The Incidence of Neonatal Opioid Syndrome has Increased Dramatically in Ontario in Past 2 Decades

Between 1992 and 2011, the annual number of infants diagnosed with neonatal opioid syndrome increased 15-fold, with the largest increase occurring between 2003 and 2011.

What does this mean?

- The incidence of neonatal opioid syndrome in infants rose from 0.28 per 1000 live births in 1992 to 4.29 per 1000 live births in 2011.
- 70% of women who delivered babies with neonatal opioid syndrome are prescribed opioids in the 100 days prior to delivery.

Policy Implications

- The Food and Drug Administration and Health Canada have implemented a ‘black box warning’ indicating that opioid use in pregnancy can result in neonatal opioid syndrome.

How do we know this?

The ODPRN conducted a retrospective, population-based study of all births between January 1, 1992 and December 31, 2011 in Ontario and identified 3086 infants diagnosed with neonatal opioid syndrome. Overall, the incidence of neonatal opioid syndrome increased from 0.28 per 1000 live births in 1992 and 4.29 per 1000 live births in 2011. Nearly half (n=930) of infants born with neonatal opioid syndrome in the last 5 years were born to 884 women who were eligible for publically funded prescription drugs at the time of delivery. Among these, 67% of women received an opioid prescription in the 1 to 2 years preceding delivery, 81% received an opioid between 1 year and 100 days prior to delivery, and 70% received an opioid in the 100 days prior to delivery. Infants born to mothers prescribed opioids in the 100 days preceding delivery had longer length of stay during the hospitalization where neonatal abstinence syndrome was diagnosed (median of 19 vs 10 days, p<0.001) and more outpatient physician encounters during the year after birth (median of 25 vs. 17 visits, p<0.001) as compared to infants born to women with no opioid prescription in the 100 days prior to delivery.


This Research Minute was created by the ODPRN.
The ODPRN is funded by the Ontario Drug Innovation Fund to respond rapidly and directly to policy-makers’ needs for relevant research.
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