

MI-CRE 2023 Annual Research Symposium and Policy Forum

Prevalence of smoking cessation pharmacotherapy use during pregnancy: a multi-national population-based study.

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Is Presenter an HDR Student? No

Has Research been submitted/presented elsewhere: Abstract without results has been accepted for a poster presentation at APSAD 2023 which will be held in Adelaide from 12 to 15 November 2023.

Abstract

Background and Aims: Significant evidence gaps exist regarding the pregnancy safety of smoking cessation pharmacotherapies, especially for the risk of congenital malformations. Consequently, professional bodies advise against varenicline, and bupropion use and recommend caution with nicotine replacement therapy (NRT) use. It is unknown how many women use these medicines during pregnancy. This study will quantify, across four countries, the proportion of women using smoking cessation pharmacotherapies during pregnancy, and during the first trimester specifically.

Design and Methods: All pregnancies that resulted in birth in New South Wales (NSW) between 2015-2019 were identified from routinely collected data sources. Records were linked to pharmaceutical dispensing records. We defined use of a smoking cessation pharmacotherapy during pregnancy as having at least one dispensing with days' supply overlapping the period from date of conception to childbirth. We calculated prevalence of use among all pregnancies, pregnancies with maternal smoking, and during the first trimester of pregnancy (11 weeks following date of conception). Analyses are currently being replicated using equivalent linked data sources from New Zealand, Norway, and Sweden.

Results: In NSW, the prevalence of prescription NRT use was 0.23% among all pregnancies, 2.4% among pregnancies with maternal smoking, and 0.14% during the first trimester. Use of varenicline and bupropion was even lower: 0.14% and 0.01% of all pregnancies, 1.2% and 0.1% of pregnancies with maternal smoking, 0.13% and 0.01% during the first trimester. Prevalence estimates from all four countries will be presented.

Conclusions: Few women used smoking cessation pharmacotherapies during pregnancy, and among those who did, NRT was dispensed more often, aligning with current recommendations.

Impact: Due to unknown safety, it is reassuring that few women in NSW use smoking cessation pharmacotherapies during pregnancy. Our findings indicate that pregnancy risk minimisation strategies are not currently required for these medicines.