Simulation in Pediatric Nurse Practitioner Curriculum

Patricia Cecil DNP, APRN, FNP-C, CPNP-PC

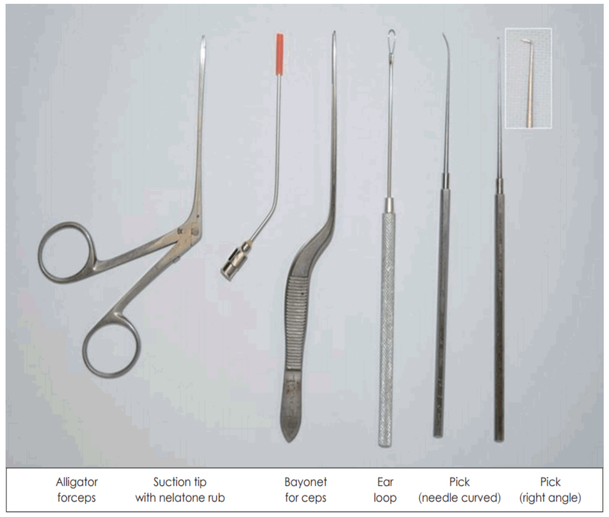
Purpose

•Improve knowledge of common Pediatric primary care office procedures.

•Increase the confidence of the Pediatric Nurse Practitioner in performing common Pediatric Primary Care Office procedures.

•Decrease the anxiety of students when caring for patients who require common Pediatric Primary Care Procedures

•Improve satisfaction of program curriculum



Background

•Simulation has proven to be an effective tool in nursing education. In a landmark study conducted by the National Council of State Boards of Nursing published in 2014, simulation in undergraduate programs could effectively replace up to 50% of traditional clinical hours without a change in clinical performance or national licensure pass rates(Hayden et al., 2014).

• The NCSBN also recommends having faculty dedicated to simulation implementation as well as a structured and theory based debriefing modality. Faculty should be specifically educated in debriefing theories and modalities.

Methods

•A needs assessment was performed with the Pediatric Nurse Practitioner Concentration Director to identify the gaps within the didactic/clinical requirements.

• Common Pediatric Primary Care Office Procedures simulation was developed to meet these needs and bridge the gap.

• Common Pediatric Primary Care Office Procedures simulation includes: foreign body removal from ear & nose, corneal abrasion, suture/staple removal & nursemaid elbow reduction.

•The Simulation, *A Day in the Office*, had students work through 4 patient scenarios, 4-5 students in each group moved from each simulated experience with a faculty facilitator.

•Facilitators led students in a process of care driven analysis of the scenario.

•Pre & post briefing was provided

•Student knowledge was evaluated pre and post simulation

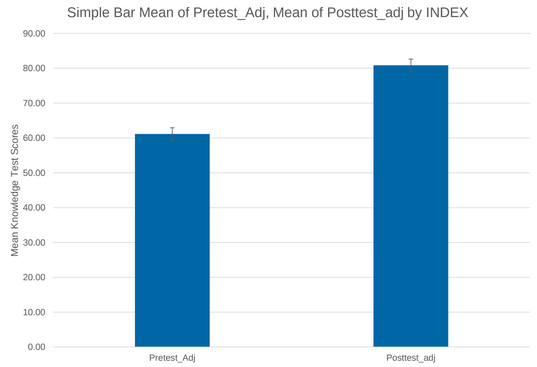
•Students completed the NLN Satisfaction with Simulation Scale, a 5 point Likert Scale

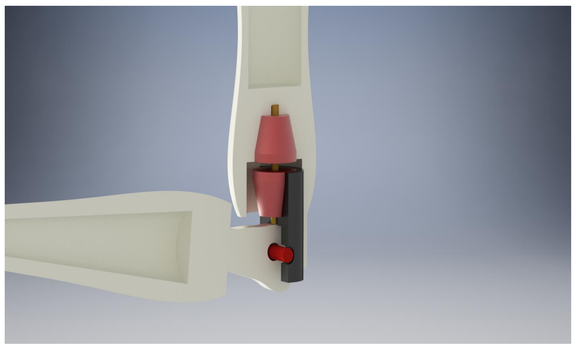
Results

Pre & Post Simulation Knowledge Assessments revealed nearly a 20 point improvement overall with an N=55. Average Pre Simulation Knowledge assessment score: 62.1. Average Post-Simulation Knowledge Assessment score 81.8

NLN Student Satisfaction and Self-Confidence Survey revealed:

- 95% of students agreed that the teaching methods used in this simulation were helpful and effective
- 98% of students strongly agreed or agreed that through simulation they had increased confidence levels in mastering the content of the activity.
- Having faculty to facilitate each simulation greatly improved their ability to understand indications and contraindications of procedures.





•Provisional Patent filed May 2019 K. Kompalli, C. Sargent, P. Cecil, S. Smith, T. Gore & J. Todaro, Task Trainer Nursemaid Elbow. Patent Pending.

Discussion

•Results of the project demonstrate that a simulation experience in addition to didactic content provides an effective mode of improving knowledge of common pediatric primary care office procedures.

•Students who have had the opportunity to perform common pediatric primary care procedures in a controlled, non-threatening environment are less anxious and more confident when in the clinical setting.

•A Day in the Office simulation provides a starting point for integrating simulation in the Pediatric Nurse Practitioner Curriculum, further development of ethical and controversial topics in Pediatric Primary care such as the vaccination debate, management of mental health and pediatric obesity/nutrition also present difficult topics to address with parents, thus simulation provides students with a safe environment to begin these discussions with an opportunity for reflection and learning.

•This project demonstrates both improved knowledge and confidence in performing common pediatric primary care office procedures. Given the increasing difficulty in placing students in quality pediatric clinical sites, simulation provides students with the opportunity to develop and master these skills.

Acknowledgements

Many thanks to Dr. Sharlene Smith and Dr. Teresa Gore, project supervisors for their unwavering support throughout this project. Gratitude and many thanks to J. Todaro and all the staff of the Simulation Center but especially to Koundinya Kompalli & Cory Sargent for their contributions to the creation of the Nursemaid Elbow. A special thanks to Dr. Susan Kennel for her assistance in simulation of the nursemaid elbow and Dr. Rebecca Lutz for her assistance in simulation of corneal abrasion & mentoring throughout the project.

UNIVERSITY OF SOUTH FLORIDA
A PREEMINENT RESEARCH UNIVERSITY