MINISTRY OF HEALTH
STATE UNIVERSITY OF MEDICINE AND PHARMACY
«NICOLAE TESTEMIȚANU»

Approved
by the Council of Medicine Faculty No. 2
Meeting Protocol No.__ from ________
Dean of Medicine Faculty No.2
Professor, PhD________ M. Gavriliuc

Approved
at the meeting of Infectious diseases CEMPh
Meeting Protocol No.__ from ________
Head of Infectious diseases CEMPh
Professor, PhD________ V. Pântea
ANALYTICAL PROGRAM // Syllabus

Name of the course: Infectious diseases of children
Code of the course: S.11.O.098
Type of the course: mandatory

Total number of academic hours – 70 hours
Inclusively courses - 20, practical seminars – 50

Number of credits offered for course completion: 3

Names of lectures authors:

Associated professor Tatiana Alexeev
Assistant professor Tatiana Juravliov

Chişinău 2011
Explanatory note

Infectious diseases have a great importance in the structure of the general morbidity and children mortality.

Nowadays the majority of children with acute infectious diseases may be treated at home and the doctor is obliged to establish as soon as possible the write diagnosis, to prescribe a correct treatment regimen, to assure if necessary the emergency medical assistance, to organize prevention measures in the epidemic place, etc.

The aim of the Department Children’s Infectious Diseases activity is the training of doctors in order to assure good knowledge in the field of modern diagnosis, therapy and prevention procedures for infectious diseases at children.

The training process will cover and epidemiological aspects of these diseases.

This program will cover also a series of important problems within this field that are faced by students of VI year, after their familiarization with infectious diseases of adults, and our department will specify particular clinical and evolution features of infectious diseases in children according to the age and differential diagnosis.
The student must have following knowledge:

1. Early diagnosis of infectious diseases of children
2. Clinical features, disease evolution, complications and particularities according to the age. Infectious diseases consequences at children.
3. Clinical symptoms of the cranial nerves affection.
4. Indications for hospitalization and rules for patient’s transportation in case of infectious diseases.
5. Laboratory diagnosis and treatment of infectious disease in home conditions (isolation, therapy regimen, diet, prescription’s fill in).
6. Clinical symptoms and laboratory tests of cerebral spinal fluid in viral and bacterial meningitis.
7. To perform a treatment plan for children with infectious diseases.
8. To perform a plan of emergency medical measures at the prehospital level of medical assistance in case of:
   - Meningococcal infection;
   - Meningitis, meningoencephalitis;
   - Toxic scarlet fever.
9. To give medical emergent help to children with:
   - Toxic-infectious shock;
   - Acute cerebral edema.
10. Diet and hygienic regimen of patients with infectious diseases.
11. Criteria for admission to the institutions for children (kindergartens, schools).
12. The survey in dynamics of children with infectious diseases and their follow-up.
13. Immunization and prophylaxis of infectious diseases at children (national schedule of immunization).
The student must possess following practical skills:

1. To perform an examination of a child with infectious diseases;
2. To establish and motivate the early diagnosis of infectious diseases at children;
3. To perform a plan of medical care at home in case of a patient with infectious disease;
4. To interpret the blood analysis at children with infectious diseases according to the age;
5. Organization of a correct transportation to the hospital of the child with infectious disease;
6. Isolation and treatment at home of a patient with infectious disease;
7. To perform a plan of laboratory examination of children infectious diseases and to mention basic (specific) diagnostic methods;
8. To characterize the rash in different infectious exanthematous diseases;
9. To characterize changes in the pharynx in different infectious diseases with angina syndrome;
10. To collect emetic masses, fecal material, urine and blood for bacteriological exam;
11. The gastric lavage method at children;
12. To appreciate the presence and the degree of dehydration at infants and small children in acute infectious gastroenteritis;
13. The stool characteristics at patients with acute infectious gastroenteritis and viral hepatitis;
14. Treatment and oral rehydration (plan A, B, C);
15. Qualitative laboratory test to exam biliary pigments in urine;
16. The appreciation of jaundice degree in viral hepatitis;
17. The examination of the abdomen, liver and spleen;
18. Meningeal symptoms at children;
19. To interpret correct the results of laboratory exams, CSF, bacteriological and virusological test of the blood, serological tests (complement fixation – CF, hemagglutination inhibition – HI, enzyme-linked immunosororbent assay – ELISA, polymerization chain reaction – PCR, neutralization reaction - NR) of nasopharyngeal eliminations, exam of intestinal bacterial colonies.
The student must know following:

1. Specific features of infectious diseases agents at children;
2. Morbidity by infectious diseases at children;
3. Pathogenesis and pathology of infectious diseases;
4. Principles and modern methods of infectious diseases diagnosis;
5. Principles of specific therapy of infectious diseases (therapy with serums, immunotherapy);
6. Principles of antibiotic therapy in infectious diseases;
8. Rules of behavior in patient’s room;
9. Principles to fill in clinical files of patients with infectious diseases;
10. Structure, functions, anatomic and physiological features of SNC, respirator and digestive tract, and other systems at infants and small children;
11. Specific features of infectious diseases at adults;
12. Indications, techniques and clinical interpreting of lumbar puncture.
13. Treat the child’s with acute intestinal infections and acute respiratory viral infections
14. Complications in infectious diseases at children
15. Criteria of hospitalizations in infectious diseases at children
16. Laboratory findings in infectious diseases at children
The Plan
of Lectures for students of VI<sup>th</sup> university year
Faculty of General Medicine (XI<sup>th</sup> half-year)
2011-2012

<table>
<thead>
<tr>
<th>№</th>
<th>THE NAME OF THE SUBJECT</th>
<th>Number of hours</th>
<th>Lecturer</th>
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<tbody>
<tr>
<td>1.</td>
<td>Streptococcal infection in children. Scarlet fever.</td>
<td>2</td>
<td>T.Alexeev T.Juravliov</td>
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<tr>
<td>2.</td>
<td>Diphtheria.</td>
<td>2</td>
<td>T.Alexeev T.Juravliov</td>
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<td>3.</td>
<td>Measles (rubeola). Rubella.</td>
<td>2</td>
<td>T.Alexeev T.Juravliov</td>
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<tr>
<td>4.</td>
<td>Specific features of influenza and acute respiratory infections at children.</td>
<td>2</td>
<td>T.Alexeev T.Juravliov</td>
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<tr>
<td>6.</td>
<td>Meningococcal infection at children.</td>
<td>2</td>
<td>T. Alexeev T. Juravliov</td>
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<tr>
<td>8.</td>
<td>Herpesvirus infections (Chickenpox, Herpes Zoster, Herpes simplex).</td>
<td>2</td>
<td>T. Alexeev T. Juravliov</td>
</tr>
<tr>
<td>10.</td>
<td>Acute viral hepatitis at children. Fulminating hepatitis.</td>
<td>2</td>
<td>T.Alexeev T.Juravliov</td>
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<td></td>
<td>TOTAL</td>
<td>20</td>
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Chief of the Department,
Professor PhD                     V.Pântea
# The Plan

of subjects for Practical work-sessions for students of VI<sup>th</sup> university year
Faculty of General Medicine (XI<sup>th</sup> half-year)
2011-2012

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<tbody>
<tr>
<td>1.</td>
<td>Rules of admission to the hospital, distribution to the rooms and discharge of children with infectious diseases. Files and documentation. Case presentation.</td>
<td>3</td>
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<tr>
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<tr>
<td>2.</td>
<td>Acute Intestinal Infections at children. Salmonellosis, Shigellosis, Escherichiosis.</td>
<td>6</td>
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<tr>
<td>3.</td>
<td>Treatment of acute gastroenteritis at children. Syndrome of dehydration, pathogenesis, clinical manifestations, diagnosis and treatment. Oral rehydration.</td>
<td>4</td>
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<td>5.</td>
<td>Enteroviral infections (non-polio(myelitis). Poliomyelitis.</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td>Diphtheria. Mumps.</td>
<td>5</td>
</tr>
<tr>
<td>7.</td>
<td>Meningococcal infection at children.</td>
<td>5</td>
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<tr>
<td>8.</td>
<td>Influenza and acute respiratory infections.</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>Scarlet fever. Measles . Rubeolla.</td>
<td>5</td>
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<tr>
<td>11</td>
<td>Practical skills.</td>
<td>5</td>
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<td><strong>TOTAL</strong></td>
<td><strong>50</strong></td>
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Chief of the Department, 
Professor PhD                                      V.Pântea
1. **Streptococcal infection.**

2. **Diphtheria.**

3. **Measles (rubella). Rubella.**

4. **Mumps (epidemic parotitis).**

5. **Pertussis (whooping cough).**
6. Meningococcal infection at children.

7. Influenza and acute respiratory viral infections at children.
The role of viral infections in pediatric morbidity. Etiology and pathogenesis in different viral infections. Diagnosis. Treatment.
d) Specific features of the infection with respiratory syncytial virus. Obstruction syndrome. RS-infection at premature and new-borns.

8. Herpesvirus infections.


Acute diarrhea with Escherichia coli.
Acute diarrhea with Salmonella.

10. Acute gastroenteritis caused by conditional pathogen bacteria and viruses. Intestinal dysbiosis.

11. Treatment of acute gastroenteritis at children.
Dehydration syndrome, pathogenesis, clinical manifestations, diagnosis. Treatment. Oral rehydration. Indications and basic principles of infusion therapy.


Optional subjects

1. Infectious mononucleosis.

2. Cytomegalovirus infection.
DEPARTMENT CHILDREN’S INFECTIOUS DISEASES

Practical skills for students of VI\textsuperscript{th} university year

1. Bacteriological test in Diphtheria, Pertussis, Meningococcal Infection.
2. Bacteriological test in Salmonellosis, Shigellosis, Escherichiosis.
3. Immunofluorescent test in respiratory viral infections, acute diarrhea (technique, importance).
5. Technique of “thick drop” of the blood. Indications.
7. Coprological test, clinical interpretation.
8. Serological tests in infectious diseases at children.
9. Gastric lavage. Indications, technique, bacteriological test results.
10. Examination of the patient in acute infectious disease (viral hepatitis, rubella, mumps, etc.)
11. Interpretation the results of the blood tests in infectious diseases in children.
12. Endovenous perfusions, indications, technique, fluids, complications.
15. Diet and hygienic regimen for patient with infectious diseases (meningitis, mumps, diphtheria, viral hepatitis).
18. Immunization and prophylaxis of infectious diseases at children (national schedule of immunization).
20. Emergency medical assistance in case of acute cerebral edema, toxic-infectious shock, seizures, hyperthermia, food toxic-infection.
9. Harison’s Infectious diseases, 2010