Introduction

A significant number of women continue to consume alcohol while pregnant, with rates in Australia estimated to be 37%4. Prenatal exposure to alcohol is associated with increased risk of birth defects, and poor developmental outcomes.

Choosing to drink alcohol once pregnancy is recognised is a different behaviour to drinking alcohol without awareness of pregnancy, and thus may be associated with different predictors. The period of pregnancy between conception and recognition is a unique period that warrants focussed study.

However, it is often unclear whether alcohol consumption prior to pregnancy recognition is taken into account. Retrospective studies may be deliberately or inadvertently prompting women to only report alcohol consumed once becoming aware they were pregnant, so may underestimate their consumption.

Results

Most women (n=884, 59.4%) drank alcohol between conception and pregnancy recognition. Table 1 shows adjusted comparisons between drinkers and abstainers. Drinkers overall were of higher SES backgrounds, older, more likely to be in their first pregnancy, more highly educated, more likely to smoke and use illicit substances, and less likely to have planned their pregnancies.

Table 1: Adjusted comparison of maternal characteristics of drinkers and abstainers

<table>
<thead>
<tr>
<th>Maternal age</th>
<th>Prenatal alcohol classification</th>
<th>Odds ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-24</td>
<td>Low</td>
<td>1.00 (1.00 - 1.00)</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>1.00 (1.00 - 1.00)</td>
</tr>
<tr>
<td></td>
<td>Heavy</td>
<td>1.00 (1.00 - 1.00)</td>
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Prevalence of drinking reduced to 19.4% following pregnancy recognition.

- 69.9% of drinkers ceased drinking.
- 18.3% reduced their alcohol consumption.
- 11.6% made no reduction to their alcohol use.

Method

Participants

Data were drawn from a prospective pregnancy cohort study, “The Triple B Study: Bumps, Babies and Beyond”. Pregnant women (n=1487) recruited from antenatal clinics at metropolitan public hospitals.

Measures

Women were asked about alcohol use during the first trimester (T1), with consumption recorded separately pre- and post-recognition of pregnancy. Measurements were standard drinks (S.D.; 10g alcohol per drink).

Participants were categorised into five levels of alcohol consumption using a composite method incorporating both frequency and quantity:
- "Abstinent" (no alcohol)
- "Low" (≤7 S.D. per week, up to 2 S.D. per occasion)
- "Moderate" (<7 S.D. per week, ≥2 to 4 S.D. per occasion)
- "Binge" (>7 S.D. per week, frequency of at least weekly)

Change in alcohol use from pre- to post-recognition pregnancy was classified either as cessation, reduction, or no reduction.

Conclusions

Fetal alcohol exposure early in pregnancy is highly prevalent when the period prior to pregnancy recognition is taken into account. Heavy or binge drinking during this time period was more common than low-level drinking.

However, most women reduce or cease their alcohol consumption after becoming aware of pregnancy.

Factors associated with women’s decision to cease, reduce or continue alcohol use included alcohol use prior to pregnancy recognition, maternal age, smoking status, illicit substance use.

Greater public education about the importance of abstaining from alcohol while planning a pregnancy as well as early detection of pregnancy would be beneficial.

References


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