Perinatal Outcomes of American Indian and Alaska Native Women in California State, 2005-2008

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OBJECTIVE: Few studies have focused on pregnancy outcomes among American Indian and Alaska Native (AI/AN) women. We sought to compare maternal and neonatal outcomes of AI/AN to Non-Hispanic white (NHW) women in a large cohort in California State.

STUDY DESIGN: This is a retrospective cohort study of singleton, nonanomalous gestations among AI/AN and NHW women in California between 2005-2008, using linked vital statistics and ICD-9 data. Chi-square and paired t-tests were used to compare perinatal outcomes between the two groups. Outcomes of interest included gestational age at delivery, birthweight, intrauterine fetal demise (IUFD), neonatal death (NND), infant death, preeclampsia, gestational diabetes (GDM), primary cesarean delivery, and postpartum hemorrhage (PPH). Multiple logistic regression was used to estimate adjusted odds ratios (aOR), controlling for maternal age, education, parity, prenatal care, insurance status, and tobacco use.

RESULTS: This was a large cohort consisting of 508,951 NHW women and 35,792 AI/AN women. Overall, AI/AN women had worse perinatal outcomes compared to NHW women. Being of AI/AN ethnicity was associated with increased rates of preeclampsia (3.16% vs. 2.56%, p-value < 0.0001), GDM (5.6% vs 4.44%, p-value < 0.0001), and PPH (3.35% vs. 2.67%, p-value < 0.0001). After controlling for key confounders, there was no significant difference in the risk of NND, but risk of infant death (between 29 days - 1 year of age) remained significantly elevated (aOR 1.52, 95% CI 1.22-1.90). Rates of low birthweight and being small for gestational age were also statistically elevated among AI/AN women.

CONCLUSION: AI/AN women continue to experience increased risks for adverse perinatal outcomes compared to NHW women. Of note, this includes actionable factors such as preeclampsia and GDM, which warrants further investigation and targeted interventions to potentially reduce inequalities in birth outcomes.

Screening for glucose intolerance during the immediate postpartum period in women with gestational diabetes

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OBJECTIVE: To determine whether a 2-hour Glucose Tolerance Test (GTT) administered during postpartum hospitalization can predict abnormal 6-12 week postpartum glucose testing.

STUDY DESIGN: A prospective cohort trial was performed at a single institution from February 2013 to April 2015. Women were included if they had gestational diabetes and at least 3 meals postpartum. Patients underwent an inpatient fasting 2-hour GTT on either postpartum days 1 through 4 and were instructed to follow up in 6-12 weeks for standard postpartum glucose testing. Testing was considered abnormal if the fasting value was >100 mg/dL and/or if the 2 hour value was >140 mg/dL. Baseline demographics were collected and descriptive analyses were performed. Sensitivity, specificity, positive predictive value (PPV), and negative predictive values (NPV) of the inpatient GTT to predict abnormal 6-12 week postpartum glucose testing were calculated.

RESULTS: Seventy-one of the 77 women enrolled in the study completed the inpatient GTT. The mean age was 34 years (+5) and mean pre-pregnancy BMI was 30 kg/m² (+8). Of the patients that