

## **A Summary of Report**

**On**

**Two Days National Workshop on Advance Cardiac life Support and  
Basic life support**

**Organized**

**By**

**Hayat Nursing Institute, an initiative of Foundation for Social Care  
(Regd. Trust) engaged in the field of Health, Education, HIV/AIDS,  
Economic Development, Relief and Rehabilitation etc. since last 23  
years.**

**14<sup>h</sup> – 15<sup>th</sup> November 2024**

**Report written by**

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***Introduction***

A two days national workshop was held in Lucknow On 14<sup>th</sup> & 15<sup>th</sup> November 2024 to share the findings of research on ***ADVANCE CARDIAC LIFE SUPPORT AND BASIC CARDIAC LIFE SUPPORT***

It was well attended and brought together more than 150 participants from local NGO , Health care agencies , Trust , Media ,Other Nursing Organizations and Hospitals involved in healthcare in different parts of Lucknow , participation in the workshop was lively.

***Conception***

BLS, ACLS: Integrated Resuscitation Mastery

The “Integrated Resuscitation Mastery” national workshop offers the students with a comprehensive understanding of Basic Life Support (BLS), Advanced Cardiovascular Life

Support (ACLS), and techniques. In this workshop advanced clinical practice, and a team- based approach was demonstrated, & participants left the workshop as confident and proficient resuscitation experts, well-prepared to save lives and make a significant impact on patient outcomes.

***Objectives***

1. To start the workshop with a thorough lecture cum demonstration of BLS, ACLS, guidelines, including the latest updates in resuscitation protocols.
2. To practice Hands-on Training with High-fidelity Simulations, critical decision-making and effective team communication in a safe environment.
3. To learn ECG interpretation, atrial and ventricular activities during cardiac emergencies so to bridge the gap between theory and practical applications.
4. To provide students scenario-based learning.
5. To offer students Personalized Feedback and Assessment

***Purpose of the workshop***

The purpose of ACLS and BLS workshops is to teach life-saving techniques to help people respond to emergencies and cardiac arrest:

- Describe the importance of high-quality CPR
- Describe and apply all the steps of chain of survival
- Recognize the signs of someone needing CPR.
- Perform high quality CPR for an adult, child and infant.
- Use of AED
- Provide effective ventilation by using a barrier device.

- Describe the techniques for relief of foreign body obstruction for adult, child and infant.
- Apply the BLS, primary and secondary assessment sequences for a systematic evaluation of adult patients.
- Perform high quality BLS including early chest compressions and early use of AED.
- Recognise and management of respiratory arrest.
- Early recognition and management of ACS, Stroke, arrhythmias and cardiac arrest.
- Recognize the ECG rhythms
- Drugs and doses used in ACLS algorithms
- Recognize the impact of team dynamics on overall team performance
- Usefulness of rapid response team or medical emergency team.

### ***1. ACLS (Advanced Cardiac Life Support)***

This workshop is for healthcare professionals, such as nurses, physicians, and paramedics, who need to stabilize patients who have experienced a life-threatening event. ACLS builds on BLS techniques with more advanced procedures and interventions.

### ***2. BLS (Basic Life Support)***

This workshop is for anyone who wants to learn basic CPR, AED usage, and other primary lifesaving skills. BLS is performed in the beginning stages of an emergency, while ACLS is used to continue treatment in the hospital.

Benefits of BLS training include:

Confidence

Learning and practicing the proper techniques and protocols can help you act quickly and efficiently in an emergency.

### ***3. Reduced anxiety***

Preparing to respond to emergencies can help you make rational decisions and provide effective care

### ***4. Sharing of Experiences and Learning***

The workshop began with an informal sharing of the participants' experiences and learning around cardiovascular emergencies and role of American heart Association. There was a great deal of expertise in the room and many interesting issues were raised. Among these were:

1. Causes for cardiovascular disorders

2. Prevention
3. Role of American heart disease

### ***Presentation of the research findings***

The Authors presented their key findings in a lively and detailed talk, followed by a question and answer session and also using pretest & posttest knowledge questionnaire and formal critiques by a number of invited speakers.

### ***Conceptual framework – ACLS & BLS***

The research explored the way ACLS & BLS are taken into account and addressed at different levels in the individual & institutional level.

The research also focused, to a lesser extent, on the more traditional level of community awareness and participation in relation to techniques used to help save lives during cardiac arrest. Although as a student, they may not have to attend to the patient, they could be present in accidents outside of the hospital, where they should be able to perform the necessary actions to save a life. After attending the training, one becomes somewhat confident that they can take control of the situation because they will know what to do until the emergency services arrive

The research focused about the latest AHA Guidelines on BLS & ACLS followed by Mega code. An overview of the steps, equipment used for early patient resuscitation and use of AED as per recent AHA guidelines was given.

The guidelines highlighted a set of clinical interventions for the immediate emergency management of cardiac arrest, heart attack and other life threatening medical emergencies as well as knowledge and skills to apply those interventions. The guidelines were set into several groups of algorithms or instructions that are followed, and to increase its effectiveness. The major algorithm in the guidelines was the Cardiac Arrest Algorithm.

### ***Research Methodology***

The research was based on participatory methodologies at the project level, questionnaires and interviews within the sample organization, as well as studying the policies and procedures of American Heart Association Guidelines and wider reading. Participatory Appraisal (PA) techniques and tools were used

The research sample were the registered participants of the workshop

***Key points:***

During the course, the students got training in essential skills individually, as part of a team, and as team leader in different learning stations based on simulated clinical scenarios.

The students learned the basics of resuscitation like chest compressions, adult and infant breaths, management of choking in adults and infants etc. Realistic simulations were focused on the following key concepts: proficiency in recognizing and initiating early management of peri arrest conditions, of choking and the supportive care, identifying and treating, recognizing other life-threatening clinical situations such as cardiac arrest and providing initial care, applying BLS & ACLS algorithms and effective resuscitation team dynamics.

At the end of the course, students appeared for a online test to evaluate the knowledge on clinical interventions for the emergency management of life threatening conditions which evaluated the achievement of the course objectives by the student. The students who successfully completed the course were provided with certification

Comments from experts and other participants

Here are some key points in Advanced Cardiovascular Life Support (ACLS) and Basic Life Support (BLS) training:

- **Skills:** BLS training covers basic life-saving skills like CPR, AED use, and choking management. ACLS training covers more advanced techniques like advanced airway management, complex resuscitation algorithms, and emergency cardiovascular pharmacology.
- **Medications:** ACLS requires medications that only specialists can administer.
- **Teamwork:** Teamwork is a cornerstone of ACLS care.
- **CPR Coach:** In ACLS, the CPR Coach focuses on ensuring the patient receives high-quality CPR, while the Team Leader focuses on other aspects of running a code.
- **ECG interpretation:** ECG interpretation is a crucial part of ACLS and involves identifying and diagnosing cardiac conditions based on electrical signals from the heart.
- **Neonatal Resuscitation Program (NRP):** The NRP algorithm is an essential tool for managing neonatal care.

- **Airway management:** Airway management is a key component of both BLS and ACLS. The optimal method of managing an airway depends on your practice, experience, and the patient's condition.
- **Cardiac arrest recognition:** Prompt recognition of cardiac arrest and activation of the emergency response system are crucial steps in the BLS algorithm.

After the presentation of the findings several experienced and respected people in the workshop detailed comments which were followed by contributions and discussion groups from many participants within the workshop. These findings are summarized below.

### *Critical analysis*

**Target audience:** BLS is for a broader audience, including laypersons, while ACLS is for healthcare professionals.

**Training focus:** BLS covers basic life-saving skills like CPR, AED use, and choking management. ACLS covers more advanced techniques like advanced airway management, complex resuscitation algorithms, and emergency cardiovascular pharmacology.

**Medical knowledge:** BLS doesn't require extensive medical knowledge, but a basic understanding of human anatomy and physiology is helpful. ACLS assumes a higher level of medical knowledge and is intended for healthcare professionals who already have a foundation in medical practice.

ACLS builds upon prior training in BLS and cardiopulmonary resuscitation (CPR) courses. ACLS courses often include a review of BLS course material.

### **CONCLUSION:**

The scores are as below

<b>Pre test</b>	<b>Average</b>	<b>Median</b>	<b>Total percentage</b>
	<b>7</b>	<b>6</b>	<b>47%</b>
<b>Post test</b>	<b>12</b>	<b>13</b>	<b>80%</b>

The primary aims of our study was to evaluate the fundamental knowledge and skills related to advanced cardiac life support (ACLS) and basic life support (BLS) among nursing students through a survey-based assessment and to compare pre-test and post-test surveys following theoretical and simulation-based training to assess improvements in knowledge.

