RADAR

Research Archive and Digital Asset Repository



Smith, L

Alcohol consumption during pregnancy and breast feeding in Canada is prevalent and not strongly associated with mental health status

Smith, L (2017) Alcohol consumption during pregnancy and breast feeding in Canada is prevalent and not strongly associated with mental health status, *Evidence-Based Nursing*

doi:

This version is available: https://radar.brookes.ac.uk/radar/items/aa4e0e1c-49c0-4aba-9bbb-02fe50d9bfe9/1/

Available on RADAR: February 2017

Copyright © and Moral Rights are retained by the author(s) and/ or other copyright owners. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This item cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder(s). The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.

This document is the postprint version of the journal article. Some differences between the published version and this version may remain and you are advised to consult the published version if you wish to cite from it.

Category: Midwifery

Study type: Quantitative- other

Author's declarative title: Alcohol consumption during pregnancy and breast feeding in Canada is prevalent and not strongly associated with mental health status.

Citation: Lang S, Quere M, Shield K, Rehm J, Popova S. Alcohol use and self-perceived mental health status among pregnant and breastfeeding women in Canada: a secondary data analysis. *BJOG* 2016;**123**:900-909.

Commentary

Implications for practice and research

- Healthcare practitioners need to be aware that women who stop drinking alcohol during pregnancy may resume drinking whilst breast feeding.
- Breast feeding women should be informed about the potential effect of ethanol on the baby.
- Longitudinal studies are needed to describe the trajectory and patterns of alcohol
 use in women of reproductive age from preconception through pregnancy and
 beyond.
- Teasing apart the correlates and determinants of different patterns of alcohol use preconception, during pregnancy and beyond would help to identify potential targets for intervention development and delivery, to improve maternal and infant health.

Context

Women are advised to avoid consuming alcohol whilst pregnant or breast feeding in guidance for alcohol consumption issued by various countries. Harm from excess drinking during pregnancy is well documented. In contrast less is known about the effects of fetal exposure to ethanol via breast milk. Little research has investigated patterns and predictors of alcohol consumption in women who are breast feeding. Understanding modifiable determinants of continued drinking may help identify key factors for designing and delivering interventions to change health behaviours of women of reproductive age to improve maternal and infant health and wellbeing.

Methods

The study aimed to estimate the proportion of women in Canada who reported drinking alcohol during their pregnancy and whilst breast feeding, and to investigate how women's rating of their own mental health was related to their alcohol consumption during these two periods.

Data for 18,612 pregnant women and 15,836 breast-feeding women from the Canadian Community Health Survey (CCHS 2003 – 2010) was combined for analysis. The CCHS is a large population-based cross-sectional survey gathering information from individuals aged 12 years or more living in private households in any one of the ten provinces and three territories of Canada. The study collected information on the frequency of alcohol

consumption during pregnancy, and whilst breast feeding and whether women rated their own mental health status as: excellent, very good, good, fair, or poor. Statistical models were used to investigate relationships between social-demographics, self-perceived mental health and alcohol intake during pregnancy and breastfeeding.

Findings

Around one in ten pregnant women and two in ten breast feeding women consumed alcohol. The vast majority consumed alcohol less than once a month, with consumption more than once per week between two to three percent during pregnancy, and six to seven percent during breast feeding. Women were more likely to consume alcohol during pregnancy if they were older, white, employed, with higher education and household income, not married, with "good" mental health and if they were binge drinkers during 12 months before pregnancy. For women who consumed alcohol whilst breast feeding, results were similar with two exceptions. Married women were more likely to consume alcohol and there were no striking patterns between mental health status and alcohol consumption. Prevalence varied geographically, with highest consumption in Quebec and lowest in Newfoundland and Labrador. Proportions of women who consumed alcohol during pregnancy was significantly lower in 2010 than 2003, but rates for breastfeeding women changed little over the same time period.

Commentary

This study found despite health messages to avoid alcohol consumption during pregnancy a significant proportion of women continue to do so in Canada. These results are consistent with overall global estimates for alcohol use during pregnancy, and considerably lower than the prevalence of around one quarter of women in Europe.³ The study showed the prevalence of alcohol consumption during pregnancy had decreased over the study time period, suggesting that health messages to avoid alcohol during pregnancy have been effective.

Another important finding was that even if women ceased drinking alcohol whilst pregnant many resumed during breast feeding. In addition, the proportion of women who do so stayed at similar levels over the study period. If reporting biases are similar for these two time periods, then this suggests that women's knowledge and attitudes towards drinking alcohol whilst breast feeding are different to their knowledge and attitudes about alcohol consumption during pregnancy.

The weak association found between drinking during pregnancy and mental health status is consistent with a UK longitudinal study.⁴ The absence of any links between mental health and breast feeding supports the need for further research to explore the current knowledge of midwives and women of reproductive age regarding alcohol use during breastfeeding to help identify targets for interventions to improve health and wellbeing of women and infants.

Commentator details

Name: Lesley Smith

Affiliation: Oxford Brookes University

Correspondence address: Oxford Brookes University, Faculty of Health and Life Sciences Marston Campus, Jack Straws Lane, Oxford, OX3 0FL, United Kingdom.

Email: lesleysmith@brookes.ac.uk

References

- International Alliance for Responsible Drinking (IARD). Available at: http://www.iard.org/policy-tables/drinking-guidelines-pregnancy-breastfeeding/ (accessed 3rd February 2017)
- May PA and Gossage JP. Maternal risk factors for Fetal Alcohol Spectrum Disorders. Not as simple as it might seem. *Alcohol Research & Health* 2011; 34(1):15-26
- 3. Popova S, Lange S, Probst C et al. Estimation of national, regional, and global prevalence of alcohol use during pregnancy and fetal alcohol syndrome. A systematic review and meta-analysis. *Lancet Glob Health*. 2017 Jan 13. pii: S2214-109X(17)30021-9. doi: 10.1016/S2214-109X(17)30021-9. [Epub ahead of print]
- 4. Leis JA, Heron J, Stuart EA, et al. Associations between depressive and anxious symptoms and prenatal alcohol use. *Matern Child Health J.* 2012 Aug;**16**(6):1304-11. doi: 10.1007/s10995-011-0892-8.

Competing interests

None