Oral Defense Announcement
University of Missouri – St. Louis Graduate School

An oral examination in defense of the dissertation for the degree
Doctor of Nursing Practice with an emphasis in Pediatric Nurse Practitioner

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B.S. in Nursing, May 2019, University of Missouri-St. Louis

Improving Pediatric Asthma Outcomes Through Pictorial Asthma Action Plans

Date: July 12, 2023
Time: 10:45 a.m. to 11:30 a.m.
Place: Room 2 - Seton Hall Lower Level

Abstract
Asthma is the leading chronic disease of children and leading cause of childhood emergency department (ED) visits, hospitalizations, and missed school days. Asthma action plans (AAPs) including photographs or pictures of asthma medications, symptoms, triggers, and devices have been found to improve parents’ understanding of their child’s asthma and has increased their comfortability level in providing care for their child. The purpose of the study was to ascertain if providing pictorial AAPs to children between the ages of 4 and 11 years old enhances the child’s asthma control and the child’s and their parent’s understanding of the child’s asthma treatment plan. The aim of the project was to improve asthma control test (ACT) scores by 3 points, reduce the number of asthma-related ED visits between March-May 2022 and March-May 2023 by 25%, and improve parents’ understanding of their child’s asthma management plan. The design was an interventional, pre-post study. The study had a mixed-method research design. The interventions included a pictorial AAP, ACT tool, 3-point Likert scale for statements regarding perceptions of the pictorial AAP, and a retrospective and prospective chart review. The setting for the study included a large, urban, primary care pediatric clinic, located in the city of St. Louis. The clinic had two different locations. This study used a convenience sample. Completion of the study included 18 participants. The ACT scores improved by a mean of 5 points. The ACT scores pre and post intervention were statistically significant (p=0.002). Although the reduction in ED visits was not statistically significant, there was a clinically significant reduction in ED visits. The pictorial AAP had a positive effect on the child and parent’s understanding of asthma management and improved the child’s asthma control, demonstrated by improved ACT scores, reduction in ED visits, and positive asthma perceptions and knowledge-based questionnaire responses. The pictorial AAP intervention may be a favorable standard, instead of the current standard AAP without pictures, to decrease asthma morbidity and mortality.

Defense of Dissertation Committee
Elise Schaller, DNP, MHA, APRN, CPNP-PC - Chairperson
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