Training the Pediatric Post-Anesthesia RN to Care for the Maternal Fetal Patient

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Background Information:
The Boston Children’s Hospital (BCH) Maternal Fetal Care Center expanded surgical services to include interventions for fetuses of pregnant women. To ensure excellence in care for these patients within our institution, a need to provide training for our current pediatric Post-Anesthesia Care Unit (PACU) nurses in preparing and recovering the maternal fetal patient was identified.

Objectives of Project:
To develop and implement a training program for pediatric PACU nurses to ensure the delivery of safe and quality care to the maternal fetal patient.

Process of Implementation:
Nursing leaders created a PACU subject matter expert (SME) group of 11 nurses. All Maternal Fetal SMEs:
• Became Advanced Cardiovascular Life Support certified
• Completed the Association of Women’s Health, Obstetric and Neonatal Nurses Fetal Heart Monitoring education course
• Attended both maternal fetal simulation and live skills sessions

Multidisciplinary collaboration with BCH Immersive Designs Systems facilitated four simulation sessions. A specialized maternal fetal simulator was used to train staff on fetal monitoring, tocometry, obtaining fetal heart tone dopplers, and emergency response (Figure 1).

Additionally, resources were provided (Figure 2) and live skills sessions were held for the Maternal Fetal SME group:
• These sessions utilized pregnant volunteers to practice fetal monitoring, tocometry, and fetal heart tone dopplers
• A patient care scenario was developed to orient attendees on the maternal hemorrhage cart and response protocol
• Educational lectures on obstetric medication pharmacology and psychosocial support of the maternal fetal patient were also provided (Figures 3-6)

Leopold’s Maneuvers

First maneuver: to determine the part of the fetus in the fundus. Also helpful in locating the back. In the fundus:
Second maneuver: is to determine the part of the fetus presenting into the pelvis. The following maneuver gives us information about the gestational age.
Third maneuver: is to determine the degree of cephalic flexion and engagement—important for fetal monitoring because the fetal heart is heard best over the fetal head.
Fourth maneuver: is to locate the back, arms and legs. This is helpful in locating the fetus for fetal heart monitoring.

Figure 1. Simulation Skills Session

Figure 2. Resource Handout Provided to RNs at Skills Day

Figure 3. RN Applying Tocometry and Fetal Heart Monitoring Transducer During Live Skills Session

Figure 4. Live Skills Education Provided Rothafe

Figure 5. RNs Participating in Hemorrhage Cart Derby

Figure 6. Medication education

Statement of Successful Practice:
• After training, 100% of Maternal Fetal SMEs answered “Yes” to “Do you feel more confident in taking care of the Maternal Fetal patient?” in an evaluation survey.
• All participants were observed to demonstrate competency in live skills training. Maternal Fetal SMEs have provided safe and quality care for over 50 fetal intervention surgical cases.

Implications for Advancing the Practice of Peri anesthesia Nursing:
• This program created a safe and high-quality model of care for PACU nurses caring for the maternal fetal patient.
• It also strengthened the multidisciplinary communication and teamwork across multiple departments in the institution to better serve a vulnerable patient population.