



ELSEVIER

Featured Article

# Evaluation of Nurse-Specific and Multidisciplinary Simulation for Nurse Residency Programs

Catherine A. Rhodes, MSN, RN, WHNP-BC, RNC-OB, SANE-A\*,  
Dawn Grimm, MSN, RN, CCNS, Kathleen Kerber, MSN, RN, ACNS BC,  
Cheryl Bradas, PhD(c), RN, GCNS-BC, CNRN, Barbara Halliday, MSN, RN, CNS,  
Sue McClendon, MSN, RN, CNS-BC, Julie Medas, MSN, RN, CNS,  
Thomas P. Noeller, MD, Molly McNett, PhD, RN, CNRN

Department of Nursing, Simulation Center, The MetroHealth System, Cleveland, OH 44109-1998, USA

## KEYWORDS

nurse residency;  
simulation;  
multidisciplinary crisis  
simulation;  
nursing orientation;  
standardized patients;  
hospital-based  
simulation

## Abstract

**Background:** Newly licensed registered nurses (NLRNs) may lack knowledge and confidence in dealing with patient events and interacting with other disciplines. Nurse residency programs can integrate simulation training into orientation to address these deficiencies.

**Method:** A prospective cohort study design evaluated NLRN knowledge, confidence, and satisfaction after participating in simulation with peers and crisis simulation with a multidisciplinary group.

**Results:** There were steady increases for knowledge and confidence in both peer and multidisciplinary sessions. Satisfaction scores were highest for multidisciplinary sessions.

**Conclusions:** Our study demonstrates simulation, particularly with crisis events and multidisciplinary teams, may impact outcomes up to 18 months for the NLRN.

## Cite this article:

Rhodes, C. A., Grimm, D., Kerber, K., Bradas, C., Halliday, B., McClendon, S., Medas, J., Noeller, T. P., & McNett, M. (2016, July). Evaluation of nurse-specific and multidisciplinary simulation for nurse residency programs. *Clinical Simulation in Nursing*, 12(7), 243-250. <http://dx.doi.org/10.1016/j.ecns.2016.02.010>.

© 2016 International Nursing Association for Clinical Simulation and Learning. Published by Elsevier Inc. All rights reserved.

Training newly licensed registered nurses (NLRNs) in preparation for competent practice in the hospital setting is a fundamental principle of care delivery (Vandrey & Whitman, 2001). Didactic instruction alone encourages passive learning through memorization of facts. When NLRNs are expected to think critically to process complex data and reach logical decisions about patient care, they

often feel vulnerable, and many become dissatisfied and leave positions within the first 2 years of service (Vandrey & Whitman, 2001). Multiple studies report clinical preparation for nursing students is insufficient (Partin, Payne, & Slemmons, 2011; Weaver, 2011; Wotton, Davis, Button, & Kelton, 2010). Recent systematic reviews identify simulation as a key component to address gaps in clinical preparation of nurses, as evidence demonstrates positive effects of simulation on knowledge, skills, safety, and confidence among nurses and interprofessional

\* Corresponding author: [crhodes@metrohealth.org](mailto:crhodes@metrohealth.org) (C. A. Rhodes).

groups (Fisher & King, 2013; Murdoch, Bottorff, & McCullough, 2013; Norman, 2012).

Specifically, in crisis situations, NLRNs must learn that clear collaborative teamwork is needed to effectively implement evidence-based standards of diagnosis and treatment (Carne, Kennedy, & Gray, 2011; Cates, 2011). The team, which often includes NLRNs, must manage the entire situation, including behaviors and the environment (Bruce et al., 2009). A variable number of team members may respond to a call for assistance in a crisis situation in an uncoordinated order and with varying years of crisis response experience. For those newly employed or with less crisis response experience, the acute crisis situation is not the ideal circumstance to learn complex cognitive and procedural tasks (Bruce et al., 2009).

Therefore, mannequin-based simulation (MBS) has emerged as one method to enhance critical thinking and teamwork during acute crises in the health care setting (Carne et al., 2011; Cates, 2011; Régo, Lyon,

& Watson, 2011; Youngblood, Zinkan, Tofil, & White, 2012). MBS and standardized patient (SP) training have been incorporated as an integral part of many nurse residency programs (NRPs). Within our institution, MBS and SP training was performed with NLRNs on entry into the residency program with one scenario utilizing an MBS and the others utilizing SPs; a second training session was done near the end of their residency that incorporated multidisciplinary crisis simulation training with other providers using MBS. A research study was designed around this program to evaluate nurse-specific and multidisciplinary crisis simulation training on NLRN knowledge, confidence, and satisfaction immediately after simulation experiences and at 6, 12, and 18 months post simulation. The purpose of this article is to present findings from this study and highlight areas for future integration of simulation experiences as residency programs evolve.

## Review of the Literature

Experiential learning enhances assimilation, synthesis, and application of clinical concepts to patient care situations

(Alinier, Hunt, Gordon, & Harwood, 2006; Bruce et al., 2009; Shoemaker, Riemersma, & Perkins, 2009). Experiential learning outside the clinical setting may occur through interactive teaching approaches (i.e., human simulators, models of specific body parts, computer-assisted instruction, and case studies). The goal of these teaching methods is to achieve appearance of realistic clinical events for team members to complete key tasks during a crisis situation, improving efficiency of treatments, patient outcomes, and patient safety (Baxter, Akhtar-Danesh, Landeen, & Norman, 2012; Pak & Hardasmalani, 2015).

A key component of experiential learning now includes the use of an MBS to add a mechanism for trained personnel to participate in clinical decision making, practice skills, and observe outcomes from decisions (Liaw et al., 2014; Meyer et al., 2014). MBS are highly interactive, computer-driven, full-body mannequins with features replicating numerous human functions, and changes in clinical conditions. Trainees may interact with the mannequin in a manner very similar to human-to-human interactions. Use of MBS among nursing students in particular is beneficial to meet the demands of complex patient care (Weaver, 2011). Integration of MBS provides the opportunity for NLRNs to obtain experience in managing complex situations with specific feedback on their performance.

In addition to MBS, SPs are also used to represent specific patient conditions, providing a systematic approach to situations that can be used for evaluation of student performances (Association of Standardized Patient Educators, 2010). Frequent content areas for SP are communication, clinical and physical examination skills, cultural sensitivity, and teaching spiritual care (Bolstad, Xu, Shen, Covelli, & Torpey, 2012; Husson, Zulkosky, Fetter, & Kamerer, 2014; May, Park, & Lee, 2009; Storr, 2010). Advantages of SPs include opportunities for reflection, ability to observe learner's abilities performed independently, realism of the practice case, and capability for repeating scenarios without jeopardizing patient safety or comfort (Robinson-Smith, Bradley, & Meakim, 2009).

Integration of MBS and SP experiences are shown to enhance clinical learning, self-efficacy, confidence, motivation to learn, clinical performance, critical thinking, and knowledge gains in a safe, structured setting (Bruce et al., 2009; Elfrink, Kirkpatrick, Nininger, & Schubert, 2010; Hoadley, 2009; Jeffries, 2007; Robertson et al., 2009; Traynor, Gallagher, Martin, & Smyth, 2010). MBS training alone has immediate effects on learning and knowledge development. Studies among NLRNs indicate MBS and SP simulation fosters communication, critical thinking and prioritization skills (Beyea, Slattery, & von Reyn, 2010; Bricker & Pardee, 2011; Young & Burke, 2010), and increases perceived confidence and readiness to care for patients (Beyea et al., 2010; Bricker & Pardee, 2011, Conner-Warren, Hillman, & Murphy, 2014; Gordon & Buckley, 2009; Liaw et al., 2014). More recently, use of

### Key Points

- Simulation in nurse residency programs is valuable and provides knowledge and confidence to newly licensed registered nurses.
- Newly licensed registered nurses who participated in simulation experiences showed increases in mean scores for knowledge and confidence up to 18 months post simulation.
- Newly licensed registered nurses had a higher sense of satisfaction with multidisciplinary simulation session in comparison to RN only session.

# دانلود مقاله



<http://daneshyari.com/article/2646883>



- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات