Title:
Improving Maternal Outcomes by Implementing a Maternal Warning Tool for Early Recognition of OB Hemorrhage

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ACCEPTED

Session Title:
Maternal-Child Health Nurse Leadership Academy (MCHNLA)

Slot:
MCH: Sunday, 17 November 2019: 11:45 AM-12:15 PM

Applicable Category:
Clinical, Leaders, Researchers

Keywords:
Early Warning Tool, Maternal Child Health and Obstetrical Hemorrhage and Recognition

References:


**Abstract Summary:**

Despite the many research studies on maternal morbidity and mortality, women in the United States are being impacted by Postpartum Hemorrhage. Do nurses recognize and respond to maternal hemorrhage sooner when using a Maternal Early Warning tool compared to nurses who do not?

**Content Outline:**

**Introduction/Background:**

- Maternal morbidity and mortality nationally continues to be a growing concern throughout the United States.

- Nationally, from 2006-2015 maternal morbidity has increased as much as 45% as defined by 21 conditions and procedures of those 21 known conditions Postpartum Hemorrhage contributes to 11.5% of the adverse outcomes (Fingar, Hambrick, Heslin, & Brick, 2018)

- Nationally and locally, Postpartum Hemorrhage along with cardiovascular, noncardiovascular, and infection/sepsis continue to be the leading causes that contribute to maternal mortality and morbidity.

- Nationally, from 2006-2015 the amount of blood transfusions rose from 77.9 to 121.1 per 10,000 deliveries, which reflects a 54% increase (Fingar et al., 2018)

- The state of Indiana maternal mortality and morbidity rate rose from 34.9 deaths per 100,000 live births in 2016 to 41.4 deaths per 100,000 live births in 2018, which is above the national average of 20.7 deaths per 100,000 or by 50% (Americas Health Rankings, 2018)
Aim/Goal/Purpose:
The purpose of this Maternal-Child Health Nurse Leadership Academy (MCHNLA) project is:

- To review how implementing an early warning tool impacts nursing recognition when caring for maternal patients experiencing a Postpartum Hemorrhage.

Methods:

- Develop a multidisciplinary team
- Perform a literature review
- Obtain IRB and Performance Improve Committee approval
- Conduct baseline and pre and post education assessment related to nurses and physicians
- Create and Implement online education
- Create and implement tip sheets for each nurse as a reference
- Request Maternal Early Warning tool be added to the EMR as a SMARTPHRASE to use as a communication tool
- Work with unit leader to reinforce education and use of tool
- Retrospective Chart Analysis looking at the following quality metrics:
  - Time of delivery, cumulative blood loss (QBL), time second hemorrhage medications administered outside of 2nd bag of oxytocin administration (timing / type) if blood products received

Results/Anticipated outcomes:

- Increase nurses recognition of a postpartum hemorrhage sooner with using the early warning tool.
- Expedite the management and treatment of a PPH by administering PPH medication more quickly.
- Decrease the need of blood product administration.

Conclusion:

- The use of an Early Warning tool facilitates earlier recognition of early warning signs and management
- When using an Early Warning tool the need of a blood product administration will decrease
- Eventually, decrease incidence of postpartum hemorrhage which will ultimately decrease incidence of maternal mortality and morbidity.

Topic Selection:
Maternal-Child Health Nurse Leadership Academy (MCHNLA) (25199)
Abstract Text:

Introduction / Background: Despite numerous research studies, professional position statements and media coverage on maternal morbidity and mortality, women in the United States continue to be impacted by postpartum hemorrhage. The literature is clear, nationally and locally, postpartum hemorrhage is one of the top three causes that contribute to maternal mortality and morbidity. In the U.S. between 2006-2015 maternal morbidity has increased as much at 45% as defined by 21 conditions and procedures. Of these 21 known conditions, postpartum hemorrhage contributes to 11.5% of the adverse outcomes (Fingar, Hambrick, Heslin, & Brick 2018). In addition, during the same time frame, the amount of blood transfusions rose from 77.9 – 121.1 over 10,000 deliveries, which reflects a 54% increase (Fingar et al., 2018). Key elements of readiness, recognition, response and reporting are essential for interprofessional perinatal teams to improve maternal outcomes. Specifically, tools have been created to serve as early warning signs especially for postpartum hemorrhage such as the Maternal Early Warning Tool (MEWT) which if used properly and consistently offer an opportunity to address postpartum hemorrhage and improve maternal morbidity and mortality (Shields, Wiesner, Klien, & Pelletreau, 2017). This project was completed as a part of the Maternal-Child Health Nurse Leadership Academy (MCHNLA) with support from SIGMA and our program sponsor Johnson & Johnson.

Aim/ Goal/ Purpose: The purpose of this IRB exempt quality improvement project was to implement the Maternal Early Warning tool and measure how the tool impacts nursing early recognition when caring for maternal patients experiencing warning signs of a postpartum hemorrhage.

Methods:

- Develop a multidisciplinary team
- Perform a literature review
- Obtain IRB and Performance Improve Committee approval
- Conduct baseline and pre and post education assessment related to nurses and physicians
- Create and Implement online education
- Create and implement tip sheets for each nurse as a reference
- Request Maternal Early Warning tool be added to the EMR as a SMARTPHRASE to use as a communication tool
- Work with unit leader to reinforce education and use of tool
- Retrospective Chart Analysis looking at the following quality metrics:
  - Time of delivery, cumulative blood loss (QBL), time second hemorrhage medications administered outside of 2nd bag of oxytocin administration (timing / type) if blood products received

Results / Anticipated outcomes: The anticipated outcome is that nurse will recognize a postpartum hemorrhage sooner with using the Maternal Early Warning tool. Earlier recognition will help expedite the management and treatment of a post-partum hemorrhage by administering appropriate medication more quickly and a decrease in the need of blood product administration.
Conclusion: The outcomes of this project should suggest that the use of an Early Warning system facilitates earlier recognition of early warning signs and management which will in return decrease the need of a blood product administration, eventually decrease incidence of postpartum hemorrhage which will ultimately decrease incidence of maternal mortality and morbidity.