

## Case Study Higher Education

University Medical Center /  
Simulation-Based  
Education



# Using Simulation-Based Education to Improve Patient Safety and Patient Care

## BACKGROUND

Simulation-based education provides a structured, learner-centered environment in which novice, intermediate, and advanced practitioners can learn or practice skills without causing harm to patients in a safe and realistic environment with the ultimate goal of improving patient safety. A Clinical Simulation Center (CSC) represents a living collaborative environment between all healthcare professions, where the needs of the patient come first. It is through this lens "to best serve patients" that simulation works to fully realize the benefits of simulation-based education, practices, and research opportunities.

## EXECUTIVE SUMMARY

### Client Challenges

A university hospital in Lebanon needed to create a safe environment for its students in medicine, clinical pharmacy and nursing to practice in a safe and risk-free environment before engaging in hands-on experience:

- The hospital setting is usually not ideal for students to apply their theoretical knowledge to practice
- Interprofessional experience was at a minimum
- The number of clinical encounters was suboptimal compared to the number of students

### Our Solution

- Established an international training center certified by the American Heart Association
- Created continuing medical education programs
- Established research practices in clinical simulation

### Our Intervention's Impact

#### Educational and Professional Development

- Established a Clinical Simulation Center
- Introduced the first fully recognized academic certification in simulation-based education in the Middle East, with the University School of Medicine and in collaboration with the University of Illinois, Chicago
- 6515 participants learned through the center's various programs
- Introduced the first Standardized Patient program in Lebanon in collaboration with the university's School of Arts & Sciences
- Created a complete pediatric setting
- Obtained the first capability of providing "in situ" or mobile simulation
- Organized the first Lebanese Conference in Simulation-Based Education

**First fully recognized  
academic certification in  
simulation-based education  
in the Middle East**

**For more information:**

w: [consult.lau.edu.lb](http://consult.lau.edu.lb)

e: [consult@lau.edu.lb](mailto:consult@lau.edu.lb)

t: +961-9-547254 ext. 2242

©2017 LAU Consult. All rights reserved.

## IN FOCUS

### Key Client Challenge

There was a need at a university in Lebanon to consider a different learning approach to practice before attending to a live patient.

### Our Solution

#### Accreditation

- Received Royal College of Physicians and Surgeons of Canada accreditation
- Established an American Heart Association (AHA) International Training Center
- Earned Certificate of appreciation from AHA for life support initiatives in the community.

#### Educational and Professional Development

- Introduced train-the-trainer courses to around 50 faculty, medical and non-medical staff from all over Lebanon
- Created continuing medical education programs
- Established specialty training for critical care
- Established research practices in clinical simulation
- Introduced standardized workshops to a large interprofessional audience such as “Shape your skills” for nurses, breaking bad news for physicians, suturing for surgeons, basic skills for physicians, anesthesia crisis resource management, neonatal and pediatric courses, difficult intubation, etc
- Helped organize the first Lebanese Conference in Simulation Based Education
- In the process of integrating a scalable software platform for health education.

---

**Vanda Abi Raad, MD, MHPE**  
Senior Consultant