Simulation: Strategies to Increase Nurse Educator Confidence

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Dedication and Acknowledgement

Thank you, to my husband John, for your endless support and encouragement, especially on the days when this journey seemed impossible to navigate. I could not have done this without you. To my children Jonathon and Justin, I hope to be your inspiration that you can achieve absolutely anything with patience and determination. To my parents, I hope this accomplishment makes you proud.

Abstract

Background: Simulation is increasingly used in acute care settings to assist with skill acquisition and knowledge. This educational modality is often delivered by clinical nurse educators who lack the necessary professional development on the topic.

Purpose: This Doctor of Nursing Practice (DNP) project aimed to determine if education on simulation pedagogy, INACSL Standards of Best Practice: Simulation, and the use of a standardized process for simulation would increase the confidence of nurse educators conducting simulation-based education (SBE).

Methods: Clinical nurse educators participated in a two-hour virtual education session focused on simulation pedagogy, best practices for simulation, and tools to establish a standardized process for SBE. A pre-and post-survey measured a perceived increase in confidence in planning, implementing, and evaluating SBE.

Results: Findings demonstrated a statistically significant increase in the confidence of the nurse educators in conducting SBE after this virtual session.

Recommendations and conclusions: Training for nurse educators on simulation design, facilitation, evaluation, and a process to deploy SBE is indicated. Initial and ongoing nursing professional development to include competency attainment is needed to ensure the effectiveness of this teaching approach.

Keywords: Simulation; simulation pedagogy; nursing education; nurse educator; competency; confidence; self-efficacy; standardized process for simulation; best practices

Background and Significance

Clinical nurse educators provide training foundational to safe and quality patient care by adopting the latest evidence and best practices. Simulation is an educational methodology that incorporates teamwork and knowledge to solve real-life problems and promotes a foundational understanding between learners and new concepts (Walker & Stevenson, 2016). The evidence directly links simulation and improved patient outcomes (Ajmi et al., 2019). Novice and expert nurses learn from this approach in an environment that poses no risk to patients. Concurrently, opportunities for dialogue, feedback, and evaluation of the simulated experience promote proficiency on clinical topics. Skill acquisition, confidence, and competence to manage clinical situations have been positively impacted through SBE (Andersen et al., 2018). This safe, immersive, and experiential learning has been adopted as an effective teaching strategy (Jeffries & Rodgers, 2021). Evidence supports simulation use yet translating this evidence into practice is problematic due to a lack of trained simulation experts (Thomas & Kellgren, 2017).

Currently, nurse educators lack proficiency in conducting and evaluating SBE (Kardong-Edgren, 2021). According to the Society for Simulation in Healthcare (2022), there are only 2,580 Certified Healthcare Simulation Educators worldwide. Nurse educators using simulation are often self-taught or through on-the-job training and may not be aware of the latest research and best practices resulting in variations that impact desired learning outcomes (Harper et al., 2018; Randall & Randall, 2021).

Integrating simulation into new and established programs requires the expertise of trained educators (Jeffries et al., 2015). Acute care facilities strive to incorporate simulation into educational curriculums. They need a process to cultivate knowledge by nurse educators on best practices to ensure a meaningful simulation experience for participants. Furthermore, instruction

on simulation best practices contributes to standardization in developing, implementing, and evaluating simulation-based curricula in acute care settings (Palaganas & Mancini, 2021).

Fortunately, best practices for simulation are put forth by the International Nursing Association of Clinical Simulation and Learning (INACSL). The INACSL Standards of Best Practice: Simulation© addresses simulation design, outcomes, objectives, facilitation, debriefing, participant evaluation, professional integrity, simulation enhanced interprofessional education (Sim-IPE), and operations (INACSL, 2020). These standards provide a framework for simulation educators to apply when designing, implementing, and evaluating this form of experiential learning (Beroz, 2021). Instruction for nurse educators on these standards and simulation pedagogy increases the self-confidence of those using simulation as a teaching strategy (Garner et al., 2018).

Simulation-based learning has been met with increasing interest and has become more common in nursing education (Kardong-Edgren, 2021). This sophisticated model requires planning with an intentional approach to design, implement, and evaluate programs. Simulation design should provide a realistic snapshot of clinical situations and appropriate learning outcomes. Nurse educators with proficiency in simulation must develop and implement high-quality simulation programs (Ng & Ruppel, 2016). Implementation should occur deliberately to align the simulation with the overall goals of the curriculum. Evaluation of the activity is necessary to refine teaching strategies and ensure optimal learning outcomes (Tagliareni & Forneris, 2016).

Purpose

The nursing professional development department in an extensive health system in North Carolina sought to use best practices to standardize education incorporating simulation.

However, SBE was being developed, facilitated, and evaluated by clinical nurse educators that lacked formal education on best practices and were without a standardized process. Therefore, this DNP project aimed to determine if instruction on simulation pedagogy, INACSL Standards of Best Practice: Simulation, and the use of a standardized process for simulation would increase the confidence of nurse educators conducting SBE.

Review of Current Evidence

Purpose of Review

The review of evidence focused on three targeted areas. First, simulation pedagogy and barriers to implementation based on the confidence of clinical nurse educators were examined. Next, INACSL standards and barriers to applying them to simulated education were explored. Finally, the review assessed the need for a standardized process when using simulation for nursing education in acute care facilities.

Search Strategy

The following databases were searched: CINAHL Complete, PubMed, and Google Scholar. The initial query focused on simulation in nursing education in acute care settings. Keywords for the search included "simulation," "simulation pedagogy," "nursing education," "nurse educator," "competency," "confidence," "self-efficacy," "standardized process for simulation," "simulation in acute care," and "best-practices." The searches occurred between August 2020-February 2022. The investigation was limited to articles written in English within the past five years from the search date resulting in 365 articles. Those chosen were from peer-reviewed sources focused on competency development and competency development barriers for nurse educators and best practice implementation for simulation. A relevant textbook on simulation in nursing education was also utilized. After database searches, reference lists of all

studies appraised in full text were screened for additional resources. The further synthesis included a review of the National League of Nursing (NLN), INACSL, Association for Nursing Professional Development (ANPD), and Society of Simulation in Healthcare (SSH) websites. Common themes were noted in the literature to include best practices, standardized implementation of SBE, barriers to nurse educator confidence, and strategies to increase confidence.

Standardization Using Best Practices

The literature cites common themes associated with applying INACSL Standards of Best Practice: Simulation to SBE in schools of nursing and the acute care setting. These best-practice standards have guided faculty in program development and serve as a resource for quality while providing consistency, an essential component for nurse educator development (Beroz, 2017; Rutherfod-Hemming et al., 2015). Furthermore, when standards are used within an educational program for clinical nurse educators, self-efficacy in using SBE increases (Aebersold, 2018; Garner et al., 2020; Karacay & Kaya, 2020).

Facilitation, one of the eight INACSL best practice standards, is an essential component of SBE, requiring an understanding of theoretical and pedagogical underpinnings of simulation and best practices to effectively guide the learning experience (Adamson, 2015; Bowe et al., 2017; Jeffries & Rodgers, 2021). The skilled facilitator immerses the learner in a clinical scenario and contributes to learning by navigating participants through a realistic scenario followed by debriefing (Aebersold, 2018; Bowe et al., 2017; Moulton et al., 2017). However, clinical nurse educators serve as facilitators often without essential education on simulation needed to function effectively in this capacity (Beroz, 2017; Tamas et al., 2019).

In 2021, INACSL introduced a fourth edition of the best practice standards, resulting in a name change, revised standards, and two additional standards (INACSL Standards Committee et al., 2021). Interestingly, The Healthcare Simulation Standards of Best Practice™ now include a standard focusing on professional development and pre-briefing. Professional development standards specifically speak to the need for ongoing professional development for those using SBE as a teaching modality (INACSL Standards Committee, 2021).

Barriers to Nurse Educator Confidence

A plethora of barriers exists around nurse educators' confidence and ability to conduct SBE. These barriers include a lack of funding for simulation programs, lack of time for education and planning for educators, lack of standardization, lack of familiarity with simulation technology, ineffective evaluation tools, and a lack of education on simulation pedagogy (Beroz, 2017, Roh et al., 2019, Thomas & Kellgren, 2017). Removal of such barriers is needed to move the science of simulation forward.

Those using simulation as a teaching modality report inconsistencies in development and training; as a result, lack of confidence in using simulation equipment, debriefing, planning simulation scenarios, and evaluating outcomes exists (Garner et al., 2018; Roh et al., 2019). These gaps in faculty development result in a lack of faculty confidence. While training platforms exist across simulation organizations such as the SSH, INACSL, and the NLN, nurse educators continue to report a lack of formal training on simulation best practice competencies (Aebersold, 2018; Thomas & Kellgren, 2017; Koukourikos, 2021).

A lack of training on complex simulation equipment negatively influences nurse educator confidence. Technology has escalated, yet educators have not been afforded the time or exposure to equipment to make them proficient (Boje et al., 2017; Fongang et al., 2017). This lack of

expertise makes simulation a challenge for educators and produces anxiety, further contributing to a lack of confidence (Simes et al., 2018). Based on findings that nurse educators lack skill and confidence in conducting SBE, a strategic approach to increasing nurse educators' self-efficacy is needed (Luo et al., 2021).

Strategies to Increase Nurse Educator Confidence

An overarching theme in the literature was the need to increase the confidence of nurse educators using simulation as a teaching strategy (Cheng et al., 2015; Hallmark, 2015; Simes et al., 2018). Education on and adoption of INACSL Best Practices: Simulation is needed to standardize the simulation process (Sittner et al., 2015). These standards have provided both guidance and structure around nurse educator professional development, resulting in a framework that promotes the development, execution, and evaluation of SBE using a systemic approach (Aul et al., 2021; Hallmark, 2015).

Efforts to standardize the process of conducting simulation have contributed to the competency development of nurse educators (Jeffries et al., 2015). Instruments have been developed to evaluate SBE based on the INACSL standards (Evaluating Healthcare Simulation, 2022; Grota et al., 2020). In addition, tools are available to assess facilitators and foster skill acquisition to enhance confidence and competence in those facilitating and debriefing. The Observational Structured Assessment of Debriefing (OSAD) can be used to evaluate the debriefing skills of simulation facilitators, while the Facilitator Competency Rubric (FCR) can guide and prioritize simulation skill development (Dale-Tam et al., 2021; Leighton et al., 2018).

Several professional development strategies for increasing nurse educator confidence have been successful. These include simulation fellowship programs, one- and two-day workshops, train-the-trainer approaches, and virtual learning through online modules (Gantt et

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al., 2020; Garner et al., 2018; Ng & Ruppel, 2016). A simulation mentorship program has shown promise in developing essential faculty skills (Terpstra & King, 2021). Finally, online education using modules has effectively increased the confidence and ability of educators to conduct SBE (Gantt et al., 2020). The varied approaches to increase nurse competency and confidence have demonstrated positive results.

Summary

Simulation is an effective learning pedagogy that requires the knowledge and expertise of educators serving as simulation facilitators. While SBE is on the rise, there is a lack of knowledge and proficiency of educators facilitating simulations (Beroz, 2017). An educational approach is recommended to bridge this knowledge gap to ensure that simulations are developed and executed based on best practices. Several barriers exist and impede the self-confidence of nurse educators in facilitating simulation. These include a lack of time to learn about and conduct simulations effectively and a lack of funding for organizations. Another barrier is the lack of faculty development in all aspects where simulation is used as an educational approach. Simulation design, facilitation, debriefing, and evaluation of the effectiveness of simulations stood out as the most problematic areas.

Theoretical Model

The NLN Jeffries Simulation Theory guided the development of a virtual educational session that focused on implementing a standardized process for SBE by nurse educators in an acute care setting. Each theory component was described during the education and served as a framework to instruct nurse educators on methods to develop educational courses incorporating simulation. Providing a structure based on theory sought to assist nurse educators in developing, implementing, and assessing this experiential and immersive learning strategy.

The NLN Jeffries Simulation Theory includes the following components: context, background, design, simulation experience, facilitator and educational strategies, participant, and outcomes (Jeffries et al., 2015). The experience is a dynamic synergy between facilitator and participant in an interactive, learner-centered, collaborative, and experiential learning environment within a safe space. The facilitator creates a robust learning environment, adjusts simulations to meet learning outcomes, provides feedback, and debriefs. Outcomes focus on systems, patients, and participants and should include reaction and self-confidence, learning changes in knowledge, skills, attitudes, and behavior, or applying skills to the clinical setting. (Jeffries et al., 2015).

While the NLN Jeffries Simulation Theory was initially designed to focus on pre-licensure nursing education, its application is helpful when guiding the development of nurse educators' preparation to develop simulation experiences for learners (Young & Shellenbarger, 2012). The theory aligns with INACSL Standards of Best Practice: Simulation and, when coupled, provide a structure for ensuring a safe learning environment for clinical nurse educators to increase their confidence in using simulation as a teaching strategy.

Methods

Project Purpose

The primary aim of this project was to determine if education on simulation pedagogy, INACSL Standards of Best Practice: Simulation, and the use of a standardized process increased the self-efficacy of nurse educators conducting SBE. Virtual education based on the INACSL Standards of Best Practice: Simulation was presented to nurse educators working in an acute care setting. The instruction was delivered via the web-based platform, Zoom.

Design

The adapted Self-Efficacy Toward Teaching Inventory for Nurse Educators (SETTI-NE), Appendix A, was administered to nurse educators in acute care hospitals before and after virtual education. A convenience sample with selection criteria limited to registered nurses with a minimum education of Bachelor of Science in Nursing, working as clinical nurse educators for an extensive health system, was employed. The project's participation recruitment was completed via an email invitation with an attached flyer detailing dates, times, and links to join the session. American Nurses Credentialing Center (ANCC) contact hours were provided for those that participated and completed an evaluation.

Translational Framework

The Iowa Model- Revised framework guided the work of establishing sustainable change based on the best evidence for implementation of SBE. This evidence-based practice (EBP) model is used when new or focused guidelines are established and helps make a sustainable change (Hanrahan et al., 2019). The step-by-step guide for translating evidence into practice can be used by novice and expert clinicians seeking to improve quality (Iowa Model Collaborative, 2017). This model serves as a guide for clinicians and systems in clinical decision-making.

In healthcare, simulation has long been utilized to increase clinician knowledge and improve patient and system outcomes (Kardong-Edgren. 2021). Nurse educators leading simulated experiences often lack the knowledge, confidence, and tools to lead simulations effectively, as they often receive little preparation for their roles (Monsivais & Nunez, 2021). This organization prioritized implementing a simulation program and recognized that clinical nurse educators must become proficient in delivering SBE. After a thorough review, it was determined that sufficient evidence existed to design and pilot a process where education is provided to clinical nurse educators that hoped to increase their self-efficacy in providing SBE.

Using this model to promote evidence-based practice in simulation provided an opportunity for an innovative change to improve SBE delivered by clinical nurse educators.

Setting

The educational intervention occurred in an extensive health system located in North Carolina. This health care organization comprises twenty hospitals, both tertiary care and community-based, clinics, surgery centers, free-standing emergency rooms, and urgent care facilities. The footprint of the health care organization touches both urban and rural areas.

Sample

Participation in the collection of data was voluntary. The target population was a convenience sample of registered nurses with a minimum of a Bachelor of Science in Nursing (BSN), working as clinical nurse educators for an extensive health system. A total of 55 clinical nurse educators were invited to participate, and 43 attended.

Intervention

A two-hour virtual class was delivered on two separate dates to accommodate schedules vias the web-based platform, Zoom. The project director and a simulation educator presented the content. Education provided an overview of simulation pedagogy, the INACSL Standards of Best Practice: Simulation, and using a standardized process to deliver the instruction. Each standard was discussed and included simulation design, outcomes and objectives, facilitation, debriefing, participant evaluation, professional integrity, simulation-enhanced interprofessional education (Sim-IPE), and operations. Criteria to implement each standard were discussed. A standardized process for conducting SBE, based on the INACSL recommendations, was outlined. Links to simulation checklists and the best practice standards were made available to

each participant to assist with future simulations (International Nursing Association for Clinical Simulation and Learning, 2021).

Instrument

The Self-Efficacy Towards Teaching Inventory for Nurse Educators (SETTI-NE) was adapted with permission from the authors and used for data collection (see Appendix A). Tollerud (1990) developed the original tool, the Self-Efficacy Towards Teaching Inventory (SETTI), used to measure confidence in teaching abilities of students enrolled in counselor programs at the graduate and doctoral level. Nugent et al. (1999) modified the SETTI to assess critical aspects of self-efficacy in new nurse educators in the United States. The most recent revision to the instrument was in 2017. The SETTI-NE revision mirrors current nursing practice is used globally and demonstrates good reliability and validity with a scale content validity inventory (CVI) benchmark of 0.89 and a raw Cronbach's alpha ($r = 0.98$) (Garner et al., 2018). This educational session's non-academic setting and short nature resulted in the request to adapt the instrument. The SETTI-NE consists of 54 questions in addition to demographic questions. Some questions are specifically geared towards educators working in an academic setting. Due to the short nature of this educational program and the use of a pre-and post-survey approach, questions geared towards an academic environment were omitted. Only the most pertinent questions related to this educational session were used to decrease the time needed to complete both surveys.

Data Collection

Institutional Review Board (IRB) approval was obtained from both the university and the health system. Demographic data collection includes sex assigned at birth, age, highest nursing and non-nursing degree held, years working as a nurse, years working as a nurse educator, other

teaching experience, and formal nursing education, including courses and semesters of preparation. Confidence in the ability to be effective in teaching skills was assessed using a 4-point Likert scale. Informed consent was obtained before data collection, where the initial question of the adapted SETTI-NE explained the project and requested consent before proceeding with additional survey questions. Participants created an anonymous identifier to ensure the confidentiality of each participant. This was accomplished by each person entering a number based on the day of the week of their father's birthday, the first two letters of their mother's maiden name, and the number of siblings they have, including step and half-siblings. This resulted in an anonymous identifier to compare the pre-and post-survey results.

The adapted SETTI-NE pre-survey and post-survey were delivered electronically using Survey Monkey. An anonymous identifier was used to pair the data. This de-identified data received from participants was exported from Survey Monkey and uploaded to the IBM® Statistical Package for the Social Sciences® (SPSS) with the assistance of the site's nurse scientist. Data was kept confidential on a password-protected computer in the hospital. The data reports were not printed or reproduced and were permanently deleted when the project was complete. Finally, there was no supervisory relationship between those collecting data and the participants.

Data Analysis

Data analysis using descriptive statistics included means, percentages, and standard deviation of the sample populations' compared variables. A survey using the SETTI-NE was done before the educational intervention and repeated post-intervention to determine if the confidence level for teaching using SBE increased due to the education. Inferential statistics, the Wilcoxon Signed-Rank Test, compared pre-survey data to post-survey data.

Results

Two educational sessions were conducted with a total of 43 participants. One hundred percent of participants completed both the pre-and post-survey. Due to an inability to pair anonymous identifiers, nine responses were omitted from the data analysis.

Table 1

Demographics of Participants (N = 34)

Demographics	*n*	*%*
Sex Assigned at Birth		
Female	31	91.2
Male	3	8.8
Age in years		
26-30	2	5.9
31-35	8	23.5
36-40	6	17.6
41-45	2	5.9
46-50	4	11.8
51-55	6	17.6
56-60	4	11.8
61 or older	2	5.9
Nursing degree		
BSN	18	52.9
MSN	15	44.1
PhD	1	2.9

RN experience in years		
4-5	1	2.9
6-10	6	17.6
11-15	10	29.4
16-20	5	14.7
21-25	3	8.8
26-30	1	2.9
31-35	3	8.8
More than 35	5	14.7

Note.

The data were analyzed using IBM SPSS Statistics (Version 28) predictive analytics software. Descriptive statistics were used to determine the means and percentages of the sample. Inferential statistics, the Wilcoxon Signed-Rank Test, provided a comparison of pre-and post-survey data that were not normally distributed based on the result of the Shapiro-Wilk test for normality, $p < 0.05$.

Impact of Simulation Education on Nurse Educator's Confidence

Pearson Chi-Square analysis was used to compare demographic data to the nurse educator's confidence level based on the educational intervention. There was no significant change in the level of confidence based on sex assigned at birth ($p = 0.964$), age ($p = 0.140$), nursing degree ($p = 0.898$) and RN experience ($p = 0.935$).

Table 2 reports mean pre- and post-adapted SETTI-NE scores. Nurse educators who participated in the educational intervention on most variables showed a significant increase in

confidence levels. There was no significant change in nurse educator confidence for the variable related to communicating at a level that matches the participant's comprehension.

Table 2

Adapted SETTI-NE Pre Survey and Post Survey Results (N=34)

Confidence Level	Pre-survey		Post-survey		Change	
	Mean	SD	Mean	SD	Mean	SD
Integrate best practices into SBE**	2.56	0.705	3.32	0.638	0.076	-0.067
Develop expected outcomes for SBE**	2.50	0.615	3.32	0.589	0.82	-0.026
Modify facilitation to participant level of experience**	2.56	0.660	3.26	0.567	0.7	-0.093
Use debriefing after an SBE to encourage learning**	2.71	0.676	3.44	0.613	0.73	-0.063
Use simulation expected outcomes as a basis for participant evaluation**	2.50	0.707	3.29	0.524	0.79	-0.183
Provide a supportive learning environment for SBE**	2.91	0.668	3.38	0.551	0.47	-0.117
Ask open-ended stimulating questions**	2.91	06.21	3.47	0.563	0.56	-0.058
Ability to communicate at a level that matches participant's ability to comprehend*	3.21	0.538	3.29	0.760	0.08	0.222

*Note. p > .05 *, p < .05**, Simulation-based experiences (SBE)*

Discussion

The findings demonstrate that nurse educators increased their confidence in conducting SBE with additional knowledge on simulation pedagogy. Significant increases in perceived confidence were noted in the post-survey, where the adapted SETTI-NE was used as a measurement tool. These findings align with a previous study where participants increased their self-efficacy following an educational intervention on simulation where the SETTI-NE was used as a measurement tool (Garner et al., 2018). In addition, the findings support the need for nurse educator professional development as a foundational component when using simulation as an educational methodology, as was reported by Roh and colleagues (2016). INACSL Standards of Best Practice: Simulation provided a structure for nurse educators to develop, implement, and evaluate a simulation-based curriculum in an acute care setting supporting previous recommendations (Palaganas & Mancini, 2021).

The NLN Jeffries Simulation Theory coupled with the INACSL best practices for simulation was used as a framework for the education provided to the nurse educators. A consistent method of incorporating the best practices based on theory was emphasized during the educational intervention to help the participants feel more confident in their abilities to execute simulate-based education. To make a sustainable change in this practice environment, the Iowa Model-Revised guided the planning and implementation of the instruction to emphasize the use of a standardized process around best practices when developing simulation-based education.

Initial plans for data collection included a second post-survey assessment thirty days following the education to determine if the educators had used SBE and if their confidence level was sustained since the post-survey on the day of the education. However, due to Corona Virus Disease (COVID) restrictions, there was no opportunity to conduct SBE during these thirty days.

It was anticipated that the confidence level would increase using a pre-and post-survey approach. It was also expected that those with a BSN would benefit more from the education than those with an MSN or Ph.D. However, there was no significant difference in the results based on nursing degrees.

A trained educator is essential when integrating SBE into a nursing curriculum. As clinical nurse educators in this acute care setting have varied backgrounds, experiences, and education, training in simulation is not a standardized part of onboarding and orientation. Previous education in simulation is not a requirement for this role. However, simulation is commonly used as a teaching strategy. Therefore, nurses are using this educational methodology without knowledge and training on this topic, potentially hindering its' effectiveness.

Limitations

Challenges in providing education to clinical nurse educators arose, with the most challenging aspects being time constraints and pandemic restrictions. All the participants were employees of the same department in one healthcare system, and the education was conducted during working hours, limiting the amount of time devoted to the topic. A two-hour virtual education session was conducted on two separate dates to promote participation and accommodate work schedules; however, much more time is needed to educate on this topic. Ideally, the education would have consisted of a didactic and in-person, hands-on component where educators could practice each element of simulation facilitation. Unfortunately, gathering in person was restricted to only essential functions due to the pandemic. While the outcomes suggest that confidence in conducting SBE increased, ongoing education on this topic is needed.

Recommendations for Future Study

Perceived self-confidence increased following structured education on simulation-based practices for nurse educators. This project demonstrated that confidence in executing education using simulation increased following instruction on the topic. A variety of strategies exist to increase the competency of educators that use SBE; however, a consensus on the best approach has not been determined. Further study into interventions to increase nurse educator confidence in simulation is needed.

Relevance and Recommendations for Clinical Practice

Simulation is used in acute care facilities to provide a safe learning environment for skill acquisition that poses no harm to patients. For SBE to be most effective, it must be facilitated by those educated on this topic. Healthcare systems employ nurse educators who use a variety of teaching methodologies, including simulation, to inform the nursing staff. Yet, all educators are not confident in using simulation as a teaching strategy. Nurse educators need education on simulation design, facilitation, evaluation, and a process to deploy the education. Furthermore, training a nurse for a new role in clinical education should include a standardized process for competency attainment in SBE.

Conclusion

To effectively use simulation as a learning tool in the acute care setting, competence in delivering SBE is needed. This requires nursing professional development in the use of simulation as a teaching modality. This project sought to understand if nurse educators increased their self-confidence in conducting SBE through education on the topic and by employing a standardized process. The project results indicated that confidence in using simulation as a teaching strategy increased due to formal education on simulation, best practices for SBE, and a

consistent process for delivery of this educational modality. Nurse educators are charged with bringing best practices in care delivery to front-line nurses and need the tools, structure, and education to deliver education most effectively. Skilled clinicians deserve skilled nurse educators to bring them substantial learning opportunities following the best evidence.

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Appendix A

Adapted Self-Efficacy Toward Teaching Inventory for Nurse Educator (SETTI-NE)

Demographic Information

For this DNP project, you will need to have an anonymous identifier. Please follow these steps.

- Enter the actual date of your father's birthday. (Ex. 16)
- Enter the first 2 letters of your mother's maiden name. (Ex. Sm)
- Enter the number of siblings you have including step and half. (Ex. 3)
- An example of this entry would be 16Sm3.

In what geographical market do you work?

- o GWSM
- o GCM

How do you identify yourself?

- o Male
- o Female
- o Transgender
- o Do not identify as female, male, or transgender

Age in years:

- o 25 or below
- o 26-30
- o 31-35
- o 36-40
- o 41-45
- o 46-50
- o 51-55
- o 56-60
- o 61 or above

Highest degree held:

- o Bachelor's degree (Nursing)
- o Master's degree (Nursing)
- o Doctor of Nursing Practice
- o Doctor of Philosophy (Nursing)
- o Doctor of Philosophy (Other)
- o Other _____

Years working in the clinical setting as a nurse:

- o 1 year or less
- o 2-3 years
- o 4-5 years

- o 6-10 years
- o 11-15 years
- o 16-20 years
- o 21-25 years
- o 26-30 years
- o 31-35 years
- o Greater than 35 years

Years of teaching in nursing education:

- o 1 year or less
- o 2-3 years
- o 4-5 years
- o 6-10 years
- o 11-15 years
- o 16-20 years
- o 21-25 years
- o 26-30 years
- o 31-35 years
- o Greater than 35 years

Teaching experience in fields other than nursing:

- o Yes
- o No

Hours of formal education courses that focused on teaching in a nursing program:

- o None
- o 1-3 semester hours
- o 4-6 semester hours
- o 7 or more semester hours

If you have formal nursing education courses, identify the type of courses (check all that apply):

- o Program Evaluation
- o Instructional technology/teaching strategies
- o Educational psychology
- o Curriculum Development
- o Learning/instructional theory
- o Other (please list): _____

Please rate how confident you are in your ability to be effective in each of the following teaching skills and behaviors on a scale of 1-4 where 1 is not confident and 4 is completely confident.

1	State goals and objectives clearly	1	2	3	4
2	Plan teaching methodologies	1	2	3	4
3	Plan teaching and learning activities	1	2	3	4
4	Deliver teaching methodologies	1	2	3	4
5	Communicate at a level that matches the participant's ability to understand	1	2	3	4
6	Ask open-ended questions	1	2	3	4
7	Recognize and respect individual differences	1	2	3	4
8	Communicate consistently both verbally and non-verbally	1	2	3	4
9	Develop teaching strategies that promote critical thinking	1	2	3	4
10	Integrate best practices into simulation-based experiences	1	2	3	4
11	Develop expected outcomes for simulation-based experiences	1	2	3	4
12	Modify simulation facilitation to participants' level of experience and competence	1	2	3	4
13	Use debriefing after a simulation-based experience to encourage learning	1	2	3	4
14	Use simulation expected outcomes as a basis for participant evaluation	1	2	3	4
15	Provide a supportive learning environment for the simulation-based experience	1	2	3	4
16	Use feedback from participants to improve teaching	1	2	3	4
17	Evaluate the expected outcomes of a course	1	2	3	4

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