

**Engaging and Supporting  
Pregnant Women  
who use Substances:  
Principles and Interventions**

# Agenda

1. Substance use
2. Gender Differences
3. Providing Service
4. Effects of use on Mother and Child

# The Context

- 50% of pregnancies are unplanned
- Alcohol and tobacco are legal and commonly used substances
- Illicit substance use is often unacknowledged
- Lack of information about the impact of substance use among consumers as well as professionals

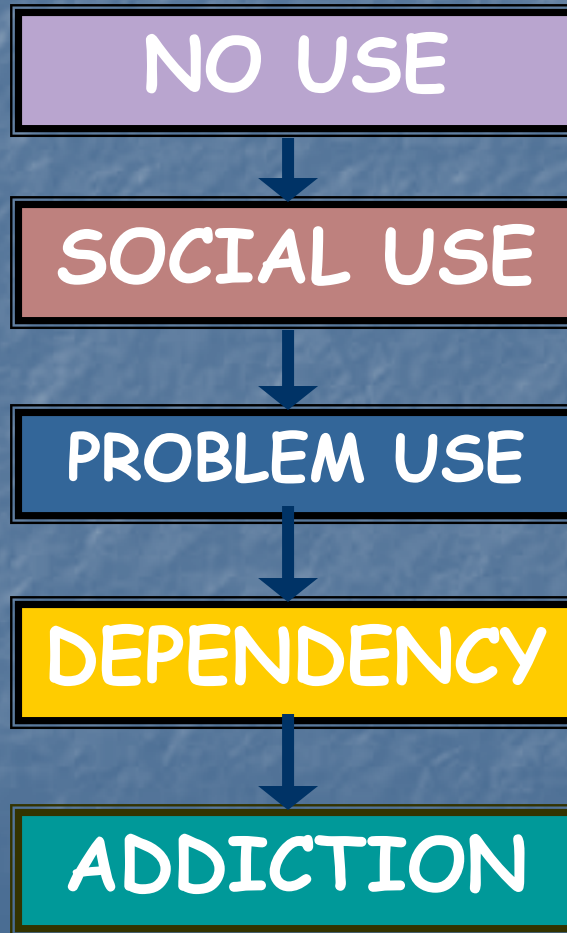
# Gender Differences

- Fear of losing their children
- Lack of specific programming
- Less access to accessible treatment
- Less likely to have supportive partners

# Gender Differences

- Domestic violence
- Women may not know how to use
- Inject wrong/ forced to share needles, pipes
- Forced to have sex or forced unsafe sex

# Continuum Of Substance Use



# Many women:

- Quit using when they find out their pregnant
- Are given wrong information or not given information about the effects of alcohol and other drugs

**Many factors can lead to  
poor birth outcomes**

# Reasons for use

Multi-faceted

Interconnected

Feelings of  
guilt,  
shame,  
inadequacy

Current Domestic  
Violence

History of Trauma

Poverty



# Complex Lives

**The lives of substance involved pregnant and parenting women are complex**

- Lack of support system
- Unstable environments
- Homelessness
- Poor parenting
- Mental illness
- Partner substance abuse
- Family violence
- Poverty
- Lack of services

# Exercise

# Risk Factors

- Substance Use  
AND
- Inadequate income
- Inadequate housing
- Lack of pre-natal care
- Poor nutrition
- Trauma history
- Mental Health problems
- Lack of parenting & social support

# Caught Between Policies

We tend to punish substance by not having:

- Adequate;
- Sensitive;
- Non-stigmatizing options

**Paradox: some supports may encourage women to avoid medical and social services**

# Providing Service

# Be Aware of Personal Biases

- What are your own experiences with drugs and alcohol?
- What messages regarding drugs and alcohol use did you grow up with?
- Do you view certain drugs as being acceptable and others as unacceptable?

- Is this grounded in objective information or in personal feelings?
- Do you view drug/alcohol use as a risk factor that is equal to other risk factors?
- What have your experiences been within your present role or other work roles?

# Substance Use and Pregnancy

Engagement is the key to success

## Holistic Approach

- Nutrition
- Prenatal care
- Shelter
- Sleep
- Stressors
- Safety

In supporting the pregnant woman to improve her health the babies health will also improve

# Pregnancy and Parenting

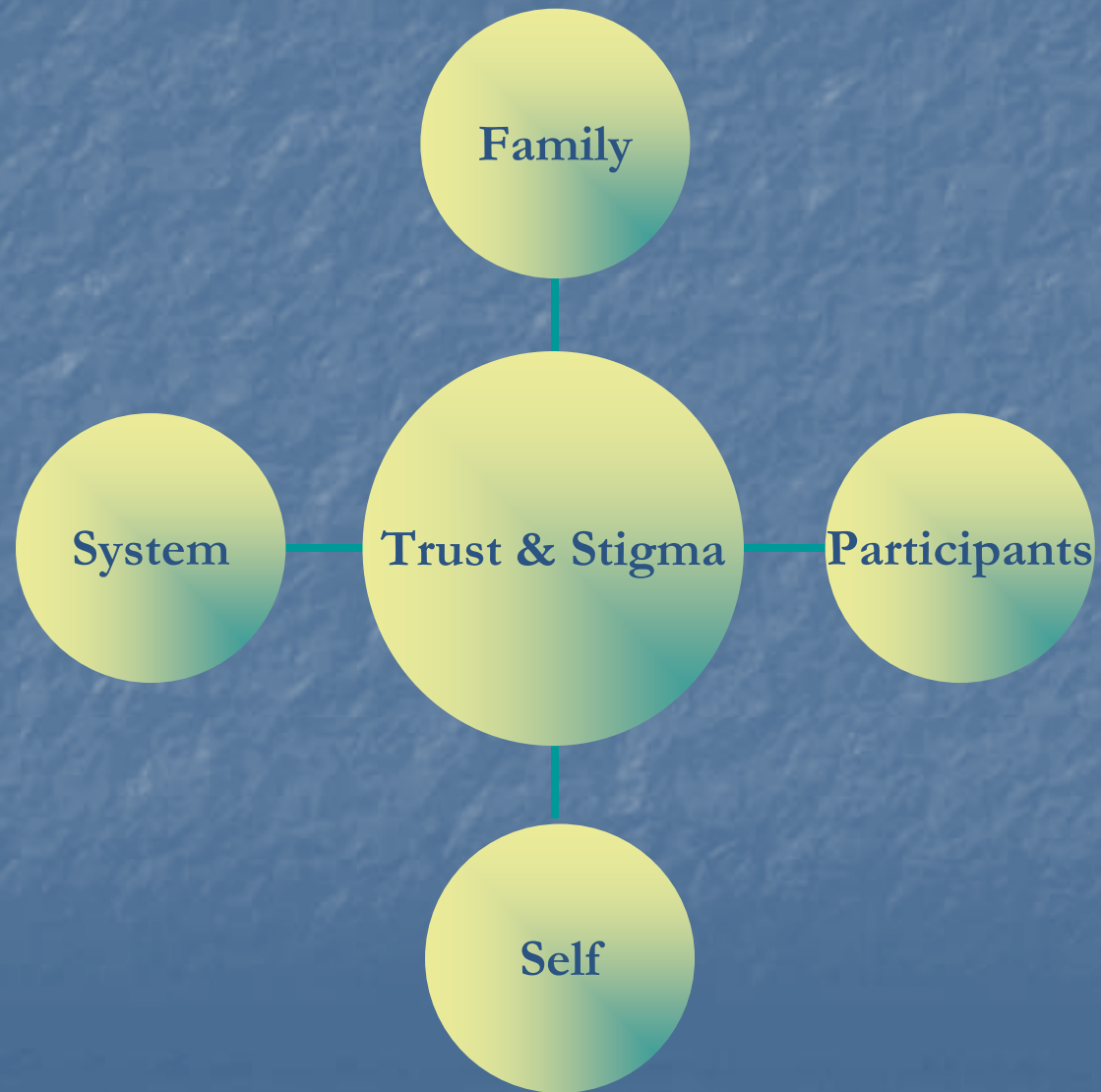
Primary responsibility for children

Particularity important for  
women's services

Basic services such as:

- Prenatal care
- Child programming
- Parenting programming

# Challenges



**Women fear that their  
children will be apprehended**

**Collaborate**

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# Barriers to Collaboration

- Women often carry feelings of guilt, shame and grief
- Service providers often consider only the person in their office and neglect the needs of the children
- Adversarial relationships and collusion do not help the client reach their goals

# Benefits to Collaboration

- Creates clarity regarding expectations
- Encourages transparency and openness
- Clarifies roles and responsibilities
- Effective interagency partnerships provides opportunities for cross-sectoral training and better understanding of issues
- Results in improved advocacy efforts when needed

# Research Findings

- Engage, motivate, inform and encourage pregnant and parenting women so they can make informed and healthy choices for themselves and their children
- Support changes in substance use
- Involvement results in fewer separations of children and mothers, increased health outcomes and fewer development concerns

# Some tips for making your agency open to disclosures of drug and alcohol use

- Make it routine to ask about drug and alcohol use as part of your intake process
- Have accurate information about services and resources for those with substance use concerns visible and available

# How to Ask Questions

- Be curious
- Remain non-judgmental
- Be straightforward, calm and direct
- Ask in every interaction
- Ask question that anticipate a positive response eg. How often do you use drugs or alcohol?

# Pregnancy, Parenting and Harm Reduction

- More complex discussion
- Consideration required about the impact on children
- A challenge for systems not accustomed to considering children or the family
- Conflicts for workers when parents make decisions which place them and/or their children at risk

# Harm Reduction Strategies

- Connecting women to Child welfare agencies before baby is born
- Referring woman to resources that address all needs- non-judgemental pre/post natal services
- Working with her to reduce substance use, as child welfare goals around substance use may not always be the same
- Validate anything the woman does that will promote her health and the health of the fetus/baby

# Harm Reduction Strategies

- Address feelings of shame/guilt re: use during pregnancy in order to engage and avoid escalated use
- Make it clear to the woman that making changes in her pattern of alcohol/drug use is a process you would support her through
- Ensure she understands her options and develop a realistic plan ie. Child welfare expectations

# THE PARADOX OF CHANGE

(Rogers, 1957)

“Clients are most able to change when they feel free not to.”

# Effects of Substance Use on both Mother and Child

# Fetal Effects Of Substance Use

- Effects observed may be due to substance itself or due to withdrawal state
- Difficult to separate toxic effects from other factors:
  - Poor nutrition
  - Lack of prenatal care
  - Concurrent use of other substances e.g. tobacco

# Alcohol Fetal Effects

- Alcohol freely crosses the placenta
- Reaches concentrations in the fetus that are as high as that in the mother
- The fetus has limited ability to metabolize alcohol
- Alcohol can damage developing fetal cells
- Alcohol affects the umbilical cord and placenta
- Hypoxia can result from disruption in blood flow to fetus

# Fetal Alcohol Effects Dependant On:

- Timing of exposure
- Duration of alcohol consumption
- Dose of alcohol
- General health of the mother
- Services available to the mother
- Other drug use
- Combinations of these factors

# Timing of alcohol use

**There is no safe time  
to drink in pregnancy**

- Birth defects – can occur in first trimester of pregnancy
- Growth retardation – can occur in third trimester
- Central nervous system – can occur throughout pregnancy

# Physical Effects

- Growth retardation – low birth weight, height/length
- Central Nervous System – small head circumference, attention deficits, increased activity, delayed speech, learning deficits, behavior concerns
- Birth defects – hearing problems, dental crowding, limb, eye and internal anomalies.
- Facial Characteristics – view slide

## Characteristics FAS facial features

### Discriminating Features

Short palpebral fissures

Flat midface

Short nose

Indistinct philtrum

Thin upper lip

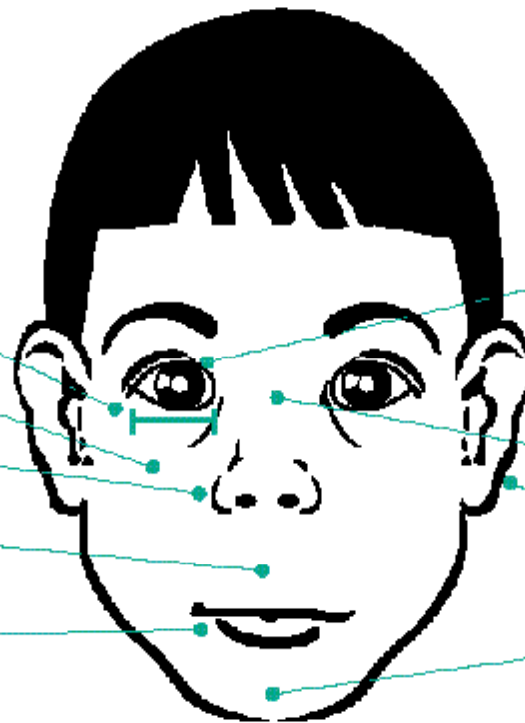
### Associated Features

Epicanthal folds

Low nasal bridge

Minor ear anomalies

Micrognathia



# What is Fetal Alcohol Spectrum Disorder? (FASD)

- Umbrella term used to describe the spectrum of disabilities associated with prenatal exposure to alcohol
  - FAS -fetal alcohol syndrome
  - pFAS – partial fetal alcohol syndrome
  - ARND – alcohol related neuro-developmental disorder
  - ARBD – alcohol related birth defects

# No Safe Limits

- No known safe limit for alcohol use in pregnancy
- FAS is associated with heavy and binge drinking

**The safest choice is not  
to consume alcohol during pregnancy**

## **Alcohol Maternal effects**

- Pre-eclampsia: high blood pressure can lead to eclampsia (seizures)
- Anemia

# Cannabis

## Fetal and Neonatal effects

- Components of cannabis, including THC, cross the placenta, but cannabis has not been implicated as a human teratogen
- Negligible difference in birth weight. (50gm)
- Possible long term neurodevelopment effects. Hyperactivity, Impulsivity, Inattention, Increased delinquency.

### Neonatal effects

- Some studies have found a small reduction in birth weight associated with cannabis use

# Cannabis

## Maternal effects

- Psychiatric effects: poor sleep, ↑ prevalence of anxiety and depression, irritable mood, poor concentration
- THC can accumulate in breast milk, theoretically affecting brain development. Possible neonatal effects include:
  - ☞ Lethargy
  - ☞ Less frequent and shorter feeding times
  - ☞ Decreased motor development at age 1
- Long-term effects of using cannabis while breastfeeding are unclear

# Cannabis

## Recommendations for breastfeeding

- Breastfeeding mothers should refrain from consuming cannabis.
- Advisory to discontinue breastfeeding if addiction exists.
- Mothers must also be informed of formula feeding risks.
- Breastfeeding babies should be closely monitored.

**Cannabis-use during pregnancy should be decreased or avoided.**

# Tobacco

- Classified as a stimulant
- Smoking a single cigarette produces over 4,000 chemicals
- Nicotine has half life of 2 hrs
- Nicotine crosses the placenta easily
- Fetal concentrations of nicotine are generally 15% higher than maternal levels.

# Tobacco



Despite a decrease in overall smoking rates in Canada, Health Canada estimates that approximately 25% of all pregnant women smoke during their pregnancies.

# Tobacco

## Fetal Effects

- ↑ risk of spontaneous abortion
- ↑ premature birth
- ↑ incidence of low birth weight
- Two-fold increase in risk of placental abruptions
- Preterm premature rupture of membranes has been shown to occur more frequently

# Tobacco

## Neonatal Effects

- NNWS- irritability, tremors & sleep disturbances (mothers who smoke heavily)
- SIDS is 3x higher risk (greatest risk with 10 or more cigs per day)
- Second hand smoke is a risk

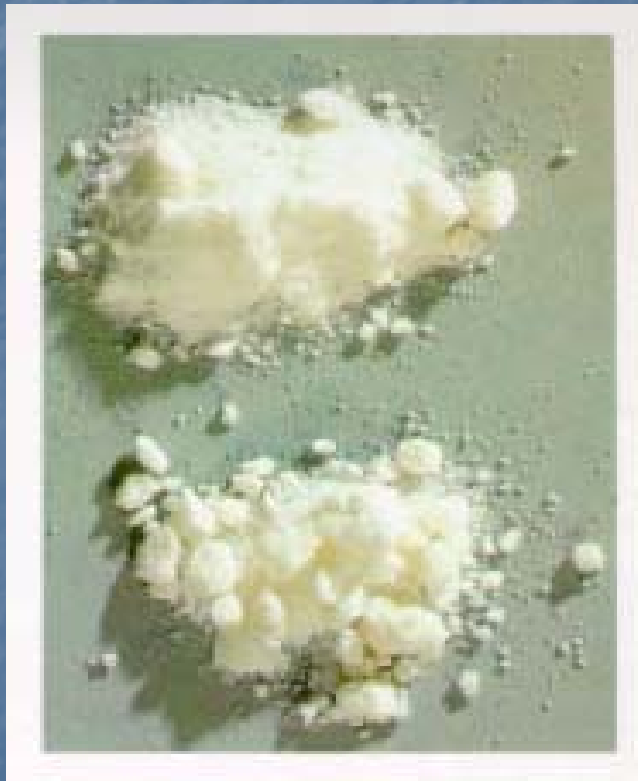
### Long Term effects

One study found- two-fold greater risk of committing violent crimes

# Tobacco and Breastfeeding

- Smoking reduces breast milk (one study said no change)
- Effects of exposed infants are unknown
- Effects of the thousands of other chemicals are unknown

# Cocaine



# Cocaine

- Stimulant that readily crosses the placenta.
- Cocaine hydrochloride, a white crystalline powder, can be snorted or injected.
- Powder cocaine can also be chemically changed to create crystals or rocks— known as “freebase” or “crack”—that can be smoked.
- Most women who use cocaine use at least one other drug (e.g., alcohol, cigarettes and/or cannabis) and have other risk factors related to poor pregnancy outcome including poor nutrition, high gravidity and lack of prenatal care.

# Cocaine

## Fetal/Neonatal/Long-term effects

- Low BW, smaller head circumference & body length
- ↑ incidence of preterm birth
- Possible genital or urinary tract malformations
- Possible learning disabilities
- ↑ Spontaneous abortions
- ↑ Placental abruption

**Only the risk of placental abruption and premature rupture of membranes were statistically associated with cocaine use itself when other factors were controlled**

# Cocaine and Neonates

Careful monitoring of neonates is recommended; comfort measures, especially touch, reduced stimulation (e.g. quiet room with dim lighting, no excessive testing, keeping interventions to a minimum) and breastfeeding are generally sufficient

# Cocaine use and Breastfeeding

- Abstinence throughout pregnancy is recommended
- Discontinuing at any time during pregnancy can improve the fetal outcome
- Breastfeeding is not recommended. She should not breastfeed within 3 days of using the drug
- The risks of breastfeeding while using cocaine must be weighed against the overall benefits of breastfeeding

# Opiates

- Drug Class                      Narcotic analgesics
- Examples                        Heroin, morphine,  
Demerol, Percodan,  
Dilaudid, Tylenol #1,  
#2, #3, Codeine,  
Oxycontin

# Opiates

## Effects of Use in Pregnancy on mother

- Toxemia
- Poor nourishment with vitamin deficiencies
- Anemia
- Intrauterine growth restriction
- Infections
- Preterm labour
- Medical complications due to use of unclean needles, abscesses, hepatitis, urinary tract infection, STI's, HIV/AIDS

# Opiates and Fetal / Neonatal Effects

- Neonate experiences withdrawal only when a woman used regularly during pregnancy
- 40-60% of infants born to women on heroin, & up to 85% of those born to mothers on methadone, experience withdrawal
- Opioid withdrawal can trigger uterine contractions in the first trimester that could lead to spontaneous abortion
- Withdrawal usually begins shortly after birth, typically within 24 hours but possibly up to 2 weeks later, depending on the half life of the opioid
- Poor feeding, irritability, sweating, tremors, vomiting and diarrhea may also occur, while seizures and death have been reported in severe, untreated withdrawal cases

# Opiates

## Care in Pregnancy

- Withdrawal of the opiate-dependent woman in pregnancy is not recommended due to increased risk to the fetus
- Methadone maintenance is the treatment of choice

## Maternal Effects

- Pre- eclampsia – high blood pressure
- Placental abruption
- Premature rupture of membranes due to withdrawal

# Other Medications

- **Benzodiazepine.**- Babies exposed in utero to benzodiazepines should be watched carefully after birth for signs of abrupt discontinuation syndrome. This syndrome may include: Sedation, Hypotonia, Reluctance to suck, Apnea, Cyanosis, impaired metabolic responses to cold stress
- **SSRIs:** (*Prozac*): consider if benefits outweigh risks of using medication – risks are still being studied
- **MDMA:** (*Ecstasy*): one study (Lancet 1999) reported that infants born to mothers who used MDMA during pregnancy are at increased risk of congenital birth defects (highly criticized because it was not controlled for other life style issues/other drug use.)

# Other Medications

- **Ketamine & P.C.P** : One study on rats suggest that ketamine and pcp have an action that is similar to that of alcohol on a developing fetus, thus causing brain damage (*Science* 283(5398):70-74, 1999). One study on rats links first trimester exposure to lasting changes in brain chemistry
- Most research on “club drugs” is still at the animal level
- **Lithium** - completely equilibrates across the placenta. Lithium levels at the time of delivery are associated with Prenatal complications
- Lithium excretion in breast milk varies widely (from 0 to 30% of the Maternal weight-adjusted dose) from woman to woman
- Newborns should be monitored for possible lithium toxicity

# Breastfeeding and use

- Safe in women abstinent from drug use
- Any active use is not recommended for women who are breast feeding
- Women who are smoking and/or methadone maintained are still encouraged to breastfeed
- Hepatitis B and Hepatitis C positive women are encouraged to breastfeed
- Breastfeeding is not recommended for women who are HIV positive

# The Goals

- Support pregnant substance users by educating them in their options so they can make informed choices
- Support changes in substance use during pregnancy
- Identify and address the needs of children affected by substance use
- Provide mothers with tools/supports to make healthy decisions to parent effectively

# Contact Information

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