

INTERNATIONAL HIGHER SCHOOL OF MEDICINE

Department PEDIATRICS

SYLLABUS

PEDIATRIC CARDIORHEUMATOLOGY

2022-2023 academic year

for students of medical faculty

3 course VI semester, groups ____

1,1 credits (38 h, including auditorial – 20 h, independent work – 18 h)

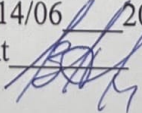
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Venue: Zoom

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Venue: The clinical maternity hospital #2, str. Moskovskaya 148

The Syllabus is considered
at the meeting of the department of Pediatrics ____
Protocol № 8 dated 14/06 2023
Head of the department 

Course Objective of PEDIATRIC CARDIORHEUMATOLOGY

Recognition the cardiologic and rheumatologic diseases by different diagnostic methods and definition the therapeutic tactics depending on the severity of the patient's condition

After study of the discipline the student must:

Knowledge:

1. Acute Rheumatic Fever: Etiology, pathogenesis, clinical manifestation, Jones Criteria, laboratory studies, D/D, management, secondary prophylaxis;
2. Congenital Heart Diseases (PDA; VSD, ASD, Coarctation of Aorta, Tetralogy of Fallot): Classification, hemodynamic changes, clinical manifestation, management;
3. Non Rheumatic Heart Diseases (Infective Endocarditis, Acute Myocarditis, Cardiomyopathies, Pericarditis;
4. Congestive Heart Failure: Etiology, clinical manifestation, management;
5. Diffuse Connective Tissues Disorders (Juvenile Idiopathic Arthritis, Systemic Lupus Erythematosus, Juvenile Dermatomyositis): Etiology, pathogenesis, clinical manifestation, Diagnostic Criteria, laboratory studies, management

Be able to (skill):

- collect complaints and history,
- examine the patient and have conclusion about leading clinical symptoms and possible complications;
- assign and interpret the results of laboratory and instrumental investigations;
- expose the right diagnosis, treatment plan and to write correctly the dosage of medicines;
- define methods and orders of resuscitation and be able to restore vital functions of the body; identify indications for hospitalization, rehabilitation and disability examination of patients.
- visual inspection and palpation of the skin, muscles, joints, the heart, peripheral vessels, chest;
- defined borders of heart, measurement of blood pressure, characterize pulse;
- determine of joint function, measurement of joints;
- percussion and auscultation of heart, differentiation of functional and organic heart murmurs; reading and interpreting the results of radiological diagnostics, ECG, ECHOCG;
- writing of medical history,
- calculate dosages of drugs according with patient's age, weight.

Attitude: to inform and demonstrate understanding of questions

Pre-requisites.

- Anatomy: Anatomical features of the heart and blood vessels at different ages
- Physiology, pathophysiology: Fetal circulation, circulation after birth, Basic compensatory and adaptive mechanisms of the cardiovascular system.
- Introduction to clinic. Cardiovascular system, 4 sem: Cardiovascular examination in children. Semiology of congenital and acquired cardiovascular diseases in children. Semiology of heart layers damages. Main clinical syndromes in CVS pathology: Acute and Congestive Heart failure.
- Introduction to pediatrics, 3 sem: The pediatric inspection approaches of sick child, Interpretation of growth indicators

Post-requisites.

- Pediatric surgery
- Children's infectious diseases
- Pediatric neurology
- Family medicine
- Medical genetics
- Public health

THEMATIC PLAN OF LECTURES:

№	Topic of lecture	Hours	Date
1.	Rheumatic fever in children	2	
2.	Congenital heart diseases	2	
3.	Myocardial diseases in children: Myocarditis & Cardiomyopathy	2	
4.	Diffuse diseases of connective tissue in children.	2	
		8	

THEMATIC PLAN OF PRACTICAL CLASSES:

№	Topic of practical class:	Hours	Date
1.	Rheumatic fever in children	2	
2.	Congenital heart diseases	2	
3.	Myocardial diseases in children: Myocarditis & Cardiomyopathy	2	
4.	Heart Failure in children	2	
5.	Diffuse diseases of connective tissue in children.	4	
	Total:	12	

THEMATIC PLAN OF INDEPENDENT WORK OF STUDENTS

№	Theme of independent work	Hours	Date
1.	The hemodynamic changes in case of Congenital Heart Diseases PDA	30min	
2.	The hemodynamic changes in case of Congenital Heart Diseases VSD	30min	
3.	The hemodynamic changes in case of Congenital Heart Diseases ASD	30min	
4.	The hemodynamic changes in case of Congenital Heart Diseases Coarctation of Aorta	30min	
5.	The hemodynamic changes in case of Congenital Heart Diseases Tetralogy of Fallot	30min	
6.	The diagnostic Criteria and management of Juvenile Idiopathic Arthritis	30min	
7.	The diagnostic Criteria and management of Systemic Lupus Erythematosus	30min	
8.	The diagnostic Criteria and management of Juvenile Dermatomyositis	30min	
9.	The diagnostic Criteria and management of Infective Endocarditis	30min	
10.	The diagnostic Criteria and management of Infective Acute Myocarditis	30min	
11.	The diagnostic Criteria and management of Cardiomyopathies	30min	

Recommended reading for the discipline:

Basic:

No	Authors	Title	The year of publishing	publishing house	Availability in the IHSM library (number)
1	Kliegman RM, Geme III JW	Nelson textbook of pediatrics. Vol.1.-21th ed.	2020	9 996 128 296	50
2	Ghai OP, Paul VK, Bagga A.	Essentials of pediatrics.-8th ed.	2013	978-81-239-2334-5	9
4	Alekseev.V., Starodubetz.U., Isakova F.	Introduction to Pediatrics: Compendium for foreign student	2012	978-9967-26-670-4	342
7	Nelson., Richard E. Berhman, Robert M. Kliegman	Essentials of Pediatrics	2000	4th	12
8	A Parthasarathy	Case Scenarios in Pediatric and Adolescent Practice	2014	1st edition -	http://library.ism.edu/kg/Online_Library/eBookDetails.aspx?id=288
9	Graham TP	Recommendations for Training in Pediatric Cardiology	2005	7th -E d -	http://library.ism.edu/kg/Online_Library/eBookDetails.aspx?id=938
10	William W. Hay Jr, et al By McGraw	Current Pediatric Diagnosis & Treatment	2002	16th Ed	http://library.ism.edu/kg/Online_Library/eBookDetails.aspx?id=57

11	Kenneth B Roberts MD By Lippincott Williams & Wilkins Publishers	Manual of Clinical Problems in Pediatrics	October 2000	5th edition	http://library.ism.edu/kg/Online_Library/eBookDetails.aspx?id=230
12	Pervez Akber Khan	"Basis of Pediatrics"	2000	7th -E d -	https://ketabton.com/book/14837
13	Schwartz RS	Autoimmune and intravascular hemolytic anemias.	2011	eds. Cecil Medicine . 24th ed.	Philadelphia, Pa: Saunders Elsevier; 2011: chap 163

Additional:

12. Consensus Guidelines on Pediatric Acute Rheumatic Fever and Rheumatic Heart Disease; Indian Academy of Pediatrics (shared in google classroom)
13. <https://www.indianpediatrics.net/july1996/571.pdf> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5105230/>
14. <https://emedicine.medscape.com/article/2069746-guidelines><https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD007037.pub3/epdf/standard>
15. <https://www.ahajournals.org/doi/10.1161/CIR.0000000000001001>;
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2805590/>;
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5814111/> ;
16. <https://www.ahajournals.org/doi/full/10.1161/CIR.0000000000000682>
17. <https://www.oatext.com/pediatric-cardiomyopathies-a-review-of-literature-on-clinical-status-and-meta-analysis-of-diagnosis-and-clinical-management-methods.php>
18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3903430/>

Grading policy and procedures for all types of work

For the period of studying the discipline, the student gains points for the relevant parameters (per unit):

current score - 40 points

independent work - 20 points

control score (final assessment of knowledge per unit) - 40 points

Maximum score - 100 (40+20+40)

Grading system for student's achievements

Criteria for grading for the discipline				
Maximum score	Intervals			
	«unsatisfactory»	«satisfactory»	«good»	«excellent»
Current control - 40	0-23	24-30	31-35	36-40
Interval Criteria	Does not complete the task, does not know and does not understand the lecture material of the lesson, which prevents further assimilation of the program; cannot apply the acquired knowledge to solving situational problems, test questions. Does not answer teacher's questions Does not have practical skills when examining a patient	Performs the task not in full, has gaps in the assimilation of lecture material, has difficulty in applying knowledge to solve situational problems, test questions; does not fully and accurately answer the questions of the teacher. When examining a patient, he has poor practical skills	Completes the task in full, knows the lecture material, but sometimes makes mistakes when solving situational problems and test questions, understands the main content of the lecture material, gives correct answers to the teacher's questions. When examining a patient, he partially possesses practical skills	Completes the task in full, easily applies knowledge and skills in solving situational problems and test questions, rarely makes mistakes, gives complete and correct answers to the teacher's questions. When examining a patient, he has full practical skills

Independent work - 20	0-11	12-14	15-17	18-20
Interval Criteria	Presentation, report, table, situational task is missing	The content of the presentation, report, tables partially correspond to the given topic, the sequence of presentation of theoretical issues is violated: etiology, pathogenesis, epidemiology, clinic, differential diagnosis, laboratory diagnosis, treatment and prevention. Situational tasks contain little description of a clinical case	The content of the presentation, report, tables does not fully correspond to the given topic, the sequence of presentation of theoretical issues (etiology, pathogenesis, epidemiology, clinic, differential diagnosis, laboratory diagnosis, treatment and prevention) is not fully preserved. Situational tasks incompletely contain a description of a clinical case	The content of the presentation, report, tables correspond to the given topic, the sequence of presentation of theoretical issues (etiology, pathogenesis, epidemiology, clinic, differential diagnosis, laboratory diagnosis, treatment and prevention) is fully preserved. Situational tasks contain a description of the clinical case in its entirety
Module - 40	0-23	24-30	31-35	36-40
Interval Criteria	Does not know the answers to test questions and situational tasks	Poor knowledge of answers to test questions and situational tasks	Knows well the answers to test questions and situational tasks	Knows the answers to test questions and situational tasks

Conduct Policy: (lateness, absence, behavior in the auditorium, late submission of work).

- Punctuality and completion of tasks.
- Mandatory attendance of classes.
- Attending class in a clean medical uniform.
- Eliminating conversations on a cell phone in the classroom.
- Active participation in the learning process.
- Doing homework on time.
- Academic detention at the time specified by the teacher.

For violations of the Conduct Policy, the total points for discipline might be reduced to 1-5 points.

Academic Ethics Policy.

- Be tolerant, respect the opinions of others.
- Formulate objections in the correct form.
- Constructively support feedback in all classes.
- Plagiarism and other forms of dishonest work are unacceptable. Plagiarism includes the following: the absence of references when using printed and electronic materials, quotes, thoughts and works of other authors or students.
- Prompting and cheating during tests, exams, classes is unacceptable as well as passing an exam for another student, unauthorized copying of materials.

For violations of the Academic Ethics Policy, the total points for the discipline may be reduced to 1-5 points.

Guidelines for the lessons of the discipline

Key questions covered in lesson #1.

1. To recognize the development of heart and rheumatic diseases with help of clinical, laboratory and instrumental diagnostics methods;
2. To identify the causes of development of these diseases
3. To take measures for their prevention and elimination;
4. To provide the differential diagnosis with other diseases;
5. To define therapeutic tactics depending on the severity of the patient's condition.

Recommended reading for this discipline:

[1], [2], [3], [13-18]

Key questions covered in lesson #2.

1. To recognize the development of Congenital heart diseases with help of clinical, laboratory and instrumental diagnostics methods;
2. To identify the causes of development of these diseases

3. To take measures for their prevention and elimination;
4. To provide the differential diagnosis with other diseases;
5. To define therapeutic tactics depending on the severity of the patient's condition.

Recommended reading for this discipline:

[1], [2], [3], [13-18]

Key questions covered in lesson #3.

1. To recognize the development of Non-rheumatic and infectious Carditis, Arrhythmias in children with help of clinical, laboratory and instrumental diagnostics methods;
2. To identify the causes of development of these diseases
3. To take measures for their prevention and elimination;
4. To provide the differential diagnosis with other diseases;
5. To define therapeutic tactics depending on the severity of the patient's condition.

Recommended reading for this discipline:

[1], [2], [3], [13-18]

Key questions covered in lesson #4.

1. To recognize the development of Congestive Heart Failure in children with help of clinical, laboratory and instrumental diagnostics methods;
2. To identify the causes of development of these diseases
3. To take measures for their prevention and elimination;
4. To provide the differential diagnosis with other diseases;
5. To define therapeutic tactics depending on the severity of the patient's condition.

Recommended reading for this discipline:

[1], [2], [3], [13-18]

Key questions covered in lesson #5.

1. To recognize the development of Diffuse connective tissue diseases in children with help of clinical, laboratory and instrumental diagnostics methods;
2. To identify the causes of development of these diseases
3. To take measures for their prevention and elimination;
4. To provide the differential diagnosis with other diseases;
5. To define therapeutic tactics depending on the severity of the patient's condition.

Recommended reading for this discipline:

[1], [2], [3], [13-18]

Methodological instructions for the implementation of independent work on the discipline

Each student of group must prepare project of THE ONE THEME consisting of 10 slides with less text and in view pictures, scheme, charts

The first slide should include "IHSM", "Department of pediatrics", "the theme of presentation", "the full name of the student", group, semester, "the data of teacher", the filing date, and the last slide - list of references, resources.

Assessment of Independent work includes: design, content, and answering.