

TITLE: Postpartum Mental Health Comparison Between Mothers Delivering Before and During the COVID 19 Pandemic

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BACKGROUND: Postpartum Depression has been known to be one of the most common complications in the postpartum period, affecting up to 1 in 7 women. With the onset of the COVID 19 pandemic and the stay-at-home order declared for the state of Florida on April 1, 2020, pregnant women were subjected to additional stressors of isolation and fear of the unknown.

OBJECTIVE: We are seeking to identify whether there is a change in maternal mental health for mothers who delivered during the COVID 19 pandemic.

METHODS: This study includes a retrospective chart review of mothers who delivered at Ascension Sacred Heart Hospital before (October 2019-March 2020) and during (May 2020-October 2020) the COVID 19 pandemic. The primary outcome compared the Edinburgh Postnatal Depression Scale (EPDS) scores between the two cohorts. Scores were collected within 48 hours of delivery, with a range from 0-30, and a result of 10 or greater indicating that depression may be present. Secondary outcome measures evaluated other markers of mental health in the antepartum period, including drug use, weight gain in pregnancy, and sexually transmitted disease (STD) rates. Inclusion criteria were patients who delivered via cesarean section or vaginal delivery at 36 weeks or greater with a documented EPDS score within 48 hours after delivery. Exclusion criteria included age less than 18 or greater than 45, deliveries before 36 weeks, fetal demise, or pre-existing depression as potential outcome confounders.

RESULTS: After applying the above criteria, our analysis included 153 women delivering before and 196 delivering during the COVID 19 pandemic. The rate of delivery via cesarean section during the pandemic was significantly higher with 35.7% compared to 20.3% before the pandemic ($P=0.0024$). In our study, the rate of depression during the pandemic was not significantly increased compared to before the pandemic, with values of 8.4% and 8.6%, respectively ($P=1$). The mean EPDS score was 3.66 during the pandemic and 3.65 before the pandemic ($P=0.97$). Drug use in pregnancy was also comparable between the two groups, with 15.8% usage in the COVID 19 cohort versus 22.2% usage in the pre-COVID cohort ($P=0.16$). The rates of STD transmission was not statistically significant with 15.3% acquisition during the pandemic and 13.2% before the pandemic ($P=0.67$). Weight change in pregnancy was also found to be similar, with a weight gain of 9.98 (+/- 7.25) kg during the pandemic compared to a gain of 10.16 (+/- 9.24) kg before the pandemic ($P=0.87$).

CONCLUSION: The results of this study do not demonstrate a negative impact on maternal mental health from the COVID 19 pandemic. Nonetheless, as worsening depression can lead to potentially detrimental long-term effects, it is important for healthcare providers to remain vigilant in screening and treating depression early.

References:

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