

Background

Why is this important?

- Methadone maintenance therapy (MMT) is used to treat opioid use disorder. In Ontario, MMT is a recommended treatment for pregnant women with opioid use disorder.
- Little is known about the women who use this therapy throughout pregnancy and their outcomes.

What were we investigating?

- The study examined whether timing of methadone initiation for pregnant women impacted outcomes for the mother and baby shortly after delivery.

Key Points

- Most pregnant women with opioid use disorder initiated MMT prior to conception.
- Although the odds of key perinatal outcomes occurring shortly after delivery did not differ significantly based on timing of methadone initiation, women who started therapy later on in pregnancy were more likely to have their child removed by social services at the delivery.

Study Details

How was the study conducted?

- We conducted a population-based cohort study among female residents of Ontario between the ages of 16 to 50 who were eligible for public drug coverage and who were using MMT during pregnancy between April 1, 2005 and March 1, 2015.
- Women were stratified based on their timing of methadone initiation: 1) stabilized prior to conception, 2) newly initiated prior to conception, 3) initiation in trimester one, 4) initiation in trimester two, and 5) initiation in trimester three.
- We captured 6 primary outcomes as indicators of perinatal health: small for gestational age, preterm birth, congenital anomalies, severe maternal morbidity, Cesarean section, and induced labour
- We also captured 5 secondary outcomes that were specific to maternal opioid dependence: neonatal abstinence syndrome, admission to the neonatal intensive care unit, treatment for neonatal abstinence syndrome, removal from mother's custody at hospital discharge, and neonatal death.

For more information

Guan et al. [Impact of timing of methadone initiation on perinatal outcomes following delivery among pregnant women on methadone maintenance therapy in Ontario](#). *Addiction*, 2018.



What did we find?

- During our study period we identified 1,842 women who met our inclusion criteria.
- Overall, 68.5% (N=1,261) mothers were stabilized on therapy prior to conception, 19.2% (N=353) were newly initiated prior to conception and 12.4% (N=228) started therapy during pregnancy.
- Almost half of the mothers (N=907 of 1,842; 49.2%) were stabilized on therapy before conception and had continuous methadone throughout pregnancy.
- No significant associations were found between timing of methadone initiation and perinatal outcomes, with the exception of infants being discharged to social services. Increased odds of custody removal was observed in infants whose mother newly started methadone maintenance therapy before conception (aOR=1.92, 95% CI 1.18-3.09), in the first (aOR=4.19, 95%CI 2.27-7.53), second (aOR=3.70, 95%CI 1.64-7.74) or third (aOR=4.16, 95%CI 1.34-10.69) trimester compared to those stabilized on therapy before conception.

Recommendations

Policymakers

- Access to methadone maintenance therapy should be widely available for women with opioid use disorder who are pregnant, or are planning a pregnancy.

Clinicians

- Clinicians caring for women with opioid use disorder of reproductive age should provide methadone maintenance therapy as necessary.
- Additional care may be required for many of these women as perinatal outcomes captured in this study occurs at a higher rate in this cohort than those reported more broadly for Canadian women, suggesting that this is a vulnerable population.

Patients

- If you have an opioid use disorder and are planning a pregnancy or are pregnant, speak to your physician about treatment options.