

Title: Evidence-Based Strategies to Reduce Postpartum Hypertension and Preeclampsia Readmissions

Purpose and Rationale: Postpartum hypertension/preeclampsia (PHP) is a serious illness that may occur after delivery. Severe preeclampsia can escalate to eclampsia, which is life threatening, leading to seizures, strokes, liver failure, pulmonary edema, heart failure, or death (Sutton et al., 2018; Vilchez et al., 2016). This illness is responsible for a substantial number of preventable obstetrical readmissions. Advanced maternal age, Black race, obesity, and cesarean delivery are associated with a higher risk of PHP (Goel et al., 2015; Wen et al., 2019).

The purpose of this evidence-based practice (EBP) project was to reduce readmissions with PHP on a postpartum unit at an acute-care hospital in southern California following the IOWA Model (Iowa Model Collaborative, 2017).

Synthesis of Evidence: PHP within 12 weeks of delivery poses serious risks, including readmissions and death (Powles & Gandhi, 2017). Sociodemographic characteristics of nurses, including experience, and education levels, impact their ability to manage PHP (Reid et al., 2018; Sutton et al., 2018). The literature indicated that adherence to evidence-based strategies that enhance education led to decreased readmission rates (Lewis, 2020; Van Houwelingen, 2021). Readmissions can be reduced via nurse education initiatives (Morley & Levin, 2021; O'Leary et al., 2016). Additionally, the Joint Commission (JC) mandated a new standard to reduce morbidity and mortality due to PHP in 2019. The standard mandated that all hospitals in southern California provide role-specific education to all postpartum nurses.

Practice Change: Focused PHP assessment for all postpartum patients regardless of their risk was the first change. Patient education every shift and upon discharge emphasizing warning signs of the illness and when to seek emergency care after discharge was added in addition to following up with a phone call, three days after discharge, to inquire about the patient's understanding of PHP education and address any questions.

Implementation Strategies: Multifaceted strategies included an educational program following the new JC perinatal standard to educate all postpartum nurses about PHP assessment and complications, and to address continuing patient education. Patient educational handouts were created to inform and assess understanding of patients about PHP symptoms and complications. The policy was updated to mandate the implementation of this program during orientation and critical events training, and annually. The educational program was refined based on the unit nurses' feedback. This project is being replicated at a sister hospital.

Evaluation: Nurses' knowledge and EBP self-efficacy significantly improved after completing the education. 27 nurses completed the Postpartum Nursing Knowledge Teaching survey and the Evidence-Based Nursing Practice Self-Efficacy scale. After the education, knowledge increased with 100% (N=27) of nurses scored 100% in all areas including knowledge of JC new standard. There was a significant overall improvement in self-efficacy in using EBP ($\mu=73.51$ pre-education to $\mu=84.44$ post-education, $p<.001$). The follow up calls revealed 100% of patients received the education and understood when to seek medical help.

Conclusions and Implications for Practice: Creating sustainable methods to decrease PHP readmissions is imperative. Implementing a nurse education program with JC standard adherence improves quality of care, decreases readmissions with PHP, and reduces fatal outcomes.

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