SOUTH KAZAKHSTAN **MEDICAL ACADEMY**

АО «Южно-Казахстанская медицинская академия»

Department of "Emergency Medical Care and Nursing"

044-57/11 (

Methodological recommendations for teachers on teaching clinical skills at the Practical Skills Center (using the implementation algorithm)

P 1 of 6

Methodological recommendation for teachers on teaching clinical skills at the Practical **Skills Center**

(using the execution algorithm)

«Оңтүстік Қазақстан медицина академиясы» АҚ

Specialty: 6b10101 "general medicine" Subject: "Emergency Medical Care - 1, 2"

Course: 5

Department: emergency medical care and nursing

Developer: Yerimbet B. M.

OŃTÚSTIK QAZAQSTAN **MEDISINA AKADEMIASY**

SKMA

SOUTH KAZAKHSTAN

MEDICAL **ACADEMY**

АО «Южно-Казахстанская медицинская академия»

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Reviewed and discussed at the meeting of the department

«Оңтүстік Қазақстан медицина академиясы» АҚ

Proposition "28" 41 2022 G.

Head of the Department, PhD, Associate Professor

A.A. Seydakhmetova

OŃTÚSTIK QAZAQSTAN 🚜 SOUTI	TH KAZAKHSTAN	
MEDISINA (SKMA) MEDI	DICAL	
	DEMY	
«Оңтүстік Қазақстан медицина академиясы» АҚ 💛 🗡 АО «	«Южно-Казахстанская медицинская академия»	,
Department of "Emergency Medical Care and Nu	ursing" 044-57/11 ()	
Methodological recommendations for teachers on teaching clinical sk	kills at the Practical Skills P 3 of 6	
Center (using the implementation algorithm)	1)	

- **1. Name of clinical skill:** Algorithm of extended cardiopulmonary resuscitation (not a shock rhythm)
 - **2. Learning objectives:** To have advanced CPR skills.
- 3. Time required for preliminary instruction and demonstration of the skill on a dummy: 5 min.
 - **4 Time required for self-mastery of the skill:** 10 min.
 - 5. The necessary theoretical knowledge to master the clinical skill:
 - advanced resuscitation algorithm
 - algorithms and indications of defibrillation
 - contraindications to defibrillation
 - ensuring the patency of the respiratory tract and ventilation
 - reversible causes
 - diagnosis and treatment of reversible causes of circulatory arrest
 - ways of drug administration
 - medications for CPR
- **6.** A list of simulators, mannequins, models, visual aids: a dummy simulator "Volodya" for extended cardiopulmonary resuscitation.
- **7. List of medical devices and equipment:** masks, sterile gloves, Ambu bag, laryngoscope, intubation tube, venous catheter, electric pump, sterile cotton balls, syringes for injection 2.0, 5.0, 10.0, 20.0 ml, oxygen for inhalation, 70% ethyl alcohol solution, saline solution (0.9% 400.0 ml), epinephrine 0.18% -1.0 ml, atropine 0.1% -1.0 ml (1 mg).

8. Skill execution algorithm:

№	Step-by-step actions			Execution	on
			Yes	No	Remark
1	Assessment of vital parameters. Patient preparation. Performing one CPR period	Assessment of consciousness (call out and pat on the shoulders) Put on a flat surface, free the chest from clothes, raise the tip of the legs by 30-40 degrees, ensure the patency of the upper respiratory tract. Assessment of breathing (see, hear, feel). Assessment of the circulatory system (pulsation of the carotid artery on both sides). Performing one CPR period (5 cycles of 30 compression; 2 times of ventilator)			

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«Оңтүстік Қазақстан медицина академиясы» АҚ

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АО «Южно-Казахстанская медицинская академия»

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2	Heart rate assessment	Turning on the		
	using a defibrillator.	defibrillator		
		Installing electrodes,		
		connecting a monitor,		
		determining the type of		
		circulatory arrest.		
		Defibrillation is not		
		required.		
3	Provision of venous	Venipuncture of the		
	access	peripheral vein.		
4	Drug administration	Intravenous		
		administration of 1 mg		
		of epinephrine, 10 ml of		
		isotonic sodium chloride		
		solution. Repeat every		
		3-5 minutes.		
5	Performing one CPR	Performing one CPR		
	period	period (5 cycles of 30		
		compression; 2 times of		
		ventilator)		
6	Heart rate assessment	Defibrillation is not		
	using a defibrillator.	required.		
7	Performing one CPR	Performing one CPR		
	period	period (5 cycles of 30		
		compression; 2 times of		
		ventilator)		
8	Drug administration	Atropine 0.1% IV or 1.0		
		ml (1 mg) per bone.		
		Repeat every 3 minutes.		
		If the standard dose		
		does not help, the dose		
		can be increased to 3		
		mg, the total to 0.04 mg		
		/ kg.		
9	Status monitoring	Heart rate measurement,		
		oxygen saturation and		
		capnography		
	Total:			

9. Tasks:

- Assessment of the patient's condition.
- Conducting extended cardiopulmonary resuscitation according to the protocol.

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10. Criteria for evaluating the performance of the skill:

№	Implementations	Evaluation criteria
1	Completed	According to the clinical skills, the student completed 9 step-by-step actions. Correctly assessed the condition of the unconscious patient and completely performed cardiopulmonary resuscitation. Correctly assessed the effectiveness of the activities carried out.
2	Partially completed	According to the clinical skills, the student completed 4-5 steps of 9 step-by-step actions. He did not fully assess the condition of the unconscious patient and performed cardiopulmonary resuscitation. I did not correctly determine the effectiveness of the activities carried out.
3	Failed:	According to clinical skills, the student did not complete 9 step-by-step actions. I could not correctly assess the condition of the unconscious patient and perform cardiopulmonary resuscitation. I did not evaluate the effectiveness of the activities carried out.

11. Literature:

Basic literature:

- 1. The State program for the development of healthcare of the Republic of Kazakhstan "Densalyk" for 2021-2024
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- 5. Emergency outpatient cardiology: a brief guide / V. V. Ruksin. 2nd ed. Moscow: GEOTAR-Media, 2016.- 255 s
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Additional literature:

«Оңтүстік Қазақстан медицина академиясы» АҚ

- 1. Emergency cardiology. Edited by P.P. Ogurtsov, V.E. Dvornikov. GEOTAR-Media. 2016. 272 p.
- 2. Clinical protocol of diagnosis and treatment "Sudden death". Approved by the Joint Commission on the Quality of Medical Services of the Ministry of Health of the Republic of Kazakhstan dated June 23, 2016. Protocol No. 5.
- 3. Emergency medical care. Clinical recommendations / ed.: S.F. Bagnenko. M.: [B. I.], 2015. 871 p.
- 4. Emergency care for children: reference book: trans. from it. / Moscow: Medpress-inform, 2014.