MODULE OF SKILL LABORATORY PRACTICE

BLOCK : DISASTER RELIEVE MEDICINE

TOPIC : ADULTS ADVANCED LIFE SUPPORT

I. GENERAL OBJECTIVE

After completion of skill laboratory practice the student will be able to perform adults advanced life support intervention for patients with cardiac arrest.

II. SPECIFIC OBJECTIVES

At the end of skill laboratory practices, the student will be able to perform understand the procedure of ALS including:

- a. High Quality CPR
- b. Rhythm recognition
- c. Defibrillation
- d. Drug Therapy
- e. Sign of return of spontaneous circulation
- f. Assessment of reversible causes

III. SYLLABUS DESCRIPTION

Sub Model Objective

After finishing skill practice of clinical examination, the students will be able to perform advanced life support intervention for patients with cardiac arrest.

Expected Competencies

a. Student will be able to demonstrate procedure of ALS in patients with cardiac arrest

Methods

- a. Demonstration
- b. Coaching
- c. Self-practices

Laboratory Facilities:

- a. Class Room
- b. Mannequin for ALS
- c. Reading Material
- d. Trainers
- e. Student Learning Giude

Equipment

- a. IV Cannule
- b. Drugs
- c. Syringe
- d. ECG monitor

Venue

Training room (Skills Laboratory)

Evaluation

- a. OSCE
- b. Point nodal evaluation

V. LEARNING GUIDE

ADULTS ADVANCED LIFE SUPPORT CHECKLIST							
NO	STEPS	SCORE					
		0	1	2			
1.	Confirm cardiac arrest: check for sign of pulse and breathing						
2.	Call resuscitation team						
3.	Perform uninterrupted chest compressions while applying self-						
	adhesive defibrillation/monitoring pads – one below the right clavicle						
	and the other in the V6 position in the midaxillary line						
4.	Stop chest compressions; check the rhythm form the ECG monitor.						
	(This pause in chest compressions should be brief and no longer than						
	5 seconds)						
5.	Resume chest compressions immediately; warn all rescuers other						
	than the individual performing the chest compressions to "stand						
	clear" and remove any oxygen delivery device as appropriate						
6.	The designated person selects the appropriate energy on the						
	defibrillator and presses the charge button. Choose an energy setting						
	360 J (monophasic) or 120-200 J (biphasic) for the first shock, or						
	follow the manufacturer's guidance for the defibrillator. If unsure of						
	the correct energy level for a defibrillator choose the highest						
	available energy						
7.	Ensure that the rescuer giving the compressions is the only person						
	touching the patient						
8.	Once the defibrillator is charged and the safety check is complete, tell						
	the rescuer doing the chest compressions to "stand clear"; when						
	clear, give the shock						
9.	After shock delivery immediately restart CPR using a ratio of 30:2,						
	starting with chest compressions. The total pause in chest						
	compressions should be brief and no longer than 5 seconds						
10.	Continue CPR for 2 min; the team leader prepares the team for the						
	next pause in CPR						
11.	Pause briefly to check the rhythm in monitor			_			
12.	If VF/pVT, repeat steps 6–12 above and deliver a second shock			_			
13.	Resume chest compressions immediately						
14.	Give adrenaline 1 mg IV while performing a further 2 min CPR.						
15.	Pause briefly to check the rhythm in monitor, If VF/pVT, repeat steps						
	6–12 above and deliver a second shock.						
16.	Resume chest compressions immediately. Give amiodarone 300 mg						
	IV while performing a further 2 min CPR.						
17.	Repeat this 2 min CPR – rhythm/pulse check – defibrillation sequence						
	– drugs if VF/pVT persists						
18.	If organised electrical activity compatible with a cardiac output is						
	seen during a rhythm check, seek evidence of ROSC (check for signs						
	of life/central pulse)						

19.	Mention If there is ROSC, start post-resuscitation care		
20.	If there are no signs of ROSC or asystole is seen, continue CPR and		
	switch to the non-shockable algorithm		
21.	Start CPR 30:2		
22.	Give adrenaline 1 mg IV as soon as intravascular access is achieved		
23.	Continue CPR 30:2 until the airway is secured – then continue chest		
	compressions without pausing during ventilation		
24.	Recheck the rhythm after 2 min:		
	If electrical activity compatible with a pulse is seen, check for a pulse		
	and/or signs of life		
	If there is ROSC, start post-resuscitation care		
	If there are no signs of ROSC, continue CPR, recheck the rhythm after		
	2 min, give further adrenaline 1 mg IV every 3-5 min		
25.	Mention Treat reversible causes:		
	5 Hs: hypoxia, hypovolemia, hydrogen (acidosis),		
	hyper/hypocalcaemia and other metabolic disorders, hypothermia		
	4 Ts: Thrombosis, tension pneumothorax, tamponade, toxins		

VI. CRITERIA OF PERSONAL PERFORMANCE EVALUATION

SCALE	PERFORMANCE ACHIEVEMENT	COMMENT
1	If students are doing the task that only fill less than 35% of	LOW
	whole items for each step precisely	
2	If student are doing the task that only fill 35% - 60% from	MILD
	whole items for each step precisely	
3	If student are doing the task that only fill 60% - 78% from	MODERATE
	whole items for each step precisely	
4	If student are doing the task that fill at least 80% from	EXCELLENT
	whole items for each step precisely	