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Drugs & Alcohol use during Pregnancy

Winter Conference 2008
'Substance Use Across the Lifespan-
Evidence & Interventions'

Jenny Robinson

Thursday, 24.07.08

Effects Of Drug & Alcohol Use in Pregnancy



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

National clinical guidelines for the management of drug use during pregnancy, birth & the early development years of the newborn 2006



Important Points

- Engagement
- Acknowledge difficulty in discussing D&A issues
- Assess D & A use as early in pregnancy as possible [type, amount, route, frequency]
- D & A use does not occur in isolation from other factors

D & A use in Pregnancy



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- Heroin
- Benzodiazepines
- Alcohol
- Tobacco
- Cannabis
- Amphetamines
- Inhalants

Heroin – acute withdrawal in pregnancy, increased risk of:-



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- Spontaneous abortion
- Small for dates baby
- Fetal Distress
- Fetal Death In Utero
- Premature labour and delivery
- Infant withdrawal

Heroin - Options and consequences need to be explored for the woman to make informed choices:



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- To keep using heroin
- To stop using and “hang out”
- To detox with medication
- TO STABILISE ON METHADONE**
- (ONLY RECOMMENDED OPTION)
- buprenorphine



Buprenorphine ['Bup']

- Transfer from methadone to 'Bup', is strongly advised against, due to risk of precipitate withdrawal
- Available as sublingual tablet
- Long half-life: normally is given daily in pregnancy
- Partial opiate agonist: produces only a partial effect when it binds to opiate receptors in the brain

Pharmacotherapy



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- Methadone should remain treatment of choice for pregnant women
- Buprenorphine
- BUT if woman already on Buprenorphine, wishes to continue, & with informed consent OK during Pregnancy & Breastfeeding
- Suboxone** not recommended in preg

Suboxone



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Buprenorphine [subutex] & Naloxone [narcan]

-If injected causes severe withdrawal [naloxone]

-- NOT RECOMMENDED IN PREGNANCY

More community pharmacies favouring this, in preference to 'bup'. Associated with less problems with diversion

MANAGEMENT OF PHARMACOTHERAPY IN PREGNANCY



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- most women will need to increase their dose throughout their pregnancy
- a woman who is stable on pharmacotherapy, is addressing her drug use, linked into regular antenatal care and addressing her psychosocial issues = good pregnancy outcome



Benzodiazepines

- Health risks not clearly established
- Recommended transfer to a long-acting benzo [diazepam] & gradual dose reduction
- Chronic use during pregnancy may result in neonatal withdrawal
- Inconsistent reports of morphological problems [ie cardiac defects; cleft palate; inguinal hernia; small for dates]

Benzodiazepines effects on the infant initially may include:-



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- Hypothermia
- Poor feeding, poor suck
- Breathing problems
- Poor muscle tone

Benzodiazepine's- withdrawal symptoms, in baby, may include:



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- Tremors
- Hypertonicity
- Irritability
- Excessive sucking
- Vomiting & diarrhoea
- When combined with opiates, may cause a severe protracted withdrawal

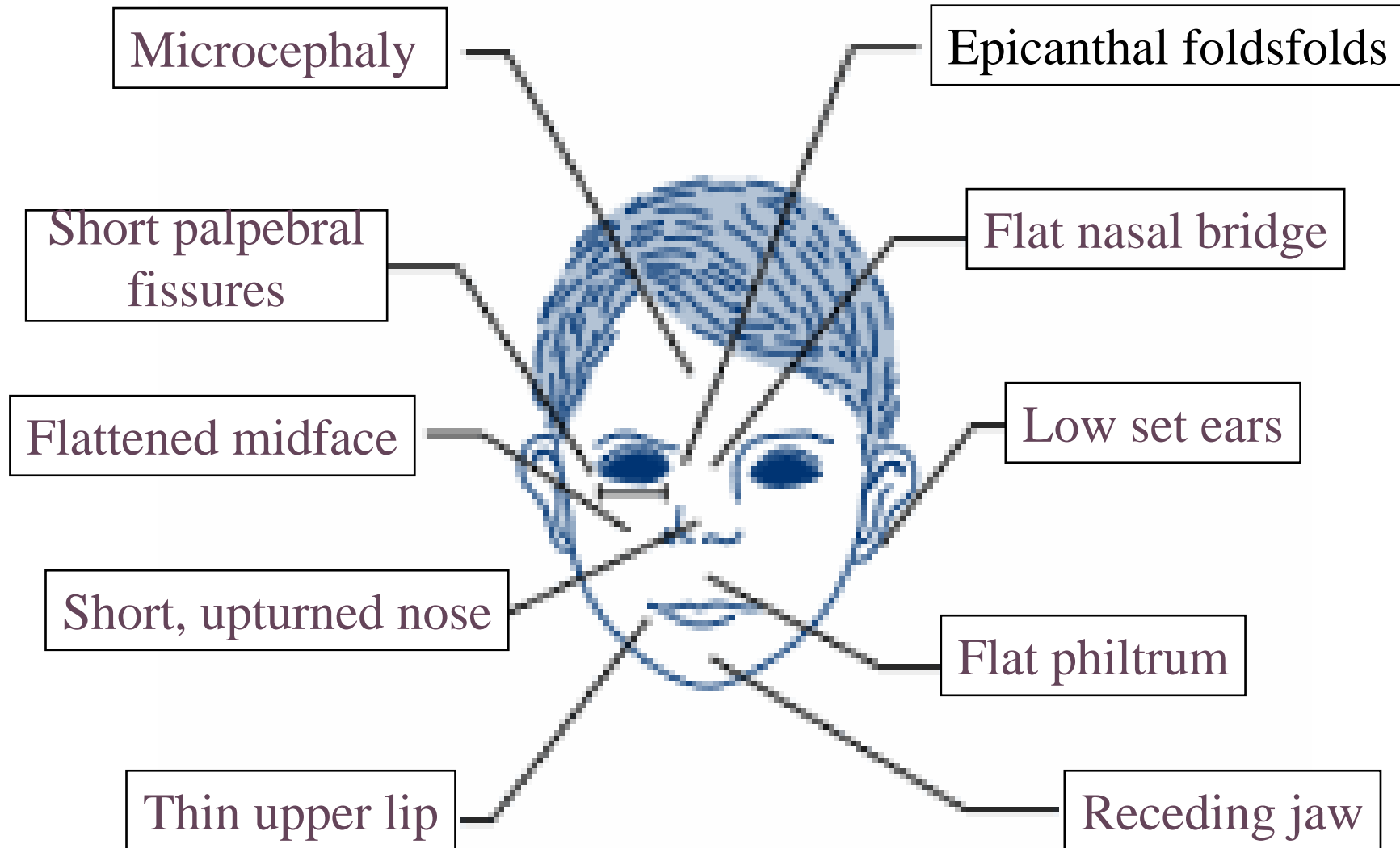
Alcohol- Fetal Alcohol Syndrome {FAS}



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- Severe deficits including CNS involvement, SGA & postnatal growth restriction, facial dysmorphism
- Concurrent cannabis use may increase risk of FAS
- 70% recurrence rate with other pregnancies

Facies in Fetal Alcohol Syndrome





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Alcohol- Fetal Alcohol Spectrum Disorder [FASD]



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- More common than FAS
- Partial or incomplete expression of alcohol's teratogenic effects
- May have the same neurological symptoms & behavioural challenges as children with full FAS

Alcohol & Pregnancy



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KNOWN TERATOGENIC EFFECTS

- Level of drinking which causes significant problems not known
- FASD
- FAS
- up to 5% of birth defects may be alcohol related - leading cause of mental retardation in USA



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Alcohol Use in Pregnancy

CURRENT NHMRC Guidelines

24.07.08.....

- Not drink more than 2 standard drinks in one 24 hour period
- Also recommended that you should have less than 7 standard drinks per week
- Should have at least two alcohol free days per week



Alcohol- infants exposed to excessive alcohol use



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- Should be observed & monitored for withdrawal for 7 days
- if mother intoxicated at birth , babe will withdraw 24-48 hrs post birth
- Supportive medication if indicated
- Assess signs of FAS
- Regular **specialist follow-up** in infancy & early childhood
- **ESPECIALLY 1st 6 months**, crucial early detection – early intervention

Tobacco



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Tobacco



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- Smoking reduces fertility in both men & women
- Dose related increased risk of cleft lip/palate
- Increased incidence of threatened & spontaneous miscarriage
- placental insufficiency assoc with low birth weight & preterm birth

Tobacco



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- Dose dependent association between smoking & placental abruption, & placenta praevia
- Increased risk of FDIU [highest risk over age 40]
- 3 fold increase in risk of SIDS

Pregnancy and Cannabis



- Effects similar to cigarette smoking ie: low birth weight, Small for Gestational Age infant, miscarriage, premature labour.
- No well described abstinence syndrome - increased activity, decreased sleep and feeding difficulties reported, often exhibited week 2

Pregnancy and Cannabis



Health risks not clearly established

- BUT may have some developmental affects
- attention/memory & cognitive functioning
- Sleep disturbances in 3 year olds
- Reduced memory & performance on verbal scales at 3yrs
- Reduced height at 6yrs
- Increased child hyperactivity, impulsivity & inattention at 10yrs

Pregnancy & Amphetamines



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- Less blood flow to uterus and placenta causing poor fetal growth
- Less oxygen & nutrient transfer to the fetus resulting in hypoxia, malnutrition & distress
- Hypoxia can lead to fetal heart enlargement
- Maternal hypertension associated with placental abruption



Pregnancy & Amphetamines

- No specific management options for stimulant withdrawal during pregnancy
- **Cessation of the drug is the only option**
- Counselling is vital.
- Management includes treating withdrawal symptoms as they occur



Inhalants- effects on fetus

- Little information available
- Contain toxic substances that maybe harmful to the fetus
- Nearly all inhalants cross placenta
- Maybe assoc with : increased risk of miscarriage, low birth weight, birth defects, SIDS

Inhalants



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- Cessation strongly recommended
- D&A counselling to assist
- Increased risk associated with polydrug use



Inhalants- care of infant

- An abstinence syndrome has been observed
- Excessive high pitched cry
- Poor sleep
- Hyperactive moro reflex
- Tremor
- Hypotonia
- Poor feeding
- Characteristic odour [pulmonary excretion of volatile substance]

Summary: impact of D&A use during pregnancy



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On Infant

Effects during pregnancy

- Teratogenic effects - alcohol
- Inconsistent case reports of deformations – amphetamines, benzodiazepines
- Prematurity, growth restriction, pregnancy complications – tobacco
- Vascular accidents – cocaine
- Effects secondary to maternal lifestyle and other health issues

Immediate

- Toxicity – narcotics, alcohol, benzodiazepines, SSRIs, amphetamines

On mother

IVDU- BBV's; vein damage, abscesses, liver damage, poor nutrition

Overdose- ABI

Alcohol- liver damage, poor nutrition

Summary: Impact of D&A use in pregnancy



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Long term

- Neurodevelopmental difficulties – alcohol (FAS, FASD)
- Effects on psychosocial development, learning, behaviour and susceptibility to addiction– chaotic caregiver lifestyle and behaviours, exposure to domestic violence, increased incidence of mental health problems may compound effects

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Antenatal considerations

Screening-maternal/fetal wellbeing

Dietetics referral

D&A counselling

Social work

SUPPORTS

DirectLine 1800 888 236

RWH Drug Information Line 03 8345 3190

WADS 03 9344 3631

www.thewomens.org.au/alcoholdrugservice

- **National clinical guidelines for the management of drug use during pregnancy, birth & the early development years of the newborn 2006**

Local Supports



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- Upper Hume Community Health Service [UHCHS]

- Wodonga VIC 3690
T: 02 6022 8888

- Central Hume Alcohol & Drug Service
[CHAODS]

86-90 Rowan St Wangaratta

5723 2000

www.ovensandking.org.au



Local supports



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- MCHN service - Enhanced Home Visiting
- Child First / Family Support