

**CHARACTERISTICS OF THE NEONATAL PERIOD**  
**Academic discipline «Pediatric Propedeutics»**

*Teacher's guide for the 3<sup>rd</sup> year*  
*English medium students*

**ОСОБЛИВОСТІ ПЕРІОДУ НОВОНАРОДЖЕНОСТІ**

**З дисципліни «Пропедевтика педіатрії»**

*Методичні розробки*  
*до аудиторної роботи викладачів*

**МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ**  
**Харківський національний медичний університет**

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Затверджено  
Вченою радою ХНМУ  
Протокол № від

**Харків**  
**ХНМУ**  
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Compiled by: Klymenko V.A.  
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Особливості періоду новонародженості: метод. вказ. до аудиторної роботи викладачів / упор. В.А.Клименко, Т.В. Сіренко, К.О. Яновська. – Харків, ХНМУ, 2016. – 16 с.

Упорядники: Клименко В.А.  
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**Number of class periods:** independent work– 3;  
practical trainings – 4.

### **Contents**

The course of the neonatal period defines not only adaptation of a child to new living conditions but also programs health parameters for the whole life. The basis of understanding of the neonatal period is knowledge of peculiarities of a newborn child and transient states. Aspects of care and nutrition of a newborn child should be particularly underlined.

### **Specific goals**

#### **To know:**

1. What do you understand by the term “newborn child”?
2. Physiological and transient states of the neonatal period.
3. Conception of maturity of a newborn child.
4. Signs of prematurity.
5. Primary hygienic care and patronage of a newborn child. Care of a newborn child.
6. Characteristic of investigational methods of a newborn child.
7. Vaccination against tuberculosis and hepatitis B.
8. Sanitary and hygienic conditions in neonatal departments.

#### **Be able to (list of practical skills):**

1. Collection of the medical history of a newborn child.
2. Evaluation of the state of a newborn child using Apgar score and Silverman score.
3. Determination of the maturity of a newborn child, maturity or prematurity.

4. Carry out anthropometric measurements, assessment of the physical development.
5. Carry out clinical examination of a newborn child.
6. Determination of transient states of newborn children.
7. Identification of high-risk newborn children (according to their medical history).
8. Carry out the primary hygienic care of newborn children.
9. Hygienic care of a newborn child (cleaning of eyes, ears, nasal passages, skin, mucus membranes, swaddling, feeding from the bottle, bathing).
10. Maintenance of the sanitary and hygienic conditions in the neonatal department.

### **Providing an initial level of knowledge-abilities**

To apply the materials of the guidelines for independent extra-curricular activities of students to the subject 1.

### **Materials needed for methodological support:**

#### **The technological card of the lesson**

№	Step of the lesson	Study time (min)	Tutorials		Place of the lesson
			Learning tools	Equipment	
1.	Determination of the initial level of knowledge	20	Testing	Tests	Classroom
2.	Determination of the main positions of the topic	25	Quiz, discussion	Graphical structure of the topic, case history	Classroom

				of childrens with breastfeeding and after introduction of solid foods.	
3.	Break	10			
4.	Solution for the training tasks of the topic	45	Independent work of a student under the guidance of a teacher - training of practical skills	Premises and equipment of the hospital	Departments of the hospital
5.	Break	30			
6.	Solution for the training tasks of the topic	45	Independent work of a student under the guidance of a teacher - training of practical skills.	Premises and equipment of the hospital	Departments of the hospital

			Completion of the diary of practical training.		
7.	Break	10			
8.	Determination of the output level of skills readiness.	20	Checking of the practical skills of a student while work in the departments.	Premises and equipment of the hospital	Departments of the hospital
9.	Determination of the output level of knowledge and skills readiness.	15	Solving and discussion of situational assignments Checking entries in the diary of practical training	Situational tasks	Classroom
10.	Summation of the lesson. Assignment	10	Quiz, discussion		Classroom

	to the next lesson.				
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**The estimated basis of the action** in performance of the learning objectives of the topic:

1. Study the medical history of the child.
2. Self-study in the Hospital departments – Carry out clinical examination of a newborn child.

Determination of transient states of newborn children.

Identification of high-risk newborn children (according to their medical history).

Carry out the primary hygienic care of newborn children.

### **Tasks for the final knowledge assessment.**

#### **Situational tasks:**

**Task 1:** A baby was born at the 32 weeks gestation age, weight – 2300g.

1. Assess the gestation age.
2. What period of prenatal development is considered as normal?

#### **Standard of answer:**

1. Premature child.
2. 38-42 weeks.

**Task 2:** A baby was born at the 43 weeks gestation age.

3. Assess the gestation age.
4. What period of prenatal development is considered as normal?

#### **Standard of answer:**

3. Postmature child.
4. 40±2 weeks.

**Task 3:** A child after birth is marked with pink torso, extremities are cyanotic, heart rate 100 / min., good rhythmic breathing; weak bending limbs, grimace at orinasal rehabilitation. Assess the condition of the newborn using Apgar score.

**Standard of answer:** 7 point.

**Task 4:** 39 weeks of gestation age. Weight of a child at birth – 2800g, height – 50cm, head circumference – 36cm, breast circumference – 34cm. Assess the infant physical development.

**Standard of answer:** low weight by the time of birth (intrauterine hypotrophy).

**Task 5:** A newborn (boy), 4 days. Was born on the 3<sup>rd</sup> pregnancy, 3<sup>rd</sup> childbirth, weight 3500.0g. The two previous pregnancies ended with the birth of healthy children. On the third day after birth icteric discoloration of the skin appeared and it worsened on the 4<sup>th</sup> day. Assess the skin color, identify if it is normal or pathological.

**Standard of answer:** physiologic jaundice of the newborn.

**Task 6:** The condition of a newborn is assessed with the Apgar score:

**Choice of answers:**

A - in 1-5 mins;

B - in 10 mins;

C - in 20 mins;

D - in 1-2 hrs after the birth.

**Standard of answer:** A – in 1-5 mins.

**Task 7:** The maximum physiological loss of body weight of the newborn is:

**Choice of answers:**

A - 1-4%,

- B - 5-7%,
- C - 8-10%,
- D – more than 10%.

**Standard of answer:** B - 5-7%.

**Task 8:** After the examination of a newborn was determined: pale pink skin, skull sufficient bone density, small fontanel is closed, ears tight, nails edge overlap the fingers, lanugo determined only on the back, development of subcutaneous tissue is adequate, umbilical ring is located midway between the sternum and pubis, testicles descended into the scrotum. Identify the maturity / prematurity of the infant.

**Standard of answer:** The infant mature.

**Task 9:** After the examination of 5 days age mature child (girl) was identified that lacteal glands are enlarged - metrorrhagia. Assess the situation, what treatment could be done?

**Standard of answer:** This physiological state - sexual crisis. Medicines are not necessary, prevented infection and hygiene regime should be followed.

**Task 10:** 34 weeks of newborn gestation age. Weight – 2100.0g. After the examination of a newborn was determined: wrinkled skin of dark red color, almost complete absence of subcutaneous tissue, soft ears, a lot of fluff hair on the face, legs, back; low location of navel, labia minora are not covered by labia majora. Identify the maturity / prematurity of the infant.

**Standard of answer:** The infant is premature.

### **Points that student can get for the work**

The maximum number of points which may be consequently obtained by students is 200 points; this includes 120 points for current educational activity and 80 points for the final lesson.

Current educational activity of students is controlled during practical classes according to specific goals in the course of each practical class as well as during self-training in the hospital department. It is recommended to apply the following means of diagnostics of the students' level of readiness: control of practical skills, solving cases and test control of theoretical knowledge.

The current assessment of students on respective topics is conducted in the traditional 4-point grade scale ("excellent", "good", "satisfactory" and "unsatisfactory") with further conversion into a multiscore scale.

**The grade "Excellent"** is given when the student knows the program in toto, illustrating the answers with various examples; gives clear and comprehensive answers without any hints; delivers the material without any inaccuracies or errors; performs practical tasks of a different degree of complexity.

**The grade "Good"** is given when the student knows the whole program and understands it well, gives correct, consistent and structured but not completely comprehensive answers to questions, although he is able to answer additional questions without mistakes; solves all cases and performs practical tasks experiencing difficulties only in the most complex situations.

**The grade "Satisfactory"** is given to the student based on his satisfactory level of knowledge and understanding of the entire subject. The student is able to solve modified tasks with the help of hints; solves cases and applies practical skills experiencing difficulties in simple cases; is unable to deliver a consistent answer, but answers direct questions correctly.

The mark "Unsatisfactory" is given when the student's knowledge and skills do not meet the requirements of the grade "satisfactory".

Given the number of practical classes the grades are converted into the multiscore scale as follows:

**The mark "Excellent" – 72-80 scores**

**The mark "Good" – 60-71 scores**

**The mark "Satisfactory" – 50-59 scores**

**The mark "Unsatisfactory" – 0 scores**

**List of learning literature:**

**Basic literature:**

1. Propaedeutics of Paediatrics: Manual for foreign students / V. A. Fjoklin, V. A. Klymenko, O. M. Plakhotna, T. V. Sirenko, A. I. Kojemiaka, O. V. Sharikadze. – Kharkiv: 2010. – 356 p.
2. Kapitan T. Propaedeutics of children diseases and nursing of the child / T. Kapitan. – The state cartographical factory, 2006. – 734p.
3. Lecture.

**Additional:**

1. Nelson textbook of pediatrics.—19th ed./ [edited by] Robert M. Kliegman... [at. ol], p. SM
2. Ghai O.P. Essential pediatrics (fourth edition). – New Delhi, India: Interpint, 1996.–476 p.
3. Gupte S. The short textbook of pediatrics, 8<sup>th</sup> edition. – New Deli, India.: Iaypee Brthe others. Medical publishers (P) hTD, 1998. – 617 p.
4. Bickley L.S., Hockelman R.A. Physical examination and History Taking. – Philadelphia, New York, Baltimor.: Lippincott, 1999. – 789 p.

*Для нотатків*

*Для нотатків*

*Для нотатків*

*Навчальне видання*

**ОСОБЛИВОСТІ ПЕРІОДУ НОВОНАРОДЖЕНОСТІ**

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