Abstract

Background and Purpose: This performance improvement project sought to evaluate the effects of a blended education program on improving nurse confidence managing seizures and performing neurological assessments in an epilepsy monitoring unit (EMU) on a pediatric medical/surgical unit.

Methods: This project utilized a 1-group pre-/post-intervention design of process improvement to determine if an evidence-based blended on-going education program resulted in improved nurse confidence performing neurological assessments and managing seizures in an EMU. The project was implemented in an EMU on a pediatric unit at a large urban academic medical center in the mid-Atlantic region. The intervention was presented to 42 pediatric nurses over a 12-week period using evidence-based EMU relevant educational resources and rapid-cycle deliberate practice (RCDP). The Nursing Assessment Rating Scale and the Student Satisfaction and Self-Confidence survey were used as measures to evaluated the effectiveness of the invention.

Results: A total of 42 nurses completed the project with a mean age of 31.9 years (SD 9.3). Statistical significance was demonstrated among the sample (n=42) in median nurse confidence scores (15.5 vs. 18, $P < 0.001$), median nurse satisfaction scores (20 vs. 23, $P < 0.001$), and median nurse self-confidence scores pre-to post-education (34 vs. 38, $P < 0.001$).

Conclusions: This performance improvement project found that a blended evidence-based education program, which contains EMU relevant resources and a hands-on RCDP scenario improved nurse confidence and satisfaction working in an EMU.

Implications: Determining the frequency of when to present the blended education program for the most beneficial outcomes will be an important next step. Sustaining the project and presenting short hands-on training sessions throughout the year that are efficient in terms of time and resources will be ideal. This project has further proved that continued educational opportunities can improve nurse confidence working in an EMU.

Keywords: Epilepsy monitoring unit (EMU), seizure management, neurological assessment, pediatric nurses, continued education