

Parental cannabis use during preconception and pregnancy: Longitudinal associations with infant birth outcomes.

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Introduction and Aims: Cannabis use is common in young adulthood and may continue into pregnancy, causing potential risk to early fetal development. Yet few longitudinal studies have examined patterns of cannabis use across this period, and potential impacts on infant birth outcomes. We examined the frequency of preconception and pregnancy cannabis use in parents, and the extent to which cannabis use in these periods predicts infant birth outcomes.

Method: Data was from the Triple B Pregnancy Cohort Study, a longitudinal study of pregnant women and partners in NSW and WA. The sample comprised 1,620 women and 820 partners. Cannabis use (current use = yes/no) was assessed at three months preconception and across pregnancy. Offspring birth outcomes were recorded from hospital records.

Results: The frequency of cannabis use in women was similar at preconception and in the early weeks of pregnancy (6.3% and 5.2%, respectively), decreasing after pregnancy awareness (3.5%). In partners, the frequency of cannabis use was similar at preconception and pregnancy (9.0% and 8.3%, respectively).

Regression analyses indicated that perinatal cannabis use in women was broadly associated with poorer infant birth outcomes. The strongest associations were identified with pregnancy cannabis use, with greater odds of low infant birth weight (OR = 5.24), small size for gestational age (OR=4.72), small head circumference (OR=6.33) NICU admission (OR=2.18), and prematurity (OR=3.85). Cannabis use in partners, however, was not associated with infant birth outcomes.

Discussion and Conclusions: Cannabis use among women in the preconception and pregnancy periods predicted an increased risk of poorer infant birth outcomes. Whilst associations were not observed in our sub-sample of partners, further research in partners with higher frequency cannabis use is warranted.

Implications for Practice or Policy: Results underscore the importance of public health messaging about the risks associated with cannabis use during the transition to parenthood, to reduce the harmful impacts of cannabis to parents and infant offspring.

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