SUBJECT CARD

Faculty of Medicine and Health Sciences
Field of studies: Medicine
Form of studies: Full-time
Degree: Long-cycle Master's program
Specializations: No specialization
Academic year: 2022/2023

GENERAL PEDIATRICS	
SUBJECT	**General pediatrics**
NUMBER OF ECTS POINTS	3
LANGUAGE OF INSTRUCTION	English
TEACHER(S)	Assoc. Professor Zbigniew Żuber, MD, PhD lek. Marta Czubaj-Kowal, MD lek. Anna Piątkiewicz-Faryna, MD lek. Grażyna Jaszczyńska, MD lek. Maciej Bugajec, MD lek. Małgorzata Stelmachowska, MD lek. Monika Połcik-Jastrząb, MD lek. Michał Sokołowski, MD lek. Lidia Stopyra, MD lek. Anna Górak, MD lek. Katarzyna Niedrygas, MD lek. Alicja Toton, MD lek. Angelika Chmaj, MD
PERSON RESPONSIBLE	Assoc. Professor Zbigniew Żuber, MD, PhD
NUMBER OF HOURS	
LECTURES	20 h
CLASSES	40 h
GENERAL OBJECTIVES	
OBJECTIVE 1	Acquainting with issues of child development, proper division of periods of child development from prenatal to puberty. Acquaintance with issues related to childhood physiology and systemic pathology. Teaching pathophysiology of the neonatal period, including assessing the general condition of the newborn, familiarizing with the concepts of newborn born on time, normal birth weight, APGAR. Teaching how to describe pathological phenomena related to the concepts of a newborn at risk, prematurity, intra-fluid dystrophy, and a newborn baby small for his fetal age, large for his fetal age. To present and teach a detailed physical examination in all age groups, including groups of clinical problems typical of childhood.

GENERAL PEDIATRICS	
OBJECTIVE 2	Presentation of a logical interpretation of the results of laboratory and diagnostic tests depending on age, including developmental variability and the pathology found. Learning the principles of differential diagnosis leading to the diagnosis of the disease and teaching how to plan the outline of therapy in a broadly understood pediatric clinic.
LEARNING OUTCOMES	
MK1	**Knowledge:** Student can discuss the impact of obstetric problems in the perinatal period and on the further development of the child. He knows the pathophysiology of the neonatal period.
MK2	**Knowledge:** Student knows the problem of adaptation to extrapubic life and clinical complications associated with these phenomena. Is able to recognize and differentiate respiratory disorders and respiratory diseases of the newborn period.
MK3	**Knowledge:** Student knows and understands pathological processes associated with congenital disorders of carbohydrate, amino acid / protein and fat metabolism. He can recognize the clinical symptoms of dyselectrolytemia and acid-base disorders.
MK4	**Knowledge:** Student is able to divide birth defects depending on the time of teratogenic factor action, shows orientation and knows the principles of recognizing genetically determined diseases. Knows the problems of neonatal infections, with particular emphasis on congenital infections.
MK5	**Knowledge:** Student knows and understands etiopathogenesis, symptomatology, treatment and prevention of respiratory diseases taking into account the specifics of developmental age. Is able to characterize acute and chronic respiratory diseases, knows the etiopathogenesis, clinical picture and treatment of laryngitis, bronchitis and bronchiolitis and pneumonia, can discuss the clinic of bronchial asthma, cystic fibrosis
MK6	**Knowledge:** Student knows and understands etiopathogenesis, symptomatology, treatment and prevention of cardiovascular disease in children of all ages. Knows the principles of diagnosis and differential diagnosis and treatment of congenital heart defects. Can discuss large and small symptoms of heart defects. Knows the signs of circulatory failure in a child, is able to discuss the essence of hemodynamic disorders, is able to classify circulatory failure and is able to present treatment principles.

GENERAL PEDIATRICS	
MK7	**Knowledge:** Student knows and understands etiopathogenesis, symptoms, treatment and prevention of acute and chronic gastrointestinal diseases, taking into account the differences in the clinical picture related to the child's age. He can discuss in detail acute and chronic gastrointestinal infections, acute viral, bacterial, fungal and parasitic diarrhea. Knows and understands the issues of chronic diarrhea, osmotic diarrhea, congenital and acquired deficiencies of disaccharide cleaving enzymes. Is able to discuss the causes and pathomechanism of sectional diarrhea and chlorine diarrhea. Is able to present the principles of diagnosis and differential diagnosis of food allergies, knows how to propose a therapeutic treatment scheme using nutritional preparations and antiallergic drugs. Knows the principles of differential diagnosis of chronic abdominal pain in children - including peptic ulcer disease, ulcerative colitis, and Crohn's disease.
MK8	**Knowledge:** Student knows and understands etiopathogenesis, symptomatology, treatment and prevention of urinary tract diseases, can plan detailed diagnostics taking into account child's developmental periods. Is able to discuss and classify urinary tract infections in children in everyday practice, knows the principles of diagnosis, monitoring and treatment of sterilizing the urinary system. Is able to characterize and classify renal failure, knows metabolic disorders of uremia, etiopathogenesis, clinical picture and possibilities of renal replacement therapy in children. Is able to interpret the results of biochemical and laboratory tests performed on children with kidney disease. He knows and correctly characterizes the birth defects of the urinary system and their relationship with urinary tract infections. Can propose diagnostics of congenital urinary tract defects.
MK9	**Knowledge:** Student understands and correctly interprets changes in the endocrine system during child development and maturation. Knows the rules of practical assessment of child development and growth disorders can propose diagnostics, differentiation and treatment. Discusses and understands hormonal and metabolic disorders in the course of thyroid disease. Is able to classify and understand sexual dysfunction including adrenal gland diseases. Can present important physiological processes occurring during puberty. Knows and understands etiopathogenesis, symptomatology, treatment and prevention of endocrine system diseases.
MS1	**Skills:** Student conducts an efficient pediatric interview regarding child development, immunological prevention and current disease as well as associated diseases.
MS2	**Skills:** Student applies knows and understands the technique of pediatric examination, taking into account the specificities associated with the age of the patient and the degree of his development. Is able and applies the proper technique of physical examination of a newborn baby, infant and elderly child.

GENERAL PEDIATRICS	
MS3	**Skills:** Student can and applies child development analysis using correlated somatic tables and percentile grids. Is able to analyze deviations from the norm and performs interpretations of deviations found from the physical examination.
MS4	**Skills:** Student knows the principle of performing diagnostic tests and knows how to use the results of commissioned tests in practice. Performs a logical interpretation of the results of laboratory and diagnostic tests depending on age, including developmental variability. Interprets the found deviations of test results in basic disease entities.
MS5	**Skills:** Student performs differential diagnosis leading to the diagnosis of the disease and is able to plan the outline of therapy. Applies the principles of clinical diagnosis, additional tests and treatment of childhood infectious diseases. Recognizes and differentiates based on knowledge of the symptomatology of the most common childhood diseases.
MC1	**Social competency:** Student demonstrates the need and has the ability to systematically supplement knowledge. He can make contact (depending on the child's age), interview the child and his guardian. Can examine a child without causing anxiety to the child.
INTRODUCTORY REQUIREMENTS	
[1] Passing the course in introduction to pediatrics with a positive result. **[2]** Theoretical knowledge of the basics of general pediatrics.	
COURSE PROGRAM	**DETAILED DESCRIPTION OF THE TOPIC BLOCKS**
LECTURE 1	Clinical symptoms and the diagnosis of the pathological process in pediatrics, diagnostics, interpretation of additional tests, diagnosis.
LECTURE 2	Rules for dealing with a sick child. The intervention of a doctor, when observation and when treating a newborn, an infant.
LECTURE 3	Active and passive prevention of infectious diseases in children, Vaccinations – news.
LECTURE 4	Symptoms and differential diagnosis in nervous system disorders in developmental age. Developmental disorders, developmental delay. Cognitive impairment.
LECTURE 5	Seizure conditions: febrile seizures, epilepsy. Autism. ADHD.
LECTURE 6	Symptoms and differential diagnosis in respiratory diseases in children: Cystic fibrosis.
LECTURE 7	Musculoskeletal disorders, symptoms, diagnosis, treatment.
LECTURE 8	Metabolic diseases, rare and ultra-rare diseases in pediatrics.
LECTURE 9	Skin symptoms in pediatrics.
LECTURE 10	Emergencies in pediatrics, assessment, classification.

GENERAL PEDIATRICS	
CLASS 1	Cystic fibrosis. Acute respiratory failure in older children Chronic respiratory diseases.
CLASS 2	Acquired heart defects. Arrhythmias in children. Hypertension. Chronic heart failure in children. Inflammatory diseases of the heart. Cardiomyopathies.
CLASS 3	Active and passive prevention of infectious diseases in children, Vaccinations - practical issues, complications.
CLASS 4	Shortness of breath, respiratory failure, stridor, cough, wheezing, hemoptysis, hyperventilation.
CLASS 5	Musculoskeletal disorders, inflammatory diseases of the osteoarticular-muscular system, symptoms, diagnostics, diagnosis, treatment.
CLASS 6	Basics of pharmacotherapy, principles of bioethics and basics of EBM in pediatrics. Coordination of proceedings.
CLASS 7	Selected issues regarding congenital metabolic defects, rare and ultra-rare diseases, symptoms, diagnostics and substitution treatment, enzyme replacement therapy (ETZ).
CLASS 8	Systemic diseases, interdisciplinary approach, principles of comprehensive care in pediatrics. Principles of modern treatment of autoimmune diseases, modern biological (anti-cytokine) drugs.
CLASS 9	Emergencies in pediatrics, practical rules of conduct.
CLASS 10	Intensive care for children - examination of patients, analysis of anamnesis and physical examination, interpretation of additional tests, differential diagnosis.
CLASS 11	Caring for a healthy child – monitoring growth, puberty, weight control).
CLASS 12	Differentiation of the most common disease symptoms in children (swollen lymph nodes, fever, rashes).
CLASS 13	Problems of the newborn period - selected disease entities.
CLASS 14	The most common infectious diseases of childhood.
CLASS 15	The most common rash diseases - when a dermatologist, pediatrician, infectious disease specialist.
CLASS 16	Oncological and hematological threats in children.
CLASS 17	Organ changes and complications in the course of acute and chronic diseases. Long-term care principles. Palliative care.
CLASS 18	Childhood neurological diseases.
CLASS 19	Functional and emotional disorders - diagnostics, rules of conduct, psychological aspects of diseases.

GENERAL PEDIATRICS	
CLASS 20	The most common additional tests and their interpretation as well as the most common pediatric procedures.
DIDACTIC METHODS (APPLIED)	
	Multimedia presentations, Lectures, Teaching by the patient's bed, Case study.
STUDENTS WORKLOAD	
NUMBER OF HOURS UNDER SUPERVISION	Lectures (20) + classes (40) = 60 hours
NUMBER OF PREPARATION HOURS	Preparation for classes: 20 hours Preparation of medical history: 5 hours Preparation for the exam: 35 hours
TOTAL NUMBER OF HOURS FOR THE COURSE	120 hours
CONDITIONS FOR COURSE COMPLETION	
Attendance at all lectures and classes is obligatory. Final credit (for grade) in the form of obtaining: Positive assessment of passing the classes and positive result of the final test, oral responses to the exercises and 100% attendance at the classes. Attendance at all classes: in case of the absence or absence of classes due to lack of student's preparation or negative assessment of the result of the entrance test, it is necessary to do the classes confirmed by signature and stamp of the assistant leading the group. It is necessary to make up for any absences from classes, it is recommended to present or write a specific topic prepared by the student as part of self-study).	
METHODS OF ASSESMENT	
IN TERMS OF KNOWLEDGE	Multiple choice test.
IN TERMS OF SKILLS	Development of a medical history; Practical exam.
IN TERMS OF SOCIAL COMPETENCY	Activity during classes, observation of behavior towards patients, colleagues, assessment of group work.
FORMATIVE	Colloquia, mid-term papers.
SUMMATIVE (I & II TERMS)	**I term (EXAM):** Multiple choice test **II term (RETAKE EXAM):** Multiple choice test

GENERAL PEDIATRICS	
GRADING SCALE	
2,0 (UNSATISFACTORY)	The correct answer is **below 60%** of questions asked, no knowledge of the methodology of subjective and physical examination, insufficient knowledge of the symptomatology of issues discussed during classes
3,0 (SATISFACTORY)	The correct answer to **over 60% (60 - 66%)** of questions asked, sufficient mastery of the methodology of the subjective and physical examination, sufficient knowledge of the symptomatology of issues discussed during classes
3,5 (SATISFACTORY PLUS)	The correct answer to **67 -74%** of questions asked, mastery of the methodology of subjective and physical examination, knowledge of the symptomatology of issues discussed during classes
4,0 (GOOD)	The correct answer to **75 - 82%** of questions asked, good mastery of the methodology of subjective and physical examination, good knowledge of the symptomatology of issues discussed during classes
4,5 (GOOD PLUS)	The correct answer to **83 - 90%** of questions asked, almost complete mastery of the methodology of subjective and physical examination, good knowledge of the symptomatology of issues discussed during classes
5,0 (VERY GOOD)	The correct answer to **over 90%** of questions asked, very good mastery of the methodology of subject and physical examination, full knowledge of the symptomatology of issues discussed during classes

Komentarz [MF1]: Rozbieżność z polską wesją:
3.0 **60 - 69%**
3.5 **70 – 76%**
4.0 **77 – 83%**
4.5 **84 – 89%**
5.0 **90 – 100%**

BASIC LITERATURE

[1] Nelson Textbook of Pediatrics Tom 1-2, Karen Marcdante, Robert M. Kliegman, Hal B. Jenson, Richard E. Behrman, red. wyd. pol. Andrzej Milanowski Elsevier Urban & Partner, 2013;
[2] Nelson Textbook of Pediatrics, 2-Volume Set, 21st Edition, Authors: Robert Kliegman Joseph St. Geme, eBook ISBN: 9780323568883, Elsevier 2019;
[3] Pediatria t. 1-2. Wydanie: II zmienione i uaktualnione, 2018. Redakcja naukowa: Wanda Kawalec, Ryszard Grenda, Marek Kulus. Wydawca: PZWL Wydawnictwo Lekarskie;
[4] Pediatria do LEK i PES. Podręcznik do Lekarskiego Egzaminu Końcowego i Państwowego Egzaminu Specjalizacyjnego). Anna Dobrzańska, Jozef Ryżko; Elsevier Urban & Partner, 2014.

SUPPLEMENTARY LITERATURE

[1] Stany nagłe pediatria; Marcin Tkaczyk; Wydawca: Medical Tribune; Rok wydania: 2018; Wydanie: II;
[2] Pulmonologia dziecięca; Katarzyna Krenke, Marek Kulus; Wydawca: PZWL; Rok wydania: 2018; Wydanie: I;
[3] Alergologia; Krystyna Obtułowicz; Wydawca: PZWL; Rok wydania: 2016; Wydanie: I;
[4] Reumatologia wieku rozwojowego. Kompendium. Red. E.Smolewska. PZWL 2019. Wyd. I;
[5] Gastroenterologia dziecięca, Poradnik lekarza praktyka; Piotr Albrecht; Wydawca: Czelej; Rok wydania: 2014; Wydanie: I;
[6] Endokrynologia wieku rozwojowego; Beata Pyrżak, Mieczysław Walczak; Wydawca: PZWL; Rok wydania: 2018; Wydanie: I.