

I. Lupan

Dean of Faculty of Dentis MD, PhD, professor

SYLLABUS

MD, PhD, professor N. Revenco

of the discipline Pediatrics

(faculty of Dentistry)

Name of course: Pediatrics Code of course: S.08.8.087 Type of course: Compulsory Total hours - 36: Lectures - 12, practical classes - 24 Number of credits - 2 Names of teachers: Romanciuc L., Guragata A., Ciuntu A., Cenusa F., Rotaru A., Cirstea O.. Turcu O.

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I. *Aim of discipline:* learn the basic notions on the anatomical and functional peculiarities of child's body in relation to the age, the principles of history collection, perform a general physical exam, assessment of neuro-psychological and physical development in children of different ages, assessing the diet of the child, immunoprophylaxis, etiology, diagnosis, treatment and prevention of different illnesses in children and their role in dental diseases, recognition of danger signs and general emergency medical assistance to critically ill child. The major orientation of pediatric is the prophylaxis medicine in healthy children.

II. Training objectives of the discipline:

Level of knowledges and understanding

1. Knowledge on basic pediatric pathology.

2. Laws of child growth and development, factors that influence growth and development.

3. The anatomical-physiological, functional, morphological peculiarities in children of different ages.

4. Principles of nutrition in healthy and sick children of different ages.

5. International Classification of Diseases (ICD-10).

6. Basic principles of pediatric pathology: etiology, pathogenesis, clinical manifestations of typical diseases in children, the principles of diagnosis, treatment and prevention of these diseases.

7. Major emergencies in pediatrics.

8. Methods of preventing disease in children.

9. Childhood immunization schedule in Republic of Moldova.

Level of the application

1. Working with current medical documents: chart of observation, evolution.

2. Collection of the history (interview).

3. Anthropometric measurements in assessing physical development in children of different ages.

4. Making a general physical exam child of different ages.

5. Assessment of nutritional status of the child.

6. Prescription of the diet (food intake) in children of different ages.

7. Recognition of vital signs, symptoms and signs of the disease, major syndromes of child pathology.

8. Interpreting laboratory results: clinical, biochemical, bacteriological.

9. To interpret the results of imaging tests.

10. Formulation of definitive clinical diagnosis according to existing classifications.



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11. To indicate general measures and drug treatment for the child according to the established diagnosis, prevention and rehabilitation.

- 12. Emergency medical care in critically ill children.
- 13. Health education of mothers.

The level of integration

- 1. To develop knowledge and integrated approach to healthy child nursing, including nutrition as an important precondition for the child and adult health.
- 2. To promote the implementation of new knowledge and practices of nursing in future clinical work in relation to parents and carers of children.
- 3. To assess and evaluate the role of different exogenous and endogenous factors in promoting a healthy lifestyle.
- 4. Integrate knowledge about nursing practices for the proper development of the child.

III. Conditioning and preliminary requirements:

Specific issues to childhood: nutrition, nursing, growth and development, physical and neuro-psychological, practical skills and contemporary methods of etiology, diagnosis, treatment and

prevention of different illnesses in children.

IV. The content of the discipline

Lecture, practical lessons, independent work

A. Lectures

No. of order	Topics	No. of hours
1.	Introduction to the discipline. Maternal and child health care in	2
	Moldova. Child health indicators. Childhood periods.	
2.	Growth and development. Evaluation of physical and neuro-	2
	psychological development in children.	
3.	Anatomical and physiological locomotion in children. Hypo-	2
	vitaminosis in children. Rickets: clinical manifestation, diagnosis,	
	treatment and prevention.	
4.	Anatomical and physiological particularities of the digestive system in	2
	children. Chronic digestive disorders in children (gastritis,	
	gastroduodenitis, ulcer disease): etiology, principles of diagnosis,	



	treatment, prevention.	
5.	Morphological and functional particularities of the cardiovascular	2
	system in children. Rheumatic fever. Peculiarities of clinical	
	manifestations, diagnosis, treatment and prevention principles.	
6.	Anatomical and physiological particularities of the hematopoietic and	2
	immune system in children. Anemic syndrome and bleeding in children.	
	Total	12

A. Practical classes

No. of order	Practical classes topics	No. of hours
1.	Introduction to the discipline. Maternal and child health care in Moldova. Child health	5
	indicators. Childhood periods. Medical supervision of children in the Republic of	
	Moldova. Growth and development. Evaluation of the physical and neuropsychological	
	development in children. Characteristics of growth and development of children at	
	different ages. Assessment of physical and neuropsychological development. Notion of	
	mental retardation in development. Infant nutrition. Natural food priorities.	
	Diversification. The importance of nutrition in the development and rational dental	
	eruption in children. Mixed and artificial feeding of infants. Milk mixtures, feeding	
	children at the age of one year and the importance of adequate nutrition in development	
	and maturation of the maxillo facial system.	
2.	Anatomical and physiological particularities of the locomotor system in children.	5
	Hypovitaminosis in children. Rickets: clinical manifestation, diagnosis, treatment and	
	prevention. Pathology of acute respiratory diseases in children: specific features of	
	semiology, principles of diagnosis and treatment. The role of chronic infection	
	outbreaks in emergence and evolution of respiratory diseases in children.	
3.	Anatomical and physiological particularities of the digestive system in children.	5
	Chronic digestive disorders in children (gastritis, gastroduodenitis, ulcer disease):	
	etiology, principles of diagnosis, treatment, prevention.Morphological and functional	
	specific features of the cardiovascular system in children. Rheumatic fever. The	
	features of clinical manifestations, diagnosis, treatment and prevention principles.	
4.	Anatomical and physiological particularities of the hematopoietic and immune system	5



	in children. Anemic syndrome and bleeding in children. Features of impaired urinary system in children. Urinary infection ways. Principles of diagnosis and treatment.		
	Prevention of reno-urinary diseases in children.		
5.	States of emergency in children and tactics in medical syndrome: hyperthermic, convulsions, anaphylactic shock, dehydration, hypothermic syndrome, hemorrhagic syndrome.		4
	Total	24	hou

C. List of questions in the discipline Pediatrics for the colloquy

- 1. The term 'health'. Health groups and their characteristics.
- 2. Child health surveillance standards in force, by age and nosology.
- 3. Periods of childhood: characteristic features of children at different periods.
- 4. Critical periods of childhood.
- 5. Particularities of history taking in children.
- 6. Particularities of objective examination in pediatrics.
- 7. Organization of pediatric primary care. The role of dentist in prevention of pediatric diseases.
- 8. Immunoprophylaxis of the children in Moldova. National immunization calendar.

9. Physical development of children. Factors influencing the growth and development of children.

10. Particularities of neuro-psychological development of children in the 1styear of the infancy.

11. Positive and negative factors influencing neuro-psychological development of children in the postnatal period.

12. Notion of the neuro-psychological retardation in children.

13. Principles of physical development in children.

14. Chronic disorders of nutrition. Etiology, classification, prevention.

15. Children's biological age.

16. Teeth eruption in children. Clinical signs of "denticia dificilis".

- 17. The importance of vitamins for growth and development of children.
- 18. Rickets. Classification. Clinical manifestations of rickets.



19. The importance of rickets in pediatric pathology. Prophylaxis of ante-and postnatal rickets.

- 20. Anatomical and physiological particularities of the bone system in children.
- 21. Hypovitaminosis in children. Significance of hypovitaminosis in dental pathology .Their role in the emergence of dental bleeding. Prevention of hypovitaminosis.
- 22. Natural diet. Advantages of natural food.
- 23. Composition of breast milk, its difference from the milk of other mammals.
- 24. Contraindications for breastfeeding.
- 25. Diversification: terms and how to place food compliment.
- 26. Mixed feeding. Milk formulas used as supplements.
- 27. Hypogalactia. Etiology. Classification. Secondary hypogalactia and prophylaxis.
- 28. Feeding of mother.
- 29. Artificial feeding. Basic principles in the preparation of artificially fed infant diet.
- 30. Classification of milk mixtures used in mixed and artificial feeding.
- 31. Nutrition of a child over one year. Notion of diet.
- 32. Anatomical and physiological particularities of the respiratory sistem in children.
- 33. Assessment of severity of respiratory pathology in children of an early age.
- 34. Diagnosis and treatment principles of acute bronchitis in children.
- 35. Uncomplicated acute pneumonia in children. Etiology and clinic picture.
- 36. Diagnosis and treatment principles of acute pneumonia in children.
- 37. Prevention of respiratory diseases in children.
- 38. Morphological and functional particularities of the cardiovascular system in children.
- 39. Rheumatic fever in children. Clinical picture.
- 40. Particularities of development of rheumatic fever in children. Prevention of complications.
- 41. Diagnostic criteria of rheumatic fever and prevention.
- 42. Primary and secondary prevention of rheumatic fever in children.
- 43. Principles of treatment of rheumatic fever in children.
- 44. Anatomical and physiological particularities of the blood system in children.
- 45. Particularities of dental care for children with hemophilia.
- 46. Anatomical and physiological particularities of the immune system in children.



- 47. Critical periods of immunoreactivity development in children.
- 48. Hemorrhagic syndrome in children: clinical manifestations, diagnostic principles.
- 49. Principles of management child dental disease in hemorrhagic syndrome of different etiology.
- 50. Characteristics of anemic syndrome in children.
- 51. Acute diarrheal disease in children. Etiology, epidemiology, clinical manifestations.
- 52. Characteristics of dehydration syndrome in children of an early age.
- 53. Management of dehydration syndrome in children with acute diarrheal disease in therapeutic clinic.
- 54. Chronic digestive disorders in children: chronic gastric ulcer. Etiology, clinical manifestations, diagnostic principles.
- 55. Principles of treatment and prevention of chronic diseases of the digestive tract in children.
- 56. Anatomical and physiological particularities of the urinary system in children.
- 57. Urinary tract infection in children: etiology, clinical presentation, diagnostic principles.
- 58. Prevention of renal and urinary disorders in children.
- 59. Management of hyperthermia syndrome in children.
- 60. Emergency management of seizures in children.
- 61. Emergency management of anaphylactic shock in children.
- 62. Emergency management of hemorrhagic syndrome in children.
- 63. Emergency management in case of unconsciousness in children.
- 64. Emergency management in case of ingestion of toxic substance, including drug intoxication, in children.
- 65. Respiratory failure in children: causes, main clinical symptoms.

V. Bibliography:

- 1. Barbara Bates. Guide to Physical Examination and History Taking, Lippincott Company. 2003, 714p.
- 2. Kliegman: Nelson Textbook of Pediatrics, 18th edition. ISBN-13, 2457p.
- 3. Lectures on the theme.
- Maydannic V. G. Propaedeutic of Pediatrics, Kharjiv national Medical University. 2010, 348 p.



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VI. Teaching and learning methods:

Pediatrics discipline is taught in classical manner: lectures and practical lessons. The theoretical lectures will be hold by the course holders. During practical lessons students will discuss the topic, will work in hospital wards where daily will examine patients, assessment of diagnostic methods and treatment. The Department reserves the right to perform some practical lessons in an interactive manner.

VII. Suggestions for individual work:

For learning clinical discipline of Pediatrics is required a proper training in the fundamental science, systematic learning of theoretical material taught in lectures, and active involvement in practical classes. Within these you will apply theoretical knowledge to bedside and will develop practical skills for assessing the physical and neuropsychological development parameters, will assess the level of development, you'll practice in recommendations on nutrition, nursing and immunoprophylaxis, contemporary methods of etiology, diagnosis, treatment and prevention of different illnesses in children. Discipline can be taught successfully only through knowledge of the theoretical material, active participation in discussions of appropriate practical exercise, including the writing of diploma thesis. For this purpose we recommend the following:

- 1. Attend all lectures and practical classes provided not only for the presence, try to use your time more effectively (listen carefully to the teacher, note the most important topics, clarify questions or uncertainties you may have on the topic);
- 2. Come to practical classes with "homework done", study theoretical material, note in the workbook the most important information for practical application (formulas, evaluation criteria, classifications and rules), formulate questions on topics less understood;
- 3. Participate actively in discussions of clinical case: try to make your own opinion on each patient presented by your colleagues;
- 4. Do not hesitate to ask teacher questions, it will help you to get a clear picture on the discussed subject and will prove that you have learned the material;
- 5. Pay more time to the individual work: Pediatrics, as medicine in generally is not learned "on the fly".

VIII. Assessment methods:

Current: Daily checking of theoretical knowledge, practical skills, perfecting medical documentation, multiple choice test, pediatric clinical observation sheet, case presentation, totalisation (formative assessment):

The final grade: differentiated colloquium, oral test with 3 topics in the ticket.



At the colloquium for Pediatrics discipline are admitted students with the average grade of 5 and students who have met the full study program. Topics for exam (practical skills list, tickets) approved at the meeting of the Department of Pediatrics will be presented to the students at least one month before the session. Knowledge is assessed with marks from 10 to 1 without decimals as follows:

- Grade 10 or 'excellent' (equivalent ECTS A) will be given for acquiring 91-100% of the material;
- Grade 9 or 'very good' (equivalent ECTS B) will be given for acquiring 81-90% of the material;
- Grade 8 or 'good' (equivalent ECTS C) will be given for acquiring 71-80% of the material;
- Grade 6 and 7 or 'satisfactory' (equivalent ECTS D) will be given for acquiring 61-65 and 66-70% respectively of the material;
- Grade 5 or 'weak' (equivalent ECTS E) will be given for acquiring 51-60% of the material;
- Grade 3 and 4 (equivalent ECTS FX) will be given for acquiring 31-40% and 41-50% of the material;
- Grade 1 and 2, or 'unsatisfactory' (equivalent ECTS F) will be given for acquiring 0-30% of the material;

Method of the grades rounding		
The sum of notes from current assessments and final examination	Final grade	
5	5	
5,1-5,5	5,5	
5,6-6,0	6	
6,1-6,5	6,5	
6,6-7,0	7	
7,1-7,5	7,5	
7,6-8,0	8	
8,1-8,5	8,5	
8,6-9,0	9	
9,1-9,5	9,5	
9,6-10	10	

Method of the grades rounding

The absence from the examination without good reason is recorded as 'absent' and is equivalent to the grade 0 (zero).

The student is entitled to two repeated attempts of the failed exam.

IX. Language of instruction:



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Romanian, Russian, English, French.