

Assessing Disparities in Care Utilization and Outcomes Among Pregnant Women with T2D Based on Race and Ethnicity

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Background/Objective:

Disparities faced by individuals with type 2 diabetes (T2D) or gestational diabetes mellitus have been identified. However, because less is known about disparities faced by pregnant women with T2D and since the prevalence of T2D is increasing, we sought to investigate this issue.

Methods:

We performed a retrospective cohort study that included 369 women with singleton gestation and T2D that delivered from 2018-2020. Using maternal self-reported race and ethnicity abstracted from the electronic medical record, we categorized the women as Non-Hispanic White, Non-Hispanic Black, or Hispanic. Demographics, health care utilization, and maternal and neonatal outcomes were also abstracted. One way ANOVA and chi-squared tests were utilized to compare outcomes among the groups, and logistic regression was used to control for co-variables.

Results:

Non-Hispanic White and Non-Hispanic Black women had a higher BMI at their first prenatal visit and were more likely to be nulliparous. They were also more likely to have a prior caesarean delivery and chronic hypertension. Non-Hispanic Black women were more likely to have ≥ 12 prenatal visits compared to Non-Hispanic White and Hispanic women (70 vs. 43 vs. 45%, $p < 0.001$), and non-Hispanic Black women had the lowest early pregnancy HbA1c (7.0 ± 1.6 vs. 7.9 ± 2.1 vs. $7.5 \pm 1.7\%$, $p < 0.001$). Additionally, caesarean delivery rates were lowest for Hispanic women compared to Non-Hispanic White and Non-Hispanic Black women (45 vs. 63 vs. 71%, $p < 0.001$); this difference persisted after controlling for co-variables (aOR 0.53, 95% CI 0.30-0.92). Conversely, there were no differences in birth weight category, preterm birth < 37 weeks, hypertensive disorders of pregnancy, or NICU admission.

Conclusion and Potential Impact:

Pregnancies complicated by T2D have an increased risk of poor maternal and neonatal outcomes. For some outcomes, there is a significant difference among Non-Hispanic White, Non-Hispanic Black, and Hispanic women. Future studies are therefore needed to investigate causative factors and potential interventions.