Preoperative Fluid Therapy to Decrease Postoperative Nausea and Vomiting in High Risk Populations: Practice Change Outcomes

Brandi Scarbrough Carmichael

Abstract
Postoperative nausea and vomiting (PONV) continues to be a negative complication that impacts patient satisfaction and potentiates unfavorable patient outcomes. Certified Registered Nurse Anesthetists (CRNA) are in a unique position to help alleviate this problem. However, CRNAs must be vigilant in utilizing evidence-based practices that decrease PONV and identifying patients who have increased risk factors for developing PONV.

For this doctoral project, an educational in-service on the use of preoperative fluid therapy to decrease PONV in high risk populations was held with participating CRNAs. This doctoral project’s main purpose was to evaluate CRNAs’ willingness to make a practice change after participating in the educational in-service. Also, the in-service increased the CRNAs’ knowledge on how to recognize patients that are at increased risk for developing PONV. Before the educational in-service was held, an informal needs assessment was conducted at the chosen facility. The needs assessment revealed that CRNAs as well as post-anesthesia care unit (PACU) nurses were still routinely treating PONV.

Participating CRNAs completed two questionnaires. The first questionnaire was administered before an educational in-service and the second questionnaire was administered 2 weeks later. A total of 18 CRNAs participated in the educational in-service and completed both questionnaires. Descriptive statistics was utilized to analyze the data gathered from the questionnaires.

Before the educational in-service was held, only 5 out of 18 (27.8%) participants indicated they currently used preoperative fluid therapy to decrease PONV. Two weeks after the educational in-service was held, 18 out of 18 (100%) participants indicated the educational in-service influenced their decision to use preoperative fluid therapy in their plan of care. Although the amount of times preoperative fluid therapy was used varied among the CRNAs, all 18 participants utilized preoperative fluid therapy in the 2-week time frame.