Evaluation of an Updated Maternal Severe Hypertension Recognition and Response Protocol

Date: July 6, 2022  
Time: 9:30 a.m. to 10:05 a.m.  
Place: 204 SCCB

Abstract

**Problem:** Hypertensive disorders of pregnancy are a leading cause of morbidity and mortality. An area of concern is the lack of women and infant departments who have a standardized approach for treatment of severe hypertension congruent with the American College of Obstetricians and Gynecologists (ACOG) recommendations.

**Methods:** A department with approximately 4,000 deliveries per year was the site for this quality improvement project. A descriptive observational design was used to evaluate the effect of an updated protocol on treating hypertensive events within 30-60 minutes. The protocol was updated by a maternal fetal medicine physician and a certified nurse midwife. Data was evaluated 3 months prior to and 3 months after implementation of the updated protocol.

**Results:** One hundred fifty-five patients met eligibility criteria and participated in the project. The relationships between program change and meeting the time to treatment goal was significant, $x^2 (1, N = 155) = 8.8, p = 0.003$. Variables shown to not have a significant relationship between program change were the average number of blood pressure readings to normalize per patient, the number of times the repeat blood pressure was met, and magnesium utilization.

**Implications for Practice:** Implementation of the updated protocol increased knowledge to staff and clarified notification to the house provider along with decreasing the percentage of severe maternal hypertensive events not treated within 30-60 minutes over a 3-month period. Updating the maternal severe hypertension recognition and response protocol resulted in improved practice to align with ACOG guidelines.

Defense of Dissertation Committee

Cathy Koetting, PhD, DNP, APRN, CPNP-PC, PMHS, FNP-C - Chairperson  
Charity Galgani, DNP, APRN, WHNP-BC  
Jennifer Kowal, MSN, CNM, WHNP-BC