Micro-lectures take home messages

0. Introduction/ Learning Goals

- Understand the importance of first aid in emergency situations.
- Learn the basic principles and techniques of first aid.
- Gain confidence in providing first aid assistance.
- Recognize the importance of ongoing learning and improvement in first aid skills.

1. First Aid Tool Kit

- Always have a well-stocked first aid kit readily available.
- Regularly check and replenish items in the first aid kit.
- Familiarize yourself with the contents and uses of each item in the kit.
- Keep the first aid kit in a easily accessible location.

2. Six Principles of First Aid

- Assess the situation and ensure your own safety before providing assistance.
- Recognize and prioritize life-threatening conditions.
- Provide care based on the individual's needs and available resources.
- Continuously monitor and reassess the patient's condition.
- Maintain confidentiality and respect the patient's privacy.
- Seek professional medical help when necessary.

3. Primary Assessment

- Primary assessment includes 4 actions: (1) Check scene safety; (2) Check Responsiveness; (3) Call for help if needed; (4) Perform ABCDE
- Conduct a quick assessment to identify any immediate life-threatening conditions.
- Check for responsiveness and call for help if needed.
- Assess the patient's airway, breathing, and circulation.
- Control any severe bleeding or injuries that may compromise the patient's life.

4. Secondary Assessment

- Conduct a thorough head-to-toe assessment of the patient.
- Gather information about the patient's medical history and current condition.
- Check for any additional injuries or conditions that may require treatment.
- Continuously monitor the patient's vital signs and provide appropriate care.

5. Communication & ISBAR

- Use effective communication techniques to convey information clearly and accurately.
- Use the ISBAR (Introduction, Situation, Background, Assessment, Recommendation) format for structured communication during handovers.
- Ensure proper documentation of all relevant information.
- Communicate with empathy and respect towards the patient and other healthcare professionals.

6. Burns

- Quickly remove the patient from the source of burn and stop the burning process.
- Assess the severity of the burn and provide appropriate first aid.
- Cool the burn with running water for at least 20 minutes.
- Cover the burn with a sterile, non-stick dressing and seek medical attention if necessary.

7. Bleeding

- Perform the ABCDE looking for signs of life-threatening bleeding: elevated heart rate, decreased blood pressure, unresponsiveness.
- Apply direct pressure to the bleeding site using a clean cloth or bandage.
- Elevate the injured area, if possible, to help control bleeding.
- If bleeding continues, apply additional pressure and consider using a tourniquet as a last resort.
- Seek medical help for severe bleeding or if bleeding cannot be controlled.
- Be aware that a patient may have a life-threatening hemorrhage even with no visible external bleeding, due to internal bleeding (ex: abdominal trauma, ectopic pregnancy)

8. Wounds & Penetrating Trauma

- Cleanse the wound with clean water or saline solution.
- Apply a sterile dressing or bandage to protect the wound from further contamination.
- Monitor the wound for signs of infection and seek medical attention if necessary.
- For penetrating trauma, do not remove any objects stuck in the wound and seek immediate medical help.

9. Safe Immobilization (moving a patient away from danger)

- Assess the patient's condition and stability before attempting to move them.
- Use proper lifting techniques and seek assistance if needed.
- Immobilize any suspected spinal injuries by maintaining the patient's head and neck in a neutral position.
- Continuously monitor the patient's vital signs during the movement.

10. In-Lane Stabilization

- Assess the scene for potential hazards and ensure your safety.
- Provide immediate assistance to any injured individuals within the lane.
- Stabilize the injured person's head and neck to prevent further injury.
- Communicate with emergency services and provide them with accurate information about the situation.

11. Pelvic Injuries

- Pelvic injuries can be life-threatening and require immediate medical attention.
- Symptoms of a pelvic injury may include severe pain, difficulty walking or standing, and swelling or bruising in the pelvic area.
- Immobilizing the pelvis with a pelvic binder or improvised materials can help stabilize the injury until medical help arrives.
- Prompt medical evaluation and imaging studies are crucial to assess the extent of the pelvic injury and determine appropriate treatment.

12. Musculoskeletal Injuries

- Musculoskeletal injuries, such as fractures and sprains, are common and can result from accidents or overuse.
- Rest, ice, compression, and elevation (RICE) can help reduce pain and swelling in acute musculoskeletal injuries.
- Immobilization, such as splinting or casting, may be necessary for certain fractures or dislocations.
- Physical therapy and rehabilitation play a vital role in the recovery and prevention of future musculoskeletal injuries.

13. Extremities Splinting

- Splinting is the temporary immobilization of a fractured or injured limb to prevent further damage and reduce pain.
- Splints can be made from various materials, such as padded boards, rolled-up magazines, or even improvised with clothing and sticks.
- When splinting, it is important to immobilize the joints above and below the injury site to prevent movement.
- Splints should be applied snugly but not too tight, and the injured limb should be supported and elevated whenever possible.

14. Motorcycle Accident

- Motorcycle accidents can result in severe injuries due to the lack of protective barriers.
- In case of a motorcycle accident, call emergency services immediately and provide them with accurate information about the location and condition of the injured person.
- Do not remove the helmet of an injured motorcyclist unless necessary for CPR or if the person is experiencing difficulty breathing.
- Be cautious of potential spinal injuries and avoid moving the injured person unless absolutely necessary and with proper support.

15. Choking

- Choking can be life-threatening, and immediate action is crucial.
- Recognize the signs of choking, such as difficulty breathing, inability to speak, or clutching the throat.
- Perform the Heimlich maneuver or abdominal thrusts on conscious choking victims.
- Encourage individuals at risk of choking to chew food thoroughly and avoid talking or laughing while eating.

16. Poisoning

- If someone has been poisoned, immediately call emergency services or a poison control center.
- Try to identify the substance ingested, and provide this information to medical professionals.
- Do not induce vomiting unless instructed by medical professionals or poison control.
- Keep potential toxins out of reach of children, and store them in their original containers with clear labels.

17. Diarrhoea

- Diarrhoea can be caused by various factors, including viral or bacterial infections, food poisoning, or medication side effects.
- Stay hydrated by drinking plenty of fluids, including oral rehydration solutions, to replace lost electrolytes.
- Avoid spicy, fatty, or dairy-rich foods that may worsen diarrhoea.
- If diarrhoea persists for more than a few days or is accompanied by severe symptoms, seek medical attention.

18. Fever

- Fever is often a sign of an underlying infection and can be a normal response of the body's immune system.
- Monitor body temperature using a thermometer and take appropriate action based on the severity of the fever and associated symptoms.
- Stay hydrated and dress lightly to help regulate body temperature during a fever.
- Seek medical attention if the fever persists for more than a few days, is accompanied by severe symptoms, or affects infants or young children.

19. Seizure

- During a seizure, ensure the person's safety by removing any nearby objects that may cause harm.
- Do not restrain the person or put anything in their mouth.
- Time the duration of the seizure and call emergency services if the seizure lasts longer than five minutes or if the person is injured or does not regain consciousness.
- After the seizure, help the person into a recovery position and provide reassurance.

20. Chest Pain

- Chest pain can be a symptom of various conditions, including a heart attack, angina, or indigestion.
- If someone experiences severe or prolonged chest pain, call emergency services immediately.
- When performing the ABCDE and taking vitals, look for severity criteria such a low blood pressure
- Taking the SAMPLE history, describe the chest pain in details using the OPQRST.
- Encourage the person to sit upright and stay calm while awaiting medical help.
- Do not administer any medication unless instructed to do so by medical professionals.

21. Stroke

- Recognize the signs of a stroke using the acronym FAST: Face drooping, Arm weakness, Speech difficulties, Time to call emergency services.
- Time is critical in stroke cases, so call emergency services immediately if you suspect a stroke.
- Keep the person calm and comfortable, and avoid giving them anything to eat or drink until medical professionals assess their condition.
- Prompt medical intervention can significantly improve the chances of recovery and minimize long-term disability.

22. Hypoglycemia

- Hypoglycemia, or low blood sugar, can occur in individuals with diabetes or due to certain medications and/or excessive alcohol consumption.
- Offer a source of fast-acting carbohydrates, such as fruit juice or glucose gel, to someone experiencing hypoglycemia.
- If the person is unconscious or unable to swallow, do NOT give them anything to eat or drink, place the victim in recovery position and seek medical help immediately.
- Encourage individuals with diabetes to monitor their blood sugar levels regularly and carry a source of glucose with them at all times.

23. Environmental Related Emergencies

- Environmental emergencies, such as heat exhaustion or stroke and hypothermia can be lifethreatening and require immediate attention.
- If someone shows signs of an environmental emergency, move them to a safe and comfortable location and call emergency services.
- Provide basic first aid, including cooling down or warming up the person, while awaiting medical help.
- Take appropriate measures to prevent environmental emergencies, such as staying hydrated, dressing appropriately for the weather, or seeking shade in extreme heat.

24. Bites

- Animal bites can lead to infections, so it is important to clean the wound thoroughly with soap and water.
- Seek medical attention for animal bites, especially if the skin is broken or if the animal is unknown or potentially rabid.
- In case of a snake bite, keep the affected limb immobilized and seek immediate medical help.
- Prevent bites by avoiding contact with unfamiliar animals and taking appropriate precautions,
 such as using insect repellent or wearing protective clothing in areas prone to bites.

25. Peer-Feedback

- Peer feedback is a valuable tool for personal and professional growth.
- Provide specific and constructive feedback that focuses on the person's actions or behaviors rather than their character.
- Use the "sandwich" approach, where you start with positive feedback, provide constructive criticism, and end with positive reinforcement.
- Be open to receiving feedback from peers and use it as an opportunity to learn and improve.

26. Review

- Regularly reviewing and reinforcing knowledge and skills is essential for competence and preparedness in emergency situations.
- Take the time to review and update emergency response plans and protocols to ensure they are effective and up to date.
- Engage in ongoing training and education to stay current with best practices and advancements in emergency care.
- Encourage a culture of continuous learning and improvement within your organization or community.

27. What's Next

- After an emergency or medical situation, it is important to debrief and reflect on the experience to identify areas for improvement.
- Update emergency contact information and ensure everyone involved is aware of any changes.
- Take proactive steps to prevent future emergencies, such as implementing safety protocols or providing education and training to prevent accidents or injuries.
- Stay vigilant and prepared for future emergencies by regularly reviewing and refreshing your knowledge and skills.