

EXPERIMENT: 09



Centurion
UNIVERSITY

Shaping Lives...
Empowering Communities...

Ms. Rupali Rupasmita Rout
Assistant Professor

AIM OF THE EXPERIMENT: First Aid – Theory, basics, demonstration, hands on training, audio-visuals, and practice, BSL (Basic Life Support) Systems [SCA - Sudden Cardiac Arrest, FBAO - Foreign Body Airway Obstruction, CPR, Defibrillation (using AED) (Includes CPR techniques, First Responder).

REQUIREMENT: Data Collection

THEORY:

FIRSTAID:

First aid is the immediate care given to a person who has been injured or suddenly taken ill. Includes home care if medical assistance is not available or delayed. It also includes well-selected words of encouragement, avoidance or willingness to help, and promotion of confidence by demonstration of competence.

BASIC LIFE SUPPORT (BLS):

BLS is a level of medical care which is used in life threatening illness or injury until they can be given to full medical care by advance life support, Pharmacist, nurses, physician and paramedics. It can be provided by trained medical personnel such as emerging medical technicians and qualified by standard.

GENERAL DIRECTION TO GIVE FIRST AID:

Responsibility of the first aider in the management of casualty:-

- Assessment of the situation.
- Identify the problem.
- Giving immediate and adequate treatment.
- bearing in mind that some condition will required more urgent attention.

- Arrangement for the transport of casualty according to their seriousness of his or her condition.
- Prevent cross infection.

CPR:

1. Check the scene for safety, form an initial impression.
2. If the person appears unresponsive, CHECK for responsiveness, breathing, life-threatening bleeding or other life-threatening conditions.
3. If the person does not respond and is not breathing or only gasping, CALL 9-1-1 and get equipment, or tell someone to do so.
4. Place the person on their back on a firm, flat surface.

5. Give 30 chest compressions

- ✚ Hand position: Two hands centered on the chest
- ✚ Body position: Shoulders directly over hands; elbows locked
- ✚ Depth: At least 2 inches
- ✚ Rate: 100 to 120 per minute
- ✚ Allow chest to return to normal position after each compression

5. Give 2 breaths

- ✚ Open the airway to a past-neutral position using the head-tilt/chin-lift technique
- ✚ Ensure each breath lasts about 1 second and makes the chest rise; allow air to exit before giving the next breath

Note: If the 1st breath does not cause the chest to rise, retilt the head and ensure a proper seal before giving the 2nd breath. If the 2nd breath does not make the chest rise, an object may be blocking the airway

6. Continue giving sets of 30 chest compressions and 2 breaths.

Performing Child & Baby CPR:

1. Place the child or baby on their back on a firm, flat surface.

✚ For a child, kneel beside the child

✚ For a baby, stand or kneel to the side of the baby, with your hips at a slight angle.

2. Give 30 compressions.

✚ For a child, place the heel of one hand in the center of the child's chest, with your other hand on top and your fingers interlaced and off the child's chest

- Position your shoulders directly over your hands and lock your elbows
- Keep your arms straight
- Push down hard and fast about 2 inches at a rate of 100 to 120 per minute
- Allow the chest to return to normal position after each compression

✚ For a small child, use a one-handed CPR technique

- Place the heel of one hand in the center of the child's chest
- Push down hard and fast about 2 inches at a rate of 100 to 120 per minute

✚ For a baby, place both thumbs (side-by-side) on the center of the baby's chest, just below the nipple line

- Use the other fingers to encircle the baby's chest toward the back, providing support
- Using both thumbs at the same time, push hard down and fast about 1 ½ inches at a rate of 100 to 120 per minute
- Allow the chest to return to its normal position after each compression

3. Give 2 breaths.

- ✚ For a child, open the airway to a slightly past-neutral position using the head-tilt/chin-lift technique
- ✚ For a baby, open the airway to a neutral position using the head-tilt/chin-lift technique
- ✚ Blow into the child or baby's mouth for about 1 second
 - Ensure each breath makes the chest rise
 - Allow the air to exit before giving the next breath
- ✚ If the first breath does not cause the chest to rise, retilt the head and ensure a proper seal before giving the second breath. If the second breath does not make the chest rise, an object may be blocking the airway

4. Continue giving sets of 30 chest compressions and 2 breaths until.

- ✚ You notice an obvious sign of life
- ✚ An AED is ready to use
- ✚ Another trained responder is available to take over compressions
- ✚ EMS personnel arrive and begin their care
- ✚ You are alone and too tired to continue
- ✚ The scene becomes unsafe
- ✚ You have performed approximately 2 minutes of CPR (5 sets of 30:2), you are alone and caring for baby, and you need to call 9-1-1

FOREIGN BODY AIRWAY OBSTRUCTION:

Choking happens when an object lodges in the throat or windpipe blocking the flow of air.

- ✚ In adults, a piece of food is usually to blame.
- ✚ Young children often choke on small objects.
- ✚ Choking is life-threatening.
- ✚ It cuts off oxygen to the brain. Give first aid as quickly as possible if you or someone else is choking.

FIRSTAID:

- 1) **If a choking person can cough forcefully, let the person keep coughing.**
Coughing might naturally remove the stuck object.
- 2) **Give five back blows.** Stand to the side and just behind a choking adult. For a child, kneel down behind. Place your arm across the person's chest to support the person's body. Bend the person over at the waist to face the ground. Strike five separate times between the person's shoulder blades with the heel of your hand.
- 3) **Give five abdominal thrusts.** If back blows don't remove the stuck object, give five abdominal thrusts.

- ✚ **Stand behind the person.** For a child, kneel down behind. Place one foot slightly in front of the other for balance. Wrap your arms around the waist. Tip the person forward slightly.
- ✚ **Make a fist with one hand.** Put it just above the person's navel.
- ✚ **Grasp the fist with the other hand.** Press into the stomach, also called the abdomen, with a quick, upward thrust — as if trying to lift the person up. For a child, use gentle yet firm pressure to avoid damaging the internal organs.

4) Alternate between five blows and five thrusts until the blockage is removed.

Conclusion: From the above experiment, we know about first aid, theory, basic, demonstration, hands-on training, the practice of basic life support like sudden cardiac arrest(CPR), foreign-body airway obstruction.