A Simulation Strategy for Code Responses With Senior Nursing Students
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Purpose: Many nurses have never experienced an emergency situation and are unsure of how to respond (Huseman, 2012). Additionally, many RNs report feelings of incompetence in performing both basic and advanced resuscitation skills. Practice with emergency situation simulations is one way to offer nursing students experience in circumstances they may not encounter in clinical rotations as well as provide a safe environment to foster critical thinking skills. Therefore, the purpose of this project was to determine if an emergency simulation exercise would improve self-efficacy and competency in senior nursing students.

Methods: This project was a non-experimental, pre-/post-intervention study. Senior level nursing students were given electrocardiogram education and then they participated in an emergency situation in the University's Simulation Lab. Self-efficacy was measured using the Basic Life Support-Self-Efficacy Scale (BLS-SES). Competency was measured during simulation using a code competency checklist adapted by the Primary Investigator from American Heart Association ACLS guidelines. Self-efficacy was measured pre- and post-simulation. Post-simulation, students also completed the NLN Simulation Design Scale to assess the instructor-developed simulation. Descriptive statistics and t-tests were used to analyze the data.

Results: There were 120 students surveyed. Female 93% and Male 7%. Ten percent had performed CPR in the past and 20% had witnessed a cardiac arrest. Only 2.5% had used an AED in the past. Scores on the BLS-SES increased significantly after participation in the simulation (pre-test M = 68.04, SD 17.43; post-test M = 89.64, SD =37.78; $p < 0.05$). Students initially had difficulty identifying rhythm changes and calling out of steps they performed. The NLN Design Scale Survey results indicated students thought the design of the simulation was important and they had adequate information to perform in the simulation (M = 4.49 SD = .640).

Conclusion: This project demonstrated that simulation-based nursing education was effective to increase student self-efficacy in responding to patients during a code situation. Simulation is one way to introduce students to stressful emergency situations that they may have little exposure to in clinical rotations. The improvements in these elements can lead to improved patient outcomes that benefit both patients and nurses throughout their career.

Title:
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Keywords:
Education, Emergency and Simulation

Abstract Summary:

This project presents nursing students ability to assess and respond to patient deterioration in a pre-/post-intervention study. Practice with emergency situation simulations is one way to offer an experience in circumstances which may not present during clinical rotations. Simulated emergencies can aid development of core skills that enhance patient outcomes.

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Author Summary: Sharon Carter is a Clinical Instructor at The University of Texas at Austin and has been in nursing education since 2012. As a clinical instructor, her interests have included integrating the use of simulation to increase nursing students ability to handle emergency situations to improve patient outcomes. She is currently working on her Doctor of Nursing Practice degree from The University of Texas at Austin.