MINISRTY OF HEALTH OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY
Department of Pediatrics №1

Syllabus of educationally selective discipline "Algorithm for pediatric diagnosis of complex clinical cases in family medicine"

Scope:	*Total hours for discipline:* 45 hours, 1.5 credits. Semester XI – XII. 6 year
Days, hours, place:	According to the schedule of classes. Department of Pediatrics No. 1. St. Ac. Vorobyova 3, Communal non-commercial enterprise "Odessa Regional Children's Clinical Hospital" of the Odessa Regional Council, 9-storey building, 7th floor.
Teacher (s)	Aryayev M.L. Corresponding Member National Academy of Medical Sciences of Ukraine, Doctor of Medical Sciences, Professor, Head of the Department. Associate professors: PhD Kaplina L.E., Biryukov V.S., Senkivska L.I. Assistants: Ph.D. doctor of philosophy Usenko D.V. Assistants: Pavlova V.V., Selimkhanova D.S., Bishley N.O., Streltsov M.S., Talashova I.V.
Contact information:	Information by phone: Kaplina Larisa Evgenievna, head teacher: 0509707163. Senkivska Liudmyla Ivanivna, responsible for organizational and educational work at the department: 0679590334 or by landline of the department: (048) 705 53 21 - laboratory assistant, Olkhovska Veronika Olexandrivna. **E-mail:** pediatrics50@gmail.com. **Personal consultations:** from 2:00 pm to 5:00 pm every Thursday and from 9:00 am to 2:00 pm every Saturday. **On-line consultations:** from 4:00 pm to 6:00 pm every Thursday and from 9:00 am to 2:00 pm every Saturday. A link to an online consultation is provided to each group separately during the class.

COMMUNICATION

Communication will be carried out in the classroom.
During distance learning, communication is carried out through the Microsoft Teams platform, Zoom, as well as through e-mail correspondence, through Viber messengers (through groups created in Viber, for each group separately through group leaders).

ANNOTATION OF THE EDUCATIONAL DICSIPLINE

The subject of study of the selective discipline

"Algorithm for pediatric diagnosis of complex clinical cases in family medicine"

Course prerequisites and post-requisites:

Prerequisites**:** Ukrainian (professional), foreign language (professional), Latin and medical terminology, medical biology, medical and biological physics, medical chemistry, biological and bioorganic chemistry, human anatomy, histology, cytology and embryology, physiology, microbiology, virology and immunology, life safety; fundamentals of bioethics and biosafety, pathomorphology, pathophysiology, pharmacology, hygiene and ecology, pediatric propaedeutics.

Postrequisites**:** internal medicine, pediatrics, surgery, obstetrics and gynecology, infectious diseases, epidemiology and principles of evidence-based medicine, oncology and radiation medicine, traumatology and orthopedics, anesthesiology and intensive care, emergency and emergency medical care.

Purpose**:** The application's acquisition of the higher education of additional knowledge and mastery of professional competences in providing emergency care to children, based on the competences obtained during the study of previous disciplines.

Task**:**

1. Formation of skills and abilities: in differential diagnosis, mostly complex clinical casesin children.

2. Improving the skills of substantiating a clinical diagnosis, drawing up a plan for laboratory and instrumental research at the most complex clinical cases in children.

3. Mastery of the ability to determine the tactics of emergency care, treatment and prevention of the most complex clinical cases diseases in children.

Expected learning outcomes.

As a result of studying, the applicant for higher education must:

Know: "Algorithm for establishing a pediatric diagnosis of complex clinical cases in family medicine"

Algorithms of communication with parents establishing a pediatric diagnosis in complex clinical cases with abdominal pain (functional, organic), with jaundice in newborns, with bronchial obstruction syndrome (obstructive bronchitis, bronchial asthma, foreign body of the respiratory tract), with inflammatory diseases of the urinary system in children, with delayed physical development in children in the practice of family medicine.

Be able to:

Conduct a survey of parents atestablishing a pediatric diagnosis in complex clinical cases child with abdominal pain(functional, organic factors).

Conduct a survey of parents atestablishing a pediatric diagnosis in complex clinical cases child with jaundice of newborns.

Conduct a survey of parents atestablishing a pediatric diagnosis in complex clinical casesin a child with bronchial obstruction syndrome (obstructive bronchitis, bronchial asthma, foreign body of the respiratory tract)

Conduct a survey of parents atestablishing a pediatric diagnosis in complex clinical cases with inflammatory diseases of the urinary system in children.

Conduct a survey of parents atestablishing a pediatric diagnosis in complex clinical cases with delayed physical development in children.

Conduct clinical examination of children of different ages according to standard methods.
Analyze the results of laboratory, functional and instrumental research.
Carry out differential diagnosis and substantiate the clinical diagnosis.
Determine the tactics and provide emergency medical care in emergency situations in children.
Determine the nature and principles of treatment of sick children on the basis of a preliminary clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
Perform medical manipulations (according to list 5) for common diseases in children.
Keep medical records for common diseases in children.

DESCRIPTION OF THE EDUCATIONAL DISCIPLINE

The dicsipline will be conducted in the form of seminars (16 classroom hours); organizing the student's self-make work (29 hours).

Teaching methods: discussion of theoretical issues, frontal survey on basic terminology, testing, role-playing games for mastering communication skills with a child or his parents, planning and carrying out preventive vaccinations for children and adults (work in a team).

THE CONTENT OF THE OPTIONAL ACADEMIC DISCIPLINE

Topic 1. Algorithm for establishing a pediatric diagnosis in complex clinical caseschildwith abdominal pain and functional disorders in the practice of family medicine.

Development of the algorithm pediatric diagnosis of abdominal pain in the practice of family medicine. Definition, etiopathogenesis, classification according to the Rome criteria of IY. Peculiarities of clinical manifestations, volume and peculiarities of laboratory and instrumental diagnostics for abdominal pain with functional disorders in the practice of family medicine. Differential diagnosis, principles of treatment. Dispensary observation, prevention, prognosis.

Topic 2. Algorithm for establishing a pediatric diagnosis in complex clinical caseschildwith abdominal pain with organic disorders in the practice of family medicine.

Development of the algorithmpediatric diagnosis of abdominal pain in the practice of family medicine. Definition, etiopathogenesis, classification according to the Rome criteria of IY. Peculiarities of clinical manifestations, volume and peculiarities of laboratory and instrumental diagnostics for abdominal pain with organic disorders in the practice of family medicine. Differential diagnosis, principles of treatment. Dispensary observation, prevention, prognosis.

Topic 3. Algorithm for establishing a pediatric diagnosis in complex clinical cases child with jaundice of newborns in the practice of family medicine.

Development of the algorithm pediatric diagnosis of jaundice in newborns in the practice of family medicine. Definition, etiopathogenesis, classification. Peculiarities of clinical manifestations, volume and peculiarities of laboratory diagnostics for jaundice of newborns in the practice of family medicine. Differential diagnosis, principles of treatment, prevention, prognosis.Communicative skills of communicating with the mother of a newborn child with manifestations of jaundice according to the Algorithm of Integrated Management of Childhood Illnesses.

Topic 4. Algorithm for establishing a pediatric diagnosis in complex clinical cases hilled with bronchial obstruction syndrome (obstructive bronchitis), in the practice of family medicine.

Processing at the algorithm for establishing a pediatric diagnosis of bronchial obstruction syndrome in the practice of family medicine (obstructive bronchitis). Definition, etiopathogenesis, classification. Peculiarities of clinical manifestations, volume and peculiarities of laboratory and instrumental diagnostics. Differential diagnosis, principles of treatment. Dispensary observation, prevention, prognosis in obstructive bronchitis in the practice of family medicine. Mastering the communication skills of interviewing parents about the probability of a diagnosis of bronchial asthma in a child. Mastering the communication skills of interviewing parents of a child with chronic cough.

Topic 5. Algorithm for establishing a pediatric diagnosis in complex clinical cases child with bronchial obstruction syndrome (bronchial asthma), in the practice of family medicine.

Processing at the algorithm for establishing a pediatric diagnosis in bronchial obstruction syndrome in the practice of family medicine (bronchial asthma). Definition, etiopathogenesis, classification. Peculiarities of clinical manifestations, volume and peculiarities of laboratory and instrumental diagnostics. Differential diagnosis, principles of treatment. Dispensary observation, prevention, prognosis in bronchial asthma in the practice of family medicine. Mastering the communication skills of interviewing parents about the probability of a diagnosis of bronchial asthma in a child. Mastering the communication skills of interviewing parents of a child with chronic cough.

Topic 6. Algorithm for establishing a pediatric diagnosis in complex clinical cases child with bronchial obstruction syndrome (foreign body of the respiratory tract) in the practice of family medicine.

Processing at the algorithm for establishing a pediatric diagnosis in the case of bronchial obstruction syndrome in the practice of family medicine (obstructive bronchitis, bronchial asthma, foreign body of the respiratory tract). Definition, etiopathogenesis, classification. Peculiarities of clinical manifestations, volume and peculiarities of laboratory and instrumental diagnostics. Differential diagnosis, principles of treatment. Dispensary observation, prevention, prognosis in the case of a foreign body of the respiratory tract in the practice of family medicine. Mastering the communication skills of interviewing parents about the probability of a diagnosis of bronchial asthma in a child. Mastering the communication skills of interviewing parents of a child with chronic cough.

Topic 7. Algorithm for establishing a pediatric diagnosis in complex clinical cases child with inflammatory diseases of the urinary system in children in the practice of family medicine.

Processing algorithm for establishing a pediatric diagnosis for inflammatory diseases of the urinary system in children in the practice of family medicine. Definition, etiopathogenesis, classification of inflammatory diseases of the urinary system in children. Peculiarities of clinical manifestations, scope and peculiarities of laboratory and instrumental diagnostics for inflammatory diseases of the urinary system in children in the practice of family medicine. Differential diagnosis, principles of treatment of inflammatory diseases of the urinary system in children in the practice of family medicine. Dispensary observation, prevention, prognosis for inflammatory diseases of the urinary system of children in the practice of family medicine.

Topic 8. Algorithm for establishing a pediatric diagnosis in complex clinical cases child with delayed physical development in children in the practice of family medicine.

Processing algorithm for establishing a pediatric diagnosis in the case of delayed physical development in children in the practice of family medicine. Definition, etiological factors, pathogenesis of delayed physical development in children in the practice of family medicine. Peculiarities of clinical manifestations, volume and peculiarities of paraclinical diagnostics in the case of delayed physical development in children in the practice of family medicine. Differential diagnosis, principles of treatment for delayed physical development in children in the practice of family medicine. Dispensary observation, prevention, prognosis for delayed physical development in children in the practice of family medicine. Mastering the practical skills of assessing the physical development of children of different ages according to sigma and centile nomograms.

List of recommended literature:

Basic:

1. Nelson Textbook of Pediatrics / Edition 2 volume set. Edition: 21st, 2019.
2. Avery's Diseases of the Newborn Book Tenth Edition •2018. Copyright © No of pages 1656 https://www.sciencedirect.com/book/9781437701340/averys-diseases-of-the-newborn
3. Vinod K Paul, Arvind Bagga. Ghai Essential Pediatrics, 8th edition, 2013. PDF format.

Additionally:

1. Chang AB, Marchant JM Approach to chronic cough in children. -Literature review:Nov 18, 2020. – UpToDate: https://www.uptodate.com/contents/approach-to-chronic-cough-in-children?search=chronic%20cough%20in%20children&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1

2. O'Brien S.Approach to the child with bleeding symptoms:Literature review. - UpToDate:Sep 19, 2019. - https://www.uptodate.com/contents/approach-to-the-child-with-bleeding-symptoms?search=Approach%20to%20the%20child%20with%20bleeding%20symptoms&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1
3. Global Initiative for Asthma – GINA, перегляд 2019 https://ginasthma.org/wp-content/uploads/2019/06/GINA-2019-main-report-June-2019-wms.pdf
4. Aryayev M, Senkivska L and Lowe JB (2021) Psycho-Emotional and Behavioral Problems in Children With Growth Hormone Deficiency. Front. Pediatr. 9:707648. doi: 10.3389/fped.2021.707648

EVALUATION

Forms and methods of current control: oral (survey, participation in a role-playing game), practical (working with the patient and his parents), assessment of communication skills and activity in the class

EVALUATION OF KNOWLEDGE (DISTRIBUTION OF POINTS)

Forms and methods of current control: oral, written, practical.
Final control - a test
Means of diagnosing learning success: questions for current control, clinical tasks, role-playing cases, questions for final control, performance of practical skills on simulation equipment, individual tasks.

Current assessment criteria for the seminar session:

Excellent "5"	The applicant for higher education is fluent in the material, takes an active part in role games, discussing and solving a situational clinical problem, confidently demonstrates practical skills during the examination of a sick child and interpretation of clinical, laboratory and instrumental studies, expresses his opinion on the topic of the lesson, demonstrates clinical thinking.
Good "4"	The applicant for higher education is well versed in the material, participates in the role games, discussion and solution of the situational clinical problem, demonstrates practical skills during the examination of a sick child and interpretation of clinical, laboratory and instrumental studies with some errors, expresses his opinion on the topic, demonstrates clinical thinking.
Satisfactorily "3"	The applicant for higher education does not have enough material, insecurely participates in the role games, discussion and solution of the situational clinical problem, demonstrates practical skills during the examination of a sick child and interpretation of clinical, laboratory and instrumental studies with significant errors.

Unsatisfactorily "2"	The applicant for higher education does not have the material, does not participate in the role games, discussion and solution of the situational clinical problem, does not demonstrate practical skills during the examination of a sick child and the interpretation of clinical, laboratory and instrumental studies.

FINAL EXAMINATION - a credit given to the applicant for higher education who has completed all sections of the educational program of a selective discipline, actively participated in seminars, has an average current grade of at least 3.0 and has no academic debt. Possibility and conditions of obtaining additional (bonus) points: not provided.

SELF-MAKE WORK OF HIGHER EDUCATION ACQUIRES

1. Independent work involves only preparation for each seminar.
2. Independent study of the algorithm of communication with the parents of a child with feeding problems by the algorithm of the Integrated management of childhood diseases
3. Independent study of the communication algorithm with the parents of a child with rickets.
4. Independent study of the algorithm of communication with the parents of a child with manifestations of anemia according to the algorithm of Integrated management of childhood diseases
5. Independent study of the algorithm of communication with the parents of a child with manifestations of eating disorders according to the algorithm of Integrated management of childhood diseases
6. Independent study of the algorithm of communication with the parents of a child with manifestations of diarrhea according to the algorithm of Integrated management of childhood diseases

POLICY OF THE EDUCATIONAL DISCIPLINE

Deadline and retake policy:

1. Class absences for disrespectful reasons are worked out according to the schedule of the teacher on duty.

2. Class absences for valid reasons are worked out according to the individual schedule with the permission of the dean's office.

Policy of the academic integrity:

Adherence to academic integrity by students involves:

- independent performance of educational tasks, tasks of current and final control of studying outcomes (for persons with special educational needs this requirement is applied taking into account their individual needs and capabilities);

- links to sources of information in the case of the use of ideas, developments, statements, information;
- compliance with the law on copyright and related rights;
- providing reliable information about the results of their own (scientific, creative) activities, used research methods and sources of information.

Unacceptable in educational activities for participants in the educational process are:

- use of family or business relationships to obtain a positive or higher assessment in the implementation of any form of control over learning outcomes or preferences in scientific work;
- use of prohibited auxiliary materials or technical means (cheat sheets, abstracts, headphones, telephones, smartphones, tablets, etc.) during control measures;
- passing the procedures of control of learning outcomes by fictitious persons.

For violation of academic integrity, students may be held subject to the following academic liability:

- reduction of the results of assessment of exams, tests, etc.;
- re-assessment (exam, test, etc.);
- appointment of additional control measures (additional individual tasks, tests, etc.);

Policy of the attendance and lateness:

Dress code: a medical gown that completely covers outerwear or medical pajamas, a medical cap, a mask, changeable shoes.

Equipment: notebook, pen, stethoscope, medical latex gloves.

Health status: the applicant of the higher education suffering from acute infectious diseases, including respiratory diseases, are not allowed to study.

Start of classes: 8.30 am.

The applicant who is late for class may be present, but if the teacher put "absence" in the journal, he must work it out in the general order.

Mobile devices: can be used with the permission of the teacher, if they are needed to perform the task.

Behavior in the audience: working, calm.