

# Drug Abuse During Pregnancy

3-10% of pregnant women use drugs such as cannabis, cocaine, ecstasy/amphetamines & heroin, (USA, 2003).

Can cause developmental problems, (mental and/or physical). Can cause withdrawal, There are also socio-economically related issues.

Most pregnant women who abuse drugs also use alcohol and tobacco (which also pose risks), so it is often difficult to determine which health problems are caused by a specific illicit drug.

# Cocaine

- Effects on the mother
  - **Early miscarriage-** Increased risk.
  - **Premature labour-** (<37 weeks) Women who use cocaine during pregnancy are around twice as likely to have a premature baby.)
  - **Abruption-** Increased risk of placental abruption which can be fatal for both.

# Effects on the foetus (1)

- **Brain damage** - Cocaine crosses the placenta and enters the baby's circulation. It is a powerful stimulant of the central nervous system and can cause irreversible brain damage or even death in an unborn baby. These problems appear more commonly in babies of women who use cocaine throughout pregnancy than in babies whose mothers stop using the drug in the first trimester.
- **Birth Defects-** Most babies exposed to cocaine prior to birth *do not* have a birth defect, but some studies suggest that they are at increased risk -- and the risk is greater when the mother has used cocaine frequently during the pregnancy. Birth defects associated with maternal cocaine use include abnormalities of the brain, skull, face, eyes, heart, limbs, intestines, genitals, and urinary tract

# Effects on the foetus (2)

- **Low birthweight-** The drug can reduce the supply of nutrients and oxygen to the developing baby, so the baby may be much smaller at birth than it would be otherwise, even if carried to full term. Low-birthweight (less than 5½ pounds) babies are 20 times more likely to die in their first month than normal-weight babies..
- **Small heads (and thus small brains)-** Cocaine-exposed babies also tend to have smaller heads, which generally reflect smaller brains. Probably related to this is the increased risk of permanent disabilities including cerebral palsy, visual and hearing impairment.

# Effects on the newborn baby (1)

- **Withdrawal-** Some exposed babies go through "withdrawal" from the drug. Many are very jittery and irritable, startled into crying at the gentlest touch or sound. They sometimes have feeding difficulties and sleep disturbances.
- **Unresponsiveness-** Consequently, these babies are very difficult to comfort and are often described as withdrawn or unresponsive. Other cocaine-exposed babies "turn off" surrounding stimuli by going into a deep sleep for most of the day. They may not do as well as unexposed babies on measures of motor ability, reflexes, attention and mood control, and they appear less likely to respond to a human face or voice. These complications may last 8 -10 weeks after birth.

# Effects on the newborn baby (2)

- **SIDS-** Some studies suggest that cocaine-exposed babies have a greater chance of dying of sudden infant death syndrome (SIDS). However, other studies suggest that poor health practices that often accompany maternal cocaine use (such as use of other drugs) also may play a major role in these deaths.
- **Breastfeeding-** Cocaine crosses over into breast-milk in significant quantities. Its effects on the baby continue to be harmful. If a mother cannot stop using cocaine, she is advised to bottle-feed.

# Effects on the older child

- **Low intelligence –( perhaps)-** Some studies suggest that most children who are exposed to cocaine before birth have normal intelligence. However, others suggest that it may lower IQ levels. A 2002 study found that cocaine-exposed 2-year-olds were twice as likely as unexposed children from similar socioeconomic backgrounds to have significant delays in mental development.
- **Emotional and behavioural difficulties-** It is felt that there are probably only very subtle long term problems which are more likely to reflect being brought up by a drug abusing mother than having been exposed to cocaine as a baby; subtle impairments in the ability to control emotions and focus attention that could put them at risk of behavioural and learning problems. Other studies suggest that cocaine exposure may adversely affect language abilities.

# How much cocaine is safe?

- (There are websites about this written *by users, for users!* Their focus is slightly less than responsible in some cases, for example, “*Whilst cocaine use during pregnancy may have an effect for some weeks on your newborn child the evidence is that in the long term things should be alright*”. So that’s OK then!)
- Researchers have not determined just how much cocaine it takes to cause birth defects and other adverse outcomes in an exposed baby. Women who use cocaine, in any amount or any form, are therefore advised to stop before they become pregnant or to delay pregnancy until they believe they can avoid the drug completely throughout the pregnancy. Women who stop using cocaine early in pregnancy reduce their risk of having premature or low-birthweight babies

# Cannabis

- Some studies suggest that use of marijuana during pregnancy may slow foetal growth and slightly decrease the length of pregnancy (possibly increasing the risk of premature delivery).
- Both of these factors can increase a woman's chance of having a low-birthweight baby. These effects are seen mainly in women who use marijuana regularly (six or more times a week).
- After delivery, some babies who were regularly exposed to marijuana in the womb appear to undergo withdrawal-like symptoms including excessive crying and trembling.

- Couples who are planning pregnancy also should keep in mind that marijuana can reduce fertility in both men and women, making it more difficult to conceive.
- There have been a limited number of studies following marijuana-exposed babies through childhood. Some did not find any increased risk of learning or behavioural problems.
- However, others found that children who are exposed to marijuana before birth are more likely to have subtle problems that affect their ability to pay attention and to solve visual problems. Exposed children do not appear to have a decrease in IQ.

# Ecstasy and other amphetamines

- To date there have been few studies on how Ecstasy may affect pregnancy. One small study did find a possible increase in congenital heart defects and of clubfoot. Babies exposed to Ecstasy before birth also may face some of the same risks as babies exposed to other types of amphetamines.
- Some studies suggest that Methylamphetamine may cause an increased risk of birth defects, including cleft palate, and heart and limb defects. It also appears to contribute to pregnancy complications including maternal high blood pressure, delayed foetal growth, premature delivery, and excessive maternal post-partum bleeding
- After birth, babies who were exposed to amphetamines appear to undergo withdrawal-like symptoms, including jitteriness, drowsiness and breathing problems.

# Heroin

- Miscarriage
- Placental abruption
- Poor foetal growth
- Premature rupture of the membranes
- Premature delivery
- Stillbirth
- As many as half of all babies of heroin users are born with low birthweight. These babies, most of whom are premature, often suffer from serious prematurity-related health problems during the newborn period, including breathing problems and brain bleeds, sometimes leading to lifelong disabilities.

- Most babies of heroin users suffer from withdrawal symptoms after birth, including fever, sneezing, trembling, irritability, diarrhoea, vomiting, continual crying and, occasionally, seizures.
- Babies exposed to heroin before birth also face a ten-fold increased risk of sudden infant death syndrome (SIDS).
- Increased risk of HIV due to maternal needle sharing.