APPROVED
The First Pro-Rector for Scientific and Pedagogical Affairs
Danylo Halytsky Lviv National Medical University

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Assoc. Prof. Iryna SOLONYNKO

APPROVED
by the joint meeting of the Academic Councils of the Medical Faculties No. 1 and No. 2 and the Faculty of Foreign Students of Danylo Halytskyi Lviv National Medical University, Protocol No. 1/03-2024 of 13.03.2024.
Dean of Medical Faculty No 1 _____ Prof. Marta KOLYSHETSKA

Dean of Medical Faculty No 2 _____ Assoc. Prof. Oleg KAPUSTINSKYI

Dean of Foreign Students_____ Assoc. Prof. Eugene VARYVODA

APPROVED
At the meeting of the specialized methodical committee on pediatric disciplines Protocol No. 2 of "15" February 2024
The Chairman of the specialized
methodical commission _____ Prof. Lesya BESH

PASSPORT
of the examination station OSP(C)E
Cardiopulmonary resuscitation in children of different ages
Specialty 222 Medicine
discipline "Pediatric diseases with pediatric infectious diseases"

EDUCATIONAL OBJECTIVE: To test the skills ability of graduates of the Faculty of Medicine in the specialty 222 Medicine to provide cardiopulmonary resuscitation in children of different ages using an appropriate algorithm.

COMPETENCES. To check:
- Knowledge how to provide resuscitation to infants, newborns, and children, depending on the clinical situation;
- Neonatal initial care skills
- Assessment of respiratory/circulatory arrest in children;
- Bag and mask ventilation skills;
- Chest compression skills;
- Skills of using an automated external defibrillator (AED) in infants and children;
- Skills in the use of drugs in neonatal resuscitation.

PASSPORT PREPARED: Professor D.O. Dobryanskyy, Associated Professor Y.B. Kuzminov, Associated Professor O.P. Borysiuk.

DURATION OF THE EVALUATION AND TIME ALLOCATION

№	Action	Approximate time allocation
1.	Identification of the student, obtaining the task and getting acquainted with it	1-2 min.
2.	Task performance	6-8 min.
3.	Warning when allocated time finishes (by the examiner)	2 min. before time expires
	Total time	10 min.

SETTINGS

№	Organizational requirements	
1.	Room requirements	Separated room
2.	Equipment, tools	Table, care mat, 2 blankets, 1 towel, basic equipment for resuscitation (paediatric and neonatal Ambu bag, face mask for ventilation size No1 and size No2, suction bulb, pulse oximeter probe, AED and paediatric pads)
3.	Consumables and supplies for 1 student	Checklist for each student, non-sterile rubber gloves
4.	Simulation Equipment	Simulation resuscitation mannequin of the newborn, infant, child
5.	Involved employees of the department and simulation center	The department examiner – 1

INSTRUCTIONS FOR A STUDENT

- Student who is late will not be allowed to perform the tasks.
- Your appearance: white clean gown, neat hairstyle, clean hands (girls - with a neutral manicure); a face mask, a badge, a photo document identifying a person; a stethoscope (in case of violation of requirements the student is not allowed to perform the tasks).
- Say hello and introduce yourself to an examiner.
- Obtain initial information from the examiner on a newborn, infant or child who will need resuscitation:
    1. "*You are called to attend a birth due to umbilical cord prolapse with foetal bradycardia 3 min before delivery. After delivery the baby had to be separated from a mother, and was given to YOU for further assessment and care*"[1]. You have to resuscitate the baby taking into account that **baby's gestational age is 39 wks., and amniotic fluid was clear**".
    2. *"You work as a nanny for a family of doctors. Mom went to a dentist, and you stayed home with their 9-month-old baby. The child was playing on the floor. You left the room for a few minutes, and when you returned, you saw that the baby was lying on the floor and not moving. There are no chest movements, his skin is pale and cyanotic". Additional information - there is an Ambu bag in the apartment, and an AED in the shopping mall nearby.*
    3. *"You are working in the pediatric department of a children's hospital. Passing by ward #8 through the open door, you notice that a child aged approximately 3 years is lying motionless in the bed, there are no visible chest movements, and his skin is cyanotic".*
    Additional information - there is an Ambu bag in the ward and AED in the manipulation room nearby.
- Describe the steps of the resuscitation algorithm responding to the provided specific information about infant's condition.
    a. You have to describe your actions since the moment of receiving the baby from a "midwife" responding to the additional information about the infant's condition obtained from the examiner.
    b. While describing your actions according to the resuscitation algorithm, at the appropriate moment, ask the examiner for additional information about infant's condition; it is mandatory to do this

[1] The task is to describe correct performance of the main procedures in neonatal resuscitation: initial steps, positive-pressure ventilation and chest compressions.

specifically and clearly, for example: “Is it safe?", “Does the baby breathe?”, “Does the baby have respiratory disorders?”, “Is there a significant amount of fluid in the oral cavity?”, “What is heart rate, saturation?” etc.

c. After your mention of certain actions the examiner will report the expected result (for example, if you asked to perform auscultation of the heart, the examiner would report the infant’s heart rate at that moment; if the pulse oximeter probe was attached – you could ask about heart rate, saturation; if the AED pads were applied, ask about heart rhythm etc.); however, you may not ask about infant’s heart rate if the necessary actions were not mentioned, for example, the heart rate was not auscultated or the pulse oximeter probe was not connected to the baby, or about heart rhythm if AED pads were not applied).

d. Your descriptions and responses will be evaluated.

- Switch to the next stage according to the route list.

GENERAL PERFORMANCE ALGORITHM

1. Say hello and introduce yourself to an examiner.
2. Obtain initial information about a newborn baby from the examiner.
3. Describe the steps of the algorithm responding to the changes of infant’s condition.
4. On a signal, switch to another stage according to the route leaf.
5. Time of work at the stage - 10 minutes.

INSTRUCTIONS FOR THE EXAMINER

- Check the readiness for the exam (equipment, tasks according to the approved list, necessary teaching materials)
- Identify the student by a photo document.
- Register the student in a checklist.
- Orally provide the student with initial information about the newborn, infant or child:

1. *"You were called to an emergency delivery, complicated by the loss of umbilical cord loops, which was accompanied by bradycardia in the fetus 3 minutes before birth. After birth, the baby needed to be separated from the mother, and the baby is passed to you for further care*. You need to provide resuscitation to this infant, taking into account that the gestation period was 39 weeks and the amniotic fluid was clear.

2. “*You work as a nanny for a family of doctors. Mom went to a dentist, and you stayed home with their 9-month-old baby. The child was playing on the floor. You left the room for a few minutes, and when you returned, you saw that the baby was lying on the floor and not moving. There are no chest movements, his skin is pale and cyanotic". Additional information - there is an Ambu bag in the apartment, and an AED in the shopping mall nearby.*

3. "You are working in the pediatric department of a children's hospital. Passing by ward #8 through the open door, you notice that a child aged approximately 3 years is lying motionless in a bed, there are no visible chest movements, and his skin is cyanotic".

Additional information - there is an Ambu bag in the ward and AED in the manipulation room nearby.

- Do not interfere in the student's response, do not ask leading or control questions, do not suggest procedures, etc. However, provide additional information to the student about the condition of the "infant, baby or child" by responding to the relevant questions of the latter or a description of the applicant's performance of certain actions (e.g, auscultation of the heart, bag and mask ventilation, assistance with pulse oximeter probe or AED and pads placement); the examiner controls the time.
- The information provided by the examiner to the student is highlighted in bold in the appropriate column of the algorithm.
- The performance results are not shown or voiced to the learner.
- Record in the checklist the assessment for the correctness of the description of actions by the student in accordance with the algorithm.
- Summarize the points in the checklist, put your signature.
- Indicate whether or not the student has passed the stage, make a mark in the individual examination sheet, put signature.