# BLS

The very basic art of life support:

The basic thing you are going to see anywhere not only in hospitals but everywhere. Leadership should be taken one step forward; Campaign to disseminate this info to community to eventually save more lives. If anyone is interested you could approach doctor Qais or hanna.

- 1- How to assess collapsed victim
- 2- How to perform high quality CPR
- 3- How to provide effective ventilation
- 4- How to properly use an Automatic External Eefibrillator Small device that helps deliver the shock in community

## Respiratory arrest vs cardiac

RA = Doesn't' breath, there's pulse, but if it continue long enough then hypoxia and acedosis will lead to cardiac arrest CA = Pulse stops => Circulation stops

## How many causes of CA you know?

- Ventricular Tachycardia -EDefibrillation
  - Defibrillating early = Very good prognosis
  - $\circ$  ~ One of the most common cause of CA ~
- PRA
- Asystole
- All of them cause = **No pulse**

# Chain of survival

Adults [MCC circulatory arrest = Heart [3 types; MCC VTEF]

- 1- Early recognition and call for help
  - Be proactive
  - If someone passed out beside me you as a physician should hold responsibility and help ASAP
  - Call for help
    - Especially if you aren't that competent person and even if you were call for help before you wear out!
- 3- Start your CPR
  - $\circ$  ~ The earlier the CPR the better
- 4- Defibrillation
  - When you defibrillate the VTEF = Good prognosis
- Out-of-hospital
- In-hospital

Children [MCC circulation arrest = Respiratory in origin; infection hypoxia viral infection asthmatic attack]

1- Prevention Prevention Prevention ! and recognise the problems early

- Coughing using his accessory muscles or wheezing you should recognise and do something about it because if you hadn't then
- RA will begin!

Ultimate goal is to do good CPR but to do something is better than nothing!

To do mere chest compression is better than nothing > CC+Rescue breaths>High performance team

Another concept:

ABC is old concept !

CAP is better !

Compression > Airway > Breaths

- Compression should be done within the first 10 seconds after recognition
- I want to minizme and continue to do compression until help comes with minimal interruption

• Certain depth + Certain grade

#### Alograithm of adult life support

1- Assess safety

- If he the patient falls in the middle of the road you need to verify his safety and move him to safer place
- SRVB
  - $\circ$  Scene
    - You need to ensure your safety too
  - **R**
  - V
  - Bystanders
    - People who don't intervene in the reeducation of the patient => You as a leader should eliminate any ineffective or he the interrupter would be compromised and you would hold on repsponsibility!
- 2- Assess consciousness; if he isn't then
  - **Call for help**; You need to call for someone so you won't stay on your own!
  - Dial 911 on your cell phone!
  - Then assess; Check the pulse
    - Lost consciousness; Good pulse Good breathing = Seizure; Vasovegal; hypotension; neurological => Wait for help you can lift his legs
    - Lost consciousness; Good pulse Bad to non-present breathing; Enough time without prevention and CA => Assisted breaths; 10 breaths/ minute => Continually assess the circulation => He can after all lose life
    - Lost consciousness; No pulse Bad => CA => Initiate CPS!
    - Angle of lewis = You rub this area and try to wake him up ! Affect him with any painful stimulus
  - 3- Check for breathing and pulse simultaneously
    - Check if his chest is rising or nah
      - Not femoral because difficult to reach
        - Radial is weak sometimes
        - Carotid
        - Get close to the patient
          - LLF = 5-10 seconds = We need to minimise compression and delay! = The more likely he is gonna survive and live!

Chest compression

- Location: Lower 3rd sternal border of sternum
- Put the heel of your hands
- The elbows should be locked
- The height should be the lowest
- The motion should be from the muscles of the shoulders
- 5cm deeper to chest wall
  - 1/3 the depth in children
- Give enough time for the chest to recoil
- Ratio of compression: 30 compression: 2 breaths but 100-120 minutes
- Chest compression fraction; Total compression time = Minimal: 60 percent; the lesser is not good CPR
  - Compression is what drive the flow; It would make a difference!
- Invasive into the arterial line = You can see that sometimes good CPR could provide you with 60-70 if you had done correct

Minimise

5cm

recoil

120

30:2

What if the woman is pregnant?

Uterus on IVC => VR decreased => The compromised BF will get even more comprised

• Left lateral displacement of the uterus to move it away from IVC

# Infants; Hold their head

## Airway

• MCC of obstruction of away: Tongue swallowing; You shouldn't use it always; If you have any suspicion of trauma for the neck you shouldn't use it because of car accident => Jaw thrust not jaw tilt! => Fingers on jaw another on temporal bone

## Breathing

- Obscured airway > Collapsable masks > 30:2 [2 Breaths not taking more than 10 seconds and you should see the chest moving to minimise interruption] > E-C > Thumb and index C shape on mask and E on temporal > How much equipment you have decides the variation
- AED
  - $\circ$  Bags; One bag under the left axila and one one -

## Leadership!

- Sharing knowledge
  - Humbleness and openness
- Summarise and reevaluating
- Clear -specific- messages
- Closed loop communication
- Mutual respect

**Recovery position** 

• Put him on his left side to minizme aspiration

When to stop CPR

• Victim returns back

Special scenarios; Heart attack; Aspirin should be given unless there's clear indication for why not

Stroke

FAST

Drowning

- Dry area => Defibrillating him => Electricity only in dry areas!
- Breathing first; AC

Anaphylaxis

- Usually could happen from allergy stains food any medication could be a simple rash angioedema
- Epi injection = stick on thigh

Chocking

- ASK HIM!!!!!!!!!!
  - Yes => Manuvers to get the foreign body out
    - Bellow the chest wall = up and towards [Child or adult]

- Chest thrust, hold and then to backwards => Pregnant
- Hold his head down then using 3 finger middle of his chest = second manuever
- Coughing => Nothing
- Actually passed out => Manuvers
- Pulse no => BLS
- NO BLIND FINER SWEEPS