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The Impact of Maternal Stressors & Adverse Childhood Experiences, on Mental Health Outcomes During Pregnancy

Abstract

Objective: Maternal mental health during pregnancy is influenced by complex psychosocial and early life factors. Understanding how a patient's current life stressors, adverse childhood experiences (ACEs), and sociodemographic background contribute to mental health outcomes can help with future interventions and resources for mothers.

Methods: A retrospective study was done for patients ($N = 150$) receiving obstetrics services at UMC Women's Health Clinic between 2017 and 2019. Patients were administered questionnaires screening for anxiety (GAD-2), depression (PHQ-9), trauma symptoms (PCL6), adverse childhood experiences (ACE), and current stressors. Statistical analysis was performed using SPSS. The statistical procedure conducted was linear regression. The criterion variable was transformed into a continuous variable by taking the sum of the results of GAD-2, PHQ-9, PCL6 adding 1 and computing the log of that sum. The predictor variables are the total ACES score, total maternal stressors score, and maternal age.

Results: Each regression model indicated significant results: GAD: $F(3, 146) = 17.78, p < .001, r^2 = .252$, PHQ: $F(3, 146) = 17.78, p < .001, r^2 = .208$, PCL: $F(3, 146) = 17.78, p < .001, r^2 = .402$. Significant associations were seen between each mental health measure and life stressors (GAD2 $p < .001$, PHQ9 $p < .001$, PCL6 $p < .001$). ACES were significantly associated with the PCL measure ($p < .001$).

Conclusions: The regression model shows that meaningful relationships exist between predictors and perinatal health. This indicates that both past adverse experiences as well as stress experienced during pregnancy are associated with poorer mental health in perinatal women. Current life stressors tend to be associated with symptoms of anxiety, depression, and trauma. ACES is significantly associated with trauma symptoms. Screenings for psychosocial stressors earlier in pregnancy may facilitate early identification and interventions aimed at improving perinatal mental health and care. Future research should examine how these factors may be related to physical health outcomes such as preterm deliveries or pre-eclampsia in the perinatal period.