

# Impact of COVID-19 pandemic on mental health during pregnancy and postpartum: A cross-sectional study

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## Abstract

**Objective-** To determine the prevalence of peripartum depression (PPD) and anxiety during the COVID-19 pandemic, any differences between COVID-infected and non-infected mothers and its risk factors. **Study design-** Cross-sectional study. **Setting-** Tertiary care maternity hospital **Population-** Pregnant and postpartum women **Methods-** Questionnaire based direct interview. EPDS (Edinburgh postnatal depression scale) score, COVID-19 anxiety scale (CAS) was used. **Outcome measures-** Possible PPD (EPDS?13), Probable PPD (EPDS?14), Peripartum anxiety (EPDS anxiety sub score?4), COVID-19 related anxiety and risk factors of PPD. **Results-** Out of 842 eligible subjects, 142 were confirmed COVID-19 positive and 670 patients were without the infection. The mean age was 25±3.9 years and 571 (67.8%) subjects were postpartum. Among the subjects, 383 (45.5%) had possible depression, 317 (37.6%) had probable depression. Peripartum anxiety was observed among 763(90.6%) subjects and the median CAS score was 15(8-28). While there was no significant difference in the prevalence of PPD, peripartum anxiety was higher among COVID non-infected subjects (91.6% vs 86.6%, p=0.04). The CAS score was higher among COVID-19 infected compared to the non-infected [17(10-28) vs 15(8-25), p=0.00]. In multivariate analysis, history of psychiatric illness [OR- 4.2(95% CI- 1.82-9.93), p=0.001], domestic violence [OR-2.4(95% CI-1.16-5.10), p=0.019] and past obstetric complications [OR-1.5(95%CI-1.01-2.27), p=0.042] were significant risk factors for PPD. **Conclusion-** High prevalence of PPD was observed during COVID-19 pandemic without any significant difference between COVID-19 infected and non-infected subjects. COVID-19 infected patients had higher COVID related anxiety. **Funding-** None taken **Keywords-** peripartum depression; EPDS; COVID-19 anxiety scale.

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