PERIODS OF CHILDREN DEVELOPMENT

Academic discipline «Pediatric Propedeutics»
Self-study guide for the 3rd year
English medium students

ПЕРІОДИ ДИТЯЧОГО ВІКУ

З дисципліни «Пропедевтика педіатрії»

Методичні вказівки
dо самостійної роботи студентів 3-го курсу
медичного факультету
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Затверджено
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Contents

Ontogenesis of a child includes certain periods of development which are characterized by different level of physical and psychological maturity, peculiarities of diseases’ courses, special features of relations of the body with its environment. Due to these peculiarities, morphological characteristics of organs and the whole body are gradually changing; adaptive reactions are improving; psychological characteristics are modifying. Doctors should use in their practical work an individual approach to a child taking into account age-related anatomical and psychological characteristics.

Specific goals

To know:
1. General information on ontogenesis, phylogenesis and embryogenesis.
2. Modern information about the periods of childhood and meaning of the periodization for the individual approach to healthy and sick children.
3. Modern approaches to biological age of a child and his/her socialization.
7. What do you understand by the term “newborn child”? 
**Be able to (list of practical skills):**

1. Determination of the period of childhood of a child taking into account anatomical and physiological characteristics.
2. Evaluation of the correspondence of the day regimen, nutrition and care to the age of the child.
3. Identification of pathological factors and their hazardous influence on a child during different age periods.
4. Training of the use of terminology related the periodization (embryopathies, early and late-term fetopathies, prenatal, anthenatal, intranatal, postnatal and so on).
5. Use of the age criteria for identification of the period of childhood to which the child belongs.
6. Determination of the meaning of perinatal and exogenous factors on the development of a child of different age.

**Basic knowledge, practices and skills necessary for the topic (interdisciplinary integration).**

<table>
<thead>
<tr>
<th>Names of previous branches of learning</th>
<th>Acquired skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. General physiology</td>
<td>Knowledge of characteristics of organs and body systems functioning.</td>
</tr>
<tr>
<td>3. Introduction to psychology. Introduction to pedagogics.</td>
<td>Analysis of patient’s emotions, interpersonal relationships, children’s behavior.</td>
</tr>
</tbody>
</table>

**Control questions to the lesson:**

1. Necessity of the periodization, and its use in the practical doctor’s work.
2. Name the periods of the intrauterine development.
3. Name the periods of development after the birth of a child.
4. Conception of "embryopathies", "early fetopathies", "late fetopathies" and their characteristics.
5. Characterize the period of intrauterine development (duration, main patterns of physical, neurological and psychical development, typical pathologies).
6. Characterize the neonatal period (duration, main patterns of physical, neurological and psychical development, typical pathologies).
7. Characterize the infancy period (duration, main patterns of physical, neurological and psychical development, typical pathologies).
8. Characterize the pre-school period (duration, main patterns of physical, neurological and psychical development, typical pathologies).
9. Characterize the period of primary school age (duration, main patterns of physical, neurological and psychical development, typical pathologies).
10. Characterize the period of senior school age (duration, main patterns of physical, neurological and psychical development, typical pathologies).

**Graphical structures of individual issues of the topic:**
1) Grafo logical structure of the theme “Periods of the childhood” Appendix 1.
3) Grafo logical structure of clinical examination of a child Appendix 3.
4) Grafo logical structure “Peculiarities of collection anamnesis information Appendix 4.
Tests for self-control:
1. What is the normal duration of intrauterine development of a child?
   A. 240-250 days starting from conception
   B. 250-260 days starting from conception
   C. 260-270 days starting from conception
   D. 270-280 days starting from conception
   E. 280-290 days starting from conception

2. What is the normal duration of the embryonic phase of development of a child?
   A. up to 2 weeks starting from conception
   B. up to 1 month starting from conception
   C. up to 1,5 months starting from conception
   D. 2-3 months starting from conception
   E. up to 3-4 months starting from the conception

3. Which periods of childhood are combined into one perinatal period?
   A. germinal, embrional, fetal
   B. embrional, neofetal, early fetal
   C. neofetal, early and late fetal
   D. early and late fetal, intranatal
   E. late fetal, intranatal, early neonatal

4. Name the period of childhood when the influence of teratogenic factors is identified.
   A. germinal
   B. embrional
   C. fetal
   D. early neonatal
   E. neonatal.
5. During the examination of a newborn child in the delivery room severe anatomical birth defects were noticed – absence of a right arm, malformations of inner organs. What is the name of this pathology?
   A. gamethopathy
   B. embriopathy
   C. early fetopathies
   D. late fetopathies
   E. stigmas of disembryogenesis

6. The child is 6 days old. Name the period of childhood to which the child belongs.
   A. early neonatal
   B. late neonatal
   C. infancy
   D. pre- preschool period
   E. late fetal

7. Which physiological processes are mostly characteristic for the neonatal period?
   A. intensive physical development
   B. intensive psychomotor development
   C. adaptation processes
   D. sexual maturity
   E. organogenesis

8. During the questioning of the mother of a newborn child, it was established that the period from the beginning of labors till the umbilical ligation was 15 hours. What is the name of this period?
   A. – prenatal
   B. – intranatal
   C. – postnatal
   D. – perinatal
   E. – neonatal
9. District pediatrician is carrying out dispensary examination of a child aged 20 days at home. During the questioning it was established that the child was born in term with weight 3100 g, height 50 cm. Delivery without complications. The child is breastfed. Determine the period of childhood of this child.

A. – early neonatal  
B. – late neonatal  
C. – infancy  
D. – pre- preschool period  
E. – fetal

10. The child is 8 years old and is in the second year of the school. The physical development has slowed down. Milk teeth have started to change to permanent teeth. Determine the period of childhood of this child.

A. – preschool period  
B. – primary school age  
C. – senior school age  
D. – perinatal  
E. – neonatal

11. Early neonatal period lasts:
A. first day of life of a child  
B. first 6 hours of life  
C. first 7 days of life  
D. first 10 days of life  
E. first 42 hours of life

**Task for the individual student’s work:**
Prepare a report on the topic: "Different classifications of the periodization of childhood "

**Reference responses at the test questions:**
1-D; 2- D ; 3- E; 4- B; 5- B; 6- A ; 7- C; 8- B; 9- B ; 10- B; 11- C;
List of learning literature:

Basic literature:

Additional:

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
Appendix 1

**PEDIODS OF CHILDHOOD**

**INTRANATURAL** (from 2-4 to 18-20 hours from the beginning of labors till the umbilical ligation)

- Early – first 7 days
- Neonatal – first 28 days of life of a child
- Late – from 8 till 28 day

**EXTRAUTERINE** (from the birth till the death of a person; in pediatrics - from the birth till 18 years old)

- Infancy – from the 29th day till one year
- Pre-school period – from the 1st year till the 3rd year
- Preschool period – from the 4th year till the 6th year
- Primary school age – from the 7th year till the 11th year
- Senior school age – from the 12th year till the 18th year

**INTRAUTERINE** (270 days from the conception till the birth of a child)

- Phase of embryonic development from the conception till two months
- Phase of placental development (fetal period) from the 3 month till the end of pregnancy
- Early fetal – from the beginning of the 9th week till the end of 28th week
- Late fetal – after the 28th week till the birth

**INFANCY** – from the 29th day till one year

**PRESCHOOL PERIOD** – from the 1st year till the 3rd year

**PREGNANCY**

- Early fetal – from the beginning of the 9th week till the end of 28th week
- Late fetal – after the 28th week till the birth

**EPIODS OF CHILDHOOD**
Graphological structure of clinical examination of a child

<table>
<thead>
<tr>
<th>Without deviation</th>
<th>High, low height asymmetry of body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peculiarities of bodybuilding structure and stature</td>
<td>Macro-, microsomia</td>
</tr>
<tr>
<td>Skin, subcutaneous tissue, hair, nails, sweat glands</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Muscular system</th>
<th>Atrophy, hypotrophy, hypertrophy, hypoplasia, uplasia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face, skull</td>
<td>Microcephalia</td>
</tr>
<tr>
<td>Face, forehead, cochlea, eyes, eyebrow, eyelids, nose, lips, oral cavity, tongue, upper and lower jaw</td>
<td></td>
</tr>
<tr>
<td>Neck, clavicles, shoulders, chest, ribs, breast, scapula, spine, abdomen, sexual organs</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upper and lower extremities:</th>
<th>Another variants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoulder, forearm, hand, fingers, hip, foot, joints</td>
<td>- Local changes</td>
</tr>
<tr>
<td></td>
<td>- Diffuse changes</td>
</tr>
</tbody>
</table>
Graphological structure “Peculiarities of collection anamnesis information.”

Collection of information of anamnesis

- Complains
  - Main complains
  - Additional complains (questioning according systems)

- Anamnesis of disease
- Anamnesis of vitae
- Family anamnesis
- Financial conditions and conditions of life

- Obstetric – gynecologic anamnesis
- Perinatal anamnesis
Навчальне видання

Періоди дитячого віку

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Сіренко Тетяна Вадимівна
Яновська Катерина Олександрівна

Відповідальний за випуск: Клименко В.А.

Комп’ютерна верстка

Ум. друк. арк.____. Тираж____ прим. Зам. №____.