Communicating with patients and families at the end-of-life (EOL) can be difficult for pre-licensure nursing students dealing with the loss of an adult, but the death of a child is one of the most distressing forms of loss one can experience (Mullen, Reynolds, & Larson, 2015). Thus, it is imperative that appropriate and effective therapeutic communication with the family occurs during pediatric EOL care (Dosser & Kennedy, 2014). Lack of content in pre-licensure nursing curricula and limited or absent contact with dying people during clinical experiences potentiates anxiety and decreases self-efficacy related to EOL care (Mullen, Reynolds, & Larson, 2015). This leaves students ill prepared to provide that care (Carman, et al., 2016; Lippe & Carter, 2015).

Unless students have opportunities in hospitals specializing in critical or terminal pediatric care, pediatric EOL care opportunities are extremely rare in the clinical setting (Aldridge, 2017). Nurse educators must devise strategies to address the lack of clinical experiences related to EOL care. Simulation experiences provide alternative pedagogical methods for EOL education, knowledge acquisition, enhanced communication skills, and improved self-efficacy (Gillan, Jeong, & Van der Riet, 2014).

Unfortunately, the use of simulation has multiple barriers including time, expense, and laboratory space. Additionally, faculty may not be adequately trained to develop and deliver simulation scenarios specific to EOL care (Fabro et al., 2014; Gillan et al., 2014). Therefore, the purpose of this research was to explore vicarious learning as a practical alternative to traditional active learning in a simulated pediatric EOL setting. The aim of this study was to compare changes in self-efficacy related to therapeutic communication during a simulated pediatric EOL care situation between vicarious learners and active learners.

**Design**

This was a quasi-experimental, cross-sectional, repeated measures study. The intervention included a simulation scenario involving a dying pediatric patient who was not conscious.

**Method**

The sample included pre-licensure students from two baccalaureate nursing programs of similar size within one state in the U.S. southeast. After human subject approval was obtained at both sites, data were collected during spring 2018. Randomization of students to active versus vicarious learner groups occurred at the time of the scenario. Vicarious learners viewed the event in real time from a separate room, and debriefing occurred with all students in a face-to-face setting.
The nine-item Self-Efficacy in Communications Scale (SECS) assessed perceived self-efficacy prior to the simulation (SECS1), immediately after the active scenario (SECS2), and after debriefing (SECS3). Data were analyzed using a 2 X 3 mixed-design ANOVA to test for main effect and for the interaction effect of time and group.

Results
Findings were found to be both valid and reliable with a statistically significant increase in the perceived self-efficacy mean score from SECS1 (pre-simulation) to SECS2 (immediately post-simulation) for the entire sample; however, there was no statistically significant difference between vicarious learners and active learners. There was also a statistically significant increase in the perceived self-efficacy mean score from SECS2 to SECS3 (post-debriefing) for the entire sample, with no statistically significant difference between vicarious learners and active learners.

Conclusion
In conclusion, integration of EOL care curriculum is essential, both in a didactic and clinical sense. Because EOL clinical experiences are rare during the time students are in pre-licensure nursing programs, simulation provides an excellent alternative to impart education and experiences for pre-licensure nursing students regarding the soft skills required of therapeutic communication during difficult situations such as at the EOL. With simulation comes potential barriers that prevent integration of such learning experiences including limited simulation space and time, limited number of students who can effectively be in a simulated experience at one time, limited faculty trained to facilitate EOL simulations, and the overall cost of running simulations.

Vicarious learning provides an excellent alternative to traditional nursing simulation experiences. By observing relatable peers successfully perform in an active simulated scenario, vicarious learners have equal and sometimes even higher levels of improved perceived self-efficacy in performing the same tasks as those they observed while being acted out by their peers.

Acceptance of non-traditional pedagogy in a simulated situation may transform the way EOL care has historically been taught and negatively perceived by pre-licensure nursing students. Such a transformation has the potential to promote greater understanding of the importance of therapeutic communication at EOL and to empower future nurses to participate in necessary, though difficult, conversations surrounding death.

Title:
Comparing Active Versus Vicarious Learners' Self-Efficacy During a Pediatric End-of-Life Simulation

Keywords:
end-of-life, pediatric and simulation

References:


**Abstract Summary:**
This presentation describes the comparative effectiveness of vicarious versus active learning on the self-efficacy of pre-licensure nursing students during a pediatric end-of-life simulation. The presentation concludes with recommendations for the use of vicarious learning related to simulation and suggestions for future studies.

**Content Outline:**
1. Introduction
1. Therapeutic communication is critical to end-of-life (EOL) care.
2. Pre-licensure nursing students must have educational opportunities that support improved self-efficacy regarding therapeutic communication during EOL care.
3. There is limited clinical access to pediatric EOL clients, however, simulation experiences aid in providing alternative pedagogical methods for EOL education, enhanced communication skills, and improved self-efficacy.
4. Simulations have multiple barriers, including time, expense and laboratory space, as well as a shortage of faculty who are adequately trained to facilitate simulated EOL care situations.
5. The purpose of this research was to explore vicarious learning as a practical alternative to traditional active learning in a simulated pediatric EOL setting. The principal aim was to determine the effectiveness of vicarious learning versus active learning on pre-licensure nursing students’ self-efficacy, related to the provision of therapeutic communication during pediatric EOL care situations.
2. Body
A. Though it is essential to prepare future nurses to provide highly technical life-saving care that yields rehabilitative and curative client outcomes, of equal significance is EOL education regarding the therapeutic relational needs of the dying and their loved ones.

1. Over the past several decades, adequate preparation of pre-licensure nursing students regarding the provision of EOL care has taken a back seat to the greater educational emphasis of healing the sick and maintaining human life through whatever aggressive, life-saving measures necessary.

2. Educational inadequacies regarding EOL care reflect a health care culture that considers client death a failure and ignores the professional accomplishment and personal significance equated with caring for the dying and their loved ones.

3. Didactic measures alone are not adequate for training therapeutic communication, comprising the emotional, spiritual, and sociocultural support necessary to meet needs of dying clients and their loved ones.

B. Clinical experiences for observing or participating in actual pediatric EOL care situations are very limited for pre-licensure students.

1. A lack of clinical opportunities does not excuse the necessity of educating future nurses as to how to care for dying children and their loved ones.

2. Educators must explore more resourceful pedagogical methods to provide EOL pediatric experiences in which students can learn the critical element of effective therapeutic communication during EOL situations.

3. A review of the literature reveals simulated EOL experiences in which students are active participants are effective in increasing pre-licensure nursing students’ knowledge, enhancing communication techniques, and improving students’ self-efficacy.

4. EOL simulations pose several barriers, such as cost, time, and lack of qualified and adequately trained pre-licensure nursing faculty.

C. It was proposed that vicarious learning through observation of simulated EOL experiences with active participants, who are perceived as analogous to students in vicarious learner roles, would be equally as effective in improving pre-licensure nursing students’ perceived self-efficacy in provision of therapeutic communication during pediatric EOL situations.

1. To test this hypothesis, a study on voluntary pre-licensure nursing student participants compared active learners in a simulated pediatric EOL event with vicarious learners, who simultaneously observed the event via live simulcast in a location separate from the simulation setting.

2. All 100 participants completed a baseline nine-item, pre-simulation self-efficacy in communication during difficult situations scale (SECS1) within one month of the simulation experience, a second SECS (SECS2) immediately post-simulation, and a third SECS (SECS3) immediately following debriefing.

3. The within subjects’ variable was the nine-item SECS with three testing time points. The between subjects’ variable is the type of EOL simulation learning participants are exposed to, either vicarious or active.

4. Five research questions were explored using a quasi-experimental, cross-sectional, repeated measures design:

   1. What are the baseline perceived self-efficacy scale scores among pre-licensure nursing students?
   2. What are the differences between pre-licensure nursing students’ post-EOL simulation perceived self-efficacy scale scores, as compared to their pre-simulation experience self-efficacy scale scores?
3. What are the differences between pre-licensure nursing students’ post-EOL simulation perceived self-efficacy scale scores between groups, vicarious versus active learners, as compared to their pre-simulation experience self-efficacy scale scores?

4. What are the differences between pre-licensure nursing students’ post-debriefing perceived self-efficacy scale scores within groups, as compared to their post-simulation experience self-efficacy scale scores?

5. What are the differences between pre-licensure nursing students’ post-debriefing self-efficacy scores between groups, vicarious versus active learners, as compared to their baseline self-efficacy scores.

III. Conclusions
A. Vicarious learning provides an excellent alternative to traditional nursing simulation experiences. By observing relatable peers successfully perform in an active simulated scenario, vicarious learners have equal and sometimes even higher levels of improved perceived self-efficacy in performing the same tasks as those they observed while being acted out by their peers.

1. Following SECS1 There were no significant baseline assessment differences between groups, thus establishing an even baseline for later comparison.

2. Following SECS2 Within group findings for the total sample, along with within group findings among vicarious learners indicate that participation in the pediatric EOL simulation significantly improved the pre-licensure nursing students’ self-efficacy in provision of therapeutic communication during difficult conversations. Within group findings for the active learners revealed significantly improved perceived self-efficacy in six of the nine SECS items, leaving three items yielding no significant improvement in perceived self-efficacy.

3. There were no statistically significant differences between vicarious learners versus active learners on perceived self-efficacy scale scores between SECS1 and SECS2.

4. Statistically significant increases in self-efficacy scores were yielded from the post-simulation SECS2 scores to the post-debriefing SECS3 scores within both the total sample and for both the vicarious and active learner groups.

5. There was no statistically significant difference in post-debriefing self-efficacy scores between groups when compared to the participants’ baseline self-efficacy scores.

First Primary Presenting Author
Primary Presenting Author
Stephanie K. Barger, EdD, RN
University of North Alabama
Anderson College of Nursing and Health Professions
Assistant Professor
Florence, AL
USA

Author Summary: Stephanie K. Barger is an assistant professor of nursing within the Anderson College of Nursing and Health Professions at the University of North Alabama, where she has been full-time faculty since 2014. In December 2018, she graduated with her EdD in Instructional Leadership after successfully defending her dissertation on Vicarious Learning and
Perceived Self-efficacy among Pre-licensure Nursing Students during Pediatric End-of-life Situations. Dr. Barger has a clinical background in hospice and palliative care.

Second Secondary Presenting Author
Corresponding Secondary Presenting Author
Alice L. March, PhD, RN, FNP, CNE
The University of Alabama
Capstone College of Nursing
Professor
Tuscaloosa AL
USA

Author Summary: Dr. Alice L. March holds an earned PhD in rural nursing. Her undergraduate and graduate teaching experience includes lecturing and clinical supervision of generic and accelerated track pre-licensure nursing, and masters and doctoral student supervision on DNP scholarly projects and dissertation committees. Her grant writing has produced over $5 million in funding to support student scholarships. Dr. March’s research area is strategies to promote learning among nursing students, with a particular interest in simulation.

Third Secondary Presenting Author
Corresponding Secondary Presenting Author
Megan Lippe, PhD, MSN, RN
University of Alabama
Capstone College of Nursing
Assistant Professor
Tuscaloosa AL
USA

Author Summary: Dr. Megan Pfitzinger Lippe has been a registered nurse since 2009, and earned three degrees from the University of Texas at Austin. She has taught nursing students since 2011. Dr. Lippe’s research focuses on palliative and end-of-life care education. She also has developed and tested multiple high-fidelity simulations, including a withdrawal of care simulation. Dr. Lippe currently has multiple published works in areas related to end-of-life care education and simulation.