THE UNIVERSITY OF RHODE ISLAND College of Nursing

Background

Mass casualty disasters strain community resources, highlighting the critical role of prepared nurses in immediate and long-term response. While disaster preparedness is essential in nursing education, most students lack practical experience, making simulation a valuable training method. Effective disaster preparedness education requires identifying efficient instructional methods and evaluating their impact using rigorous study designs. Although various training modalities exist, there is limited comparative evidence on the effective tabletop exercises in disaster nursing education. A pilot study informed the focused alignment to best practice standards.

Purpose

This study explores the satisfaction, confidence, and perception of effectiveness among prelicensure baccalaureate nursing students regarding two disaster preparedness training methods: full-scale (FS)simulation and tabletop (TT) exercises.

Methods

A comparative quasi-experimental design assessed the effectiveness of two simulation experiences. Competency and validated effectiveness survey tools were completed by 250 self-selected senior prelicensure baccalaureate nursing students after completion of simulation experiences.

Disaster Simulation: Are full-scale experiences worthwhile?

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Results

Both FS and TT significantly improved perceived knowledge from pre- to post-test. TT participants perceived prebriefing and debriefing as more beneficial for confidence and learning than FS participants. FS participants perceived it better for increasing confidence in patient communication and practicing clinical decision-making. Main study FS was perceived as more beneficial for learning across most content areas compared to the pilot FS. The main study TT was perceived as more beneficial for learning in most areas compared to the pilot TT, with a significantly improved debriefing experience.

Discussion & Limitations

Both full-scale simulation and tabletop exercises are effective strategies for disaster nursing education when designed according to INACSL standards and best practices. Programs with limited resources can implement tabletop exercises as a practical alternative, while those with established simulation infrastructure can consider integrating either method. When resources allow, full-scale simulation may be preferred by students if given the option. Student awareness of FS option may have impacted TT feedback and perception.

Both methods reveal comparable results when conducted in alignment with INACSL standards and best practices. Moving forward, our program will conduct full scale experiences given we have adequate resources.

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