Abstract

Disparities in 17-Hydroxyprogesterone Caproate (17OHP-C) Offer, Acceptance, and Uptake in Pregnancies at Risk of Preterm Birth

Background:
One of the clearest predictors of preterm birth is a history of preterm birth. The Society for Maternal Fetal Medicine (SMFM) recommends that women with histories of a spontaneous preterm birth be offered weekly 17-Hydroxyprogesterone caproate (17OHP-C) from 16-36 weeks in subsequent pregnancies. Health and healthcare disparities are prevalent in obstetrics, particularly in preterm birth outcomes; we sought to determine if disparities in 17OHP-C utilization exist.

Objective:
To study the offer and uptake of 17OHP-C in our institution over the course of 10 years to assess for potential differences that might inform effective interventions in the future.

Study Design:
We identified all women with spontaneous preterm deliveries who had subsequent births in our urban, academic medical center between 2005 and 2015 and reviewed details from the medical record. Our primary objectives were to evaluate whether 17OHP-C was documented to have been offered to and accepted by eligible women and to also assess the uptake of 17OHP-C. Furthermore, we sought to assess demographic differences among women documented to have been offered 17OHP-C versus those who were not, and differences in the number of doses received. Our secondary objective was to abstract patient experiences with obtaining 17OHP-C as documented by an obstetric provider, social worker, or nurse and explicate reasons the women missed doses via documentation by her providers.

Results:
265 women were identified who fit eligibility criteria. Of these, 105 women (39.6%) were offered 17OHP-C and 88 (83.8%) of those women accepted. The mean number of documented 17OHP-C doses among these women was 15.7 + 5.4. Women were less likely to be offered 17OHP-C if they had public insurance (adjusted odds ratio (aOR) 0.41, 95% CI 0.19-0.82) or if their earliest preterm birth was of greater gestational age (aOR for each additional week 0.87, 95% CI 0.80-0.94). Race and ethnicity were not predictors of offer or acceptance of 17OHP-C, however, non-Hispanic black women received 4 fewer doses on average than white women (95% CI -7.81, -.48). From the patient experience standpoint we identified recurrent themes that hindered acceptance and adherence to 17OHP-C, mainly insurance difficulties, unstable housing, lack of childcare, and job flexibility.

Conclusion:
Women at risk of preterm birth are more likely to be offered and receive 17OHP-C if they have private insurance and have had an earlier preterm birth. Non-Hispanic black women received less doses of 17OHP-C overall than white women. Further inquiry into the structural causes that lead to these disparities in care for women at risk for preterm birth is necessary.