

# K.S. INSTITUTE OF TECHNOLOGY National Service Scheme ರಾಷ್ಟ್ರೀಯ ಸೇವಾ ಯೋಜನೆ



# 14, Raghuvanahalli, Kanakapura Main Road, Bengaluru - 560 109.

# WORKSHOP ON FIRST AID AND BASIC LIFE SUPPORT

**DATE:** 19\08\2023

Venue: Conference Hall, Room number 007 and Room number 008

Organized By: NSS Unit of KSIT in Association with Dhee Hospital.

**Duration:** 9:30AM – 01:30PM

Participants: Principle, All the department heads, NSS

Volunteers, Students of 3<sup>rd</sup> Sem CSE, AIML, MECH and CSD.

**INCHARGE FACULTY:** Mr. Naveen V, NSS Program Officer, KSIT.

## **OBJECTIVES:**

- To Introduce First aid and Basic life support.
- To recognize emergency situation.
- To make us aware of Cardiopulmonary resuscitation, CPR Techniques, Compression techniques, Choking relief techniques.
- To make us aware of managing severe bleeding and wound care & use of automated external defibrillator.

#### SCOPE OF THE PROGRAM

To Introduce the fundamental concepts of first aid and basic life support. The importance of timely intervention and the role of bystanders in saving lives were emphasized

# INTRODUCTION

On the 19<sup>th</sup> of August 2023, Dhee Hospitals organized a comprehensive workshop on First Aid and Basic Life Support (BLS) at KSIT, Bangalore. The purpose of the workshop was to equip participants with essential knowledge and skills to provide immediate and effective assistance in emergency situations. The event aimed to empower attendees with the ability to respond confidently and effectively when faced with medical emergencies.

#### **WORKSHOP STRUCTURE**

The workshop was structured as an interactive and engaging session, led by experienced medical professionals from Dhee Hospitals. It included both theoretical lectures and practical hands-on training. The following key topics were covered during the workshop:

#### 1. INTRODUCTION TO FIRST AID AND BLS:

Participants were introduced to the fundamental concepts of first aid and basic life support. The importance of timely intervention and the role of bystanders in saving lives were emphasized.

#### 2. RECOGNITION OF EMERGENCY SITUATIONS:

The instructors explained how to identify various medical emergencies, including cardiac arrest, choking, severe bleeding, and respiratory distress. Participants were taught how to assess the situation and prioritize actions.

#### Few Medical Emergencies

Exhaustion Asthma Fits
Heat Stroke Heat Anaphylaxis Faints
Hyperventilation Heart Attack Nose Bleeds

#### 3. CARDIOPULMONARY RESUSCITATION (CPR):

Detailed instructions on performing CPR were provided, including chest compressions and rescue breaths.

Participants had the opportunity to practice CPR on mannequins under the guidance of instructors.

During the First Aid and Basic Life Support Workshop conducted by Dhee Hospitals at KSIT, Bangalore, one of the key topics covered was Cardiopulmonary Resuscitation (CPR). CPR is a life-saving technique used in emergencies, such as cardiac arrest, to maintain blood circulation and provide oxygen to the brain and other vital organs. The workshop provided participants with detailed instructions on how to perform CPR effectively. Here's an overview of the CPR training segment.

### 3.1 CPR Techniques Taught:

Step 1: - Check the safety of yourself and the patient's safety.

Step 2: - Checking for Responsiveness: The first step in CPR is to check if the victim is responsive. Instructors demonstrated how to gently tap the victim and ask loudly if they are okay. If there is no response, the participant should proceed with the next steps.

Step 3: - Activating Emergency Services: It was emphasized that the rescuer should call for emergency medical help (108 or local emergency number) before starting CPR or asking someone else to call if available.

Step 4: - Chest Compressions:

Hand Placement: Instructors taught participants how to position their hands correctly on the victim's chest. The heel of one hand should be placed on the center of the victim's chest.

# 3.2 Compression Technique

Participants learned how to perform chest compressions by pushing down hard and fast, aiming for a depth of at least 2 inches (5 cm) in adults. Compressions should be done at a rate of around 100-120 compressions per min







# 4. CHOKING RELIEF TECHNIQUES

Practical demonstrations on techniques to relieve choking were conducted. Attendees learned how to assist both conscious and unconscious choking victims.

#### **4.1 CHOKING RELIEF TECHNIQUES:**

During the First Aid and Basic Life Support Workshop conducted by Dhee Hospitals at KSIT, Bangalore, practical demonstrations on choking relief techniques were conducted to equip participants with the skills to assist both conscious and unconscious choking victims. Choking can be a life-threatening emergency, and knowing how to respond promptly and effectively is crucial.

#### 4.2 Conscious Choking Victims

Participants were taught how to recognize the signs of a conscious choking victim, which may include holding the throat, inability to speak, and difficulty breathing. The following steps were demonstrated and practiced.

**4.2.1. Encourage Coughing:** If the victim is still able to cough forcefully, encourage them to do so, as this can help dislodge the object blocking their airway.

#### 4.2.2. Abdominal Thrusts (Heimlich Maneuver):

Stand behind the victim and wrap your arms around their waist.

Make a fist with one hand and place the thumb side against the victim's upper abdomen, just above the navel and below the ribcage.

Grasp your fist with your other hand and give quick, inward and upward thrusts to help expel the object.

#### 5.MANAGING SEVERE BLEEDING AND WOUND CARE:

Proper techniques for controlling severe bleeding were taught, along with wound cleaning and dressing methods. Participants gained an understanding of how to minimize the risk of infection.

Another critical aspect covered in the workshop was how to manage severe bleeding and provide effective wound care. Participants were instructed on the following steps:

**Direct Pressure**: In cases of severe bleeding, participants learned to apply direct pressure to the wound using a clean cloth, gauze, or their hands. This helps control bleeding and allows blood to clot.

**Elevation**: Elevating the injured area above the level of the heart can also aid in reducing blood flow to the wound and minimizing bleeding.

**Pressure Points**: Participants were introduced to specific pressure points that can be used to control bleeding in certain situations.

**Tourniquets**: While tourniquets should be a last resort, participants were taught how to apply them properly to stop severe bleeding in cases where other methods are not effective.

Participants had the opportunity to practice these techniques on training materials under the guidance of the instructors, ensuring that they were well-prepared to manage bleeding and wounds effectively.





# 6. USE OF AUTOMATED EXTERNAL DEFIBRILLATORS (AEDS):

The workshop covered the usage of AEDs in resuscitation efforts. Participants learned how to operate these devices safely and effectively.

During the First Aid and Basic Life Support Workshop conducted by Dhee Hospitals at KSIT, Bangalore, participants were educated on the crucial role of Automated External Defibrillators (AEDs) in resuscitation efforts. AEDs are devices designed to deliver an electric shock to a person experiencing sudden cardiac arrest (SCA) in order to restore a normal heart rhythm. The workshop focused on teaching participants how to operate AEDs safely and effectively.

#### **Understanding AEDs:**

The workshop began with an overview of AEDs, including their purpose, components, and importance in saving lives during cardiac emergencies. Participants were informed about the automated nature of these devices, which analyze the heart's rhythm and prompt the user to deliver a shock if necessary.

#### Operating AEDs:

- 1. Detailed step-by-step instructions were provided to participants on how to properly use an AED in a reallife scenario. The following key steps were covered.
- 2. Turn On the AED: Participants were shown how to power on the AED. Upon activation, the device typically provides clear voice prompts and visual instructions to guide the user through the process.
- 3. Attach Electrode Pads: The workshop demonstrated how to attach the adhesive electrode pads to the victim's chest. These pads are equipped with sensors to detect the heart's rhythm and provide feedback to the AED.
- 4. Analyze Heart Rhythm: Participants learned how to ensure everyone, including themselves, is clear of the victim before pressing the "Analyze" button. The AED then assesses the heart's rhythm to determine if a shock is required.
- 5. Deliver a Shock: If the AED determines that a shock is needed, participants were taught how to follow the device's instructions to deliver the shock. It's crucial to ensure no one is touching the victim during this process.
- 6. Resume CPR: After delivering a shock, the AED may prompt the user to resume CPR. Participants were guided on how to continue with chest compressions and rescue breaths following the shock.

Follow AED Prompts: Throughout the process, participants were reminded to carefully follow the AED's prompts and instructions. These devices are designed to provide user-friendly guidance to assist even those with limited medical knowledge.

#### **Practice with Training AEDs:**

To reinforce the learning, participants had the opportunity to practice using training AEDs on specialized mannequins. These training devices simulated real-life scenarios and responses, allowing participants to gain hands-on experience without the risk of delivering actual shocks.

#### **Importance of AED Training:**

The AED training segment highlighted the critical role of these devices in improving survival rates during cardiac arrest incidents. Participants left the workshop with the knowledge and confidence to operate AEDs effectively, potentially making a life-saving difference in emergency situations.





#### PARTICIPANT ENGAGEMENT:

The workshop fostered an interactive learning environment, encouraging participants to ask questions, share experiences, and engage in group discussions. The instructors provided personalized feedback and guidance to ensure that participants felt confident in their abilities by the end of the session.

#### **CONCLUSION:**

The First Aid and Basic Life Support Workshop conducted by Dhee Hospitals at KSIT, Bangalore, on the 19th of August 2023, proved to be a highly informative and practical event. Participants left with valuable skills and knowledge that could potentially save lives in emergency situations. The event showcased Dhee Hospitals' commitment to community welfare and healthcare education. Such workshops play a crucial role in building a society that is prepared to respond effectively to medical emergencies.

The workshop's success was a testament to the organizers' efforts, the expertise of the instructors, and the enthusiastic participation of attendees. It is hoped that the knowledge gained during the workshop will be shared and utilized for the betterment of the community.





#### PROGRAM OUTCOMES:

At the end of the programme, the following PO's are attained.

NSS	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO 11	PO 12
NSS PROGRAMME						2	3		3			3

#### Justification of PO mapping:

- Students can able to assess societal, health, safety, legal and cultural issues and the consequent responsibilities.
- Students can able to Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- · Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

NSS COORDINATOR

NSS Programme Officer K S Institute of Technology Kanakapura Main Road Bengaluru - 560 109

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