

# Prescription opioid use in Australian women of reproductive age

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## Background

- Prescription opioid use in pregnancy has been linked to congenital malformations in infants and adverse perinatal outcomes.<sup>1</sup>
- The limited and conflicting evidence regarding the safety of opioids in pregnancy underscores the importance of the quality use of opioid medicines in women who might become pregnant.
- As around half of all pregnancies are unplanned<sup>2</sup>, prescription opioid use among women of reproductive age may result in exposure in unplanned pregnancies.
- Thus, an understanding of prescription opioid use among women of reproductive age is crucial.

## Objective

1. To examine trends in the prevalence and incidence of prescription opioid use in Australian women aged 15 to 44 years.
2. To estimate the number of calendar months each year that women were dispensed prescription opioids.

## Methods

- Retrospective cross-sectional study involving women aged 15 to 44 years using pharmaceutical dispensing claims for a 10% random sample of Australians between 2013–2020.
- We measured annual prevalence ( $\geq 1$  opioid dispensed) and incidence ( $\geq 1$  opioid dispensed with no opioid dispensing for prior 12 months) of opioid use by opioid type and age group.
- We determined the total number of calendar months in which an opioid was dispensed. The number of women in each category of duration (e.g., 1 month) was divided by the total number of women that had filled a prescription each year, and averaged across the study period.

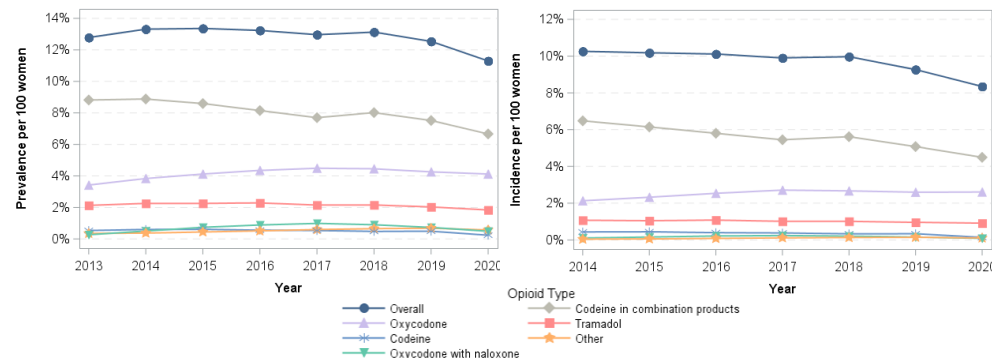
## References

1. Yazdy et al. *Prescription Opioids in Pregnancy and Birth Outcomes: A Review of the Literature*. *J Pediatr Genet*, 2015. **4**(2): p. 56–70.
2. Finer et al. *Disparities in rates of unintended pregnancy in the United States, 1994 and 2001*. *Perspect Sex Reprod Health*, 2006. **38**(2): p. 90–6.0

## Results

- On average, the prevalence of opioid use was 12.8% and incidence of opioid use was 9.7% each year.
- The prevalence decreased by 11.7%, while the incidence decreased by 19.4%.
- Codeine in combination products, oxycodone and tramadol were the most common opioids dispensed.

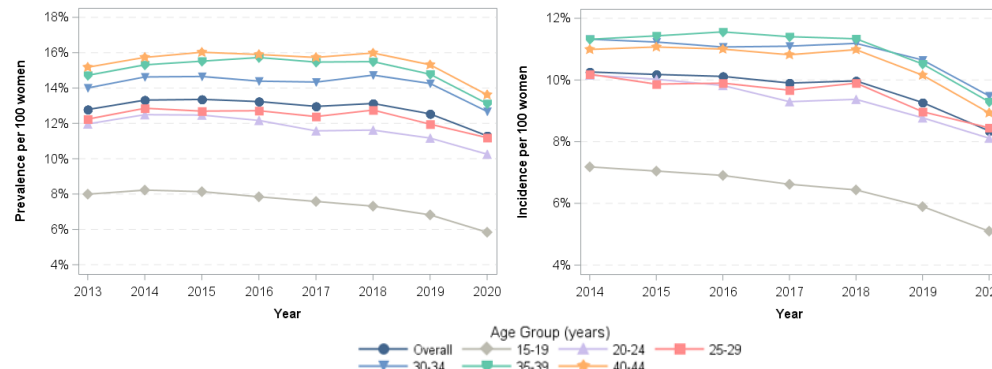
### Prevalence and incidence of opioid use among women aged 15 to 44 years by opioid type



\*Other opioids include buprenorphine, fentanyl, hydromorphone, methadone and morphine.

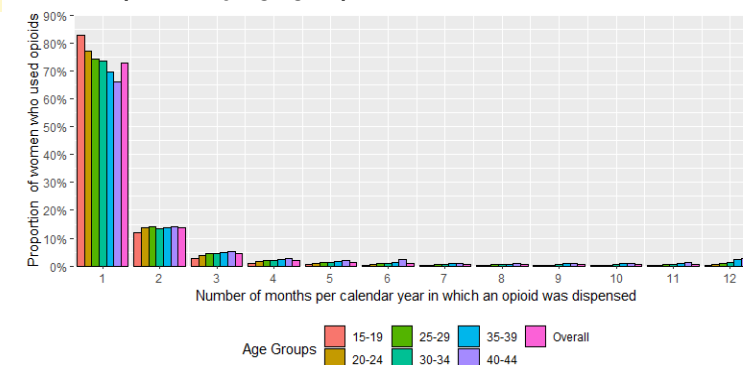
- The prevalence and incidence of opioid use was lowest in women the lowest birth rates (those aged 15 to 19 years) and high in women with the highest birth rates (those aged 30 to 34 years).

### Prevalence and incidence of opioid use among women aged 15 to 44 years by age group



- Among all women dispensed opioids, over two-thirds (72.7%) received an opioid in only one month a year.
- This short-term use was highest among women aged 15 to 19 years (82.7%) and lowest among women aged 40 to 44 years (66.0%).

### Total number of calendar months per year in which an opioid was dispensed by age group



## Conclusion & Impact

- Prescription opioid use remains common in Australian women of reproductive age which raises concerns about potential suboptimal quality use of medicines in this population, although the appropriateness of prescribing requires investigation.
- However, it is reassuring that the majority of opioid use is short-term, which minimises the risk of exposure overlapping with pregnancy.

## Disclosure

**Declarations:** SP is a member of the Drug Utilisation Sub Committee of the Pharmaceutical Benefits Advisory Committee. The views expressed in this paper do not represent those of the Committee. In 2020, the Centre for Big Data Research in Health, UNSW Sydney received funding from AbbVie Australia to conduct post-market surveillance research. AbbVie did not have any knowledge of, or involvement in, the current study. The remaining authors declare no conflict of interest.

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