

Pediatric Simulation: A Non-traditional Simulation to Engage Nursing Students

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Author Biography

Samantha H. Bishop, EdD, RN, CPNP, CNE is a Nursing Professor and Director of Nursing at Gordon State College. She is a Pediatric Nurse Practitioner that teaches in the Maternal Child nursing courses in both associate and bachelors degree programs. She has been instrumental in the creation and evolution of pediatric simulation activities for both programs.

Gordon State College (GSC), nestled in a rural community south of Atlanta, is home to a nursing program with staunch tradition and a reputation for placing safe and effective nurses into the workforce. As the program has grown and expectations have changed, the faculty and students in the program must adapt to the ever changing academic and healthcare environment.

Nursing programs have two main components, the didactic component and the clinical component. The didactic component is delivered on campus in the classroom; the clinical component is delivered in a lab in the form of skills practice or simulation and in the healthcare setting.

In 2009, due to the rising demand of pediatric clinical practice sites for nursing students, a non-traditional simulation exercise was created and required of all students in their third semester of the associate degree nursing program. This exercise was created primarily for necessity, but it has grown to be a valued practice in both the associate of science in nursing (ASN) and bachelor of science in nursing (BSN) degree programs at GSC.



The original goal of the Pediatric Simulation activity was to increase the student's confidence level, improve critical thinking abilities, and to improve time management skills. Today the goal of the activity still incorporates the original goals but also includes goals such as prioritization and evaluation of patient care, improved clinical reasoning skills, utilization of information technology, and communication and collaboration with the healthcare team. These goals have expanded to allow students to build on the skills that they will need to function in the workforce as a Registered Nurse (RN).

Pediatric Simulation is required of all students in the third semester of the ASN program and the fourth semester of the BSN program. Each student is required to attend a four-hour simulation before attending a pediatric hospital clinical. The purpose of having simulation before clinical in the hospital allows the

students to become familiar with working with the faculty and to experience the nurse's role in a simulated environment before experiencing it in the actual acute environment.

This pediatric simulation is considered non-traditional because it lasts four hours and the students run a hospital as if they were working in the real hospital as RN's. Traditional simulation lasts about two hours and students work in groups to care for one patient. The high-fidelity pediatric mannequins have various medical conditions such as pneumonia, heart failure, gastroenteritis, and fractures. The pediatric patient scenarios change at a minimum of every two weeks to assure diversity in the student experience.

On the day of simulation, each student is responsible for one patient during the four-hour simulation. The student is required to formulate a plan of care for the patient based on the nursing process. The nursing process is an underlying theoretical principal used to train nurses to incorporate critical thinking and problem solving in the provision of care to patients. The student uses the electronic medical record to collect data about their patient. Nursing faculty are present during the simulation to assist students with the development and application of their nursing plan of care. This simulation is structured and includes a pre-conference and post-conference, student objectives and evaluation of the experience.

The GSC nursing students also collaborate with the local high school Career, Technical, and Agricultural Education (CTAE) Program to allow the high school students enrolled in the healthcare pathway to attend the simulation weekly to function as patient care assistants. Patient care assistants work with nurses in healthcare settings to provide patients care. The collaboration with the high school students as assistants allows the nursing students to experience teamwork that is required in the healthcare setting to improve patient outcomes. It also allows for the CTAE students to come on a college campus, participate in a college lab, and experience nursing care in a simulated setting.

This non-traditional simulated activity for nursing students that has evolved over the last twelve years allows nursing faculty a creative way to engage students, promote student success, and develop critical thinking and problem-solving skills while using multiple forms of technology and community involvement. Student evaluations of the simulation reveal that students prefer this type of simulation to traditional simulation and that it meets the goals of the activity. Over 80% of students report a rise in their confidence level after the simulation. Skills such as prioritization and evaluation of care, improved clinical reasoning, utilization of information technology, and team work have been identified as areas where the students gained experience that will help them function in the workforce effectively as a RN. Students report that their critical thinking and clinical reasoning skills improve because they are allowed time to think through problems by themselves and make decisions on their own with faculty support when required. Over 60% of students report help in the classroom because it helps them to apply theory with clinical practice when it comes to patient scenarios.

In summary, this simulation is an example of best practices within the University System of Georgia. The unique and multifaceted components of the simulation support nursing student success. After students experience the simulation their abilities to prioritize and evaluate patient care, clinically reason, utilize information technology, and communicate and collaborate with the health care team is improved and they can apply these skills in the actual healthcare setting post-simulation. This simulation activity has been incorporated at GSC for twelve years now and will continue to be part of the nursing curriculum. This type of activity requires heavy faculty investment and creativity. It also requires institutional support in order to provide the resources and funding for simulation labs, high-fidelity mannequins and information technology. GSC has been fortunate to have faculty, institutional and community investment that will allow this educational practice to be sustainable for the foreseeable future.