

JSS Academy of Higher Education & Research JSS College of Pharmacy Department of Pharmacy Practice

Report of conduct of Basic Life Support (BLS) and Advanced Cardiac Life Support (ACLS) program for Pharm D Interns

Life support training for Pharm D interns was conducted during January 2025 at JSS AHER Skills & Simulation Lab. The Department of Pharmacy Practice in conjunction with JSS AHER Skills & Simulation Lab planned the program in advance. Students were divided into two batches and the faculty from the skills lab scheduled to impart the training were informed earlier. Students were provided with study material for Advanced Cardiac Life Support (ACLS) ahead of time to enable them to be prepared with the procedures and policies, before the actual training program. Students underwent training for 3 days during $17^{th} - 19^{th}$ January 2025 (Batch 1) and 20^{th} , $22^{nd} - 23^{rd}$ January 2025 (Batch 2). A repeat session was organized for those students who inadvertently missed the earlier sessions or had obtained less than satisfactory scores in the evaluation session at the end of the program.

Day 1:

The program involved training students about providing basic life support both in in-hospital and out-of-hospital scenarios. Introductory videos explaining the first steps to be performed in emergencies and life saving measures in cardiac arrest were displayed in the training program followed by a hands-on session of cardio-pulmonary resuscitation (CPR) with mannequins. The training began with a comprehensive overview of the Chain of Survival, underscoring the critical importance of swift recognition, CPR, defibrillation, advanced life support, and integrated post-cardiac arrest care in hospital settings. In the community, emphasis was placed on early emergency medical services (EMS) activation, immediate CPR, rapid defibrillation, and post-cardiac arrest support.

Participants were guided through the fundamental components of CPR, including chest compressions, airway management, and rescue breaths. The Adult Basic Life Support (BLS) Algorithm was introduced, detailing steps such as EMS activation, responsiveness assessment, breathing and pulse evaluation, and the initiation of CPR with a 30:2 compressions-to-breaths ratio until professional help arrives. Utilization of the automated external defibrillator (AED) was also covered when available. Hands-on CPR sessions were conducted, allowing participants to practice on mannequins and concentrate on high-quality CPR techniques for both adults and pediatrics.

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After the break an MCQ-based time-bound exam was conducted. A minimum of 80% score had to be obtained for the students to proceed with further sessions.

Day 2:

Students had to qualify pretest in order to attend the sessions on advanced cardiac life support (ACLS) which consisted of 60 MCQs comprising of 3 domains being electrocardiogram (ECG) analysis, pharmacological treatment and practical applications. Students received comprehensive training in emergency medical care, particularly focusing on ST-segment elevation myocardial infarction (STEMI) and stroke. They were instructed on prompt recognition, activation of EMS, and timely transportation for specialized interventions. The curriculum emphasized interpreting ECGs for accurate decision-making, alongside hands-on sessions covering intubation techniques and airway management tools. The ACLS algorithm and the Chain of Survival were intricately explained, while the hands-on Megacode session simulated real-life scenarios to enhance teamwork. Students learned their unique roles during resuscitation, extending their skills to post-cardiac arrest care, ensuring comprehensive emergency medical readiness.

Day 3:

The Mega Code session and team dynamics were evaluated through a comprehensive approach. Following a written objective test, students engaged in a practical session, applying their knowledge in simulated emergency settings. Post-lunch, a practical exam tested their skills in various emergency scenarios, each assigned with multiple scenarios. Performance was assessed based on the skills acquired during different sessions. This multifaceted evaluation ensured students demonstrated proficiency and adaptability in real-life emergency situations.





