Does the Advanced Disaster Life Support (ADLS) Course Increase Student Nurses’ Knowledge of Disaster Response & Preparedness?

Stephen McGhee, DNP, MSc, PGCE

Purpose

To assess student nurses’ knowledge of operational disaster response: (1) Assist with triage of mass casualties, (2) Understand the basic concepts of Incident command, (3) Assess disaster scene safety, (4) Evacuate victims, (5) Possible hazards, (6) Assess knowledge of issues post recovery, (7) Determine disaster management support needed, (8) Detect a biological chemical or radiological event, (9) Treat a victim of a chemical exposure, (10) Work in teams.

Background

- In the last two decades, over 2.6 billion people have been affected by both natural and technological disasters (WHO, 2011).
- Federal Emergency Management Agency (FEMA) declares a disaster at least once per week (FEMA, 2011).
- The frequency of the occurrence of these catastrophic events requires nurses of all levels to be able to access quality evidenced-based education in order to prepare them to respond effectively (Alfred et al, 2015).
- Despite a national mandate to include disaster related content in nursing curricula, no standardized approach has been developed (AACN, 2008).

Methods

Intervention

The ADLS course is a 2 day educational intervention delivered via a blended approach which utilizes didactic content and moulage.

Design

Pre- and post-intervention questionnaire delivered electronically via Qualtrics survey software.

Data collected at baseline and then one week after the final moulage of the course.

Sample

14 student nurses received the pre- and post-course questionnaire. A total of 8 student nurses completed both the pre- and post-course questionnaire (n)= 8.

Setting

This quality improvement project was conducted between the Center for Academic Medical Learning and Simulation (CAMLs) and the College of Nursing (CON) at the University of South Florida (USF) in Tampa.

Outcomes

Pre-intervention/Post-Intervention Questionnaire

- 10 questions related to course competencies.
- Covering: triage, incident command, scene safety, evacuation of victims, post event recovery, disaster management support required, detection of CBRN event, treatment of victim of chemical exposure, and working in teams.
- Outcomes measured using a 5-point Likert scale.

Implications for practice

- Education improved all aspects of disaster competencies.
- Triage and working in teams had the highest Cohen’s d.
- Scene safety received a medium effect Cohen’s d.

Next Step

- Requirement to have frequent opportunities to practice triage using various triage systems such as START, SALT & JumpSTART.
- Faculty must have the opportunity to maintain triage skills.

References


Acknowledgements

I would like to thank Dr. John Clochesy, Dr. Fred Sloane, and Dr. Jason Beckstead for all of their scholarly guidance and advice through the design, implementation, and data analysis phases of this project. I would also like to thank both CAMLS and the CON at USF for allowing this project to be conducted in both of their locations.

IRB approval (Pro00030031)