FINAL CLASS OF MODULE 1

Academic discipline «Pediatric Propedeutics»
Teacher's guide for the 3rd year
English medium students

ПІДСУМКОВЕ ЗАНЯТТЯ З МОДУЛЮ 1

З дисципліни «Пропедевтика педіатрії»

Методичні розробки
до аудиторної роботи викладачів

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Затверджено
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Number of class periods: practical trainings – 4.

Contents

Evaluation of the knowledge obtained by a student and the level his/her practical training is one of the final stages of student learning activities and definition of learning success.

Evaluation makes it possible to assert that the student receives the necessary knowledge, understanding, skills and competence. Competence means the proven ability of students to use knowledge, learned behavior and personal skills in educational or work situations. Competence is the ability to transfer knowledge into practice.

The forms of monitoring and evaluating are listed pursuant to the program of the work practice "Pediatric Propedeutics" and the Instruction on the evaluation of academic activities in the course of the European credit transfer system in the organization of the educational process".

Specific goals:

• to prepare for evaluation by the teacher mastering of the knowledge and skills of

To know:
1. The concept of children's health, criteria for health assessment.
2. The main functions of Pediatrics.
3. To analyze basic statistical rates of health care institutions.
4. The main historical stages of pediatrics in Ukraine.
5. Professors V.S.Chernov, V.D. Yakubovych and others as organizers of the first pediatric departments in Ukraine.
6. Professors' contributions (O.M. Khokhol, V.O.Belousov, F.D.Rum'yantseva, L.O Filkinshteyn, O.I.Skrotsky, P.M. Hudzenko, V.M. Sydelnikov, B. Y.Reznik V.D.Chebotarova and others) in the development of national clinical Pediatrics.
7. Kharkiv pediatric school, basic stages and directions of the development. Professors' contributions (Arkavin Y.S., Frishman N.M., Belousov V.A., Tets G.I. and others) in the development of pediatric science.
8. Modern information about the periods of childhood and meaning of the periodization for the individual approach to healthy and sick children.
9. Modern approaches to biological age of a child and his/her socialization.
10. Peculiarities and methods of collection of medical history in children.
11. Methods of objective clinical investigations of healthy and sick children. General examination of healthy and sick children.
12. Criteria of assessment of the general condition of sick children.
13. What do you understand by the term "newborn child"?
14. Physiological and transient states of the neonatal period.
15. Conception of maturity of a newborn child.
16. Signs of prematurity.

17. Primary hygienic care and patronage of a newborn child. Care of a newborn child.
18. Characteristic of investigational methods of a newborn child.
19. Sanitary and hygienic conditions in neonatal departments.
20. Conception of children physical development, its meaning and assessments.
21. Conception of the acceleration of children's development.
22. Method of assessment of children's physical development.
23. Semiotics of children's physical development pathology.
24. Physical education.
25. How to assess the physical development of children of different age, to understand to reasons of the pathology of physical development.
26. The basic criteria and parameters of psychomotor development of children of
27. The basic criteria and parameters psychomotor development of children of different ages.
28. The features of psychomotor development newborns.
29. Assessment of psychomotor development of children under 1 year of life by months.
30. Assessment of psychomotor development of preschool children, preschool, junior and senior school age.
31. The history factors affect changes in psychomotor development.
32. The modern aspects of breastfeeding of infants.
33. To identify the benefits of breastfeeding for newborn.
34. To define the quantitative and qualitative composition and the immunological role of a breast milk.
35. To demonstrate the calculating of volum of milk for infants using the volumetric feeding method.
36. To provide the correct technique of breastfeeding.
37. To define main difficulties in breastfeeding, the prevention of hypogalactia and mastitis.
38. To define the needs of child with breastfeeding in proteins, fats, carbohydrates and calories.
39. To define needs in proteins, fats, carbohydrates and calories in child which had the introduction of solid foods.
40. To define the modern aspects of mixed or artificial feeding.
41. To define the classification and characteristics of milk formulas.
42. To provide the correct technique of mixed or artificial feeding.
43. To define the needs in proteins, fats, carbohydrates and calories in children with mixed or artificial feeding.
44. To demonstrate the scheme of mixed and artificial feeding.

Be able to (list of practical skills to the subject):
• To interpret the child health criteria.
• To analyze the basic statistical indices of medical institutions.
• Interpret the historical stages of pediatrics in Ukraine.

• Determination of the period of childhood of a child taking into account anatomical and physiological characteristics.

• Identification of pathological factors and their hazardous influence on a child during different age periods.

• Training of the use of terminology related the periodization (embryopathies, early and late-term fetopathies, prenatal, anthenatal, intranatal, postnatal and so on).

• Use of the age criteria for identification of the period of childhood to which the child belongs.

• Determinate of the meaning of perinatal and exogenous factors on the development of a child of different age.

• Collect of the medical history of a newborn child.

• Evaluate of the state of a newborn child using Apgar score and Silverman score.

• Determination of the maturity of a newborn child, maturity or prematurity

• Carry out anthropometric measurements, assessment of the physical development of children.

• Carry out clinical examination of a newborn child.

• Determinate of transient states of newborn children.

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

• Carry out the primary hygienic care of newborn children.

• Maintenance of the sanitary and hygienic conditions in the neonatal.

• Measure of the main body parameters (weight, height, head, chest, hip, calf, shoulder circumferences, body mass index).

• Calculate of anthropometric indexes.

• Calculate of appropriate parameters of the physical development according to the empirical equations, sygmal and empirical tables, alignment charts.

• To assess of the physical development based on the received data.

• To assess of psychomotor development of children under 1 year of life by months.

• To assess of psychomotor development of preschool children, preschool, junior and senior school age.

• To interpret the results of clinical investigation (statics, motility, sensory reactions, speech, mental development).

• To conduct syndromic diagnosis of the nervous system diseases of children.

• To collect anamnesis of infants and evaluate it.

• To calculate the amount of food per day for child, according to the age.

• To make a one-day menu for child one year with breastfeeding, taking into account the needs in food ingredients.

• To evaluate the correct techniques of breasfeeding.

• Issues in the prevention of hypogalactia and mastitis.

• To demonstrate the methods of calculation for child with introduction of solid foods, taking into account the needs in food ingredients.

• To explain the definition of mixed or artificial feeding, the classification and characteristics of milk formulas.

• To collect anamnesis of children with mixed or artificial feeding and evaluate it.

• To calculate the amount of food per day for children with mixed and artificial feeding, according to the age.
• To make a one-day menu for child with mixed and artificial feeding, taking into account the needs in food ingredients.
• To evaluate the correct techniques and schemes of mixed and artificial feeding.
• To demonstrate the methods of calculation for child of mixed or artificial feeding with introduction of solid foods, taking into account the needs in food ingredients.

Materials needed for methodological support:

1. Case history of children with breastfeeding and after introduction of solid foods.
2. Graphical patterns of individual issues of the previous themes.

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	45	Testing	Tests	Classroom
2.	Break	10			
3.	Checking of practical skills	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
4.	Break	30			
5.	Solution for the situation tasks of the topics	25	Solving and discussion of situational assignments	Situational tasks	Classroom
6.	Answering for control questions for the topics of module 1.	20			Classroom
7.	Break	10			
8.	Answering for control questions of the topics of module 1.	35			Classroom
9.	Summation of the lesson. Assignment to the next lesson.	10	Discussion		Classroom

The estimated basis of the action in performance of the learning objectives the topic (sections 4, 6):

1. Self classroom work in the departments for young children and pathology of newborn - medical history, characteristics of pregnancy and childbirth, evaluation according to Apgar score, evaluation training of mothers to artificial and mixed feeding, the correct technique of artificial and mixed feeding.

2. Familiarity with the control weighting and evaluating of artificial and mixed feeding effectiveness.

Assignments for testing the final level of knowledge

Situational tasks:

1) A child was born with weight 3000g, length 50 cm. He is 4 weeks old now. He is breastfed 7 times a day with three hours day and 6-hour night intervals. The child is anxious from time to time, looks for the mother's breast actively, sucking greedily, and cries when he is taken away from mother's breast. The baby hadn't gained weight past week. At the control weighing the child sucked 40 ml of milk for a feeding.
- Estimate the child's weight
- Estimate the amount of milk for one feeding.
- Whether does the child need feeding correction? If it is required - perform it.

2) A child was born with weight 3100g, length - 50cm. He is 3 months old now. His weight is 5500 g. The child is breastfed, does not receive juices.
- Estimate the child's weight. What is normal weight for this age?
- Assess the adequacy and effectiveness of feeding.
- Is the nutrition correction required? If the answer is "yes", characterize (without calculations) measures on child nutrition correction.

3) A child was born with weight 3300 g, length 51 cm. He is 11 months at the present time. He has received an artificial feeding since 2- months-old.
- Estimate the child's weight. What is normal weight for this age?
- Determine the diet, the amount of food per one feeding.

4) A child was born with weight 3400 g, length 50 cm. He is 2.5 months old at the moment. His weight is 4600g. He has received an artificial feeding since the 1.5 months old.
- Estimate the child's weight. What is normal weight for this age?
- Determine the diet, the amount of food per one feeding.
- State a requirement for kcal per 1kg of weight.

5) A child was born with weight 3200 g, length - 51cm. He is 3 months old at the moment. He has received an artificial feeding since the age of 2 month.
- Estimate the child's weight. What is normal weight for this age?
- Determine the diet, the amount of food per one feeding.
- State a need for protein, fat, carbohydrate and calories per 1kg of weight.

6) A child was born with a body weight 3400g, with body length 51 cm. He is 5 months old at the moment. He has received an artificial feeding since the age of 8 weeks.
- Estimate the child's weight. What is normal weight for this age?
- Determine the diet, the amount of food per one feeding.
- State a need for protein, fat, carbohydrate and calories per 1kg of weight.

7) A child was born with weight 3000g, length 50cm. He is 1 month old at the moment. He has received an artificial feeding.
- Estimate the child's weight. What is normal weight for this age?
- Determine the diet, the amount of food per one feeding.
- State a need for protein, fat, carbohydrate and calories per 1kg of weight.

8) A newborn is 4 days old. He was born in term with birthweight 3500 g. Icteric coloring of his skin appeared at the 3rd day, and it is increased by 4th day.
- Assess the skin color. Whether is it norm or pathology?

9) A child was born with weight 3050 g, length 49cm. He is 6 months old at the moment. He has received an artificial feeding since the age of 2 months.
- Estimate the child's weight. What is normal weight for this age?
- Determine the diet, the amount of food per one feeding.
- State a need for protein, fat, carbohydrate and calories per 1kg of weight.

10) A newborn is 10 days old. He sleeps for 20 hours a day, does not react to surrounding people, cries when wake up, has chaotic limb movements.
- Assess a psycho-motor development of the child.

11) A child was born with a weight 3000 g, length 50 cm. He is 3 weeks old at the moment. Mother worries about sufficiency and adequacy of her breastfeeding. During clinical examination the child is active and calm. Skin is pink and pure. Body weight is 3400 g.
- Estimate measurements to assess the sufficiency and adequacy of breastfeeding
- What is normal baby's weight for this age.
- Determine the diet, the amount of food per day and per feeding.
- State a need for protein, fat, carbohydrate and calories per one day.

12) A child was born with weight 3150 g, length 52 cm. The child is breastfed, he is 5 months old. The mother has applied to a clinic with a question - whether is it time for introducing an extra food to a child.

- Estimate the normal child weight for this age.
- Compose a menu for one day.

13) A child was born with a weight 3100 g, length 48 cm. The child is breastfed; he is 9 months old at the moment.
- Estimate the normal child weight for this age.
- Determine the diet, the amount of food per feeding and day.
- State a need for protein, fat, carbohydrate and calories per 1kg of body weight.

14) A child was born with a weight 3200g, length 51cm. The child has received an artificial feeding since the age of 1 month. He is 8 months old at the moment.
- Estimate the normal child weight for this age.
- Determine the diet, the amount of food per feeding and day.

15) A child was born with a weight 2700g, length 48cm. The child has received a breastfeeding. He is 3 months old at the moment.
- Estimate the normal child weight for this age.
- Determine the diet, the amount of food per feeding and day.

16) A child was born with a weight 3400 g, length 48 cm. The child has received a breastfeeding. He is 8 months old at the moment.
- Estimate the normal child weight for this age.
- State a need for protein, fat, carbohydrate and calories per 1kg of body weight.
- Compose a menu for one day.

17) A child was born with a weight 3000g, length 49cm. The child has received an artificial feeding. He is 6 weeks old at the moment.
- Estimate the normal child weight and length for this age.
- State a need for protein, fat, carbohydrate and calories per 1kg of body weight.
- Determine an age-adequate food. Compose a menu for one day.

18) A child was born with a weight 3100g, length 51cm. The child is breastfed. He is 7 months old at the moment.
- Estimate the normal child weight and length for this age.
- State a need for protein, fat, carbohydrate and calories per 1kg of body weight.
- Determine an age-adequate food. Compose a menu for one day.

19) The doctor is examining the newborn in maternity house at once after birth. The child birthweight is 3200 g, length 49 cm. He was born in term, with severe asphyxia. Assessment according Apgar score is 3 marks.
- How this baby should be fed?

20) The child was born with a weight of 3000 g, body length of 50 cm. Now he is 4-weeks-old. Breastfed 7 times a day with a 6-hour break at night. Timely he is worry, he is looking for the mother's breast actively, sucking greedily, crying. The baby is not gaining weight. The result of control weighing is 40 ml of milk.
- To calculate the amount of milk that he should suck in a single feeding.

Distribution points that can receive the student
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**