PERINATAL USE OF OPIOID AGONIST THERAPY IN ONTARIO, CANADA: A POPULATION-BASED COHORT STUDY OF TRENDS OVER A 12-YEAR PERIOD

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Background:
The increasing toxicity of Canada's unregulated drug supply has disproportionately affected people of reproductive age. We examined long-term changes in perinatal opioid agonist treatment (OAT) use for opioid use disorder (OUD) in Ontario, Canada.

Methods:
Our population-based cohort study of perinatal OAT dispensing included all deliveries ending in live or stillbirth in which the last menstrual period (LMP) occurred between January 1st, 2013 and December 31st, 2024. We determined incident and prevalent population-adjusted dispensing rates (per 100,000 pregnancies) and 95% confidence intervals (CI) for methadone and buprenorphine-containing products (i.e., buprenorphine/naloxone, buprenorphine monoproduct, buprenorphine injection) across eight 3-month intervals comprising the perinatal period from 3 months pre-conception, each trimester of pregnancy, and up to 12 months postpartum.

Results:
Among 1,359,824 pregnancies, 10,309 (0.8%) were exposed to OAT during the perinatal period. Most initiated OAT prior to conception (68.7%), followed by during pregnancy (15.9%) and 12-months postpartum (15.4%), with the majority receiving methadone (62.6%) rather than buprenorphine (37.4%). Prevalent methadone use remained constant across the perinatal intervals but decreased more than 50% over the study period. Prevalent buprenorphine use was lower and more variable across the perinatal period, with distinct declines during pregnancy, but increased over time. Methadone initiation was highest in the second trimester (26 per 100,000; 95% CI, 23–29) while buprenorphine initiation was highest in the first 3-month interval postpartum (24 per 100,000; 95% CI, 21–26); however, initiation of methadone and buprenorphine during pregnancy and post-

partum decreased over time. Most buprenorphine dispensations were for buprenorphine/naloxone, with ≤1.2% (N=119) of OAT exposed pregnancies receiving the injection and none the monoproduct.

Conclusion:
Approximately 1% of pregnancies are exposed to OAT. Continued efforts to expand equitable OAT access, reduce stigma, and support sustained engagement across the perinatal continuum are essential to improving outcomes for parents and infants affected by OUD.

Disclosure of Interest Statement:
Juurlink DN reports receiving fees for medicolegal expert opinion related to opioids. Gomes T reports consulting fees from Canada's Drug Agency, honoraria from Indigenous Services Canada, and contracts with the Ontario College of Pharmacists and the Auditor General of British Columbia unrelated to this work. Gomes T has also been paid for expert testimony in an inquest led by the Ontario Office of the Chief Coroner. No other competing interests were declared by co-authors.

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