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OB Clinical
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Journal Article Presentation:

Title of Article:

Assessing the Effects of Age, Gestation, Socioeconomic Status, and Ethnicity on Labor Inductions.

Source:

Journal of Nursing Scholarship; 2007 3rd Quarter, Vol. 39 Issue 3, p208-213, 6p, 3 charts

Authors:

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Problem/Purpose:

“To evaluate the likelihood of cesarean births, related to race, ethnicity, socioeconomic status (SES), maternal education and age, and gestational status for labor inductions on primiparous and multiparous women.”

Design:

A retrospective descriptive correlation design.

It is difficult for the researcher to perform a true randomized study related to health risks to mom and baby and ethical issues. Instead, the researcher used a natural experiment: consider all women who were scheduled to be induced, for either elective or indicated purposes and compare those who delivered naturally.

Subjects:

N=1,325 scheduled for inductions

N= 578 primiparous group

N=114 elective inductions

N=204 inductions were indicated

N=260 those in the “natural” delivery group

N=747 multiparous group

N=214 inductions were indicated

N=191 elective induction

N=342 scheduled for induction but delivered spontaneously

These women that participated were scheduled for an induction. The setting that it took place was a large tertiary hospital in a southwestern U.S. state. The time from was between January 1-December 31,2005.

Results:

$p=.10$

- The mean differences were analyzed and from that information the researcher was unable to show statistically significant results. However, there was a correlation in both groups (Primi and multi) between induction and gestational age and ethnicity.
- Women are at higher risk for C-section the older they are regardless of whether its spontaneous or induced. 20 years is the lowest risk while it increases 1% after age 26
- Elective inductions showed no significant risk for C-section delivery in multiparous but significant risk for primiparous ($p < .01$).
- Mother's education level was a significant predictor for cesarean births, but only for multiparous women being induced, whether medically or electively → higher the education the more at risk they were for C-section with induction than those who delivered spontaneously.

“Age and gestation had nonlinear and significant associations with cesarean birth. Elective inductions for primiparous women significantly increased the likelihood of cesarean delivery. The independent effect of being a primiparous woman with an elective induction increased the probability of a cesarean birth by 50%, but this association was not significant for multiparous women. Mother's educational level was a significant predictor for cesarean births with multiparous women being induced. Ethnicity and SES did not increase the odds of cesarean delivery following labor induction for either primiparous women or multiparous women. Conclusions : Elective inductions for primiparous women increased the probability of cesarean births. Elective labor induction for primiparous women should be offered with caution, particularly for women with advanced maternal age.”

Conclusions:

The following research article showed that maternal age and newborn gestation have a significant affect on the probability that they mother will deliver by cesarean section. For primiparous women, the chances of a c-section delivery increased with induction.

Application to Practice:

I think that this article is very important to read because as a provider, we need to be aware of the risks and potential outcomes of the procedures that we do. As a nurse, we need to be informing our patients about the potential increased possibility of delivering via c-section once induced, especially those who are primiparous. I feel that this is an important fact, especially today, when labor inductions have risen 77% from 1989 to 1995.