Legalization of Cannabis: Implications for Maternal and Infant Health in BC and Emerging Best Practice for Response

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Healthy Mothers and Babies Conference 2018

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OBJECTIVES

- Review recent research on the mechanisms of action of cannabis on fetal development and pregnancy outcomes.
- Highlight best practices for prevention and harm reduction, trauma-informed interventions and potential implications for providers and pregnant women in BC
Health effects of cannabis – CEWH research

For Best Start/Health Nexus we reviewed the literature on the effects of cannabis in the perinatal period

- Natalie Hemsing, MA
- Lorraine Greaves, PhD
- Nancy Poole, PhD
- Rose Schmidt, MPH

Methods

- 2007-2017
- Medline; CINAHL
  - fertility
  - pregnancy
  - birth outcomes
  - breastfeeding
  - child development
  - parenting

n= 60 articles

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<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Significant Association</th>
<th>No Significant Association</th>
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<tbody>
<tr>
<td>Maternal asthma</td>
<td>Chabarria et al 2016</td>
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<td>Maternal anemia</td>
<td>Gunn et al 2016</td>
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<td>Birth defects</td>
<td>Van Gelder et al 2009</td>
<td>Warshak et al 2015</td>
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<tr>
<td>Study</td>
<td>Findings</td>
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<tr>
<td>Chakraborty et al. 2015 New Zealand</td>
<td>Frequent maternal use associated with better global motion perception</td>
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<tr>
<td>El Marroun et al 2010 Holland: Gen. R</td>
<td>No association with cognitive function/behavioural problems age 3</td>
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| Day et al. 2011; Goldschmidt et al 2004, 2008; Sonon et al 2015; Wilford et al 2010 USA: MHPGD | - First trimester heavy use associated with subtle deficits in verbal reasoning scores at age 6  
- Offspring of heavier users more likely to report delinquent behavior at age 14  
- Subtle negative effects on school performance  
- Subtle deficits in visual–motor coordination |
| Smith et al. 2006; 2016 Canada: OPPS | No differences on visuospatial task performance; observed differences in neural functioning/blood flow on fMRI |
| Teyhan et al. 2017 Australia | Maternal & paternal use not associated with educational attainment |
| Zammit et al. 2009 UK | Maternal use not associated with psychotic symptoms at age 12 |
Breastfeeding

- In animal studies, inhibits lactation
- Systematic review (Ordean 2014)
  - One study reported infant development delays at year 1.
  - One study reported no effect on weaning, growth, mental or motor development
- confounded by prenatal use
Parenting

- Prevention of accidental use by children
- Qualitative study: parental cannabis use, perceptions of benefits and harm, and harm reduction strategies (Donoghue 2015)
  - Parents reported no adverse impacts on parenting
  - Yet, children’s awareness of use and access occurred earlier than parents thought
  - Harm reduction strategies parents used: being discreet, using less potent strains, prioritizing family & work, not mixing with tobacco
Methodological Challenges

- Confounding factors
  - Tobacco, alcohol, other substances
  - Socio-demographics
- Small samples of women who use prenatally
- Clinical trials unethical
- Self-report
- Lack of data on quantity, potency, method of ingestion
- Interpreting animal studies

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MIXED evidence for association with decreased birth weight

MODERATE evidence of association with reduced cognitive function in exposed offspring

SUBSTANTIAL evidence of an association with lower birth weight

INSUFFICIENT evidence of an association with later outcomes in the offspring (e.g., SIDS, cognition/academic achievement, and later substance use).

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Public Health Response: USA

- 2016 review of public health agency websites found messaging on cannabis & pregnancy from 1 federal agency and 10 state agencies (Jarlenski et al 2017)
  - adverse health effects
  - few addressed scientific uncertainty
  - < half provided resources
- Limited messaging may reflect challenges with the evidence
**MARIJUANA USE WHILE PREGNANT**

Know how marijuana use can affect pregnant women and their babies.

What you eat or smoke while pregnant can reach your baby. You’re probably aware that eating vegetables can help your baby’s development. And in the same way, using marijuana can harm your baby. It may have a long-term impact on your child’s ability to learn.

If you are pregnant and have been using marijuana, talk to your doctor to get the support you need to make the healthiest choice. Your doctor can help connect you with treatments that are confidential and nonjudgmental.

PASSES THROUGH TO BABY.

BRINGS YOU A BUNDLE OF JOY.

BRINGS ON A BUNDLE OF QUESTIONS.

There is no known safe amount of marijuana use while pregnant. That’s because, no matter how it’s used (smoked, eaten, etc.), THC (Tetrahydrocannabinol, the chemical that makes you “high”) gets passed to your baby.

Secondhand smoke from marijuana can also be harmful because it has many of the same cancer-causing chemicals as tobacco smoke.

To learn more, visit GoodToKnowColorado.com/Baby.
“Studies have found associations...between frequent cannabis use during pregnancy and certain adverse cognitive and behavioural outcomes in children” (p.16)
Some Canadian examples

Risks of Cannabis on Fertility, Pregnancy, Breastfeeding and Parenting

Cannabis Use During Pregnancy

Effects of Cannabis Use during Pregnancy

The Canadian government plans to legalize cannabis by July 1, 2018. With the impending legalization of cannabis, it’s important to note that the legal use of cannabis does not necessarily make it safe. There is no known safe amount of cannabis use during pregnancy.

Currently, there is limited Canadian data about the prevalence of cannabis use during pregnancy. Cannabis use among women in Canada is on the rise, with approximately 11% of women of childbearing age reporting cannabis use in the past year according to Health Canada (2013). Cannabis use is higher among younger women, 29.7% of women aged 20-24 years report past year use. It is estimated that about 5% of pregnant women use illicit drugs during pregnancy, though it is not known what percentage use cannabis specifically.

Research on cannabis use during pregnancy demonstrates some potential negative outcomes associated with heavy use (one or more joints per day). Cannabis use during pregnancy may:

- Affect the ability to become pregnant as a result of changes in the menstrual cycle for women and lower sperm count and poorer sperm quality in men
- Increase the risk of preterm birth
- Lead to lower birth weight of the baby
- Be associated with longer-term developmental effects in children, adolescents, and adults including decreased in memory function, attention, reasoning and problem solving skills, and increases in hyperactive behaviour and future substance use

It is important to note that most of the current research evidence presents findings of studies where cannabis use was administered by smoking. Little is known about the effects of cannabis use through other routes of intake. Current evidence is also limited by reliance on self-report, the presence of confounding factors, and small sample of women who use cannabis prenatally. While more research is needed, both in quantity and quality, it is prudent to advise pregnant women and women of childbearing age of the potential long-term adverse developmental and behavioural effects associated with cannabis use during pregnancy.

For more information about cannabis use during pregnancy, please visit http://www.canadasafdresearchnetwork.ca/cannabis-use-during-pregnancy.

For more information about the Canada FASD Research Network, including other policy documents about FASD and alcohol use during pregnancy, please visit www.fasdn.ca

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To inform messaging - further research needed

- amount, frequency, potency, method of ingestion, timing
- medical/therapeutic use; low to moderate use
- paternal cannabis use
- corroborate self-report with biomarkers
- cannabis use alone; pooling data

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Summary regarding messaging

- Given evidence gaps and unknown risks, the safest approach is to support women & their partners not to use cannabis when trying to conceive, during pregnancy and breastfeeding & to take precautions while parenting
- Unbiased education & messaging
- Non-judgmental: identification of use & support
  - Beginning in preconception
  - Reduce stigma & increase opportunities for dialogue
  - Address co-use with tobacco, alcohol
  - Holistic support
  - Discuss risks & benefits regarding medicinal use
  - Safe storage, parenting, driving

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Brief support on cannabis

- From our work on other substances we already know some strategies regarding brief support.
- Centre of Excellence is doing a national project about brief support on alcohol, tobacco, cannabis and prescription opioids.
- Financial support from the Public Health Agency of Canada.
Goal

To inspire and facilitate health and social care providers to incorporate brief intervention on alcohol (and tobacco, cannabis and prescription opioids) in their daily practice with girls, women and their partners, in order to promote women’s and men’s health, and prevent FASD.
Professionals engaged in 13 Regional meetings

1. Midwives
2. Nurses
3. Physicians
4. Pregnancy outreach workers
5. Sexual health workers
6. Substance use service providers
7. Violence against women service providers
8. Indigenous service providers

1. Vancouver
2. Edmonton
3. Saskatoon
4. Winnipeg
5. Thunder Bay
6. Toronto
7. Halifax
8. Moncton
9. Charlottetown
10. St John’s
11. Whitehorse
12. Yellowknife
13. Iqaluit
We summarized the evidence related to harmful effects of these 4 substances - for women in general, in pregnancy, when breastfeeding and when parenting. downloadable from http://bccewh.bc.ca

http://bccewh.bc.ca/
We identified, and summarized available academic evidence, tools and best practices related to the effects of, and how to do brief intervention on, legal substances.

We created summaries of evidence for brief intervention by profession (soon to be released).

Annotated bibliography of articles on 4 levels of FASD prevention, published annually, downloadable from www.canfasd.ca

Alberta Health Services
Brief support


Multi-service programs serving pregnant women at risk

Approaches being studied in multi-site evaluation led by Deborah Rutman, Carol Hubberstey, Marilyn Van Bibber and Nancy Poole

Women-centred – women set their own goals for service

Harm reduction – focus on minimizing harm and promoting safety

Trauma informed - appreciating that many women have experienced serious trauma

Culturally grounded – employing cultural programming and approaches & appreciating the multi-generational impacts of colonization

Inter-disciplinary; developmental lens – addressing women’s and children’s needs holistically

Relational – focus on safe, respectful, non-judgmental, least intrusive relationships, and trusting relationships with providers

Kindness; compassion

8 programs across Canada including 3 in BC – HerWay Home, Sheway and Maxxine Wright

Centre of Excellence for Women’s Health
Holistic wellness oriented approaches addressing TRC Call to Action #33
COLLEEN REID, LORRAINE GREAVES & NANCY POOLE
British Columbia Centre of Excellence for Women's Health

Good, bad, thwarted or addicted? Discourses of substance-using mothers

Abstract
In this paper we examine discourses surrounding maternal substance use. Real scenarios were sought about how the women made sense of their lives, their children, and the actions taken by the state. Through the use of three case examples identified four major discourses. ‘Good mother’, ‘bad mother’, ‘thwarted’, ‘addicted’ revealed the multiple and intersecting ways the women made sense of their lives and their child bond and the interactions with their mothers with substance use. These discourses highlighted the complexity of the plight of the women, the attitudes, practices and stigma, trying to do the right thing and to be good mothers.

Key words: child welfare, mothering/motherhood, substance use

Collaboration Between Addiction Treatment and Child Welfare Fields: Opportunities in a Canadian Context

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Victimized or Validated?
Responses to Substance-Using Pregnant Women
LORRAINE GREAVES AND NANCY POOLE

Les femmes qui utilisent des substances nocives ont des discours personnels et sociaux de stigmatisation qui sont laissés au public. On sait que les femmes qui ont besoin de soins sont stigmatisées par la société et les soins de santé qui sont prématurées, et les soins de santé qui sont menacées. Les discours sont souvent politiques et sociaux qui peuvent aider à la fois les soins de santé de la mère et de l'enfant.

Substance use among pregnant women is a major public health problem in Canada. Some studies estimate that approximately 20-30 per cent of pregnant women in Canada during their last pregnancy. These are likely underestimates, as surveys may miss accessing women facing serious health, economic, housing, and other social problems. In addition, the significant societal stigma regarding pregnant women’s use of alcohol, drugs, and tobacco may also prevent some women from identifying use of any of these substances, even in the context of a survey.

Pregnant women who use substances come under considerable scrutiny in Canadian society. Analyses of public discourses regarding pregnant women primarily as “victims” often leads to seeing them as entirely responsible for their situations and any potential damage to their fetus. In recent years this perspective has been evident across sectors: in legal cases, policies, media headlines, and treatment approaches. This perspective reflects rationales and practices that often put substance-using pregnant women second, and sometimes place their rights in conflict with those of the fetus or child. It also affects the way programs have been developed.

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Contact CEWH

- Website: Dialogue to Action project
- Blog: Girls Women Alcohol and Pregnancy
  https://fasdprevention.wordpress.com/
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References


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