Unique Partnership and Pediatric Simulation Facilitates Learning for Students

The National League for Nursing (2012) reported that 42.1% of prelicensure RN programs identified a lack of clinical space for student learning experiences was a major barrier faced by nurse educators. Identification of pediatric clinical placement opportunities in hospital settings can be especially daunting; however, partnerships with other organizations interested in promoting health professions careers can result in meaningful learning experiences for all. Using high-fidelity simulators as the cornerstone of the learning experience allows students to practice nursing skills in a safe, fun environment, and a recent study conducted by the National Council of State Boards of Nursing revealed that high-quality simulation experiences can effectively substitute for up to 50% of traditional clinical hours (Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries, 2014).

Texas Tech University Health Sciences Center School of Nursing, a second-degree baccalaureate nursing program located in central Texas, collaborated with the local Texas Area Health Education Center East–Capital Region in a unique partnership to provide hands-on simulated learning experiences developed and implemented by nursing students for junior and senior high school students who expressed an interest in pursuing health careers. The goals were twofold: (a) to introduce the high school students to the nursing profession and the skills used in caring for pediatric patients and (b) to provide a pediatric clinical learning opportunity for the nursing students.

Scenario Development

To achieve these goals, 20 of 39 nursing students enrolled in the summer session pediatric course were divided into four groups. Each group of five students selected the age of the child and the diagnosis for which they would develop a scenario and hands-on simulation from options provided by pediatric faculty. The faculty created templates to guide the nursing students in identifying pertinent pediatric content and in developing the simulated learning experiences. Designing the scenarios required each group to learn about sensory development, communication and language development, social and emotional development, and assessment data, as well as the disease process for the selected pediatric patient. The nursing students also identified appropriate hands-on skills for the high school students to perform in caring for the child.

After developing the scenarios, the nursing students submitted the scenarios to the faculty for review and feedback. Final scenarios were then shared among the groups so that all four groups benefited by learning from each other. The scenario development process was designed to allow active engagement of the learners and to foster a collaborative learning environment, which are both important aspects of learning (Clapper, 2010; Knowles, 1980).

Simulated Learning Experience

Twenty high school students from 12 schools in the central Texas area participated in the Texas Area Health Education Center East–Capital Region Health Careers Summer Camp, which included a 1-day, hands-on, simulated learning experience with the nursing students. To start the learning activity, the nursing students provided an introduction to nursing and an explanation of the day’s activities. The high school students were divided into groups that rotated through all four pediatric simulations. The simulations included a 4-month-old infant with pertussis, a 5-year-old child who had a seizure while at camp and was transferred to the hospital, a 13-year-old girl with cystic fibrosis, and a 17-year-old young man who was critically injured while texting and driving.

The high school students learned about the disease processes, age-appropriate nursing care of the child in the inpatient setting, and nursing roles. They also learned and practiced skills such as vital signs, medication administration, starting intravenous lines, and basic life support on the high-fidelity pediatric patient simulators.

Feedback

Both groups of students were provided evaluation tools to assess their learning experiences. Sixteen of the 20 nursing students indicated that this experience assisted them in learning pediatric content and exceeded their expectations. The nursing students also commented on what they learned about working with adolescents during this experience.

When asked if they would recommend this type of learning opportunity for future cohorts, one nursing student stated, “Absolutely! It was a very rewarding experience, and I really enjoyed teaching the high school students. It caused me to reflect on my knowledge of skills and communication techniques.” Another nursing student stated, “Yes! It was awesome to create our own simulations. It really helped me to learn material.”

The high school students all indicated that they enjoyed these experiences and that they were useful in increasing their knowledge of nursing, caring for pediatric patients, and helping them decide on a career. When asked about the effectiveness of the presentation style, one high school student stated, “The simulations were well-organized, interactive, informative, and very fun!” Another stated, “The visual aids, hands-on training, and the nursing students sharing their experiences made it a really useful learning experience.”

This clinical activity satisfied 13 of the 45 required child health clinical hours. The 19 students who did not participate in the summer camp simulation completed an alternate activity that involved videotaping a developmental pediatric assessment and also received 13 pediatric clinical hours.

This creative experience met the goals for both the nursing and high school students and can be replicated by other nursing programs seeking pediatric clinical learning experiences. It is anticipated that the Texas Tech University Health Sciences Center School of Nursing will
continue to offer this learning activity as a component of the pediatric curriculum, allowing subsequent groups of students to develop their own scenarios for implementation.

References


Cady Clark, MSN, RN
Cady.clark@ttuhsc.edu
Laura Opton, DHSc, RN, CNE
Christy Weaver, MSN, RN, FNP-C
Texas Tech University Health Sciences Center School of Nursing

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