on pediatric disciplines of the National Bogomolets Medical University

Protocol №1 from «31» August 2023

The Head, professor of the pediatric
department №1

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SYLLABUS OF ACADEMIC DISCIPLINE

OK 25. Pediatrics including pediatric infectious diseases and medical practice training (professional education) on pediatrics and pediatric infectious diseases

Level of higher educational Second (master's degree)

Educational program EPP Medicine

1. Course annotation

Semester(s): 7-12

Course scope: total number of hours – 465, including lectures – 20 hours, practical classes – 230 hours, self-study work – 185 hours, medical training – 30 hours, ECTS credits – 15.5.

The purpose of the course—achievement/mastery/formation of competences

Integral:

The ability to solve complex problems, including research and innovation in healthcare. The ability to continue learning with a high degree of autonomy.

General competences (GC):

GC1. Ability to abstract thinking, analysis and synthesis.

GC2. Ability to learn and master modern knowledge.

GC3. Ability to release knowledge in practical situations.

GC4. Knowledge and understanding of the subject area and professional understanding activity

GC5. Ability to adapt and act in a new situation.

GC6. Ability to make a reasoned decision.

GC7. Ability to work in a team.

GC8. Ability to interpersonal interaction.

GC9. Ability to communicate in a foreign language.

GC10. Ability to use information and communication technologies.

GC11. Ability to search, process and analyze information from various sources source.

GC12. Determination and persistence in relation to tasks set and undertaken

responsibilities

GC13. Awareness of equal opportunities and gender issues.

GC14. The ability to realize one's rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, rights and freedoms of man and citizen in Ukraine.

GC15. Ability to preserve and multiply moral, cultural, scientific values and achievements of society based on an understanding of history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technologies, use different types and forms of motor activity for active recreation and leading a healthy lifestyle.

Special (professional, subject) competences (PC)

PC1. Ability to collect and analyze medical information about the patient clinical data.

PC2. Ability to determine the necessary list of laboratory and instrumental studies and evaluation of their results.

PC3. Ability to establish a preliminary and clinical diagnosis of the disease.

PC4. Ability to determine the necessary mode of work and rest in the treatment and prevention of diseases.

PC5. Ability to determine the nature of nutrition during treatment and disease prevention.

PC6. Ability to determine the principles and nature of treatment and disease prevention.

PC7. Ability to diagnose emergency conditions.

PC8. Ability to determine tactics and provide emergency medical care.

PC10. Ability to perform medical manipulations.

PC13. Ability to carry out sanitary and hygienic and preventive measures.

PC 14. Ability to plan and carry out preventive and anti-epidemic measures against infectious diseases.

PC 16. Ability to maintain medical documentation, including electronic forms.

PC17. Ability to assess the impact of the environment, socio-economic and biological determinants of health.

PC 21. Ability to convey one's own knowledge, conclusions and argumentation on health care problems and related issues to specialists and non-specialists, in particular to persons who are studying.

PC 24. Compliance with ethical principles when working with patients.

PC 25. Observance of professional and academic integrity, carry responsibility for the reliability of the obtained scientific results.

Program learning outcomes (PLO)

PLO 1. To have deep knowledge of the structure of professional activity. Be able to carry out professional activities that require updating and integration of knowledge. To be responsible for professional development, the ability to further professional training with a high level of autonomy.

PLO 2. Understanding and knowledge of fundamental and clinical biomedical sciences, at a level sufficient for solving professional tasks in the field of health protection.

PLO 3. Specialized conceptual knowledge, including scientific achievements in the field of health care is the basis for conducting research, critical understanding of problems in the field of medicine and those related to it interdisciplinary problems.

PLO 4. Highlight and identify leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary data of the patient's history, data of the patient's examination, knowledge about the person, her organs and systems, establish a preliminary clinical diagnosis of the disease (according to list 2).

PLO 5. Collect complaints, anamnesis of life and diseases, evaluate PLOychomotor and physical development of the patient, state of organs and systems body, based on laboratory and instrumental results studies; to evaluate information about the diagnosis (according to list 4), taking into account age of the patient.

PLO 6. Establish a final clinical diagnosis by acceptance reasoned decision and analysis of the received subjective and objective data of clinical, additional examination, carrying out differential diagnostics, observing the relevant ethical and legal norms under the control of the head physician in the conditions of the health care institution (according to list 2).

PLO 7. Assign and analyze additional (mandatory and optional) examination methods (laboratory, functional and/or instrumental) (according to list 4) in patients with diseases of organs and systems for differential diagnosis of diseases (according to list 2).

PLO 9. Determine the nature and principles of treatment of patients (conservative, operative) with diseases (according to list 2), taking into account age of the patient, in the conditions of the health care facility, outside of it and at the stages of medical evacuation.

PLO 10. Determine the necessary mode of work, rest and diet on the basis of the final clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to the existing algorithms and standard schemes.

PLO 12. Assess the general condition of a newborn child by making a reasoned decision according to existing algorithms and standard schemes, observing the relevant ethical and legal norms.

PLO 13. Assess and monitor the child's development, provide recommendations on feeding and nutritional features depending on age, organize preventive vaccinations according to the calendar.

PLO 14. Determine the tactics and provide emergency medical assistance in urgent cases (according to list 3) under conditions of limited time in accordance with existing clinical protocols and treatment standards.

PLO 15. To organize the provision of medical assistance and treatment evacuation measures for the population and military personnel in the conditions of emergencies and hostilities, including in field conditions.

PLO 17. Perform medical manipulations (according to list 5) in the conditions of medical institution, at home or at work on the basis of the previous one clinical

diagnosis and/or indicators of the patient's condition by acceptance of reasoned decision, observing the relevant ethical and legal norms.

PLO 18. Determine the state of functioning and limitations of vital activities of patients and duration of incapacity for work with registration of relevant documents, conditions of the health care institution based on data about the disease and its course, peculiarities of a person's professional activity, etc. Conduct medical documentation regarding the patient and population contingent on the basis of regulatory documents.

PLO 21. Search for necessary information in professional literature and databases of other sources, analyze, evaluate and apply this information in practice.

PLO 23. Assess the impact of the environment on health of the individuum to assess the health state of the population.

PLO 24. Organize the required level of individual security (one's own and the people one takes care about) in case of occurrence of typical situations in the individual field of activity.

PLO 25. It is clear and unambiguous to convey one's own knowledge, conclusions and argumentation on health care problems and related issues to specialists and non-specialists.

PLO 26. Manage work processes in the field of health care, which are complex, unpredictable and require new strategic approaches, to organize work and professional development of personnel taking into account acquired skills of effective teamwork, leadership positions, appropriate quality, accessibility and fairness, ensuring the provision of integrated medical assistance.

PLO 27. Communicate freely in the state language and in English orally as well as in writing to discuss professional activities, research and projects.

PLO 28. Make effective decisions on health care issues, assess the required resources, take into account social, economic and ethical considerations and consequences.

PLO 29. Plan, organize and carry out activities on specific prevention of infectious diseases, including National calendar of preventive vaccinations both mandatory and recommended ones. Manage leftover vaccines, organize additional vaccination campaigns, including immunoprophylaxis measures.

Learning outcomes for the disciplines

To know:

- Standard survey and clinical examination guidelines of a patient with pediatric diseases
 - Leading clinical symptoms or syndromes of childhood diseases
 - Criteria for preliminary pediatric diagnosis composition
 - Principles of pediatric diagnosis composition
 - Necessary mandatory and additional (laboratory and instrumental) research methods and their diagnostic significance
- Pediatric diseases differential diagnosis carrying out
- Criteria for pediatric clinical diagnosis composition
- The necessary work, rest, and nutrition schedule of pediatric patients
- Principles and main approaches in pediatric patients management
- Algorithms and standard guidelines for the treatment of pediatric patients
- Criteria for the diagnosis of emergency conditions in pediatrics
- Tactics and providing of emergency medical aid in emergency conditions for pediatric patients
 - Algorithms for performing medical manipulations in pediatric practice
 - Primary and secondary prevention, prognosis and working capacity of patients with pediatric diseases
- The work with medical documentation, including electronic forms
- The use of the official documentation system in the professional work of a doctor, including modern software
- Ethical principles in the work with pediatric patients
- Principles of professional and academic integrity.

To be able to:

- Collect complaints, medical history, evaluate clinical data

- Identify the leading clinical symptom or syndrome
- Establish a preliminary diagnosis of the pediatric diseases
- Prescribe laboratory and instrumental (mandatory and additional) methods of examination of patients with pediatric diseases and analyze their results
- Carry out differential diagnosis of pediatric diseases
- Make a clinical and differential diagnosis of the pediatric disease based on the analysis of the received data of clinical and additional examination
- Determine the necessary work, rest, and nutrition schedule of pediatric patients
- Determine the principles and basic approaches in management of pediatric patients, taking into account the age of the child, his/her clinical diagnosis according to existing algorithms and standard guidelines
- Carry out primary and secondary prevention of pediatric diseases
- Determine the working capacity and evaluate the prognosis of pediatric patients
- Diagnose emergency conditions
- Determine tactics and provide emergency medical assistance in case of urgent pediatric conditions
- Perform medical manipulations
- Maintain medical documentation, including electronic forms
- Search for the necessary information in the professional literature and databases or other sources, analyze, evaluate and apply this information in medical practice
- Apply modern digital technologies, specialized software, statistical methods of data analysis to solve complex healthcare problems
- Adhere to ethical principles when working with pediatric patients
- Maintain professional and academic integrity, be responsible for the reliability of the obtained scientific results.

Be able to demonstrate: the ability to work with pediatric patient with basic diseases in the pediatric in-patient and out-patient clinic and analyze clinical data, identify the leading clinical symptom or syndrome, establish a preliminary diagnosis of the disease, determine the necessary list of laboratory and instrumental studies and evaluate their results, carry out differential diagnosis of diseases, establish a clinical diagnosis, determine the necessary regime of work and rest, the nature of nutrition and the principles and nature of treatment (conservative, operative), prescribe non-drug and drug treatment, diagnose emergency conditions, determine tactics and provide emergency medical assistance in emergency conditions, carry out primary and secondary prevention, determine performance and prognosis, keep medical documentation, perform medical manipulations.

the skills: collection of pediatric patient complaints, medical history, life history, conducting and evaluating the results of a physical examination, identifying the leading clinical symptom or syndrome, establishing a preliminary diagnosis of the disease; appointment of laboratory and instrumental examination of the patient and interpretation of their results, carrying out differential diagnosis, establishing a clinical diagnosis; determining the principles of treatment (conservative, operative), prescribing non-pharmaceutical and pharmaceutical treatment, providing emergency medical care in emergency situations, performing medical manipulations

to decide independently: typical tasks of a doctor in the field of health care, the scope of which is provided by the specified lists of syndromes and symptoms of diseases, emergency conditions and diseases, laboratory and instrumental research, medical manipulations, issues of labor examination and rehabilitation.

Necessary training components (prerequisites, requisites and post-requisites):

- prerequisites: human anatomy, history of medicine, medical biology, histology, cytology and embryology, physiology, pathomorphology, pathophysiology, medical and biological physics, medical chemistry, bioorganic and biological chemistry, Ukrainian language (for professional direction), foreign language, life safety, basics of bioethics and biosafety, microbiology, virology, pharmacology, Latin language and medical terminology, clinical anatomy and operative surgery, medical

informatics, pediatric patient's nursing care, propaedeutics of pediatrics, propaedeutics of internal medicine, internal medicine, pediatric diseases with infectious pediatric diseases, general surgery, radiology, medical psychology, clinical immunology and allergology, anesthesiology and intensive therapy, emergency medicine;

- requisites: internal medicine, pediatric surgery, obstetrics and gynecology, general practice (family medicine);
- postrequisites: internship, residency.

Content of the discipline

Module 1

Pediatrics including medical practice (professional training) pediatric diseases

Content module 1. Pediatrics

Topic1. Rickets. Infant tetany. HypervitaminosisD. Definition, classification, etiology, pathogenesis, clinical picture, diagnostics, treatment and prevention of rickets. Definition, classification, etiology, pathogenesis, clinical picture, diagnostics, treatment and prevention of hypervitaminosis D; emergency and prognosis. Definition, classification, clinical picture, treatment and prevention of infant tetany in children.

Topic2. Acute bronchitis and pneumonias in children. Bronchitis: definition, classification, etiology, pathogenesis, clinical picture, diagnostics, differential diagnostics, treatment and prevention of different types of bronchitis. Pneumonias: definition, classification, etiology, contributing factors, pathogenesis, clinical picture, diagnostics, differential diagnostics, treatment and prevention; indications for hospitalization, methods of rehabilitation. Diagnostics and emergency in the respiratory failure in children.

Topic 3: Allergic diseases in children: bronchial asthma, allergic rhinitis, atopic dermatitis. Food allergy. Definition, risk factors and pathophysiological mechanisms of bronchial asthma development, its classification, clinical presentation, diagnostics, treatment and prevention of BA in childhood. Emergency care for a severe asthma attack. Definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment and prevention of atopic dermatitis in children, prognosis. Definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment and prevention of allergic rhinitis in children, prognosis. Definition, classification, etiology, pathogenesis, clinic,

diagnosis, treatment and prevention of food allergy in children, prognosis. Clinic and emergency care for allergic reactions (Angioedema, urticaria, Stevens-Johnson syndrome, Lyell's syndrome).

Topic 4. The most common congenital heart defects (CHD) in children. Factors, leading in CHD formation. Etiology, pathogenesis, classification, hemodynamics, typical clinical manifestations, laboratory and instrumental methods of examination, differential diagnostics, treatment tactics and prognosis of different congenital heart defects in children. Blood circulation incompetence: classification, clinical manifestations, basic methods of treatment, terms and basic indications for surgical correction, prognosis, rehabilitation. Secondary prevention of infectious endocarditis.

Topic 5. Inflammatory and non-inflammatory heart diseases in children. Acute rheumatic fever in children.. Carditis in children: definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, prognosis. Cardiomyopathies in children: definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, prognosis. Acute rheumatic fever in children: definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, primary and secondary prevention, prognosis.

Topic 6. Juvenile idiopathic arthritis (JIA) and reactive arthropathies in children. Juvenile idiopathic arthritis: definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, rehabilitation, prognosis. Reactive arthropathies in children: definition, classification, etiology, pathogenesis, clinic, diagnosis, treatment, prognosis.

Topic 7. Functional and organic gastrointestinal diseases in children. Definition, risk factors and pathophysiological mechanisms of development, classification, clinic, diagnosis, treatment and prevention in children, prognosis for: infant colic, functional disorders accompanied by abdominal pain, stomach and duodenal ulcer, inflammatory bowel diseases - Crohn's disease, ulcerative colitis. Secondary prevention of exacerbations. Emergency aid.

Topic 8. Functional and organic hepatobiliary diseases in children. Biliary dysfunction (gallbladder and sphincter of Oddi dysfunction), autoimmune diseases of the liver and biliary ducts (autoimmune hepatitis, primary sclerosing cholangitis, autoimmune sclerosing cholangitis). Clinical manifestations, diagnostics, treatment and prevention of gall bladder and sphincter of Oddi dysfunctions and organic autoimmune diseases of liver and biliary tract.

Topic 9. Urinary tract infections in children. Pyelonephritis in children. Definition, classification of the urinary system infections in children, differential diagnostics of infections of upper and lower urinary tract. Etiology, pathogenesis, clinical picture, diagnostics, treatment, prevention and prognosis of cystitis in children. Pyelonephritis in children: definition, etiology, pathogenesis, classification, clinical manifestations, diagnostics, treatment, prevention and prognosis.

Dysmetabolic nephropathies in children: definition, classification, etiology, pathogenesis, clinical picture, diagnostics, treatment, prevention and prognosis.

Topic 10. Glomerulonephritis in children. Chronic renal failure in children. Glomerulonephritis: definition, classification, etiology, pathogenesis, clinical manifestations, diagnostics, treatment, prevention and prognosis. Chronic renal failure: risk factors, etiology, pathogenesis, stages, clinical picture, diagnostics, treatment, prevention and prognosis.

Content module 2. Medical practice (professional training) pediatric diseases

Topic 11. Principles of providing current and urgent therapeutic aid in Ukraine. Studing of the structure and organization of work of the pediatric hospital, volume and forms of pediatrician work. Questioning (complains and anamnesis) and objective clinical examination of patients in the most common diseases of the childhood.

Topic 12. Interpretation of laboratory and instrumental methods of examination in the pediatric department.

Topic 13. Substantiation and formulation of the diagnosis in the most common diseases of the childhood.

Topic 14. Treatment, primary and secondary prevention in the most common pediatric diseases.

Topic 15. Providing an urgent aid in the most common pediatric diseases. Principles of deontology in the pediatrician's practice.

Module 2 **Pediatrics with pediatric infectious diseases**

Content module 1. Neonatology

Topic 1. Organization of neonatal care in Ukraine. Medical care for a healthy newborn baby.

Indexes of the quality of medical care for newborns: perinatal mortality, neonatal morbidity and mortality. Regionalization of perinatal care. Medical protocol for healthy newborn baby care: sequence of actions for providing medical care for a healthy newborn baby in the delivery room, ten steps of the warm chain, assessment of the general condition of the neonate according to the Apgar scale, scheme of the initial medical examination of the newborn, care of the umbilical cord, umbilical cord remnant, umbilical wound, prevention of hemorrhagic disease of the newborn, vaccination of newborns, screening examination of newborns.

Topic 2. Prematurely born children. Children small for gestational age.

Assessment of morphological and neuro-functional maturity of prematurely born children (according to the Ballard scale). Pathological conditions characteristic of prematurely born children. The main stages of providing medical and preventive care.

Principles of enteral and parenteral nutrition of prematurely born children. Emergency assistance in emergency situations: hypothermia, hypoglycemia, apnea. Intrauterine development retardation: causes, clinical options, features of early neonatal adaptation.

Topic 3. Asphyxia of a newborn. Birth trauma.

Asphyxia at birth: definition, causes, classification, diagnostic criteria. Initial, resuscitation and post-resuscitation care for a newborn child. Indications, contraindications, complications and stages of therapeutic hypothermia.

Birth trauma: factors from the mother and fetus, typical manifestations of various types of birth trauma (soft tissue damage, paresis, paralysis, bone fractures, intracranial hemorrhages). Modern methods of diagnosis of intracranial hemorrhages. Principles of treatment of various types of birth injuries.

Topic 4. Respiratory distress syndrome of newborns (RDS). Pneumonias of newborns.

Respiratory distress syndrome of newborns: definition, risk factors, pathogenesis, clinical signs, diagnostic methods, differential diagnosis. Principles of treatment: stabilization of the condition at birth, surfactant replacement therapy, methods of respiratory support. Antenatal steroid prophylaxis.

Pneumonias of newborns: definition, etiology, pathogenesis, classification, features of the course of pneumonia in premature babies. Principles of antibiotic therapy of pneumonia in newborns.

Topic 5. Hemolytic disease of newborns (HCN). Hemorrhagic syndrome in newborns.

Hemolytic disease of newborns: etiology, pathogenesis, classification, clinical and laboratory criteria of various forms of the disease, differential diagnosis. Phototherapy: mechanism of influence, rules of conduct, complications. Blood replacement surgery: indications, technique, complications. Specific prevention of hemolytic disease of the newborn. Forecast. Clinical manifestations of bilirubin-induced neurological dysfunction.

Causes of hemorrhagic syndrome in newborns. Hemorrhagic disease of newborns: definition, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, emergency care, prevention.

Topic 6. Intrauterine infections of newborns (TORCH - infections).

TORCH-infections of newborns: etiology, pathogenesis, clinical features, diagnosis, differential diagnosis, treatment, prevention, prognosis.

Topic 7. Bacterial infections of newborns.

Bacterial diseases of skin and subcutaneous fatty tissue in newborns, diseases of the umbilical cord, umbilical wound and umbilical vessels: classification, etiology, pathogenesis, clinical features, diagnosis, differential diagnosis, treatment, prevention, prognosis. Neonatal sepsis: definition, classification, etiology, pathogenesis, clinical features, diagnosis, differential diagnosis, treatment, prevention, prognosis.

Content module 2. Blood system diseases in children

Topic 8. Anemias in children (deficient, posthemorrhagic, hemolytic, dyshematopoietic).

Anemias in children: definition, etiology, pathogenesis, classification, clinical features, diagnosis, differential diagnosis, treatment, prevention, prognosis.

Topic 9. Hemorrhagic diseases in children.

Classification of the hemostasis system disorders. Causes and risk factors of hemorrhagic diseases in children (hemophilia, idiopathic thrombocytopenic purpura, hemorrhagic vasculitis). The main links of the pathogenesis of hemorrhagic diseases in children. Classification of hemorrhagic diseases in children. Typical elements of rash in various types of hemorrhagic diseases. Clinical manifestations of hemorrhagic syndrome in various hemorrhagic diseases. Differential diagnosis of hemorrhagic diseases in children. Criteria for laboratory diagnosis of hemorrhagic diseases. Principles of treatment and prevention of hemophilia, idiopathic thrombocytopenic purpura, hemorrhagic vasculitis. Emergency care for bleeding in children.

Topic 10. Leukemias and lymphomas in children.

Hemoblastosis, definition, classification, etiology and pathogenesis. Acute leukemia in children: clinical variants of the course, diagnosis, differential diagnosis. Principles of leukemia treatment, complications of cytostatic therapy. Forecast. Lymphomas in children: clinical features, diagnosis, differential diagnosis, principles of treatment, prognosis.

Content module 3. Endocrine system diseases in children

Topic 11. Diabetes in children.

Types of glycemic disorders in children with diabetes. Etiology, triggering factors, pathogenetic mechanisms of development, stages of development, clinical and laboratory manifestations of type 1 diabetes in children. Features of the clinical course of diabetes depending on age. Differential diagnosis of diabetes type 1, type 2 and MODY diabetes in children. Principles of diabetes therapy. Diet therapy, the system of bread units in the diet of patients with diabetes. Insulin therapy of type 1 diabetes: groups of insulin preparations, methods of its use, daily need for insulin in children in different periods of the course of the disease. Diabetic ketoacidosis and ketoacidotic coma in children: causes, clinical and laboratory manifestations, principles of therapy. Hypoglycemia and hypoglycemic coma in children: causes, clinic, diagnosis, emergency care. Differential diagnosis of hypoglycemic and ketoacidotic coma in children and adolescents. Long-term complications of type 1 diabetes in adolescence.

Topic 12. Diseases of the thyroid gland in children.

The most common disorders and diseases of the thyroid gland in children. Methods of diagnosis of diseases of the thyroid gland. Conditions associated with an elevated TSH level. Causes of hypothyroidism in children and etiology of congenital hypothyroidism. Diagnosis of congenital hypothyroidism: symptoms and screening

testing. Treatment and prognosis in congenital hypothyroidism. Acquired hypothyroidism, causes, clinical features, diagnosis, treatment. Diagnostic criteria of Hashimoto's disease. Endemic goiter, diagnosis, treatment, prognosis. Main clinical manifestations and diagnosis of Graves' disease. Treatment of Graves' disease in children. Thyrotoxic crisis, causes, clinic, emergency care. Diagnosis and treatment of thyroid cancer in children.

Topic 13. Diseases of the hypothalamic-pituitary system and gonads in children.

Etiology, pathogenesis, clinical picture, diagnostic methods, differential diagnosis, treatment and prevention of pituitary dwarfism, diabetes insipidus, hypogonadism, cryptorchidism, precocious puberty, delayed puberty, Turner's syndrome, Klinefelter's syndrome, ovotesticular disorder of sex formation, congenital hyperplasia of the adrenal cortex, obesity in children.

Content module 4. Pediatric infectious diseases

Topic 1. Measles. Rubella. Varicella. Herpeszoster

Etiology, epidemiology, pathogenesis, clinical features of typical forms, complications. Congenital rubella. Principles of treatment. Specific prevention. Anti-epidemic measures in the focus of infection.

Topic 2. Scarlet fever. Pseudotuberculosis. Etiology, epidemiology, pathogenesis, clinical features of typical forms, complications. Congenital rubella. Principles of treatment. Specific prevention. Anti-epidemic measures in the focus of infection.

Topic 3. Diphtheria. Infectious mononucleosis

Etiology, epidemiology, pathogenesis, clinical features of typical forms, complications. Congenital rubella. Principles of treatment. Specific prevention. Anti-epidemic measures in the center of infection.

Topic 4. Whooping cough. Parotid infection. Etiology, epidemiology, pathogenesis, clinical features of typical forms, complications. Congenital rubella. Principles of treatment. Specific prevention. Anti-epidemic measures in the focus of infection.

Topic 5. Meningococcal infection.

Etiology, epidemiology, pathogenesis. Classification. Clinical features of various forms. Complication. Diagnosis. Principles of treatment.

Topic 6. Poliomyelitis. Enterovirus infection

Etiology, epidemiology, pathogenesis. Classification. Clinical features of various forms. Diagnosis. Principles of treatment. Specific prevention and anti-epidemic measures in the focus of infection.

Topic 7. Acute respiratory viral infections (influenza, parainfluenza, adenovirus, respiratory syncytial, rhinovirus infection, Covid-19). Etiology, epidemiological

features, pathogenesis. Clinical forms. Complication. Diagnosis. Principles of treatment and prevention.

Topic 8. Acute intestinal infections (shigellosis, salmonellosis, Escherichiosis, intestinal yersiniosis, rotavirus infection).

Etiology, epidemiology, pathogenesis. Classification. Clinical features of typical forms in children of different ages. Complication. Laboratory diagnostics. Principles of treatment and prevention.

Topic 9. Viral hepatitis A, B, C, D and others. Etiology, epidemiology, pathogenesis. Classification. Clinical features of typical forms in children of different ages. Complications. Laboratory diagnostics. Principles of treatment and prevention.

Topic 10. HIV / AIDS in children. AIDS-opportunistic associated infections (pneumocystis, candidiasis, cryptococcal infection and others).

Epidemiological features in children. Clinical and laboratory diagnosis of AIDS-associated opportunistic infections. Principles of treatment. Prevention of congenital HIV infection.

Topic 11. TORCH infections (toxoplasmosis, cytomegalovirus infection, herpetic infection).

Etiology, epidemiology, pathogenesis. Clinical features of acquired and congenital forms. Laboratory diagnostics. Principles of treatment and prevention.

Module 3

Pediatrics, children's infectious diseases, medical practice (professional training) pediatric infectious diseases

Content module 1. Differential diagnostics of the most common diseases of the respiratory system in children. Emergency in main urgent conditions.

Topic 1. Differential diagnosis of pneumonia in children. Complications of pneumonia. Emergency care for acute respiratory failure in children. Leading clinical symptoms and syndromes in various clinical variants and complications of pneumonia in children. Data of laboratory and instrumental studies in various clinical variants of pneumonia and complications. Differential diagnosis of pneumonia in children. Preliminary diagnosis composition. Tactics of managing a patient with various clinical variants of pneumonia and its complications. Emergency care for acute respiratory failure, depending on its causes and severity. Prevention of pneumonia and its complications in children.

Topic 2. Differential diagnosis of bronchial obstruction syndrome in children. Emergency care for a severe attack of bronchial asthma in children.

Leading clinical symptoms and syndromes in bronchial asthma, bronchiolitis, acute obstructive bronchitis in children. Peculiarities of the course of bronchial

asthma in children depending on the degree of severity and level of control. Data of laboratory and instrumental research methods for bronchial asthma, bronchiolitis, acute obstructive bronchitis and their complications. Differential diagnosis of bronchial obstruction syndrome in children of different ages. Establishing a preliminary diagnosis. Patient management tactics for various clinical variants of bronchial obstruction syndrome and its complications in children in specialized and primary care departments. Providing emergency care for asthma. Prevention of bronchial asthma and bronchial obstruction syndrome in children of different ages.

Content module 2. Differential diagnosis of the most common diseases of the circulatory system in children. Emergency care for major emergencies.

Topic 3. Differential diagnosis of cyanosis, shortness of breath, cardiomegaly in children with heart diseases. Emergency care for acute heart failure in children.

Leading clinical symptoms and syndromes of circulatory diseases in children. Differential diagnosis of cyanosis, shortness of breath, cardiomegaly in children. Data from laboratory and instrumental research methods, differential diagnosis in congenital and acquired heart defects, inflammatory and non-inflammatory heart diseases in children. Tactics of managing a patient with congenital and acquired heart defects, inflammatory and non-inflammatory heart diseases, chronic heart failure in children in specialized and primary care. Emergency care for acute heart failure. Secondary prevention of infectious endocarditis in children.

Topic 4. Differential diagnosis of heart rhythm and conduction disorders in children. Emergency care for paroxysmal arrhythmias and Morgan-Adams-Stokes syndrome.

Leading clinical symptoms and syndromes in violations of the heart rhythm and conduction in children (extrasystole, paroxysmal tachycardia, atrial fibrillation, complete atrioventricular block). Clinical variants of the course of paroxysmal tachycardia and atrial fibrillation in children. Data of instrumental studies in extrasystole, paroxysmal tachycardia, atrial fibrillation, complete atrioventricular block. Differential diagnosis of extrasystole, paroxysmal tachycardia, atrial fibrillation and complete atrioventricular block. Tactics of managing a patient with violations of the heart rhythm and conduction in children. Providing emergency care for paroxysmal tachycardia, atrial fibrillation, MAS syndrome in children. Prevention of cardiac arrhythmias and conduction disorders in children.

Topic 5. Differential diagnosis of systemic connective tissue diseases and systemic vasculitis in children.

Leading clinical symptoms and syndromes in juvenile (idiopathic) rheumatoid arthritis, systemic lupus erythematosus, acute rheumatic fever, dermatomyositis, scleroderma, Kawasaki disease, nodular periarthritis and other systemic vasculitis in children. Clinical variants of the course and complications of systemic connective

tissue diseases and systemic vasculitis in children. Data of laboratory and instrumental studies in systemic connective tissue diseases and systemic vasculitis in children. Differential diagnosis of systemic connective tissue diseases and systemic vasculitis in children. Differential diagnosis of arthritis in children. Tactics of managing of sick children with systemic diseases of connective tissue and systemic vasculitis in conditions of specialized and primary care. Primary and secondary prevention of acute rheumatic fever in children.

Content module 3. Differential diagnosis of the most common diseases of the digestive organs in children. Emergency care for major emergencies.

Topic 6. Differential diagnosis of functional and organic diseases of stomach and intestines in children.

Leading clinical symptoms and syndromes in functional and organic diseases of the stomach and intestines in children (functional dyspepsia, irritable bowel syndrome, functional constipation, functional diarrhea, gastroesophageal reflux disease, chronic gastritis, peptic ulcer of the stomach and duodenum, disaccharidase deficiency, exudative enteropathy, celiac disease, cystic fibrosis, Crohn's disease, ulcerative colitis). Examination and differential diagnosis of functional and organic diseases of the stomach and intestines in children. Clinical variants of the course of functional and organic diseases of the stomach and intestines in children. Tactics of managing children with functional and organic diseases of the stomach and intestines. Emergency care for gastric bleeding. Prevention of functional and organic diseases of the stomach and intestines in children.

Topic 7. Differential diagnosis of diseases of the hepatobiliary system and pancreas in children. Emergency care for acute liver failure in children. Portal hypertension syndrome in children.

Leading clinical symptoms and syndromes in functional and organic diseases of the hepatobiliary system and pancreas in children (dysfunction of the gallbladder and sphincter of Oddi, chronic cholecystitis, pancreatitis and chronic hepatitis in children). Differential diagnosis of diseases accompanied by exocrine insufficiency of the pancreas. Examination and differential diagnosis of functional and organic diseases of the hepatobiliary system and pancreas in children. Clinical variants of the course of diseases of the hepatobiliary system and pancreas in children. Tactics of managing a child with functional and organic diseases of the hepatobiliary system and pancreas. Emergency care for acute liver failure and complications of portal hypertension syndrome. Prevention of diseases of the hepatobiliary system and pancreas in children.

Content module 4. Differential diagnosis of the most common diseases of the urinary system in children. Emergency care for major emergencies.

Topic 8. Differential diagnosis of infectious and inflammatory diseases of the urinary system in children. Differential diagnosis of hereditary diseases of the urinary system in children.

Leading clinical symptoms and syndromes in urinary system infections, dysmetabolic nephropathies and hereditary tubulopathies (phosphate diabetes, Debre de Toni-Fanconi syndrome, renal diabetes insipidus, renal tubular acidosis) in children. Clinical variants of the course and complications in infections of the urinary system, dysmetabolic nephropathies and hereditary tubulopathies in children. Data of laboratory and instrumental research methods in urinary tract infections, dysmetabolic nephropathies and hereditary tubulopathies in children. Differential diagnosis of the most common infections of the urinary system, dysmetabolic nephropathies and hereditary tubulopathies in children. Tactics of managing a child with infections of the urinary system and their complications, dysmetabolic nephropathies and hereditary tubulopathies in children.

Emergency care for acute urinary retention. Prevention of urinary tract infections in children. Dynamic monitoring in the outpatient setting.

Topic 9. Differential diagnosis of glomerulonephritis in children. Chronic kidney disease in children. Emergency care for acute kidney injury in children.

Conditions associated with hematuria in children. Differential diagnosis of acute poststreptococcal glomerulonephritis in children. Conditions associated with proteinuria in children. Differential diagnosis of nephrotic syndrome in children.

Treatment of glomerulonephritis and chronic kidney disease in children. Conservative treatment of acute kidney injury in children and indications for dialysis.

Content module 5. Medical observation of healthy and sick children in outpatient department. Emergency care for major emergencies.

Topic 10. Primary and reanimation aid providing to a neonate. The procedure for mandatory preventive examinations of a child under the age of three. Rational feeding and nutrition of a child under the age of three. Assessment of physical and psycho-motor development of a child up to three years of age. Tactics of a general practitioner in case of physical and neuropsychological development disorders of children in the first three years of life. Principles of effective counseling. Differential diagnosis and prevention of the most common deficiency conditions (rickets, iron deficiency anemia, protein-caloric deficiency) in young children. Preventive vaccinations for children under three years of age. Emergency care for anaphylactic reactions. Peculiarities of an out-patient supervision of prematurely born neonates and children born with a low body weight.

Topic 11. Cough in children. Differential diagnosis. Tactics of the doctor. Cough: a problem-oriented approach in pediatrics. The main types and causes of cough. Differential diagnosis of diseases whose main symptom is cough. Laboratory -

instrumental examinations of children with cough. Differential use of medicines for cough in children.

Topic 12. Fever in children. Differential diagnosis. Management. Emergency in febrile convulsions. Fever in children: a problem-oriented approach in pediatrics. Causes and types of fever. Differential diagnosis of diseases accompanied by fever in children. Therapeutic approaches to fever in childhood. Indications for prescribing antipyretics in pediatrics. Emergency care for febrile convulsions.

Topic 13. Pallor in children. Differential diagnosis. Management. Emergency care for bleeding. Lymphadenopathy and splenomegaly: differential diagnosis and management. Pallor in children: a problem-oriented approach in pediatrics. Differential diagnosis of diseases and conditions accompanied by pallor in children. Treatment of diseases and conditions that are accompanied by pallor in children. Emergency care for acute bleeding. Lymphadenopathy, hepatointestinal syndrome in children: differential diagnosis. Tactics of the doctor. Indications for consultation with a pediatric hematologist.

Topic 14. Integrated management of childhood diseases. The strategy of integrated management of childhood diseases and its purpose. General signs of danger of the child's condition. Assessment, classification, treatment, consultation and follow-up for cough, difficulty breathing, diarrhea, ear problems, sore throat, fever, nutritional disorders and anemia, in the presence of HIV infection in children aged 2 months to 5 years. Assessment, classification, treatment, consultation and follow-up in children under 2 months of age with jaundice, diarrhoea, feeding problems and low body weight, severe disease and local bacterial infection.

Topic 15. Final module control.

Content module 6. Pediatric infectious diseases, medical practice at the pediatric infectious department.

Topic 16. Differential diagnosis of infectious diseases with exanthema syndrome in children. Leading clinical symptoms and variants of the course of infections with exanthema syndrome (measles, rubella, chicken pox, scarlet fever, pseudotuberculosis). Differential diagnosis of exanthema syndrome in various infectious and non-infectious diseases. Tactics of managing patients, organizing anti-epidemic measures in the focus of infection in diseases with exanthema syndrome.

Topic 17. Differential diagnosis and emergency conditions in childhood respiratory infections. Leading clinical symptoms and variants of the course of childhood respiratory infections (diphtheria, infectious mononucleosis, mumps infection, whooping cough). Differential diagnosis of different forms of childhood respiratory infections. Differential diagnosis of angina and croup syndromes in various infectious and non-infectious diseases. Tactics of managing a patient with croup syndrome. First aid for croup. Features of the course of apneic whooping cough

in children. Tactics of managing a patient with whooping cough in order to prevent the occurrence of apnea. Emergency care for respiratory arrest in patients with whooping cough. Organization of anti-epidemic measures in the focus of infection in childhood respiratory infections.

Topic 18. Differential diagnosis of acute intestinal infections in children. Diagnosis and treatment. Leading clinical symptoms and syndromes of acute intestinal infections: local (gastritis, enteritis, colitis) and general (toxicosis, exicosis, neurotoxicosis, toxicosis-septic state). Clinical variants of the course of shigellosis, salmonellosis, escherichia, intestinal yersiniosis, viral diarrhea in children of different ages. Differential diagnosis of acute intestinal infections with each other and with diseases of the gastrointestinal tract of non-infectious origin. Tactics of managing children with acute intestinal infections (examination, indications for hospitalization, treatment). Anti-epidemic measures in the focus of infection.

Topic 19. Differential diagnosis and emergency in neuroinfections in children.

Leading clinical symptoms and variants of the course of meningococcal infection. Differential diagnosis of meningococcemia 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 20. Differential diagnosis and emergency conditions for influenza and acute respiratory infections in children. Leading clinical symptoms of influenza and acute respiratory infections in children. Differential diagnosis of influenza, parainfluenza, adenovirus, respiratory syncytial (RS), rhinovirus infection, etc. Pandemic influenza, its epidemiological and clinical-pathogenetic features. The leading clinical symptoms of emergency conditions observed in influenza and ARVI (hyperthermic syndrome and acute stenotic laryngotracheitis syndrome). Tactics of managing patients with influenza and acute respiratory infections. Emergency care in emergency situations. Prevention of influenza and acute respiratory infections in children.

Topic 21. Immunoprophylaxis of infectious diseases in children. Calendar of preventive vaccinations. Vaccination by age. Recommended vaccinations. Vaccination according to the state of health. Contraindications to vaccination. Post-vaccination reactions and complications, their diagnosis and treatment. Anaphylactic shock, diagnosis and emergency care.

Topic 22. Differential diagnosis and emergency conditions in viral hepatitis (VH) in children. Leading clinical symptoms, data of laboratory and instrumental studies in different clinical variants and depending on the causative agent of VH. Differential diagnosis of typical and atypical forms of hypertension in children.

Tactics of managing a patient with viral hepatitis. Anti-epidemic measures in the focus of infection.

Topic 23. Emergency conditions with viral hepatitis (VH) in children. Final module control. Leading clinical symptoms of acute liver failure in children with hypertension. Indicators of laboratory and instrumental studies in assessing the degree of severity and prognosis of the course of VH with acute liver failure syndrome. Tactics of management of a patient with hypertension with acute liver failure syndrome. Providing emergency care.

Educational discipline structure

Content modules and topics	Hours				
	Day form				
	Total	Including			
		L	P	Lab	Ind.
1	2	3	4	5	6
					7

Module 1.(4th course). Pediatrics, medical practice (professional training) pediatric diseases

Content module 1. Pediatrics

Topic 1. Rickets. Infant tetany. Hypervitaminosis D	8.0	1. 0	4.0			3.0
Topic 2. Acute bronchitis and pneumonia in children	8.0	1. 0	4.0			3.0
Topic 3. Allergic diseases in children: bronchial asthma, allergic rhinitis, atopic dermatitis. Food allergy	9.0	1. 0	4.0			4.0
Topic 4. The most common congenital heart defects in children	8.0	1. 0	4.0			3.0
Topic 5. Inflammatory and non-inflammatory heart diseases in children. Acute rheumatic fever in children.	8.0	1. 0	4.0			3.0
Topic 6. Juvenile idiopathic arthritis. Reactive arthropathies in children	8.0		4.0			4.0
Topic 7. Functional and organic gastrointestinal diseases in children	9.0	2. 0	4.0			3.0
Topic 8. Functional and organic hepatobiliary diseases in children	9.0	1. 0	4.0			4.0
Topic 9. Urinary tract infections in children. Pyelonephritis in children	8.0	1. 0	4.0			3.0
Topic 10. Glomerulonephritis and chronic renal failure in children	8.0	1. 0	4.0			3.0
Preparation to composition and composition of educational case report	7,0					7,0
Totally for content module 1	90	10	40			40

Topic 11. Practice. Principles of providing current and urgent therapeutic aid in Ukraine. Studing of the structure and organization of work of the pediatric hospital, volume and forms of pediatrician work. Questioning (complains and anamnesis) and objective clinical examination of patients in the most common diseases of the childhood		2,0			4,0
Topic 12. Practice. Interpretation of laboratory and instrumental methods of examination in the pediatric department		2,0			4,0
Topic 13. Practice. Substantiation and formulation of the diagnosis in the most common diseases of the childhood		2,0			4,0
Topic 14. Practice. Treatment, primary and secondary prevention in the most common pediatric diseases		2,0			4,0
Topic 15. Practice. Providing an urgent aid in the most common pediatric diseases. Principles of deontology in the pediatrician's practice		2,0			4,0
Totally for content module 2	30	10. 0			20.0
Total hours for module 1	120	10	50		60

Module 2. (5th course) Pediatrics with children's infectious diseases

Content module 1. Neonatology

Topic 1 Organization of neonatal care in Ukraine. Medical care for a healthy newborn baby	6,15		4,1 5			2,0
Topic 2. Prematurely born children. Children born small for gestational age.	7,15	1	4,1 5			2,0
Topic 3. Asphyxia of newborns. Birth trauma of newborns	7,15	1	4,1 5			2,0
Topic 4. Respiratory distress syndrome of newborns. Pneumonia of newborns	6,15		4,1 5			2,0
Topic 5. Hemolytic disease of newborns. Hemorrhagic disease of newborns.	6,15	1	4,1 5			2,0
Topic 6. Intrauterine infections of newborns (TORCH-infections)	6,15		4,1 5			2,0
Topic 7. Bacterial infections of newborns	6,15		4,1 5			2,0

Content module 2. Blood system diseases in children

Topic 1. Differential diagnosis of pneumonia in children. Complications of pneumonia. Emergency care for acute respiratory failure in children.	8,3		5,3			3
Topic 2. Differential diagnosis of bronchial obstruction syndrome in children. Emergency care for a severe attack of bronchial asthma in children.	8,3		5,3			3
Content module 2. Differential diagnosis of the most common diseases of the circulatory system in children. First aid for major emergencies						
Topic 3. Differential diagnosis of cyanosis, shortness of breath, cardiomegaly in heart diseases in children. Emergency care for acute heart failure in children.	7,3		5,3			2
Topic 4. Differential diagnosis of heart rhythm and conduction disorders in children. Emergency care for paroxysmal rhythm disturbances and Morgana-Adams-Stokes syndrome.	7,3		5,3			2
Topic 5. Differential diagnosis of arthritis and arthropathies in children	7,3		5,3			2
Content module 3. Differential diagnosis of the most common diseases of the digestive organs in children. Emergency care for major emergencies						
Topic 6. Differential diagnosis of functional and organic diseases of stomach and intestines in children	7,3		5,3			2
Topic 7. Differential diagnosis of diseases of the hepatobiliary system and pancreas in children. Hepatomegaly. Jaundices.	7,3		5,3			2
Content module 4. Differential diagnosis of the most common diseases of the urinary system in children. Emergency care for the main types of emergencies						
Topic 8. Differential diagnosis of infectious and inflammatory diseases of the urinary system in children. Differential diagnosis of hereditary diseases of the urinary system in children.	7,3		5,3			2
Topic 9. Differential diagnosis of acute and chronic glomerulonephritis in children. Emergency care for acute kidney injury in children.	7,3		5,3			2
Content module 5. Medical observation of healthy and sick children in outpatient department. Emergency care for major emergencies						
Topic 10. Primary and reanimation aid providing to a neonate	7,3		5,3			2

Topic 11. Cough in children: differential diagnostics and management	7,3		5,3			2
Topic 12. Pallor in children: differential diagnostics and management. Emergency in bleedings. Lymphadenopathies in children. Splenomegaly: differential diagnostics and management	7,3		5,3			2
Topic 13. Fever in children: differential diagnostics and management. Febrile convulsions in children	7,3		5,3			2
Topic 14. Integrated management of childhood illnesses	7,3		5,3			2
Tema 15. Respiratory support methods in children (CPAP, oxygen therapy)	6					6
Topic 16. Emergencies in the pediatric allergology	6					6
Topic 17. Differential diagnostics of skin rash in children	6					6
Topic 18. Emergencies in external factors influence in children	6					6
Topic 19. Final module control, including: Theoretical preparation test-control Control of practical skills Completion of the situational tasks	12,3		5,3			7
Totally for content modules 1-5	135		80			55
Content module 6. Pediatric infectious diseases, medical practice in the pediatric infectious department						
Topic 20. Differential diagnostics of the infectious diseases accompanied by exanthema in children. Medical practice	5,0		3,7 5 1,2 5			1,0
Topic 21. Differential diagnostics and emergency in pediatric respiratory infections Medical practice	5,0		3,7 5 1,2 5			1,0
Topic 22. Differential diagnostics and emergency in acute intestinal infections in children. Diagnostics and treatment. Medical practice	5,0		3,7 5 1,2 5			1,0

Topic 23. Differential diagnostics and emergency in pediatric neuroinfection. Medical practice	5,0		3,7 5 1,2 5			1,0
Topic 24. Differential diagnostics and emergency in influenza and acute respiratory diseases in children Medical practice	5,0		3,7 5 1,2 5			1,0
Topic 25. Immune prophylaxis of the infectious diseases in children Medical practice	5,0		3,7 5 1,2 5			
Topic 26. Differential diagnostics of viral hepatitis in children Medical practice	5,0		3,7 5 1,2 5			
Topic 27. Emergent conditions in viral hepatitis in children Medical practice Final module control	5,0		2,2 5 1,2 5 1,5			
Totally for content module 6	45		40			5
Total hours for module 3	180		120			60
Total hours for discipline	465	20	250			195

Topics of lections

Nº	Topic	Hours
Module 1 (4th course). Pediatrics, medical practice (professional training) pediatric diseases		
1.	Rickets in children	1.0
0.	Acute respiratory infections of upper respiratory tract and acute bronchitis in children	1.0

0.	Pneumonias in children	1.0
0.	Bronchial asthma in children	1.0
0.	The most common congenital heart defects in children	1.0
0.	Functional and organic gastrointestinal diseases in children	1.0
0.	Functional and organic hepatobiliary diseases in children	1.0
0.	Functional and organic intestinal diseases in children	1.0
0.	Urinary tract infections in children	1.0
0.	Glomerulonephritis and chronic renal failure in children	1.0
Totally for module 1		10
Module 2 (5th course). Pediatrics with children's infectious diseases		
	Asphyxia in children. Respiratory disorders syndrome	1
	Anemias in children: deficient, posthemorrhagic, hemolytic, dyshemopoietic	1
	Diabetes mellitus in children	1
	Premature neonates adaptation. Premature neonates nursing principles	1
	Hemoblastoses in children	1
	Hemolytic disease of newborns	1
	Acute intestinal infections. Viral hepatitis in children	2
	HIV/AIDS in children. AIDS-associated infections	2
Total hours for module 2		10
Total hours for discipline		20

Practical classes topics

Nº	TOPICS	Hrs
Module 1 (4th course). Pediatrics, medical practice (professional training) pediatric diseases		
1.	Rickets. Infant tetany. Hypervitaminosis D	4.0
2.	Acute bronchitis and pneumonia in children	4.0
3.	Allergic diseases in children: bronchial asthma, allergic rhinitis, atopic dermatitis. Food allergy	4.0
4.	The most common congenital heart defects in children	4.0

5.	Inflammatory and non-inflammatory heart diseases in children. Acute rheumatic fever in children.	4.0
6.	Juvenile idiopathic arthritis (JIA) and reactive arthropathies in children	4.0
7.	Functional and organic gastrointestinal diseases in children	4.0
8.	Functional and organic hepatobiliary diseases in children	4.0
9.	Urinary tract infections in children. Pyelonephritis in children.	4.0
10.	Glomerulonephritis and chronic renal failure in children	4.0
11.	Practice. Principles of providing current and urgent therapeutic aid in Ukraine. Studying of the structure and organization of work of the pediatric hospital, volume and forms of pediatrician work. Questioning (complaints and anamnesis) and objective clinical examination of patients in the most common diseases of the childhood	2
12.	Practice. Interpretation of laboratory and instrumental methods of examination in the pediatric department	2
13.	Practice. Substantiation and formulation of the diagnosis in the most common diseases of the childhood	2
14.	Practice. Treatment, primary and secondary prevention in the most common pediatric diseases	2
15.	Practice. Providing an urgent aid in the most common pediatric diseases. Principles of deontology in the pediatrician's practice	2

Total hours **50.0**

MODULE 2. (5th course). Pediatrics, children's diseases

1.	Organization of neonatal care in Ukraine. Medical care for a healthy newborn baby	4,15
2.	Prematurely born children. Children are small for gestational age.	4,15
3.	Asphyxia of newborns Birth trauma of newborns	4,15
4.	Respiratory distress syndrome and pneumonia in newborns	4,15
5.	Hemolytic and hemorrhagic diseases of newborns	4,15
6.	Intrauterine infections of the newborn (TORCH – infections)	4,15
7.	Bacterial infections in newborns	4,15
8.	Anemias in children: deficient, posthemorrhagic, hemolytic, dyshemopoietic	4,15
9.	Hemorrhagic diseases in children	4,15
10.	Leukemias and lymphomas in children	4,15
11.	Diabetes in children	4,15
12.	Diseases of the thyroid gland in children	4,15
13.	Diseases of the hypothalamic-pituitary system and gonads in children	4,15
14.	Measles. Rubella. Varicella. Herpes zoster. Scarlet fever. Pseudotuberculosis.	3,7

15.	Diphtheria. Infectious mononucleosis. Whooping cough. Parotid infection.	3,7
16.	Acute intestinal infections. Viral hepatitis	3,7
17.	Meningococcal infection. Poliomyelitis. Enterovirus infection.	3,7
18.	ARVD	3,7
19.	HIV/AIDS in children. AIDS-associated opportunistic infections	3,7
20.	TORCH-infections	3,8
<i>Totally for module</i>		80

**Module 3 (6th course). Pediatrics with pediatric infectious diseases;
Medical practice (professional training) pediatric infectious diseases**

1.	Differential diagnosis of pneumonia in children. Complications of pneumonia. Urgent care for acute respiratory failure in children.	5,3
2.	Differential diagnosis of bronchial obstruction syndrome in children. Emergency care for a severe attack of bronchial asthma in children.	5,3
3.	Differential diagnosis of cyanosis, shortness of breath, cardiomegaly in heart disease in children. Emergency care for acute heart failure in children.	5,3
4.	Differential diagnosis of cardiac rhythm and conduction disorders in children. Emergency care for paroxysmal arrhythmias and Morgan-Adams-Stokes syndrome.	5,3
5.	Differential diagnosis of systemic connective tissue diseases and systemic vasculitis in children.	5,3
6.	Differential diagnosis of functional and organic diseases of the stomach and intestines in children.	5,3
7.	Differential diagnosis of diseases of the hepatobiliary system and pancreas in children. Emergency care for acute liver failure in children. Portal hypertension syndrome in children.	5,3
8.	Differential diagnosis of infectious and inflammatory diseases of the urinary system in children. Differential diagnosis of hereditary diseases of the urinary system in children.	5,3
9.	Differential diagnosis of acute and chronic glomerulonephritis in children. Emergency care for acute kidney injury in children.	5,3
10.	Primary and reanimation aid providing to a neonate	5,3
11.	Cough in children: differential diagnostics and management	5,3

12.	Pallor in children: differential diagnostics and management. Emergency in bleedings. Lymphadenopathies and splenomegaly in children: differential diagnostics and management	5,3
13.	Fever in children: differential diagnostics and management. Febrile convulsions in children	5,3
14.	Integrated management of childhood illnesses	5,3
15.	Final control, including: Theoretical preparation test-control Practical skills control Situational tasks completion	5,3
16.	Differential diagnostics of pediatric infectious exanthema	5,0
	Differential diagnostics of pediatric respiratory infections	5,0
	Differential diagnostics and emergency in acute intestinal infections in children	5,0
	Differential diagnostics and emergency in pediatric neuroinfections	5,0
	Differential diagnostics and emergency in influenza and ARVD in children	5,0
	Immune prevention of the pediatric infectious diseases in children	5,0
	Differential diagnostics of pediatric viral hepatitis	5,0
	Emergencies in viral hepatitis in children	5,0
Totally for module 3		120
Totally for discipline		250

Independent work

No	TOPIC	Hours	Control type
Module 1 (4th course). Pediatrics, medical practice (professional training) pediatric diseases			
1.	Preparation to practical classes	33.0	Current control
2	Preparation and composition of a student's medical case report	7.0	Current control
3	Self training in the pediatric department, filling of medical practice diaries	20.0	Current control
	Totally for module 1	60.0	

MODULE 2 (5th course). Pediatrics with children's infectious diseases			
1	Preparation to practical classes	26	Current control
2	Completing an individual work: curation of patients, composition and discussion of the student's medical case report	4	Current control
	Totally for content modules 1 - 3	26	
3	Preparation to practical classes	10	Current control
5	Mastering of topics for self-training	5	Current control
	Totally for content module 6	7	
Module 3 (6th course). Pediatrics, pediatric infectious diseases, medical practice (professional training) pediatric diseases			
1	Respiratory support methods in pediatric practice	6	Current control
2	Differential diagnosis of skin rash in children	6	Current control
3	Emergencies in pediatric allergology	6	Current control
4	Emergencies in external factors influence	6	Current control
5	Preparation to practical classes	28	Current control
6	Preparation to final control № 1	3	Current control
7	Completing an individual work according to the chosen topic of the individual tasks	5	Current control
	Totally for module 3	60	
	Total hours for discipline	195	

Types of educational classes: practical classes, lections, consultations

Form of study: full-time

Methods of education:

By sources of knowledge: verbal (explanation, lecture, conversation, educational discussion, story); visual (illustration, demonstration); practical (practical work, acquisition of practical skills), work with a book.

According to the logic of presentation of educational material: analytical, synthetic, analytical-synthetic, inductive, deductive methods.

According to the level of cognitive activity: explanatory-illustrative, reproductive, problem-based, partially-research, research, method of problem presentation.

Interactive: role play, work in small groups (teams), case method, creative tasks, use of educational interactive video courses, visits to medical conferences, councils, "brainstorming", "discussion".

Distance learning methods using modern educational platforms and educational resources (LIKAR.nmu, Zoom, Skype, Classroom, etc.).

Methods of control: oral, written, test control of success, practical.

The form of the final control: transfer credit – module 1 (4th year, 7-8 semesters), module 2 (5th year, 9-10 semesters) and final control – module 3 (6th year, 11-12 semesters; combined form of conducting).

Means of diagnostics of learning success: individual tasks, presentations, questions for current monitoring, workbooks, test questions, test tasks, situational tasks, results of laboratory and instrumental research, protocols of clinical analysis of the patient, theoretical questions and tasks for the final control, diary of medical practice and summarized report of medical practice.

Language of teaching: Ukrainian, English.

**Distribution of points received by students in discipline assessment
Module 1 (4th course).**

№	Topic	Points number contributing to traditional mark			
		«5»	«4»	«3»	«2»
	Rickets. Infant tetany. Hypervitaminosis D	16-18	13-15	10-12	0
	Acute bronchitis and pneumonia in children	16-18	13-15	10-12	0
	Allergic diseases in children: bronchial asthma, allergic rhinitis, atopic dermatitis. Food allergy	16-18	13-15	10-12	0
	The most common congenital heart defects in children	16-18	13-15	10-12	0
	Inflammatory and non-inflammatory heart diseases in children. Acute rheumatic fever in children.	16-18	13-15	10-12	0

Juvenile idiopathic arthritis (JIA) and reactive arthropathies in children	16-18	13-15	10-12	0
Functional and organic gastrointestinal diseases in children	16-18	13-15	10-12	0
Functional and organic hepatobiliary diseases in children	16-18	13-15	10-12	0
Urinary tract infections in children. Pyelonephritis in children.	16-18	13-15	10-12	0
Glomerulonephritis and chronic renal failure in children	16-18	13-15	10-12	0
Educational case report	20	16	12	0
Total points for current educational activity*	Maximally – 200			

Module 2 (5th course)

№	Topic	Points number contributing to traditional mark			
		«5»	«4»	«3»	«2»
Content module 1-3 1: Neonatology, blood system and endocrine organs diseases in children					
	Organization of neonatal care in Ukraine. Medical care for a healthy newborn baby.	14	12	10	0
	Premature babies. Children from delay of intrauterine development.	14	12	10	0
	Asphyxia of newborns. Birth trauma of newborns.	14	12	10	0
	Respiratory distress syndrome of newborns. Pneumonia of newborns.	14	12	10	0
	Hemolytic disease of newborns. Hemorrhagic disease of newborns.	14	12	10	0
	Intrauterine infections of the newborn (TORCH - infections).	14	12	10	0
	Bacterial infections of newborns.	14	12	10	0
	Anemias in children (deficiency, posthemorrhagic, hemolytic, due to impaired hematopoiesis).	14	12	10	0
	Leukemias and lymphomas in children.	14	12	10	0
	Hemorrhagic diseases in children.	14	12	10	0
	Diabetes in children.	14	12	10	0
	Diseases of the thyroid gland in children.	14	12	10	0
	Diseases of the hypothalamic-pituitary system and gonads in children.	14	12	10	0
	Individual work (educational case report).	18	14	10	0
	Total points for content module № 1-3	Maximal points – 200 Minimal points – 111			
Content module 4. Pediatric infectious diseases					

№	Topic	Points number contributing to traditional mark			
		«5»	«4»	«3»	«2»
	Measles. Rubella. Varicella. Herpes zoster. Scarlet fever. Pseudotuberculosis.	25	18	13	0
	Diphtheria. Infectious mononucleosis. Whooping cough. Parotid infection.	25	18	13	0
	Acute intestinal infections. Viral hepatitis	25	18	13	0
	Meningococcal infection. Poliomyelitis. Enterovirus infection.	25	18	13	0
	ARVD	25	18	13	0
	HIV/AIDS in children. AIDS-associated opportunistic infections	25	18	13	0
	TORCH-infections	25	18	13	0
	Individual work	25	18	13	0
	Total points for content module № 4	Maximal points – 200 Minimal points – 111			

Module 3 (6th course)

№	Topic	Points number contributing to traditional mark			
		«5»	«4»	«3»	«2»
Content module 1-5 Pediatrics					
	Differential diagnosis of pneumonia in children. Complications of pneumonia. Urgent care for acute respiratory failure in children.	5	4	3	0
	Differential diagnosis of bronchial obstruction syndrome in children. Emergency care for a severe attack of bronchial asthma in children.	5	4	3	0
	Differential diagnosis of cyanosis, shortness of breath, cardiomegaly in heart disease in children. Emergency care for acute heart failure in children.	5	4	3	0
	Differential diagnosis of cardiac rhythm and conduction disorders in children. Emergency care for paroxysmal arrhythmias and Morgan-Adams-Stokes syndrome.	5	4	3	0
	Differential diagnosis of systemic connective tissue diseases and systemic vasculitis in children.	5	4	3	0

	Differential diagnosis of functional and organic diseases of the stomach and intestines in children.	5	4	3	0
	Differential diagnosis of diseases of the hepatobiliary system and pancreas in children. Emergency care for acute liver failure in children. Portal hypertension syndrome in children.	5	4	3	0
	Differential diagnosis of infectious and inflammatory diseases of the urinary system in children. Differential diagnosis of hereditary diseases of the urinary system in children.	5	4	3	0
	Differential diagnosis of acute and chronic glomerulonephritis in children. Emergency care for acute kidney injury in children.	5	4	3	0
	Primary and reanimation aid providing to a neonate	5	4	3	0
	Cough in children: differential diagnostics and management	5	4	3	0
	Pallor in children: differential diagnostics and management. Emergency in bleedings. Lymphadenopathies and splenomegaly in children: differential diagnostics and management	5	4	3	0
	Fever in children: differential diagnostics and management. Febrile convulsions in children	5	4	3	0
	Integrated management of childhood illnesses	5	4	3	0
	Final control	Maximal points – 120			

Total points for content module 1-5 *

Maximal points – 200
Minimal points – 111

Content module 6. Pediatric infectious diseases

	Differential diagnostics of pediatric infectious exanthema	10	8	6	0
	Differential diagnostics of pediatric respiratory infections	10	8	6	0
	Differential diagnostics and emergency in acute intestinal infections in children	10	8	6	0
	Differential diagnostics and emergency in pediatric neuroinfections	10	8	6	0
	Differential diagnostics and emergency in influenza and ARVD in children	10	8	6	0
	Immune prevention of the pediatric infectious diseases in children	10	8	6	0
	Differential diagnostics of pediatric viral hepatitis	10	8	6	0

Emergencies in viral hepatitis in children	10	8	6	0
Total points for content module 6	Maximal points – 200 Minimal points – 111			

Note. * - 50% of points are received for student's independent work (on each topic)

Mark on the discipline is estimated as an arithmetic average of the quantity of points received for module 1 (4th course), module 2 (5th course) and module 3 (6th course).

Correspondance of grading scales to the quality of mastering of the discipline

Mark in points	National scale mark	ECTS mark	Explanation
170-200	Excellent	A	Excellent (perfect fulfillment with minor unimportant mistakes)
155-169	Good	B	Very good (above an average level with a few mistakes)
		C	Good (in general correct fulfillment with several unimportant mistakes)
125-139	Satisfactory	D	Satisfactory (not bad but with significant mistakes)
		E	Enough (fulfillment satisfies minimal needed criteria)
60-110	Unsatisfactory	FX	Unsatisfactory (with possibility of the repeated trial)
		F	Unsatisfactory (without possibility of the repeated trial)

The list of questions for final control on “Pediatrics” discipline

1. Rickets. Definition, etiology, pathogenesis, classification, symptoms features, diagnosis, treatment. Prevention of rickets. Infant tetany: etiology, pathogenesis, symptomsal features and emergency care.
2. Hypervitaminosis D. Etiology, pathogenesis, symptomsal features, diagnosis, prevention, treatment, emergency care for acute hypervitaminosis D, prognosis.

4. Acute respiratory infections of the upper respiratory tract (acute nasopharyngitis, acute pharyngitis, acute laryngopharyngitis) in children. Etiology, pathogenesis, symptoms, diagnosis, treatment and prevention.
5. Acute obstructive laryngitis (croup) in children. Etiology, pathogenesis, symptoms and emergency care.
6. Therapeutic measures in case of fever and convulsions in children with ARI URT.
7. Acute bronchitis in children. Definition, etiology, pathogenesis, symptoms, diagnosis, treatment and prevention.
8. Acute obstructive bronchitis in children. Definition, etiology, pathogenesis, symptoms, diagnosis, treatment and prevention.
9. Acute bronchiolitis in children. Definition, etiology, pathogenesis, symptoms, diagnosis, treatment and prevention.
10. Pneumonia in children. Definition, classification, etiology, pathogenesis, symptoms, diagnosis, treatment and prevention of pneumonia in children. Forecast.
11. Acute respiratory failure in children. Definition, classification, etiology, pathogenesis, symptoms, diagnosis, emergency care.
12. Atopic dermatitis in children. Definition, classification, etiology, pathogenesis, symptoms, diagnosis, treatment and prevention, prognosis. Atopic march.
13. Allergic rhinitis in children. Definition, classification, etiology, pathogenesis, symptoms, diagnosis, treatment and prevention, prognosis.
14. Urticaria in children. Definition, etiology, pathogenesis, symptoms, diagnosis, treatment, prevention.
15. Angioneurotic edema, urticaria, Stevens-Johnson syndrome, Lyell's syndrome in children. Definition, etiology, pathogenesis, symptoms, diagnosis, treatment, prevention.
16. Bronchial asthma in children. Definition. Risk factors and pathophysiological mechanisms of development of bronchial asthma. Classification, symptoms, diagnosis, treatment and prevention of bronchial asthma in children, prognosis.
17. Severe attack of bronchial asthma (asthmatic status) in children. Etiology, pathogenesis, symptoms, diagnosis, emergency care.
18. The most common CHD in children. Etiology, classification of heart defects, hemodynamics in the most common CHD in children (VSD, ASD, PDA, tetralogy of Fallot, coarctation of the aorta, stenosis of the pulmonary artery, aortic stenosis, transposition of the main vessels).
19. Diagnosis of the most common CHD in children. Doctor's tactics and prognosis for the most common CHD in children. Conservative treatment. Indications for cardiosurgical treatment.

20. Diagnosis and treatment of heart failure in children with congenital heart disease. Secondary prevention of infectious endocarditis.
21. Carditis in children: definition, classification, etiology, pathogenesis, symptoms, diagnosis, treatment, prognosis.
22. Cardiomyopathies in children: definition, classification, etiology, pathogenesis, symptoms, diagnosis, treatment, prognosis.
23. Heart rhythm and conduction disorders in children: classification, causes, symptoms, diagnosis, treatment, prognosis.
24. Acute rheumatic fever in children. Definition, classification, etiology, pathogenesis, symptoms, diagnosis, treatment, primary and secondary prevention, prognosis.
25. Infectious endocarditis in children: definition, classification, etiology, pathogenesis, symptoms, diagnosis, treatment, primary and secondary prevention, prognosis.
26. JIA: definition, classification, etiology, pathogenesis, symptoms, diagnosis, treatment, rehabilitation, prognosis.
27. Reactive arthropathies in children: definition, classification, etiology, pathogenesis, symptoms, diagnosis, treatment, prognosis.
28. Functional digestive disorders in young children: etiology, pathogenesis, classification, symptoms, diagnosis, treatment, prevention.
29. Gastroesophageal reflux, duodenogastric reflux in older children. Etiology, pathogenesis, symptoms, diagnosis, treatment, prevention.
30. Organic diseases of the esophagus and stomach in older children. Etiology, pathogenesis, symptoms, diagnosis, treatment, prevention.
31. Functional dyspepsia, abdominal pain in older children. Definition, classification, etiology, pathogenesis, symptoms, diagnosis, treatment, prevention.
32. Dysfunctions of the gallbladder and sphincter of Oddi in children. Etiology, symptoms, diagnosis, treatment and prevention.
33. Etiology, symptoms, diagnosis, treatment and prevention of organic diseases of the biliary system in older children.
34. Exocrine pancreatic insufficiency in children. Definition, etiology, pathogenesis, symptoms, diagnosis, differential diagnosis, treatment, prevention, prognosis.
35. Acute and chronic pancreatitis in children. Etiology, pathogenesis, symptoms, diagnosis, treatment, prevention, prognosis.
36. Infections of the urinary system in children. Definition, classification, differential diagnosis of lower and upper urinary tract infections.
37. Cystitis in children. Etiology, pathogenesis, symptoms, diagnosis, treatment, prevention, prognosis.
38. Pyelonephritis in children. Definition, etiology, pathogenesis, classification, symptoms, diagnosis, treatment, prevention, prognosis.

39. Glomerulonephritis in children. Definition, classification, etiology, pathogenesis, symptoms, diagnosis, treatment, prevention, prognosis.
40. Chronic kidney failure in children. Risk factors of occurrence, etiology, pathogenesis, stages of the disease, symptoms, diagnosis, treatment, prevention, prognosis.
41. Neonatological care (service) organization in Ukraine. Nepnatological aid providence principles.
42. “Newborn” conception. Transitional states of newborns. Taking care of healthy newborn.
43. Preterm newborn conception.
44. Adaptation of different systems and organs of preterm child to an extrauterine life.
45. Principles of taking care of preterm newborns.
46. Intrauterine growth retardation: risk factors, types, symptomsal manifestations.
47. Asphyxia of newborns: etiology, pathogenesis, symptomsal manifestations, complications, diagnostics, ABC-reanimation steps.
48. Pneumopathies in newborns: etiology, pathogenesis, symptomsal manifestations, complications, diagnostics, treatment principles.
49. Hemolytic disease of newborns: mechanism of Rh-conflict and ABO-conflict development, classification.
50. Kernicterus: pathogenesis, symptomsal manifestations, diagnostics
51. Conservative treatment of hemolytic disease of newborns.
52. Indications to hemolytic disease of newborns operative treatment.
53. Differential diagnostics between physiological and pathological jaundice of newborns.
54. Antenatal and postnatal diagnostics of HDN.
55. Hemorrhagic disease of newborns: reasons of development, types, symptomsal manifestations, diagnostics and treatment.
56. Birth trauma: classification, mechanisms of development, symptomsal manifestations of cranial and spinal traumas, diagnostic methods and possible ways of treatment/correction.
57. TORCH infections conception. Risk factors, ways of contamination, pathogenesis and particular features of different intrauterine infections.
58. TORCH infections diagnostics: antenatal and postnatal ones; treatment of newborns with intrauterine infection.
59. Bacterial infections in newborns: etiology, mechanisms of development, predisposing factors, symptomsal manifestations, methods of diagnostics and principles of treatment.

60. Sepsis in newborns: etiology, mechanisms of development, predisposing factors, symptomsal manifestations, methods of diagnostics and principles of treatment.
61. Diabetes mellitus type I: etiology, pathogenesis, classification, symptomsal manifestations, main principles of diagnostics and treatment.
62. Diabetes mellitus type II: etiology, pathogenesis, classification, symptomsal manifestations, main principles of diagnostics and treatment.
63. Acute and chronic complications of diabetes mellitus: symptomsal presentation and diagnostic approaches. Principles of ketoacidosis' and hypoglycemia's management.
64. Thyroid gland diseases: etiology, pathogenesis, classification, symptomsal manifestations, main principles of diagnostics and treatment.
65. Hypothalamus-and-pituitary diseases' etiology, pathogenesis, classification, symptomsal manifestations, main principles of diagnostics and treatment.
66. Anemias in childhood: etiology, classification, main types and their symptomsal presentation, diagnostic approach and treatment tactics.
67. Iron deficiency: etiology, pathogenesis, classification, symptomsal manifestations, main principles of diagnostics and treatment.
68. Hemorrhagic diseases: etiology, pathogenesis, classification, symptomsal manifestations, main principles of diagnostics and treatment of main diseases accompanied by hemostasis disorders (thrombocytopenic purpura, hemorrhagic vasculitis, hemophilia).
69. The most common leukemias in children: etiology, pathogenesis, classification, symptomsal manifestations, main principles of diagnostics and treatment.
70. Lymphomas in pediatric practice: etiology, pathogenesis, classification, symptomsal manifestations, main principles of diagnostics, differential diagnostics and treatment.
71. Differential diagnostics of cardiomegalies in children. Emergency in acute cardiac failure in children.
72. Fever. Differential diagnostics of diseases accompanying with hyperthermic syndrome. Treatment.
73. Paleness in children: differential diagnostics of diseases accompanied by paleness, basic management approaches.
74. Basic principles of integrated management of childhood illnesses.

The list of laboratory and instrumental tests, medical manipulations and emergencies the student should master

I. Analysis of laboratory and instrumental research

1. Clinical blood analysis

2. Urineanalysis
3. Urine analysis according to Zimnytskyi
4. Fecal calprotectin tests
5. Pancreatic elastase-1 analysis
6. Clinical analysis of feces
7. Blood protein and its fractions, acute phase inflammatory markers
8. Blood glucose
9. Blood electrolytes
10. Blood lipid profile
11. Blood alkaline phosphatase
12. Blood transaminases
13. Creatinine, urea in serum blood
14. Total blood bilirubin and its fractions
15. Coagulogram
16. Analysis of pleural fluid
17. Synovial fluid analysis
18. Cerebrospinal fluid test
19. General immunological profile of blood
20. Serological reactions in autoimmune diseases
21. Microbiological tests for biological fluids and secretions
22. X-ray examination of the central nervous system, chest and abdominal organs, urinary system.
23. Spirography
24. ECG
25. Bronchoscopy
26. Endoscopic examination of the digestive tract
27. Echocardiography
28. X-ray examination of bones and joints
29. Radiation examination of the central nervous system
30. Tuberculin diagnosis
31. Fractional study of gastric juice, bile and pH-metry of the stomach

II. Medical manipulations

1. ECG registration
2. Medical injections of drugs
3. Blood pressure measuring
4. Catheterization of the bladder with a soft probe
5. Pleural puncture carrying out
6. Artificial respiration, indirect heart massage carrying out
7. Blood group and Rh factor estimation

III. Assistance in emergency situations

1. Severe degree asthma attack
2. Anaphylactic shock
3. Acute respiratory failure
4. Acute heart failure
5. Paroxysmal tachycardia

6. Morganyi-Adams-Stokes syndrome
7. Hypertensive crisis
8. Collapse
9. Acute liver failure
10. Acute kidney injury
11. Gastrointestinal bleeding

The list of questions on “Pediatric infectious diseases” discipline

1. Measles. Clinical features of typical and atypical forms. Complication. Differential diagnosis. Treatment. Prevention.
2. Rubella. Differential diagnosis of acquired and congenital rubella. Treatment. Prevention.
3. Chickenpox. Clinical picture of typical and atypical forms of chicken pox. Complication. Differential diagnosis. Treatment, prevention.
4. Herpes zoster infection. Diagnostics. Differential diagnosis. Treatment. Prevention.
5. Herpetic 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. Angina in children. Etiological features depending on age. Clinical features. Diagnostics. Differential diagnosis. Treatment. Tactics of managing angina patients at home.
8. Pseudotuberculosis. Differential diagnosis. Treatment, prevention.
9. Diphtheria. Clinical forms. Complication. Differential diagnosis. Treatment. Prevention of diphtheria.
10. Diphtheric laryngotracheitis. Symptoms. Differential diagnosis of true and false croup. Emergency aid.
11. Infectious mononucleosis. Differential diagnosis. Treatment. Prevention.
12. Whooping cough. Peculiarities of the course in infants. Complication. Differential diagnosis. Treatment Prevention.
13. Apneic form of whooping cough. Clinical and pathogenetic features. Prevention of respiratory arrest in children with whooping cough. First aid for apnea.
14. Mumps infection. Clinical picture of various forms of epidemic parotitis (parotitis, submaxillitis, sublinguitis, pancreatitis, orchitis, meningitis, etc.). Differential diagnosis. Treatment. Prevention.
15. Meningococcal infection. Clinical forms. Peculiarities of the course in children of the 1st year of life. Differential diagnosis of meningococcemia. Treatment. Prevention.
16. Infectious-toxic shock with meningococcemia. Diagnostics. Emergency aid.

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. Swelling of the brain in meningitis and encephalitis in children. Diagnostics. Emergency aid.
20. Poliomyelitis. Clinical forms. Differential diagnosis. Treatment. Prevention.
21. Enterovirus infection. Clinical forms. Differential diagnosis. Treatment. Prevention.
22. Shigellosis in children. Peculiarities of the course in different age groups. Differential diagnosis. Treatment. Prevention.
23. Salmonellosis in children. Peculiarities of the course in different age groups. Differential diagnosis. Treatment. Prevention.
24. Escherichia in children. Clinical features in children of different age groups depending on the causative agent. Differential diagnosis. Treatment. Prevention.
25. Acute intestinal infections in newborns. Etiological structure. Clinical features. Differential diagnosis. Treatment. Prevention.
26. Intestinal yersiniosis. Peculiarities of the course in children of different ages. Differential diagnosis. Treatment. Prevention.
27. Rotavirus infection. Differential diagnosis. Treatment. Prevention.
28. Toxico-exicosis with acute intestinal infections. Etiological structure. Types of exycosis. Clinical and laboratory diagnostics. Emergency aid.
29. Neurotoxicosis in acute intestinal infections. Etiological structure. Clinical and laboratory diagnostics. Emergency aid.
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 aid.
34. Flu. Clinical course. Peculiarities in young children. Complication. Differential diagnosis. Treatment. Prevention. Emergency care for hyperthermic and convulsive syndrome.
35. Pandemic flu. Peculiarities of epidemiology and clinic at the modern stage. Complication. Differential diagnosis. Treatment. Prevention.
36. Parainfluenza. Features of clinical manifestations. Differential diagnosis. Treatment. Prevention.
37. Acute stenosing laryngotracheitis (false croup) in children with acute respiratory viral diseases. Diagnostics. Differential diagnosis with true croup. Emergency aid.

38. Respiratory syncytial infections in children. Features of clinical manifestations. Differential diagnosis. Treatment, prevention.
39. Adenovirus infection. Peculiarities of the course in young children. Differential diagnosis. Treatment. Prevention.
40. HIV infection/AIDS in children. Clinic. Diagnostics. 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. Diagnostics, emergency care.

The list of practical skills to the “Pediatric infectious diseases” discipline

- I. Analysis of laboratory and instrumental research
 1. Clinical blood analysis
 2. Clinical urineanalysis
 3. Clinical liquor analysis
 4. Biochemical stool analysis
 5. Serological reactions in infectious diseases
 6. Bacteriological examination of biological fluids and secretions
 7. Immunological markers of infectious diseases
 8. Blood bilirubin and its fractions
 9. Alkaline phosphatase, thymol test, blood transaminases
2. Assistance in emergency situations
 1. Diphtheria croup
 2. Apnea with whooping cough
 3. Infectious-toxic shock with meningococcal infection
 4. Swelling of the brain in meningitis and encephalitis
 5. Toxic exicosis in acute intestinal infections
 6. Neurotoxicosis in acute intestinal infections
 7. Acute liver failure in viral hepatitis
 8. Acute stenosing laryngotracheitis in SARS
 9. Hyperthermic syndrome in influenza
 10. Febrile convulsions during flu
 11. Anaphylactic shock during vaccination

Discussed and recommended on the meeting of the pediatric department № 1, protocol № 1 from 25.08.2022

The Head of the department, professor



Berezenko V.S.

Associated professor

Levadna L.O.

Discussed and recommended on the meeting of the pediatric department № 2, protocol № 1 from 25.08.2022

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Discussed and recommended on the meeting of the pediatrics department of postgraduate education, protocol № 1 from 25.08.2022

The Head of the department, professor

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Discussed and recommended on the meeting of the pediatric infectious diseases department, protocol № 1 from 25.08.2022

The Head of the department, professor

Kramarov S.P.

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