

# Alcohol and Other Drug Use During Pregnancy: Exploring Rates of Detection and Intervention During Antenatal Care Visits

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## Background

Alcohol, tobacco and other drug use during pregnancy can increase the risk of harm to mothers and their unborn children. In antenatal clinics, universal screening is recommended to enable midwives to identify, intervene and facilitate appropriate referral. In practice however, a range of individual and structural barriers often prevent detailed examination of substance use behaviours from occurring.

## Aims

**Phase 1:** Assess screening rates during early pregnancy antenatal booking appointments, and compare rates of detection to a comparable benchmark.

**Phase 2:** Identify knowledge, beliefs and assumptions amongst midwifery staff that might play a role in affecting screening and detection rates.

## Methods

### Phase 1:

A retrospective case note audit (N=93) examined rates of screening, detection, and intervention for past and current substance use at the antenatal clinics of Modbury and Lyell McEwin Hospitals (SA). Self-reported use of alcohol, tobacco, e-cigarettes, cannabis, stimulants, and other drugs were extracted from cases of women who booked during July 2019 to September 2020. Rates of detection were analysed and compared to rates of self-reported use by women (aware of their pregnancy at the time) located within the Adelaide Primary Healthcare Network catchment as part of the 2019 National Drug Strategy Household Survey (Australian Institute of Health and Welfare; AIHW; 2020).

### Phase 2:

An online survey battery of standardised assessments of knowledge, attitudes and beliefs about substance use during pregnancy was administered to the midwives working on rotation in the antenatal services (N=20). The survey formed the basis of a Training Needs Analysis.

## Key findings

### Phase 1: Retrospective case note audit (N=93)

- Screening for past and current use more common among primiparous women (except current use of e-cigarettes)
- Screening less common for previous substance use (all women) than for current substance use
- Among those women screened, significantly lower rates of detection were found compared to benchmark:
  - 7.6% of women reported ever consuming alcohol (vs. 94.8% AIHW;  $p < .001$ )
  - 1.6% of women reported ever consuming e-cigarettes (vs. 16.5% AIHW;  $p = .001$ )
  - 2.9% of women reported ever consuming cannabis (vs. 46.7% AIHW;  $p < .001$ )
  - no women reported ever using stimulants; and opioids/sedatives (vs. 48.5% and 10.0% AIHW respectively;  $p < .001$ )
  - no difference in rates of ever consuming tobacco (35.1% vs 30.6% AIHW;  $p = .221$ )
- But no significant differences in reported levels of current use compared to benchmark



### Phase 2: Training Needs Analysis (N=20)

- Self-reported gaps in knowledge and confidence related to lower screening rates
  - No midwives reported routine enquiry into tobacco smoking (95% ask only if they suspect)
  - Misconceptions about risks of harm related to e-cigarette and tobacco use and abrupt cessation
- Modifiable beliefs about pregnant women who use alcohol or other drugs addressable through training
- Commitment to care for women who use drugs still high
  - Majority of midwives indicated that substance use disorders were preventable with appropriate care and support

"Nurses or Midwives who identify alcohol or other drugs early improve the chance of treatment success"

## Conclusions

### Phase 1:

Rates imply **selective**, rather than **universal** screening. Reported lifetime use significantly lower than benchmark (ex. tobacco), but prevalence of current use comparable. Necessary to improve rates of detection for lifetime use given the implications for potential relapse.

### Phase 2:

Range of self-identified gaps in knowledge and skills, misconceptions about use and dependence point to opportunities for intervention. Data from the tobacco and e-cigarette questions provide justification for standardised screening and assessment approach.

The findings support the need for systems reform, including the introduction of a standardised assessment framework for identifying and responding to substance use both during and prior to pregnancy, and training midwifery staff in its implementation. Better support and education is necessary to improve midwives' confidence in exploring and seeking information from women.