Abstract

Childbirth is commonly framed as a joyful and transformative event, yet for many mothers it can involve real or perceived threats, loss of control, inadequate support, coercive care, or other forms of obstetric violence that contribute to childbirth-related post-traumatic stress disorder (CB-PTSD). Although PTSD and substance use disorder (SUD) are highly comorbid, limited research has examined how untreated CB-PTSD may affect maternal SUD treatment outcomes, return-to-use risk, and recovery during subsequent pregnancies. This study examines the prevalence and types of childbirth trauma among mothers enrolled in residential SUD treatment and explores associations between childbirth trauma, mental health diagnoses, time since trauma, subsequent births, and return-to-use outcomes.

A retrospective mixed methods analysis was conducted using electronic health records from a SUD treatment center in eastern Michigan. The sample included 100 mothers of children up to age 18 who were enrolled in residential SUD treatment between 2016 and 2026 and had their child or children with them during treatment. Qualitative open-ended responses from children's biopsychosocial histories were thematically coded to identify childbirth trauma indicators. Two certified SUD treatment providers independently coded obstetric violence indicators, compared results, and resolved discrepancies to strengthen validity. Nominal trauma codes were then used in quantitative analyses examining demographic characteristics, ICD-10 mental health diagnoses, time between first recorded traumatic birth experience and most recent residential intake, number of subsequent births, and return-to-use outcomes. Microsoft Excel was used for thematic analysis and data cleaning, and IBM SPSS Statistics for Windows, version 28, was used for descriptive frequencies and statistical comparisons.

Findings from this study are intended to clarify how childbirth trauma may shape maternal recovery trajectories in residential SUD treatment. By identifying patterns of CB-PTSD, co-occurring diagnoses, and recovery-related outcomes, this research may inform trauma-responsive screening, diagnosis, and care recommendations for SUD providers serving mothers with birth trauma histories, including programs not certified to provide Women's Specialty Services.