

Season of Delivery and Postpartum Depression Symptom Severity

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Introduction. Previous meta-analyses suggest that the season in which a patient gives birth impacts the likelihood they are to develop postpartum depression (PPD). These studies find that patients who deliver in warmer seasons are less likely to develop PPD than those who give birth in cooler seasons. This study aimed to determine if the season of delivery has an impact on PPD symptom severity.

Methods. A retrospective chart review was conducted on all singleton deliveries at a single large academic medical center between 2020 and 2022 including data on demographics, details of delivery, and PPD symptom severity quantified by the Edinburgh Perinatal Depression Scale (EPDS) conducted at six-week postpartum visits. Patients who had fetal demise and patients without EPDS scores were excluded.

Results. Among the 2,364 included patients, approximately 30% of patients experienced symptoms of PPD (EPDS score >7); there was no statistically significant difference in symptom severity by season of delivery (summer: 27.6%, spring: 28.9%, fall: 30.8%, winter: 30.5%, $p = 0.59$). In a multivariate model controlling for age, smoking status, drug use, insurance, race, ethnicity, and preexisting mental health conditions, patients who delivered in winter months were 16% more likely to experience symptoms of PPD compared to those who delivered in summer months; however, this finding was not statistically significant (aOR 1.16, 95% CI 0.89-1.50).

Conclusions. The season in which a patient delivers does not impact their PPD symptom severity. However, the high prevalence of PPD throughout the year demonstrates the need to prioritize PPD symptom recognition and treatment.