

Identifying Protective Factors that Promote Perinatal Mental Health and Positive Birth Outcomes Following Adverse Childhood Experiences

River, Laura - University of Colorado Anschutz Medical Campus

Greisch, Catherine - University of Colorado School of Medicine

Shankman, Jessica - University of Colorado School of Medicine

Wolcott, Catherine - University of Colorado School of Medicine

Ashby, Bethany - University of Colorado School of Medicine

Objectives

Adverse childhood experiences (ACEs) strongly predict risk for perinatal mental health problems, as well as poorer birth outcomes and infant health (Madigan et al., 2017; McDonnell & Valentino, 2016). Positive, benevolent childhood experiences (BCEs), as well as therapeutic interventions to increase support and decrease stress during pregnancy, have been identified as protective factors that may reduce risk for perinatal depression among women with a history of ACEs (Narayan et al., 2018; Reuveni et al., 2021). However, limited research has examined whether the benefits of BCEs or therapeutic interventions extend to offset the impact of ACEs on pregnancy/birth outcomes that are significant for infants' physical well-being (e.g., prematurity and low birth weight). Moreover, pregnant women may face difficulty accessing effective therapeutic interventions in traditional settings (e.g., due to time/scheduling demands, limited availability of services, and lack of familiarity with resources). The current study examines tests the protective capacity of 1) positive childhood experiences (BCEs) and 2) integrated, accessible perinatal treatment for pregnant women with histories of childhood adversity. Specifically, the study tests whether these protective factors reduce the negative associations between ACEs and both pregnancy/birth and mental health outcomes.

Methods

The current study includes patients receiving integrated perinatal mental health care within a hospital setting, with services spanning behavioral health consultation, psychotherapy, and medication management. The sample includes 453 perinatal individuals who consented to inclusion in a research study and completed questionnaires about their childhood experiences and current symptoms prior to attending an intake appointment for individual psychotherapy or psychiatric evaluation between October 2021-November 2023. The study will be limited to individuals who completed intakes during pregnancy due to our focus on the impact of prenatal intervention on birth outcomes, with an estimated resulting subsample of 226 pregnant women. Participants completed the validated Adverse Childhood Experiences (ACEs) and Benevolent Childhood Experiences (BCEs) scales during pregnancy. Total ACE scores and childhood sexual abuse (CSA) in particular were both used as potential predictors consistent with findings in past research (e.g., Hardcastle et al., 2022). Medical chart review was conducted to extract the number of therapeutic contacts with the patient during pregnancy (including individual therapy, group therapy, consultation, or psychiatric evaluation/management); Edinburgh Postnatal Depression Scale (EPDS) scores at six weeks postpartum; pregnancy/birth outcomes including mode of delivery (vaginal or cesarean), preterm birth, birth weight, pregnancy-induced hypertension, gestational diabetes, pre-eclampsia, and HELLP syndrome; and demographic variables to be considered as possible covariates.

Results

Preliminary analyses were conducted using data from a subsample of participants (n=47), while chart review is still underway. The subsample was characterized by high rates of childhood adversity: on average, participants reported 3.17 ACEs (SD = 2.54), and 31% of the subsample had 5 or more ACEs. Participants were racially and ethnically diverse (42% identified as people of color), and predominantly low-income (40% were insured through Medicaid). Logistic regressions and chi-square analyses were conducted to examine the associations between total/overall ACEs and childhood sexual abuse (CSA) with outcomes. Overall ACEs, as well as CSA specifically, showed trending associations with low birth weight (Total ACEs: $b = -.41$, $p = .06$; CSA: $X^2 = 7.28$, $p = .03$). CSA was also associated with preterm birth (CSA: $X^2 = 4.81$, $p = .06$) and gestational diabetes (CSA: $X^2 = 4.81$, $p = .06$). These findings were observed even in a relatively small subsample. Once chart review is complete, we plan to test the associations between ACEs (overall and CSA) and pregnancy/birth and postnatal depression outcomes in the larger sample, as well as to test interactions between ACEs and protective factors (BCEs and number of therapeutic contacts during pregnancy) in predicting outcomes.

Conclusions

The current study has the potential to illuminate protective factors that can be harnessed to promote better perinatal mental health and birth outcomes among pregnant women with histories of childhood adversity. Once analyses are complete, this study will identify whether positive childhood experiences and accessible therapeutic intervention during pregnancy may benefit both maternal mental health and infants' physical health, with implications for best practices in screening to accurately identify women's levels of risk and resources as well as informing treatment that optimally supports families' well-being.

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Disclosures

None