

## Oral Session 10

### Research Study

Title: "Association Between Infertility Treatment and Post-Partum Depression in Women Participating in Pregnancy Risk Assessment Monitoring System (PRAMS)"

Claudette R. Barreto; Melanie Naranjo.; Pura Rodriguez; Marcia Varella, MD, PhD, MHS

Category: Obstetrics & Gynecology; Public Health

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**Introduction and Objective.** Background: Infertility treatment is associated with emotional stress for families undergoing such treatment. Thus, women who underwent infertility treatment could be at higher risk of developing post-partum depression. Considering the upward trend in the prevalence of postpartum depression, identification of potential risk factors for this condition is key for better diagnosis and prevention. Objective: To assess the association between infertility treatment and occurrence of postpartum depression

**Methods.** We conducted a secondary analysis of data from the Pregnancy Risk Assessment Monitoring Survey (PRAMS) years 2012-2021 (Phases 7 and 8). All participant women between 18-39 years old who answer questions about fertility were included. The independent variable was infertility treatment considered present if the participant reported receiving any fertility drugs or any medical procedures from a doctor, nurse, or other health care worker to help getting pregnant of the index child. The outcome was considered present if the women reported being told by a health care professional that she has post-partum depression. Potential confounders assessed included maternal age, race, and highest education level achieved, marital status, family income, health insurance status, maternal history of depression and smoking, plurality, presence of selected stressors, and length of neonatal stay in the hospital after delivery. Uni- and multivariate regression analyses were used to assess crude and independent associations. Stata v.16 was used to account for the complex survey design.

**Results.** Data from 66,665 women were assessed, of which, 2.2% had received some form of infertility treatment. Overall, 11.2% were diagnosed with post-partum depression. The odds of having post-partum depression in those who received infertility treatment was 40% lower than those who did not receive infertility treatment [Odds ratio (OR) 0.60, 95% confidence interval (CI) 0.45-0.80]. However, after adjustments, the association was no longer statistically significant (OR 0.92, 95% CI 0.62-1.36).

**Conclusions-Implications.** While post-partum depression is a prevalent health concern, our preliminary results suggested that women receiving infertility were not at higher risk of developing post-partum depression. Better characterization of the type and number of treatments attempted could provide a better understanding of the impact of infertility treatment on maternal mental health.

