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Obstetric Interventions: Assessment of Differential Practices by Race/Ethnicity

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Presenter Information
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OBSTETRIC INTERVENTIONS: ASSESSMENT OF DIFFERENTIAL PRACTICES BY RACE/ETHNICITY

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Abstract:

Cesarean sections constitute approximately 30% of the over 4 million live births a year in the United States, and a rising number of primary cesarean sections contribute significantly to the overall rate. Studies suggest that the rate of primary cesarean section is disproportionately higher among non-white women, even when controlling for demographic, behavioral and medical risk factors. Our study investigates the interrelationships between racial/ethnic characteristics and obstetric interventions among low risk pregnancies. We included nulliparous women with full term, singleton pregnancies and fetus in vertex presentation who delivered at UMass between April 2006 and March 2011. We excluded non-live births, women with antepartum complications or pre-labor indications for cesarean, and cases with unspecified race or missing data. Our sample consisted of 4,483 subjects, of which 7% were black, 70% white, 4% Asian, and 17% Hispanic. 74% had spontaneous vaginal deliveries, 9% had operative vaginal deliveries, and 17% had cesarean sections. 40% of the indications for cesarean were related to fetal distress, 25% to first stage labor, and 34% to second stage labor. Average maternal age was 26.2, average BMI was 24.9, average birth weight was 3381g, and average gestational age at delivery was 39.7 weeks; there were no significant differences in these variables across racial groups. We examined racial/ethnic differences in mode of delivery (spontaneous vaginal, operative vaginal and cesarean) using logistic regression models while adjusting for maternal age, BMI, and birth weight. We found that Asian women were more likely than white women to undergo cesarean section compared with spontaneous vaginal delivery (OR 1.49, 95% CI (1.02, 2.17)). We also found that Black women were more likely than white women to undergo cesarean section compared with spontaneous vaginal delivery (OR 1.43, 95% CI 1.07, 1.91)). This may warrant further investigation of racial differences in risk adjusted primary cesarean rates.