Chapter -3

FIRST AID IN ROAD ACCIDENTS

3.1 Action at a Road Traffic Accident

Road traffic accidents are increasing in number and in severity. With the development of high-speed motorways, multiple collisions and involvements are becoming more common, particularly in times of reduced visibility, fog, or torrential rain.

When confronted with a road traffic accident you must first carefully assess the situation to make sure that you and your car are visible and not at risk of being hit by another vehicle. Pull well away from the traffic stream if possible, as many 'samaritans' have been killed or severely injured.

Assess the position of the cars in the accident, turn off ignition and ensure there is no smoke, particularly if there is a smell of fuel. Detach the batteries if necessary and possible. Check the airway of any people who are injured, unconscious or trapped. Blood, vomit or dentures may need to be cleared, and the position of the patient's head should be adjusted carefully to improve air entry. Quickly examine the patient, assessing features, shock and wounds. If there is excessive bleeding, treat this by the application of a firm pad and bandage, with supplementary splintage if necessary.

If the patient is trapped in the seat, leave him alone unless he is in danger from fire or further damage. Send for assistance rapidly to the nearest medical facility. It is important to inform the ambulance service that the casualties are trapped or there is some other serious hazard.

Attempts should be made to count the passengers, as quite often passengers are thrown from the car and may travel several yards landing behind hedges or in ditches. Children may be lying on the floor of the car and should be looked for. On the whole, it is better to leave trapped patients in the vehicle until the emergency services arrive unless there is considerable risk, in which case swift action should be taken with as many people as possible to move the patient rapidly and steadily, preferably after applying splints. In this situation be careful of the cervical and thoracic spine; move the patient 'in one piece', using as many of the bystanders as possible. He should then be placed in a position of safety; if unconscious in the recovery position, otherwise on his back. If he has a chest injury, he may be more comfortable sitting up.

3.2 What happened

History:

From the sick and the injured.

From bystander.

(Note demage to vehicles which may give clues to the type of injury to be expected).

Count all casualties. Is anyone known to be missing?

What does the casualty feel? (Symptoms)

• Pain	• Breathlessness
• Loss of normal sensation	• Nausea
• Faintness	• Disorientation
• Loss of memory	• For events before the incident

• Thirst	:	
• Palpitations	:	These may indicate bleeding
• Cold, Clammy skin	:	

Information gained by examination (signs)

Adequacy of:

• Airway	• Breathing
• Circulation (and control of bleeding)	• Colour
• Conscious level	• Eyelash reflex
• Swelling	• Deformity
• Bruising	• Tenderness
• Incontinence	• Temperature

3.3 Control of Bleeding

Before you take measures to control bleeding:

- Determine the cause and source of the bleeding and general condition of the victim expose the wound to determine where the blood is coming from.
- Place the victim in a position in which he or she will be least affected by the loss of blood.
- Maintain an open airway.

After bleeding is controlled, take measures to prevent or control shock, take vital signs every 5 minutes and repeat victim assessment every 15 minutes, and stay alert for the complication of blood loss.

3.4 Bleeding and Wounds

Wounds are of different kinds. However, any kind of wound may tend to bleed most especially if the vessels are injured. The amount of blood or pressure would depend on the vessels involved.

The different kinds of vessels are as follows:

- Capillaries.
- Veins.
- Arteries.

Capillaries are minute vessels and naturally would be easy to control when it is wounded.

Veins although are bigger, have lesser pressure and are therefore easy to control after bleeding.

Arteries are almost of the same caliber as veins with respect to size but has greater pressure since it is connected directly from the left side of the heart.

Different Kinds of Wounds

Now that we have an understanding on the different kinds of vessels, it is important that we should also be familiar about the different types of wounds.

- Abrasion
- Incision
- Laceration
- Punctured
- Avulsion

Remember that whatever wound it may be, the most important thing to do is to stop severe bleeding. Severe Bleeding can lead to shock and may cause death. For minor wounds where there is minimal bleeding or no bleeding at all, prevent infection.

Direct Pressure

The first and foremost method in controlling bleeding may not be as difficult as you think. It is simply ***putting pressure directly over the wound***. This can be done with the use of gauze or any cloth available directly over the wound with constant pressure.

Remember that the aim is to stop the bleeding so continuously apply pressure over the wound. This will also allow the blood to clot and will aid in controlling the bleeding. Any gauze or cloth applied to the wound is what we call a dressing. Even your bare hands can be used as a dressing. You can also apply a bandage to hold the dressing in place.

Pressure on Supplying Artery

You may also apply **Pressure on the Supplying Artery**. This is done by pressing the brachial artery or the femoral artery should the wound involve extremities. But again bear in mind that direct pressure is always the first and foremost method in controlling bleeding.

Elevation If there is no fracture in the area of the wound, the wounded part can be elevated. But you have to remember that elevation should be done when direct pressure has been applied already.

Elevate the wounded part above the level of the heart. This will lessen the amount of blood heading to the wound and lessen the flow of blood.