**Pediatrics Discipline Sheet, General Medicine**

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| Course Name | **Child care. Neonatology. Pediatrics.** |
| Type | Mandatory | Credits | 15 |
| Academic Year | V | Semester | IX-X |
| Number of hours | Lectures | 90 | Practical lessons | 90 |
| Seminars | 90 | Individual work | 180 |
| Complexity | Professional |
| Course Chief | Ninel Revenco |
| Location | Pediatrics DepartmentPSMI Institute of Motherand Child,93 Burebista Street,Chisinau, MD-2062,Republic of Moldova(+373) 32 205 835 |
| Prerequisites and requirements: | Program: basic knowledge in related disciplines such as: anatomy, histology, pathology, human physiology, physiopathology, microbiology, pharmacology, medical semiology, medical Imagistics, also the integration with other clinical disciplines –internal medicine, obstetrics, neurology, infectious diseases, pediatric surgery.  |
| Proficiencies: collecting the anamnesis, general clinical exam of the patient, interpretation of the paraclinical investigations results – laboratory, instrumental and Imagistics, stating a clinical diagnose,outline the management plan. Excellent academic language skills, computer skills, communication and team work abilities, qualities like tolerance, initiative, compassion, autonomy.  |
| Course Mission | **The Curriculum Mission**is the academic baseline formation of the future specialist in the field of Pediatrics according to the national and international educational standards, promotion of education, national historical and cultural values, general human values, medical ethics and the fundamentals of pediatric care.***The Course Aims***:* Formation of skills in assessment of the mechanisms and factors that influence the normal somatic and psychomotor growth and development of the child.
* Formation of skills in assessment of morphological and functional features, physiological and pathological changes, main biological and humoral norms in the child’s growth and development.
* Formation of the correct abilities of healthcare, mainly based on the features of child’s growth and development, of the energetic and hydration needs, and the features of a qualitative and quantitative healthy diet in different childhood periods.
* Development of practical skills in collecting anamnesis, in completing a correct general clinical exam on each system of organs of a healthy and ill child, of appreciation of the physical (somatic) and psychomotor development in children of different ages.
* Formation of skills in assessment of the etiology, pathogenicity, classical clinical symptoms of the childhood diseases, diagnostic features, treatment and prophylaxis of these diseases.
* Formation of skills in clinical rationality and medical synthesis –fundamental elements in the pathway of becoming a doctor.
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| Presented Topics | * Child healthcare in the Republic of Moldova. Definition of child care and pediatrics. Healthy child. Childhood periods and their characteristics. Vaccination. Medical follow up of children. Patient medical record.
* Child growth and development. Methods of appreciation and evaluation of physical development.
* Psychomotor development of the child at different childhood periods: methods of evaluation.
* Nutrition and child feeding: breastfeeding, complementary feeding, formula feeding in children. Feeding features in preschool and school children.
* Term newborn: examination, temperature control, adaptation, care of a term newborn. Transition states (physiological) that are characteristic for newborns.
* Newborn asphyxia. Neonatal resuscitation. Hemorrhagic disease of the newborn.
* Neonatal jaundice. Hemolytic disease of the newborn due to Rhesus factor and blood group.
* Neonatal sepsis.
* Premature newborn: characteristics, prematurity classification. Ballard Score. Intrauterine developmental delay. Respiratory distress syndrome.
* Rickets in children. Spasmophilia.
* Nutritional disturbances in children. Acute severe malnutrition, chronic malnutrition in children. Short stature.
* Acute upper respiratory infections in children.
* Bronchitis in children. Bronchiolitis. Obstructive bronchitis.
* Community acquired pneumonia in children. Pleural diseases in children. Chronic bronchopulmonary diseases in children.
* Fever and hyperthermic syndrome in children.
* Anemic syndrome. Congenital hemolytic anemias. Acquired anemias in children. Deficiency anemias.
* Hemorrhagic diathesis in children. Immune thrombocytopenic purpura. Thrombocytopathies. Hemorrhagic vasculitis in children. Coagulopathies in children. Hemophilia A, B. von Willebrand disease.
* Urinary tract infection in children. Acute and chronic glomerulonephritis in children. Idiopathic nephrotic syndrome in children. Acute renal injury in children. Chronic renal disease in children.
* Intestinal malabsorption in children. Celiac disease. Cystic fibrosis. Lactose intolerance. Cow milk protein intolerance.
* Gastritis and duodenitis in children. Peptic ulcer in children.
* Biliary tract dysfunction. Cholecystitis in children.
* Acute and chronic pancreatitis in children.
* Ulcerative colitis in children. Crohn disease.
* Chronic hepatitis in children.
* Food allergy in children. Bronchial asthma in children.
* Congenital heart malformations.
* Acute and chronic heart failure in children.
* Cardiac arrhythmias in children and adolescents.
* Primary cardiomyopathies. Myocarditis in children..
* Acute rheumatic fever in children.
* Diffuse connective tissue diseases in children. Juvenile idiopathic arthritis. Systemic lupus erythematosus. Dermatomyositis. Systemic scleroderma.
* Diabetes mellitus in children.
* Major emergencies in pediatrics. Virtual training/basic simulation in pediatrics.
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| Course finals | At the end of studying the course, students will be able to:1. Know the theoretical basis of child care, neonatology, semiology and the most frequent pathologies in children;
2. Know the anatomical and physiological, functional, morphological features in children of different ages;
3. Know the dietary principles in a healthy and ill child of different ages;
4. Know the evolution of the physiological processes of child growth and development, principles of care, prophylaxis, social and behavioral pediatrics;
5. Know the features of the general clinical examination and the paraclinical examinations in children of different ages;
6. Know the basic principles of pediatrics pathology: etiology, pathogenicity, typical clinical manifestations of childhood diseases, up-to-date methods of diagnostics, treatment, prophylaxis of these diseases;
7. Know the indications and contraindications of using laboratory, instrumental, imagistic and other diagnostic methods of investigation in pediatrics;
8. Hold proficiency in analyses and synthesis through correlation of clinical symptoms and syndromes with complementary examination results, in making a differential diagnose and establishing a clinical diagnose;
9. Know the principles of treatment, indications, contraindications, doses of medications used in pediatrics, to be able to justify an etiological, pathogenetic, symptomatic treatment of childhood diseases;
10. Know the methods of prevention of diseases in children, prophylactic vaccination schedule for children of the Republic of Moldova.
11. Hold proficiency in completing current medical documentation: hospital patient medical record, daily monitoring of the patient status and disease evolution.
12. Provide care for the term newborn, premature newborn, to appreciate the newborn by the Apgar, Silverman, Ballard and the sepsis onset risk score.
13. Know how to collect pediatric anamnesis, anthropometric measurements with the appreciation of the physical, neuropsychological development in children of different ages.
14. Appreciate the nutritional status of a child, prescribing the correct dietary regimen to children of different age groups.
15. Execute and evaluate the results of the clinical examination of the newborn and child of different ages, to recognize the vital signs, signs and symptoms of the disease, major syndromes from childhood diseases, justification of the preliminary diagnose.
16. Organize and justify a paraclinical investigational program, to make a differential diagnose, to form and justify a final clinical diagnose according to the existing classifications.
17. Indicate general and pharmacological treatments to children according to the established diagnose, to be able to make the follow-up and rehabilitation plan of a patient with chronic diseases, prevention and rehabilitation methods.
18. ­Communicate with the patient family for recommendations and explanations, to promote the ethics principles in healthcare assistance for children.
19. Apply the skills in providing emergency healthcare assistance to children in critical status.
20. Present clinical cases from the field of pediatrics.
21. Hold, present and promote knowledge about integrated approach of a healthy and ill child and the methods of care.
22. Hold and apply clinical and research work methods and modalities.
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| Acquired practical skills | 1. To have the ability to complete current medical documentation;
2. To have the ability to care and monitor a term newborn, premature newborn, without associated pathology.
3. To be able to appreciate the Apgar, Silverman, Ballard, sepsis onset risk, andhemolytic disease of the newborn scores.
4. To be able to make correct anthropometric measurements with the appreciation of the physical development in children of different ages.
5. To be able to collect the child anamnesis.
6. To be able to perform the general clinical examination according to systems and organs in children of different ages.
7. To be able to appreciate the neuropsychological development in children of different ages.
8. To be able to appreciate the nutritional status of the child and to be able to make the correct dietary regimen in children of different ages.
9. To be able to justify the need and to interpret the laboratory analyses results in children of different ages: clinical, biochemical, immunological.
10. To be able to justify the need and to interpret the instrumental, imagistic investigations results.
11. To be able to form a final clinical diagnose according to the existing pediatric classifications.
12. To be able to make a differential diagnose of pediatric diseases.
13. To be able to make a treatment plan, according to the established diagnose, as well as the methods of prophylaxis and rehabilitation.
14. To apply and promote the ethics principles in the pediatric healthcare.
15. ­To be able to communicate efficiently with the pediatric patients family.
16. To be able to study and present clinical cases of pediatric pathology.
17. To hold knowledge and abilities for performing health education for mothers.
18. To be able to recognize/appreciate vital signs, to be able to provide emergency healthcare to critically ill children:
* To hold the technique of balloon/mask ventilation;
* To hold the technique of external cardiac massage in children;
* To hold the technique of endotracheal intubation of a newborn;
* To be able to proceed the ABCD steps in neonatal resuscitation, including the use of monitor data;
* To be able to place the child to a nasal CPAP;
* To be able to identify shock status in a child;
* To recognize cardiac and respiratory stop in a child.
* To be able to evaluate ABCDE steps (airway, breathing, circulation).
* To be able to identify respiratory dysfunction (stridor, wheezing, gasping).
* To hold the techniques of airway permeability in children
* To be able to evaluate the cardiovascular function in children (basic and advanced).
* To be able to appreciate the capillary refill time in children.
* To be able to provide basic life support and partially the advanced life support.
* To hold the technique of providing oxygen through nasal cannulas, balloon, facial mask.
* To hold the technique of safety positioning of the critically ill pediatric patient.
* To apply correctly the technique of immobilization in pediatric trauma (cervical collar, stretcher).
* To identify the patient with seizures and to know (apply) anticonvulsant medication.
* To realize the oral rehydration according to plan A and B.
* To correctly administer the medication in hypovolemic shock and anaphylaxis.
* To correctly provide defibrillation in shockable rhythms of the cardiorespiratory stop.
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| Form of evaluation | Exam |