### **Odessa National Medical University**

### **Faculty of Medicine**

### **Department of Children Infectious Diseases**

### Syllabus of the course

#### «Children infectious diseases»

Scope	2.5 ECTS credits, 75 hours
Semester, year of study	XI-XII semesters, 6 years of study
Days, time, place	according to the schedule of classes with a cyclic form of education, MI "City Clinical Infectious Diseases Hospital"
Contact phone number	723-82-18
E-mail	onmedu13@gmail.com
Workplace	Department of Children Infectious Diseases, classrooms
Consultations	Consultations and rehearsals of missed classes take place according to the schedule of consultations and rehearsals (the schedule is posted at the link <u>https://odmueduua.sharepoint.com/:f:/s/iso/Etg0UChkr5tFq</u> <u>fz9OtPNulgBDYwxUpu_6R_CPApnGtQg3Q?e=NUytna</u> )

**COMMUNICATION** with the students will be carried out in face-toface meeting. During distance learning communication is carried out using e-mail, phone, social networks, etc.

### **COURSE ANNOTATION**

**The subject of study of the discipline** - children's infectious diseases. The discipline "Children Infectious Diseases" is a mandatory component of the educational and professional training program, studied by students majoring in 222 "Medicine" qualification educational "Master of Medicine", professional qualification "Doctor" during the 6th year of study.

#### **Prerequisites:**

- -Medical biology -Biological and bioorganic chemistry -Human anatomy
- -Histology, cytology and embryology

-Physiology

- -Microbiology, virology and immunology
- -Patomorphology
- -Pharmacology
- -Propedeutics of pediatrics
- -Pediatrics
- -Obstetrics and gynecology
- -Neurology
- -Dermatology, venereology

#### **Current learning components:**

- -Pediatrics
- -Infectious diseases
- -Epidemiology and principles of evidence-based medicine
- -Emergency and emergency medical care

### **Postrequisites:**

- -Pediatrics
- -Internal Medicine
- -Infectious diseases
- -General practice (family medicine)

**Objective**: Acquisition by a student of knowledge and mastery of professional competencies and skills in pediatric infectious diseases on the basis of competencies acquired in the study of previous disciplines.

### Tasks during the study of the discipline: The student must have:

-Ability to abstract thinking, analysis and synthesis in the diagnosis and treatment of the most common childhood infectious diseases in children. (GC1)

-Ability to know and understand the subject area and professional activity in the diagnosis and treatment of the most common childhood infectious diseases in children. (GC2)

-Ability to communicate in the state language during the collection of anamnesis of life and illness, examination and examination of a child with a childhood infectious disease (GC3)

-Ability to learn and master modern knowledge, use information and communication technologies; ability to search, process and analyze information from various sources in the diagnosis and treatment of the most common childhood infectious diseases in children. (GC4).

-Ability to adapt and make an informed decision in a new situation during the diagnosis, assessment of a patient with a childhood infectious disease (GC5).

-Ability to work in a team during the diagnosis and treatment of the most common childhood infectious diseases in children (GC6).

-Ability to work in an international context, to communicate in a foreign language(GC7)

-Ability to assess and ensure the quality of work performed during the diagnosis and treatment of the most common childhood infectious diseases in children.(GC8).

-Ability to act on the basis of ethical considerations, socially responsible and consciously in the diagnosis and treatment of the most common childhood infectious diseases in children. (GC9).

#### The student must form:

-Skills of communication and clinical examination of the patient during the diagnosis and treatment of the most common childhood infectious diseases in children (SC1).

-Ability to determine the list of necessary clinical, laboratory and instrumental studies and evaluate their results in the diagnosis and treatment of the most common childhood infectious diseases in children (SC2).

-Ability to establish a preliminary and clinical diagnosis of the most common childhood infectious diseases in children (SC3)

-Ability to determine the principles of treatment, the required mode of work and rest and the nature of nutrition in the most common childhood infectious diseases in children (SC4).

-Ability to diagnose emergencies in the most common childhood infectious diseases in children (SC5).

-Ability to determine tactics and provide emergency medical care for the most common childhood infectious diseases in children (SC6).

-Ability to perform medical manipulations in patients with childhood infectious diseases (SC8).

-Ability to plan and implement preventive and anti-epidemic measures for infectious diseases (SC11)

-Ability to determine the tactics of management of persons who have relapsed into an infectious disease, subject to dispensary supervision (SC12)

-Ability to keep medical records (SC14)

#### **Expected results:**

- Have communication skills and clinical examination of the patient. Collect data on complaints, medical history, life history of common childhood infectious diseases in children. (SLO1)

-Evaluate information about the diagnosis using a standard procedure, based on the results of laboratory and instrumental studies. To determine the list of

necessary clinical-laboratory and instrumental researches and to estimate their results at the widespread children's infectious diseases at children (SLO2).

-Identify the leading clinical symptom or syndrome. Establish a preliminary diagnosis, make a differential diagnosis and determine the clinical diagnosis of common childhood infectious diseases in children (SLO3).

- To determine the principles of treatment of diseases, the necessary mode of work and rest, the nature of nutrition in common childhood infectious diseases in children (SLO4).

-Diagnose emergencies in common childhood infectious diseases in children (SLO5).

-Determine tactics and provide emergency medical care for common childhood infectious diseases in children (SLO6).

-Perform medical manipulations in patients with children's infectious diseases (SLO8)

-Plan and carry out preventive and anti-epidemic measures for infectious diseases in children (SLO11)

-Determine the tactics of management of persons who have relapsed into children's infectious diseases and are subject to dispensary supervision (SLO 12)

-Keep medical records for common childhood infectious diseases in children (SLO14)

-Comply with the requirements of ethics, bioethics and deontology in their professional activities when communicating with patients and their parents on children's infectious diseases (SLO18)

### **COURSE DESCRIPTION**

### Forms and methods of teaching

**Types of classes**: lecture (-), practical classes (40 hours), independent work (35 hours), consultations.

Form of study: full-time.

**Teaching methods**: competence, explanatory-demonstration, research, problem-oriented.

### **Course content:**

Subsection 1. Differential diagnosis of infectious diseases with exanthema, pediatric respiratory infections and neuroinfections in children. Emergencies in pediatric respiratory infectious diseases and neuroinfections.

# Topic 1-3. Differential diagnosis of infections with exanthema syndrome in children: measles, rubella, scarlet fever, pseudotuberculosis, allergic exanthema, chickenpox, shingles, herpes simplex.

Leading clinical symptoms and variants of infections with exanthema syndrome (measles, rubella, chickenpox, scarlet fever, pseudotuberculosis). Differential diagnosis of exanthema syndrome in various infectious and noninfectious diseases. Clinical and laboratory diagnostics. Complication. Age features. Tactics of patient management, organization of anti-epidemic measures in the center of infection in diseases with exanthema syndrome.

# Topic 4-6. Differential diagnosis and emergencies in pediatric respiratory infections.

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

### Topic 7. Differential diagnosis of neuroinfections in children (meningococcal infection, enterovirus infection, polio, serous and purulent meningitis, viral encephalitis).

Leading clinical symptoms and variants of meningococcal infection. Clinical forms of the disease. 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. Complication. Effects. Tactics of management of patients with meningitis and encephalitis.

# Topic 8-9. Emergencies in neuroinfections (meningococcal infection, enterovirus infection, polio, serous and purulent meningitis, viral encephalitis) in children. Diagnosis and treatment.

Syndrome diagnosis. Neurotoxic syndrome. Meningeal and encephalitic syndromes. Leading clinical symptoms of infectious-toxic shock in meningococcal infection and edema-swelling of the brain in neuroinfections in children. Tactics of patient management and emergency care in ITS and cerebral edema(CE).

# Subsection 2. Differential diagnosis of acute intestinal infections and viral hepatitis in children. Emergencies in AII and VH.

# Topic 10. Differential diagnosis of AII in children (invasive, secretory, osmotic diarrhea).

Clinical and epidemiological features of AIII in children. Leading clinical symptoms and syndromes of AII: local (gastritis, enteritis, colitis) and general (toxicosis, exicosis, neurotoxicosis, toxic-septic condition). Clinical variants of shigellosis, salmonellosis, Escherichia coli, intestinal yersiniosis, staphylococcal enterocolitis, enterocolitis caused by CPF, viral diarrhea in children of different ages. Differential diagnosis of AII among themselves and with gastrointestinal diseases of non-infectious origin. Features of pathogenesis. Tactics of management of children with AII (examination, indications for hospitalization, treatment). Antiepidemic measures in the center of infection.

## Topic 11-12. Topic 18-19. Uninvolved stays with flu and GDVI in children. Diagnostics. Likuvannya.AII. Diagnostics and treatment.

Leading clinical symptoms of toxic-exicosis and neurotoxicosis in GCI in children. Pathogenesis of toxic syndrome, types and degrees of dehydration. Data from laboratory and instrumental studies in toxic-exicosis and neurotoxicosis syndromes. Diagnosis. Tactics of a general practitioner in the diagnosis of emergencies in GCI in children, emergency care. Pathogenetic and symptomatic therapy. Methods of oral rehydration.

# Topic 13-16. Differential diagnosis and emergencies in viral hepatitis in children. Differential diagnosis of jaundice syndrome in children.

Features of epidemiology, pathogenesis. Leading clinical symptoms, data from laboratory and instrumental studies in different clinical variants and depending on the pathogen of VH. Diff. diagnosis of typical and atypical forms of VH in children. Tactics of managing a patient with viral hepatitis. Chronic hepatitis. Antiepidemic measures in the center of infection. Pathogenesis, leading clinical symptoms of acute liver failure in VH in children. Indicators of laboratory and instrumental studies in assessing the severity and prognosis of VH with acute liver failure syndrome. Tactics of management of a patient with VH with acute liver failure syndrome. Providing emergency care. Jaundice syndrome in children, differential diagnosis.

# Subsection 3. Differential diagnosis and emergencies in influenza and ARVI in children. Immunoprophylaxis of infectious diseases in children. Group of TORCH-infections. HIV / AIDS in children.

### Topic 17. Differential diagnosis of influenza and ARVI in children.

Leading clinical symptoms of influenza and ARVI in children. Differential diagnosis of influenza, parainfluenza, adenoviral, RS infection, rhinovirus infection, etc. Pandemic influenza, its epidemiological, clinical and pathogenetic features. Laboratory diagnostics. Clinical forms, complications. Features of the course at an early age.

### Topic 18-19. Emergency conditions in children with flu and ARVI .Diagnistics. Treatment.

Leading clinical symptoms of emergencies observed in influenza and ARVI (hyperthermic and convulsive syndromes and acute stenotic laryngotracheitis syndrome). Tactics of patient management. Etiotropic and pathogenetic therapy. Indications for hospitalization. Emergency care in case of emergency. Prevention of influenza and ARVI in children.

### Topic 20. Immunoprophylaxis of infectious diseases in children.

Vaccination Calendar. Vaccination by age. Recommended vaccination.Vaccination for health reasons, Contraindications to vaccination. Preventive work of the doctor on a site. Vaccine remedi. The organization of work of the office of preventive vaccinations.

# Topic 21. Diagnostics of post-vaccination reactions and acceleration in children.

Post-vaccination reactions and complications, their diagnosis and treatment. Anaphylactic shock, diagnosis and emergency care.

# Topic 22. Organization of "hospital at home" for infectious diseases in children.

Early diagnosis of infectious disease. Indications for hospitalization. Treatment. Anti-epidemic measures in the center of infection. Dispensary observation.

# Topic 23. Differential diagnosis of infectious diseases caused by TORCH-group (toxoplasmosis, cytomegalovirus infection, herpes infection)

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

# Topic 24. Features of diagnosis and differential diagnosis of HIV / AIDS in children.

Epidemiological features in children. Clinical and laboratory diagnosis of AIDS opportunistic infections. Principles of treatment. Prevention of congenital HIV infection. Features of management of pediatric patients in the terminal stage of the disease, counseling, care, psychological, spiritual and social support of the patient and his relatives.

### List of recommended reading

1. Infections children's diseases./ Y.P. Kcharchenko, A. M. Mikhailova, S.O. Kramarev I.V., Yurchenko, A.A. Shapovalova, A. I. Savchuk.-Odessa medical State, 2008.-P. 168

2..Pediatric infectious diseases / S.O. Kramarev, Y.P. Kcharchenko and al., 2014. – К.: ВСВ «Медицина» – Р. 240

### Grading

#### Assessment of current learning activities

**Control methods**: oral, written, practical, test. **Forms of final control:** grading test (semester XI-XII) **Means of diagnosing learning success**: questions for current control, tests.

The structure of the assessment of current educational activities, one practical lesson tasks, presentations, individual tasks.

1. Assessment of theoretical knowledge on the topic of the lesson - solving a situational clinical problem with answers to five positions (maximum score - 5, minimum score - 3, unsatisfactory score - 2);

2. Assessment of practical skills on the topic of the lesson - demonstration of the task with a score of five positions (maximum score - 5, minimum score - 3, unsatisfactory grade - 2);

3. Assessment of work with the patient on the topic of the lesson - with an assessment of five items: a) complaints, medical history and life, b) data of clinical examination, c) data of laboratory and instrumental examination, d) justification of clinical diagnosis, e) compilation treatment plan (maximum score - 5, minimum score - 3, unsatisfactory score - 2);

During the practical lesson, the teacher can interview 60.0 - 100.0% of students in the group and give a grade.

The grade for one practical lesson is arithmetic mean and can be only an integer (5, 4, 3, 2).

### The structure of the assessment of current educational activities of one lesson:

national scale:

- the grade "excellent" is given to the student who systematically worked during a semester, showed during examination various and deep knowledge of a program material, is able to successfully carry out tasks which are provided by the program, has mastered the maintenance of the basic and additional literature, has understood interrelation of separate sections of discipline. importance for the future profession, showed creative abilities in understanding and using educational material, showed the ability to independently update and replenish knowledge; level of competence - high (creative);

- a grade of "good" is given to a student who has shown full knowledge of the curriculum, successfully completes the tasks provided by the program, mastered the basic literature recommended by the program, showed a sufficient level of knowledge of the discipline and is able to independently update and update during further study and professional activity; level of competence - sufficient (constructive-variable);

- the grade "satisfactory" is given to the student who has shown knowledge of the basic educational program material in the volume necessary for the further training and the subsequent work on a profession, copes with performance of the tasks provided by the program, has made separate mistakes in answers on examination and at performance of examination tasks, but has the necessary knowledge to overcome mistakes under the guidance of a researcher; level of competence - average (reproductive);

- the grade "unsatisfactory" is given to the student who did not show sufficient knowledge of the basic educational and program material, made fundamental mistakes in performance of the tasks provided by the program, cannot use the knowledge at the further training without the teacher's help, failed to master skills of independent work; level of competence - low (receptive-productive).

Students' independent work, which is provided by the topic of the lesson along with the classroom work, is assessed during the current control of the topic in the relevant lesson. Assimilation of topics that are submitted only for independent work is checked during practical classes.

At the end of the course, the current performance is calculated as the average score of all grades obtained by the student on a traditional scale, rounded to 2 (two) decimal places.

The maximum score is 5.0. Discipline is considered credited if the student received a score of at least 3.0.

### **COURSE POLICY**

**Deadline and rescheduling policy:** Attendance is mandatory, practice classes and lectures are skipped on a daily basis. Students who have passes for good reasons, work them on an individual schedule.

**Policy on academic integrity**: independent performance of all types of work, tasks, forms of control provided by the work program of this discipline; links to sources of information in the case of the use of ideas, developments, statements, information; compliance with the legislation on copyright and related rights;

providing reliable information about the results of their own educational (scientific) activities, used research methods and sources of information.

### Attendance and lateness policy: classes start at 8.30.

**Form of clothing**: medical gown, which completely covers the outerwear, or medical pajamas, hat, mask, change of shoes.

Mobile devices: It is not acceptable to use mobile phones in class

**Behavior in the audience**: calm, friendly. The course involves teamwork. The communication environment is friendly, creative, open to constructive criticism.