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Prescription Opioid Use and Concurrent Psychotropic Drug Use During Pregnancy: A Population-Based Retrospective Cohort Study Utilizing Linked Administrative Data

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Introduction

It is important to investigate the use of prescription opioids during pregnancy to gain insight into the potential impact of maternal opioid exposure during pregnancy on children. We report the prevalence of prescription opioid use and concurrent psychotropic drug use in a large, Canadian population-based cohort of pregnant women.

Objectives and Approach

Using population-level linked administrative data from a universal health care system, this study included all women with a live birth in Manitoba from 1996 to 2014. Dispensing of opioids was determined from prescription drug data. Patterns of prescription opioids dispensed to pregnant women were investigated by demographic characteristics, region of residence, and socioeconomic status. Concurrent psychotropic therapies were also measured. These data address limitations associated with re-call bias, cilitate longitudinal analaysis, and allow the investigation of rare outcomes, difficult to study using other data sources.

Results

In a large population level sample of pregnancies (N=245,784), 2.43% of pregnancies were exposed to 2+ dispensations of opioids. An additional 4.95% of pregnancies recorded at a single opioid dispensation. Compared to women who were not dispensed any opioid prescriptions, the proportion of opioid exposed pregnancies who were also prescribed anti-depressants (SSRI/SNRI) was sevenfold higher (22.5% vs 3.05%). The same pattern was found for anxiolytics (37.2% vs 1.5%) and antipsychotics (3.5% vs 0.34%).

Conclusion/Implications

These data demonstrate high proportions of women were dispensed opioids during pregnancy. Further research should be

done on the short term and long term effects of these medications on infants and children. Moreover, these results highlight the need for further investigation into the effects of exposure to multiple psychotropic drugs



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