The Continuous Audit with Focus on Low-dose Oral Misoprostol to Lower the Caesarean Section Rate in Induced Women

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Introduction

This quality improvement project started by creating a continuous audit of the events and outcomes of labour and birth at Palmerston North Hospital, a secondary level Hospital in Palmerston North, New Zealand. The continuous audit has been shown recently to be a useful quality improvement tool 1. The data was stratified according to the internationally recognised Robson Ten Group Classification System (TGCS). The TGCS allows standardised comparisons of data, including C-Section (CS) rate and other maternal and perinatal outcomes, across units, countries and within the same unit at different timepoints 1,2-6.

Objectives

Through this process, it is possible to identify the subpopulations We aim to show how a new induction of labour policy driving changes in CS rates, and introduce quality improvement including low-dose oral Misoprostol has improved initiatives in order to lower the CS rate and improve other outcomes in order to allow the prospective continuous audit using the TGCS alongside other interventions, continue to maternal and perinatal outcomes1. benefit women birthing in our region.

Methods

This is a continuous, prospective audit. Data for all births were collected from January 2016. Analysis of the data compares outcomes before and after the introduction of an updated Induction of Labour policy, including low-dose oral Misoprostol, as well as monitors trends over time. The new protocol was introduced in March 2018.

Discussion & Conclusion

Our CS rates in induced nulliparous and multiparous women have fallen from 41% and 14.1% to 25% and 2.4% respectively. The continuous audit also helped to address other trends in an unwanted direction. For example, focused education helped lower sphincter tears in 2021 in induced nulliparous and multiparous women from 4.1% and 1.6% to 2.3% and 0% respectively.

Induced women in our hospital continue to have sustained lower rates of CS 4 years after the introduction of low-dose oral Misoprostol as an induction of labour agent. Without the advantage of the continuous audit and TGCS, we would not have been able to recognise important trends and direct interventions. We continue to see improvements in our CS rates amongst induced women and strive to provide women with equity of access to available induction protocols, not previously used in NZ.

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Results

Group 2A – Induced Nulliparous with Single Cephalic Pregnancy ≥ 37 Weeks Gestation

Group 4A – Induced Multiparous with Single Cephalic Pregnancy ≥ 37 Weeks Gestation