Impact of Simulation Within an Interdisciplinary Rehabilitation Team

Sara Kurtz RN, MSN, CRRN, Michelle Stimec RN, MSN, CRRN, Dawn Keith RN, BSN, CRRN, Christen Peters LPT, Patty Oppenheim RN, MSN, & Linda Turpin RN, MSN, NE-BC

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Problem

Low confidence levels of Rehab staff to perform in emergency and code blue situations.

Following a resuscitative event, nursing and therapy staff reported anxiety related to a lack of experience in code situations. A literature search supported the benefit of simulation in the student population but a gap in the literature was noted regarding use of simulation among clinical staff.

Purpose

The purpose of this study was to explore and describe the confidence level of an interdisciplinary rehabilitation team before and after the first five minutes of a simulated code utilizing a high-fidelity simulation mannequin.

Method

- A pre and post test, created by the team, was administered to the staff prior to & following a high-fidelity emergency simulation

- Following IRB approval, a convenience sample was used (n=51), as follows: Nursing(n=19), Physical Therapy(n=16), Occupational Therapy(n=13), Speech Therapy(n=2), and Therapeutic Recreation(n=1)

- A minimum of 2 disciplines participated in each scenario in order to maintain the interdisciplinary approach

- All participants were required to sign an agreement not to disclose simulation details in order to minimize risk of bias by future participants

- Nine simulations were conducted using the scenario of the first 5 minutes of a code

- Scenarios were performed in empty patient rooms & the therapy gym

- All teams were required to initiate CPR on the mannequin

- The pre and post test consisted of 4 questions regarding level of confidence (Likert Scale 1-10), role, discipline, & years of experience

Results

Confidence levels of staff

Before Simulation / After Simulation
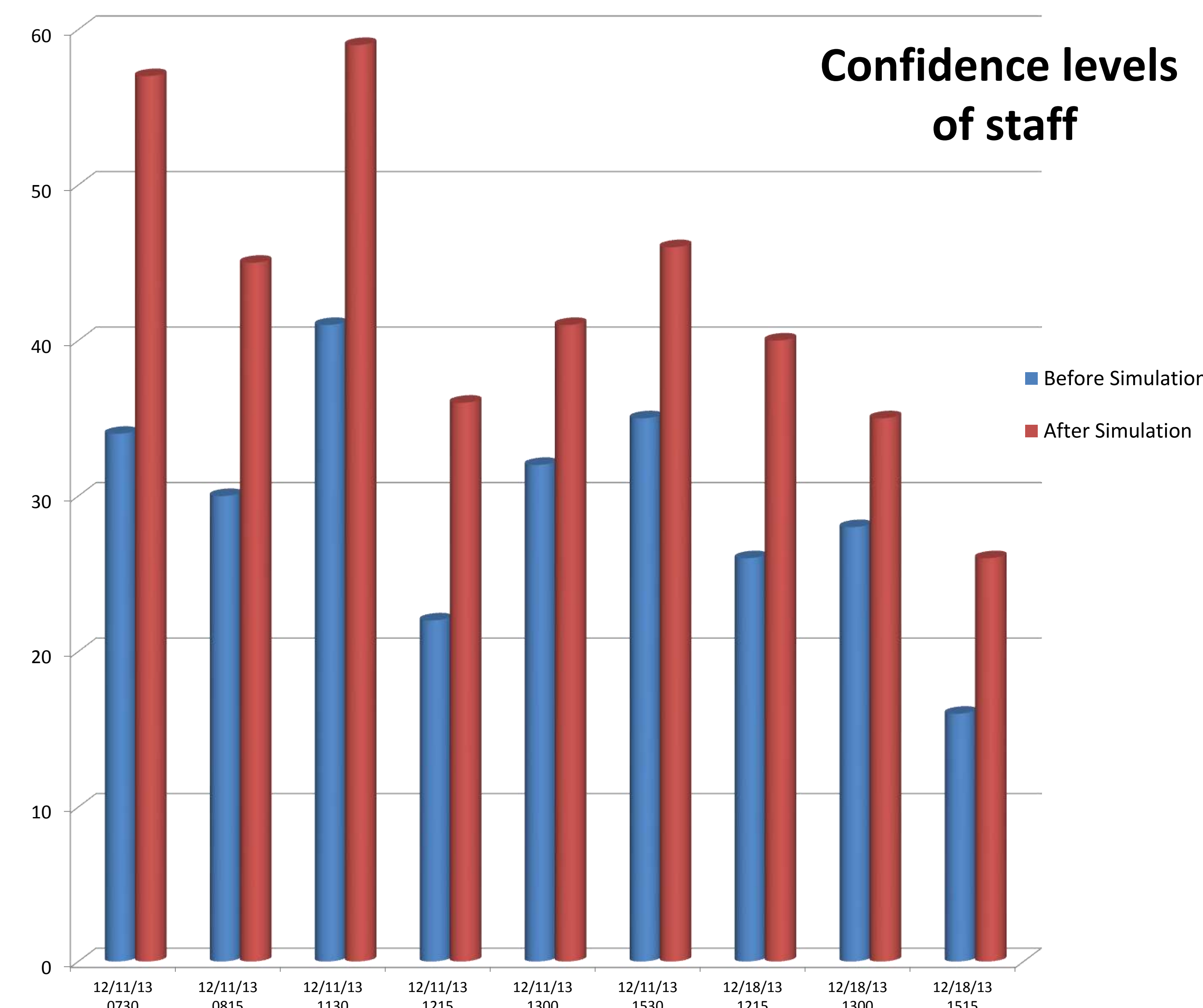
- Confidence level to perform during a code blue situation increased an average of 46.5% (with a range of 25% to 68%) from pre- to post- simulation
- The group with no RN team member had the least amount of confidence gain

Qualitative Results

Each group completed a debriefing session after the simulation and completed a questionnaire where comments, quotes and lessons reported by staff were gathered. Comments included:

- From a therapist: "Nice to do with RN, not just therapy staff"
- "Good discussion afterwards"
- "Practice with patient in a variety of settings; W/C, shower room, commode, tub, car, hall, dining room"
- "We need this more often"
- "Felt like I wanted to do more"
- "I feel a lot better"
- "I was nervous about getting started but once I started, I was better"
- From a therapist: "Once the nurse shows up (in a code blue), I know everything will be OK".

Nursing Implications

A simulated code utilizing a high-fidelity mannequin may be an effective technique to increase confidence among clinical staff during a code blue situation. In all scenarios in which a RN was present, the nurse emerged as the informal leader. Groups with no RN team member present had the least amount of confidence gain

Conclusions

- Increased confidence was reported by all groups with clinical experience ranging from <6 months to > 23 years
- An intervention which used a simulated emergency situation may be effective in increasing confidence as measured by a pre and post-survey.