

# Oral Defense Announcement

## University of Missouri – St. Louis Graduate School

An oral examination in defense of the dissertation for the degree  
Doctor of Nursing Practice with an emphasis in Women's Health Nurse Practitioner

Layna V. Schultz

B.S. Nursing, Southern Illinois University Edwardsville, 2017

### Implementation of Quantitative Blood Loss Following Cesarean Section Birth

Date: July 9, 2024  
Time: 1:30 p.m. to 2:00 p.m.  
Place: Seton Hall

#### **Abstract**

*Problems:* Postpartum hemorrhage (PPH) is a significant problem due to potential harm and is a main contributor to maternal morbidity (ACOG, 2019). According to ACOG, of maternal deaths in the United States, 11% are caused by PPH and 54-93% of the deaths related to PPH could be prevented (ACOG, 2019). When institutions adopt quantitative blood loss (QBL) protocols for improved accuracy in blood measurement, PPH can be identified sooner, allowing for earlier intervention. Inaccurate estimation of obstetric blood loss by health care providers is a primary cause of delayed staff response to PPH (ACOG, 2019).

*Methods:* This quality improvement (QI) project used a descriptive, observational design. A pre-post-test design was used to assess documentation of cesarean birth PPH, QBL documentation, and demographic data among female patients undergoing cesarean section between February and April of 2024. The setting was a Midwestern, suburban hospital. The labor and delivery unit performs approximately 3,400 deliveries yearly and 1,200 of those are cesarean sections. A convenience sample of women ages 18 to 49 years old undergoing cesarean birth was used.

*Results:* In the pre-intervention group, 40 of 283 patients were found to experience PPH. In the post-intervention group, 62 of 330 patients were found to experience PPH. The rate of detectable PPHs increased from 14.13% in the pre-intervention group to 18.79% in the post-intervention group. Compliance with QBL documentation improved by 59.39% in the post-intervention group. The Chi-square test was not significant based on an alpha value of .05,  $\chi^2(1) = 0.29$ ,  $p = .592$ , suggesting that PPH in the pre-intervention and post-intervention groups could be independent of one another.

*Implications:* This QI project did not detect a statistically significant difference in PPH recognition in the pre- versus the post-intervention group. However, QBL remains the more accurate way of measuring blood loss after birth, and this may be supported by the data which showed a 4.66% increase in identified hemorrhage before and after implementation of QBL. This information indicates a clinically significant increase in identified hemorrhages following the intervention.

#### **Defense of Dissertation Committee**

Dr. Charity Galgani, DNP, APRN, WHNP-BC - Chairperson  
Dr. Sarah Jackson, DNP, APRN, FNP-C - Committee Member  
Dr. Jennifer Hawn, DNP, APRN, WHNP-BC - Committee Member