

Characteristics, determinants, and frequency of persistent use among prescription opioid episodes initiated postpartum: a population-based cohort study from British Columbia, Canada

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Abstract

Objective: To determine the characteristics, determinants, and persistent use for prescription opioid episodes initiated postpartum in British Columbia (BC), Canada. **Design:** Population-based cohort, 2008-2015. **Setting:** Linked administrative databases including outpatient and inpatient visits and outpatient prescription dispensations for all individuals in BC tested for hepatitis C or HIV. **Population:** Opioid-naïve individuals aged 13-49 with a delivery hospitalization record. **Methods:** We used modified Poisson regression to estimate risk ratios (RR) for pre-pregnancy characteristics and adjusted RR (aRR) for delivery characteristics adjusted for potential confounders. **Main Outcome Measures:** All and persistent ([?]90 days) prescription opioid episodes initiated postpartum. **Results:** Among 292,684 eligible deliveries, 8.8% (95% CI: 8.7% to 8.9%) initiated a postpartum prescription opioid episode and 0.4% (0.4%- 0.5%) had a persistent episode. Persistent prescription opioid episodes were more frequent among cesarean vs. vaginal deliveries (1.0% vs. 0.2%, aRR 5.1 [4.6-5.8]). Opioid episodes varied regionally and declined from 12.8% in 2008 to 7% in 2012-2015. Persistent prescription opioid episodes were associated with pre-pregnancy: mental illness history (RR 2.4 [1.9-3.1]), psychotropic medication use (RRs 3.6-4.9), chronic pain (RR 2.7 [1.8-3.9]) and alcohol misuse (4.6 [2.2-9.7]), and delivery complications: intensive care unit admission (aRR 5.4 [3.3-8.9]), postpartum hospital readmission (aRR 3.9 [3.2-4.8]), and vaginal deliveries with hysterectomy (aRR 23.7 [6.1-91.8]) or tubal ligation/salpingectomy (aRR 14.6 [5.4-39.4]). **Conclusions:** Persistent prescription opioid episodes were initiated following 0.4% of deliveries. Postpartum pain management strategies should consider the strong associations between pre-pregnancy and delivery characteristics and persistent prescription opioid episodes initiated postpartum.

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