“CODE LABOR”: An Evidence Based and Interdisciplinary Approach to Managing Women Experiencing Precipitous Labor Outside of the Labor and Delivery Unit

Abstract

Problem/Purpose. Precipitous delivery refers to childbirth that occurs within 3 hours of the commencement of labor. Despite the commonality of childbirth, precipitous deliveries can incite adverse obstetrical events that can result in poor obstetrical outcomes. The intent of the present work was to address a cohort (n=75) of obstetrical (OB) and emergency department (ED) nurses’ knowledge gaps regarding the care of women experiencing precipitous labor outside of the labor and delivery unit by introducing an evidence based and interdisciplinary organizational policy, “CODE LABOR”, and an OB assessment and care algorithm called the “CODE LABOR Care Pathway”.

Methodology. Pre- and post-educational surveys were conducted to evaluate perceived limitations and improvements in interdisciplinary communication and care of women experiencing precipitous labor. Using 12 sessions, OB and ED nurses (n=57) were presented with education specific to managing women experiencing precipitous labor outside of the labor and delivery unit while including concepts of interdisciplinary communication and teamwork. Evaluation of Hospital Consumer Assessments of Healthcare Providers and Systems (HCHAPS) reports, retrospective chart reviews of women who have experienced precipitous deliveries, and post-hoc interviews were conducted to evaluate patient satisfaction outcomes, neonatal indicators, and use of CODE LABOR policy.

Results. Using multi-variate analyses, pre-educational data revealed (a) moderate to well communication was felt to occur between the OB and ED nurses prior to the CODE LABOR education (\(\bar{x}=3.84\)), (b) the average ages of the research population were 31-40 years (\(\bar{x}=35.5\)) with an average level of nursing experience of 5-10 years (\(\bar{x}=7.5\)), and (c) 50.8% of participating nurses felt comfortable or neutral when caring for an obstetrical patient experiencing precipitous labor and delivery (\(\bar{x}=29\)). The pre-educational research was significant with a P-value of .005181.

Post-educational data revealed (a) feelings of interdisciplinary communication improved (\(\bar{x}=4.42\) on a Likert scale 1-5) and (b) the nurses’ overall level of comfort improved with 56.1% reporting very comfortable and 31.5% reporting comfortable (\(p=.00001\)).

While performing retrospective chart reviews, it was determined that 393 obstetrical clients presented to the emergency department for initiation of care during the project’s time frame. It was determined that nine women experienced precipitous labor and delivery (1.8%). Seven women delivered within 7 to 40 minutes after arriving to the labor and delivery unit and two deliveries occurred outside of the labor and delivery unit (0.5%). Post-hoc interviews revealed positive utilization of the CODE LABOR policy and the “CODE LABOR Care Pathway” 50% of the time. The CODE LABOR kit and precipitous delivery tray were transferred to the ED triage area instead of the ED trauma room. Retrospective chart reviews of the precipitous deliveries (n=9) revealed one
neonatal Apgar score below seven at 5 minutes after birth (11% below goal of Apgar scores of seven or greater at 5 minutes).

HCHAPS data specific to the OB unit were evaluated for process improvement related to patient experience as reported by patient observation. Criteria evaluated included nurse communication and likelihood to recommend the hospital to friends and family, a component of patient satisfaction. Published fourth quarter 2018 data disclosed an 84.3% satisfaction rate of nurse to patient communication and a 70.6% recommendation of the hospital to friends and family (n=17) (GRMC HCHAPS Inpatient Report, 2018). First quarter 2019 data revealed an 80.2% satisfaction rate of nurse to patient communication and 71.7% that would recommend the hospital to friends and family (n=10) (GRMC HCHAPS Inpatient Report, 2019).

**Implications for Practice.** Expertise and competence with obstetrical and emergency department settings are important. Incorporating evidence based practice by instituting an interdisciplinary institutional policy helps nurses increase their assessment skills, critical decision making processes, collaborative communication, and teamwork. The influence of the CODE LABOR Policy on the OB and ED units' cultures and patient outcomes is evident. Both clinical administrators and nurses of the OB and ED units must fully harness the guidelines set forth by the CODE LABOR Policy to continue to capture knowledge gaps and improve communication and teamwork. Continued dissemination and sustainability of the information will be maintained through the organization's internal learning management system. Practicing obstetricians will also be included in the education processes.