

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 Acute Care Nurse Practitioner

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Improving Nurse Response to Seizure Events in the Epilepsy Monitoring Unit with Use of a Standardized Process

Date: July 9, 2024
Time: 3:30 PM
Place: 106 Seton Hall

Abstract

Problem: Nurses responding to seizure events in the pediatric epilepsy monitoring unit (EMU) should initiate a neurological exam in addition to managing seizure activity. When nurses respond to these events, however, there can be significant variability, which can result in diagnostic inaccuracy and adverse patient outcomes. The purpose of this project is to implement a nursing response checklist and neurological assessment guide to standardize the process of response to seizure events in the pediatric EMU.

Methods: This quality improvement (QI) project utilized a cohort study design. Standardized tools were placed in an accessible area outside patient rooms. Education was provided to nursing staff on how to use the tools. Nurses also received an emailed survey to assess confidence in the ability to respond to seizure events both before and after implementation of the tools. The primary outcome measure was nursing compliance with utilizing the checklists tools, with secondary outcomes of medication administration times and nursing confidence in responding to seizures. Data was collected through review of patient charts, review of video EEGs obtained, and answers to survey questions.

Results: Nursing compliance in utilizing the checklist tools during seizure events in the EMU was only 26.7%. The mean medication administration time for the post-intervention sample was 17.5 minutes compared to 20.7 minutes for the pre-intervention sample; however, this difference was not statistically significant. Additionally, there was no significant difference between self-reported nursing confidence between the pre- and post-implementation samples.

Implications and Recommendations: Future studies should focus on generating data from larger samples to determine the effect of standardized seizure response protocols on nursing response to seizure events and confidence in caring for patients with epilepsy.

Defense of Dissertation Committee

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