PREVALENCE OF DRUGS IN THE GENERAL POPULATION

Results from the 2013 National Drug Strategy Household Survey, AIHW
Guidelines for identification and management of substance use and substance use disorders in pregnancy

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Overview
These guidelines contain recommendations on the identification and management of substance use and substance use disorders for health care services which assist women who are pregnant, or have recently had a child, and who use alcohol or drugs or who have a substance use disorder. They have been developed in response to requests from organizations, institutions and individuals for technical guidance on the identification and management of alcohol and other substance use and substance use disorders in pregnant women, with the target of healthy outcomes for both pregnant and their fetus or infant.
Australian Guidelines

Summary

The adverse effects on fetal development of alcohol, tobacco and other substances such as psychostimulants and opioids are well known. Women who are pregnant or who may become pregnant are therefore a high priority for interventions to reduce substance use.

These clinical guidelines are intended to support a range of health care workers who care for pregnant and breastfeeding women with substance use issues, and their infants and families. The guidelines are based on the best currently available evidence, developed through a rigorous process in which international and Australian research literature was reviewed by experts and consensus achieved.

Related Link

Summary Document - Clinical Guidelines for the Management of Substance Use During Pregnancy, Birth and the Postnatal Period

File Link: Clinical Guidelines for the Management of Substance Use During Pregnancy, Birth and the Postnatal Period

File Size: 1386 kb

Type: Guideline

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Author: Mental Health and Drug & Alcohol Office
Prevalence Data substance use 2009, 2012 WCH

WCH CIS Data 2009 (2012) births 4700 (4957)
Smoking 15% (10.5%)
Substance use identified 3% (2.7%) pregnancies
  cannabis 1.8% (1.4%)
  opiates (OST) 0.8% (0.4%)
  alcohol 0.8% (0.9%)

HRIN’s 2012: 153
HRIN’s Substance use 2012: 42
Prevalence data
Hotham et al, ANZJOOG 2008

• ASSIST tool administered to 34.4% participated anonymous (WCH, LMHS)
• report significantly lower use than prior to pregnancy smoking 18.5%
  alcohol 11.8%
  cannabis 4.5%
  other substance use negligible
• Women with previous pregnancy loss significantly more likely to use tobacco, alcohol,
• First pregnancy independently associated with likelihood of ceasing alcohol use.
Patterns of use

All drug use, above sensible limits, carries risk. Adverse effects can result from drug use anywhere along a continuum of drug use patterns. Neither harm nor safety is a guaranteed outcome of any drug use.

**Experimentation**
Motivated by curiosity
Often in adolescence
Typically short-lived

**Social**
Intended to enhance social interaction or enjoyment of a recreational activity
With peers/friends
A range of drugs may be taken

**Situational**
For performance (i.e. endurance)
When specific moods or states are desired (e.g. alertness, pain relief)

**Intensive**
Regular use, extended period
Can become compulsive, dependent
Focus on drug of choice
Tolerance, withdrawal, drug seeking and using behaviours predominate

Patterns of drug use may change in either direction, be different for different drugs, stay stable, or cease from any point on this continuum.
ICD 10 Criteria for Dependence

- Dependence indicated if 3 or more of the symptoms are present in previous 12/12

- Did you have any strong desire or sense of compulsion to use *substance*? (‘craving’)
- Did you find it difficult or impossible to control your use of *substance*?
- Did you experience withdrawal symptoms after going without *substance* for a while?
- Did you use *substance* to relieve or avoid withdrawal symptoms?
- Did you increasingly neglect other pleasures or interests in favour of using *substance*?
- Did you persist with using *substance*, despite clear evidence of harmful consequences?
Talking about Substance Use

Pregnancy is a time of increased motivation to address lifestyle issues.

Clinicians generally are comfortable talking about smoking and impact on pregnancy outcomes.

Women expect to be asked about alcohol use in pregnancy.

Illicit substance use—any disclosed use ideally should be asked about at each visit.

Quantity and frequency questions for each substance.
Screening

> Early detection of substance use can lead to interventions which can benefit mother child outcomes

> Women generally not offended if questions asked in a neutral, non judgmental manner and if the benefits of reduction /abstinence are stressed.

> Universal screening for AOD use in pregnancy is recommended: it reduces the targeted screening, stigma and under identification of AOD use in pregnancy.

ANCD report identifying alcohol and other drug use during pregnancy outcomes for women their partners and their children.
ASSIST Lite Screening
Obstetric Risks

• Significant obstetric risks with licit and illicit substance misuse
• Increased abortion, premature labour, IUGR, placental abruption, fetal demise.
• Some substances teratogenic eg. Alcohol, Stimulants, benzodiazepines (high level use)
• Intravenous use past /current -risk BBVs.
• High prevalence hepatitis C amongst IVDU’s
• increased psychosocial risks and risks can rapidly change throughout pregnancy
Ante/Post-Natal Care
Late Presentation

• Low self-esteem
• Women can be very sensitive to reaction by staff
• Women may have lost children to child protection agencies and fear same
• Menstrual Problems (eg amenorrhoea)
• Mis-interpret signs & symptoms of pregnancy (nausea, headaches, fatigue could be withdrawal or a “dirty hit”)
Principles of Antenatal Care

• ENGAGEMENT !!!
• Non judgmental, professional, empathetic relationship
• aim to establish trust and maximize the likelihood of the mother committing to ongoing antenatal care
• Comprehensive drug & alcohol assessment - often obtained over time
• Info re risks associated with drug use
• Co morbidities - med eg BBV ‘s, psychiatric
Principles of Antenatal Care

- Continuity of care ante natal, birth, post natal
- aim to introduce PN services early
- Multi disciplinary team approach
- Case planning
- Maximise community supports
- Child protection issues, when to report
- Respect confidentiality
• Smoking

- Well documented harms associated
- Increased risk miscarriage, ectopic pregnancy
- IUGR, preterm delivery
- Increased risk SIDS
- Pregnancy is a good time for smoking intervention, highly motivated mothers.
- Provide brief intervention +/- NRT
Maternal alcohol consumption can harm the developing fetus or breastfeeding baby.

4A - For women who are pregnant or planning a pregnancy, not drinking is the safest option.

4B - For women who are breastfeeding, not drinking is the safest option.
FASD Fetal Alcohol Spectrum disorder

- Umbrella term describing range of prenatal alcohol exposure related disorders 2004
- Partial fetal alcohol syndrome (p FAS)
- Alcohol related birth defect (ARBD)
- Alcohol related neurodevelopmental disorder (ARND)
- Fetal alcohol syndrome (FAS)
Prevalence Alcohol Use in pregnancy

Most women reduce alcohol intake 45.5% or abstain 48% NDSHS, 2010.
NDSHS 2007 Abstinence rate 40%
Rates of high risk drinking 5+ drinks per occasion not declined over time (Cameron MJA 2013)

Predictors of alcohol use in pregnancy
Quantity/frequency pre pregnancy.
Violence /abuse in relationship
Older age assoc increased alcohol use.
High risk consumption associated with lower S/E status, single marital status.
FAS Prevalence

FAS birth prevalence AUS paed surv unit 0.06/1000 births = 0.004/1000 non indigenous births and 0.16/1000 indigenous births.

WA birth defect register + rural paed service 1980-1997 FAS 0.18 /1000 total pop (0.02/1000 non indigenous, 2.76/1000 indigenous).

> Leading cause of non genetic preventable intellectual impairment in USA.

Higher rates across indigenous populations.
FAS Prevalence

> Western Cape South Africa FASD rates 65.2-74.2/1000
> US rates vary 0.1/1000 Caucasians to 120/1000 isolated are British Columbia. Average rates 2-7/1000
> Indigenous Canadians 7.2/1000
> France 2.3/1000
> Italy FASD 8.1-14.8/1000

> 92% history of high level exposure to alcohol >4 sessions per week, > 5 binge sessions in first trimester. 75% exposed >1 drug + alcohol (Aus Paed Surv Unit)
Alcohol Treatment.

> Women drinking at harmful /dependent levels require priority access to treatment including inpatient detox
> DASSA Withdrawal Services admits to 28/40
> Admission to detox units in early pregnancy.
> >28/40 admission to obstetric facility for W/D management
> Anti craving drugs avoided
What Women Want to Know
Campaign FARE FRACGP, FRANZCOG

Women Want to Know was officially launched by FARE on 1 July 2014 in response to research which indicated that many pregnant women weren’t receiving much information, or were hearing conflicted messages, about alcohol consumption.

Most women visit a health professional when they are pregnant for advice on a range of health and lifestyle topics. These visits present the ideal opportunity to discuss alcohol consumption and reinforce that not drinking alcohol during pregnancy is the safest option.

However, some medical professionals are reluctant to discuss alcohol with women, often because they assume they are already aware of the risks, are concerned that women may feel uncomfortable, or unsure of what advice to provide and where to refer women if necessary.
Australian FASD Diagnostic Criteria

Professor Carol Bower from the Telethon Kids Institute and Professor Elizabeth Elliott from the University of Sydney thank members of the Australian FASD Collaboration, the Trial and Implementation Steering Group and Expert Review Panel, health professionals and families who have participated in the development, and staff who have worked tirelessly to develop the Australian FASD Diagnostic Instrument.

We also acknowledge the funding and support from the Australian Government Department of Health for the Australian FASD Diagnostic Instrument.
Cannabis

> Most used illicit drug
> Pregnant women report use to aid sleep, relax, manage mood anxiety induce appetite
> induces euphoria relaxation perceptual distortion cognitive/memory impairment
Withdrawal syndrome - anxiety, irritability, depressed mood, restlessness sleep disturbance
> Pregnancy- effect on foetal growth, no clear evidence tobacco use confounds, mild withdrawal syndrome
> potential developmental problems and
growth problems in children

> Risk ***Premature labour***
Case Jenny  G5 P3

> 26 year old in M.W care at hub clinic
> smoking 3 cones per day Hx preterm birth Same paternity
> StatedPx ondansetron for N7V
> Sons aged 7, 4 and 18/12. fulltime care abd never child protection issue
> A/N care progressing without incident until OGTT vomiting severe agitation vomiting t/f from to highly aroused and required large doses analgesia and sedatives to settle
> DASSA review following WAS presentation see at 29/40
> Reported daily use for 2 years in context grief.
Jenny

- Reported 5-6 per day, cyclical vomiting described stated she had ceased use.
- Presented to WAS at 31/40 with TPL
- Growth scan 51% ile
- In delivery suite very agitated vomiting behaviourly disturbed ++ showering
- Increased cannabis to 1G per day 10+ cones.
- Px low dose seroquel + diazepam + ondansetron
- Discharged after 24 hours
- Represented PROM footling Breech
- Delivered at 31/40, followed up ceased cannabis tapered meds, babe home 37/40
Cannabinoid Hyperemesis: A Case Series of 98 Patients
Douglas A. Simonetto, Amy S. Oxenterko, Margot L. Herman, and Jason H. Szostek

Abstract

Objective
To promote wider recognition and further understanding of cannabinoid hyperemesis (CH).

Patients and Methods
We constructed a case series, the largest to date, of patients diagnosed with CH at our institution. Inclusion criteria were determined by reviewing all PubMed indexed journals with case reports and case series on CH. The institution's electronic medical record was searched from January 1, 2005, through June 15, 2010. Patients were included if there was a history of recurrent vomiting with no other explanation for symptoms and if cannabis use preceded symptom onset. Of 1571 patients identified, 98 patients (6%) met inclusion criteria.

Results
All 98 patients were younger than 50 years of age. Among the 37 patients in whom duration of cannabis use was available, most (25 [68%]) reported using cannabis for more than 2 years before symptom onset, and 71 of 75 patients (95%) in whom frequency of use was available used cannabis more than once weekly. Eighty-four patients (86%) reported abdominal pain. The effect of hot water bathing was documented in 57 patients (58%), and 52 (91%) of these patients reported relief of symptoms with hot showers or baths. Follow-up was available in only 10 patients (10%). Of those, 10, 7 (70%) stopped using cannabis and 6 of these 7 (86%) noted complete resolution of their symptoms.

Conclusion
Cannabinoid hyperemesis should be considered in younger patients with long-term cannabis use and recurrent nausea, vomiting, and abdominal pain. On the basis of our findings in this large series of patients,
Great cannabis website National Canna

GP Toolkit

Resources for general practitioners.

If you don't ask about cannabis you could be missing something - GP pack

Over 200,000 Australians are currently cannabis-dependent. NCPIC has worked with industry experts to develop a cannabis toolkit for GPs and other health professionals. The kit encourages you to consider the symptoms your patient is exhibiting and the common side-effects of cannabis, in order to determine if the drug may be playing a role in their illness. So next time you see a patient with a chronic cough, depression or anxiety, ask yourself:
Methamphetamine
Basic Information

- **Methamphetamine** is a potent stimulant drug that comes in several forms: a **powder**, **Speed**; a **crystalline form**, **Crystal Meth or Ice**; and a **Base** form, resulting from poor conversion of methamphetamine oil to crystalline form.

- While the chemical composition of these three forms is the same, the potency varies, with **Ice** the strongest.
Prevalence

National Drug Strategy Household Survey suggests prevalence of methamphetamine use in Australia has remained stable since 2001 at around 2% of the population.

However, there have been significant shifts recently in the way methamphetamine is used that have created significant issues for users and the community.

Route of administration

- Smoke 54%
- Swallow 27%
- Snort 12%
- Inject 8%
Changing use:

• The number of methamphetamine users who prefer Ice over other types of methamphetamine has doubled, from (27% in 2007) and (22% in 2010), to (50% in 2013).

• There has also been a significant increase in smoking as the main route of administration, from around 20% of regular users to 40%.

• Other data show an increasing purity of Ice, from an annual average of 21% in 2009, to 64+% in 2015.

• The purity of traditionally lower-grade speed has also been increasing, from 12% to 37% between 2009 and 2013.

2013 National Drug Strategy Household Survey
National look at frequency of Ice use

- Once or twice a year 40%
- At least once a week 25%
- Every few months 14%
- At least once a month 20%

Frequency of use by Ice users

National Ice Action Strategy
## Symptoms of Withdrawal

<table>
<thead>
<tr>
<th>Time since last amphetamine use</th>
<th>Common symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days 1–3</td>
<td>Comedown</td>
</tr>
<tr>
<td></td>
<td>• exhaustion</td>
</tr>
<tr>
<td></td>
<td>• increased sleep</td>
</tr>
<tr>
<td></td>
<td>• depression</td>
</tr>
<tr>
<td>Days 2–10</td>
<td>Withdrawal</td>
</tr>
<tr>
<td></td>
<td>• strong urges (cravings) to use amphetamines</td>
</tr>
<tr>
<td></td>
<td>• mood swings (feeling anxious, irritable or agitated or feeling flat and lacking energy)</td>
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<td></td>
<td>• poor sleep</td>
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<tr>
<td></td>
<td>• poor concentration</td>
</tr>
<tr>
<td></td>
<td>• general aches and pains, headaches</td>
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<tr>
<td></td>
<td>• increased appetite (very hungry)</td>
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<tr>
<td></td>
<td>• strange thoughts, such as feeling that people are ‘out to get you’</td>
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<td></td>
<td>• misunderstanding things around you</td>
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<tr>
<td></td>
<td>• (eg seeing things that aren’t there)</td>
</tr>
<tr>
<td>Days 7–28</td>
<td>Most symptoms start to settle down, although common symptoms include:</td>
</tr>
<tr>
<td></td>
<td>• mood swings (feeling anxious, irritable or agitated or feeling flat and lacking energy)</td>
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<tr>
<td></td>
<td>• poor sleep</td>
</tr>
<tr>
<td></td>
<td>• cravings</td>
</tr>
<tr>
<td>One to three months</td>
<td>• return of normal sleep and levels of activity and mood</td>
</tr>
<tr>
<td></td>
<td>• major improvements in general health and mood</td>
</tr>
</tbody>
</table>
Methamphetamine and Pregnancy

- IV use associated with IUGR, premature labour, placental abruption,
- Risk of organ ischaemia in developing fetus
- Difficult to engage in treatment
- Comorbid depression common drug related psychosis.
- Use close to delivery may cause toxic neonate effects- overactivated, agitated.
Opioids in Pregnancy

- Licit and illicit opioid use present management issues in pregnancy
- Women on pain medications may need added reviews as analgesic needs vary as pregnancy progresses
- Anaesthetist review re analgesia options in labour
- Discussion regarding possible NAS for neonate (dose dependent)
- Illicit use presents many added challenges!
Heroin Use during pregnancy is associated with:

- Intrauterine growth retardation
- Placental abruption
- Premature labour
- Neonatal abstinence syndrome
- Increased infant mortality including SIDS
Methadone /Buprenorphine Maintenance Treatment

- First line treatment for opiate dependence in pregnant women
- Pregnant women should have priority access to maintenance therapy
- Opioid dependent partners should likewise have priority access to treatment
• Methadone Maintenance Treatment

- Methadone maintenance improves pregnancy outcomes. This improvement is reduced with continued heroin use during pregnancy.
- Dosing should be titrated to the individual with the aim to block withdrawal and suppress ongoing heroin use.
- Dose increases may be necessary as pregnancy progresses due to increased methadone metabolism.
- Heroin relapse during maintenance is an indication to increase dose.
- There is no clear dose response relationship between methadone and the risk of NAS.
Methadone Maintenance Treatment

> Co occurring use of other substances should be addressed during therapy
> Risk of severe NAS is more likely if neonate exposed to multiple substances eg benzodiazepines, heroin, cigarettes, THC etc
> Detox from opioids is not advised during pregnancy due to risks associated during withdrawal and the high rate of relapse following withdrawal
> If a pregnant woman insists on detox this should be attempted during 2\textsuperscript{nd} trimester
Methadone Maintenance Treatment

- Split dosing may used as pregnancy advances to prevent withdrawal in the mother.
- Split dosing also may have an advantage in stabilising intrauterine milieu narrowing the gap between peak and trough methadone concentrations.
- Dose adjustments following delivery may be required.
- Split dosing arrangements tapered back to single daily dose during hospital confinement.
- Breast feeding should be encouraged in all women.
Buprenorphine Maintenance

- Excellent alternative to methadone maintenance
- Partial agonist at mu receptor effective maintenance pharmacotherapy.
- Evidence suggests outcomes in pregnancy as efficacious as methadone. (methadone in use for decades)
- NAS rates in neonates similar to methadone however less morphine required to treat, shorter hospital stays
- Breast feeding encouraged
Benzodiazepines and Pregnancy

> Increased risk cleft palate, renal abnormalities with high level use.

> Neonatal abstinence syndrome which may be delayed Rx Phenobarb

> Sedation in mother – risks

> Management convert to diazepam and slowly taper during antenatal period aim for low dose or cessation by birth

> Breast feeding not recommended for doses >10mg diazepam equivalent.
Neonatal Abstinence Syndrome

• Onset 72hrs-2 weeks post birth

> depends on opioid type, (dose), when drug last consumed, gestational age, perinatal events, nutritional factors, neonatal disease/infections
> assess with Finnegan W/D scale
> approx 40% require pharmacotherapy
> baby treated with tapering dose of oral morphine
Drug and Alcohol Clinical Advisory Service (DACAS)

> 24-hour service for general practitioners and other health professional seeking advice in managing drug and/or alcohol affected patients with direct telephone access to a specialist drug and alcohol medical officer.

> Telephone: (08) 7087 1742
DASSA Obstetric Services at WCH and LMHS and FMC

- DASSA Obstetric Service based at Central DASSA Consultant, Clinical Nurse.
  Clinic WCH Wednesday am (Dr Woods clinic) M/W triage prior. WCH midwife
  Phone advice always available
  DACAS line 70871742

DIPS clinic at LMHS on Tuesdays DASSA Consultant and Obs Consultant
Visiting DASSA Nurse to FMC CLS consultant backup
Drug and alcohol services

There is a range of services available in South Australia for people who experience problems with alcohol and other drugs, which means there are many options for people with differing needs and treatment preferences.

Drug and Alcohol Services South Australia (DASSA)

Drug and Alcohol Services South Australia (DASSA) provides statewide alcohol and other drug treatment services.

- Contact Drug and Alcohol Services South Australia (DASSA)
- Drug and Alcohol Services South Australia (DASSA) publications and resources
- DASSA service activity and performance data
- Clinical information

Other substance misuse services and locations

SA Health contracts non-government agencies to provide a range of alcohol, tobacco and other drug services through the Specialist Drug and Alcohol Assessment and Treatment Services program.

Services and locations

For you  |  For health professionals

Aboriginal services and programs

More information about alcohol and other drug treatment services for Aboriginal
Substance misuse and dependence

Individual patterns of substance use range from occasional use, through to frequent and problematic use, to dependent use.

Many people who try illicit drugs do not become frequent users and many who become frequent users do not become dependent.

Multiple factors including availability of drugs, family and peer influences, and the environmental context contribute to decisions to initially try drugs. Once use has occurred, further factors contribute to the likelihood of developing dependence, including:

- environmental factors (cues, conditioning, external stressors)
- drug-induced factors (molecular neurobiological changes resulting in altered behaviours)
- genetic factors through traits such as response to drug use, personality, concurrent psychiatric disorders.

Dependence

Approximately one in four (23%) people who use heroin will become dependent. This is the
References

> National Guidelines Substance Use in Pregnancy… March 2006

> NSW Guidelines management Substance use in pregnancy 2014

> WHO Guidelines for the identification and management of substance use and substance use disorders in pregnancy 2014

> ANCD identifying alcohol and other drug use in pregnancy 2014