### Legalization of Cannabis: Implications for Maternal and Infant Health in BC and Emerging Best Practice for Response Nancy Poole, PhD Healthy Mothers and Babies Conference 2018



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

## OBJECTIVES



### 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

Risks of Cannabis on Fertility, Pregnancy, Breastfeeding and Parenting



neilleur départ

### Methods

- 2007-2017
- Medline; CINAHL
  - fertility
  - pregnancy
  - birth outcomes
  - breastfeeding
  - child development
  - parenting
  - n= 60 articles



#### MATERNAL AND NEWBORN HEALTH OUTCOMES

Outcomes	Significant Association	No Significant Association
Maternal asthma		Chabarria et al 2016
Maternal anemia	Gunn et al 2016	
Low birth weight	Brown et al 2016; El Marroun et al 2009; Gunn et al 2016; Hayatbakhsh et al 2012; NASCM 2017	Conner et al 2015; Chabarria et al 2016; De Moraes et al 2006; Mark et al 2016; Schempf 2008; Van Gelder et al 2010; Warshak et al 2015
Preterm birth	Hayatbakhsh et al 2012 Leemaqz et al 2016	Conner et al 2015; Chabarria et al 2016; Mark et al 2016; Van Gelder et al 2010; Warshak et al 2015
Stillbirth	Varner et al 2010	Conner et al 2015; Warshak et al 2015; Dotters-Katz et al 2016
Small for gestational age	Brown et al 2016; Hayatbakhsh et al 2012; Warshak et al 2015; El Marroun et al 2009	Van Gelder et al 2010
NICU placement	Hayatbakhsh et al 2012; Warshak et al 2015	Mark et al 2016
Birth defects	Van Gelder et al 2009	Warshak et al 2015

#### 

Chakraborty et al. 2015 New Zealand	frequent maternal use associated with better global motion perception
El Marroun et al 2010 Holland: Gen. R	no association with cognitive function/ behavioural problems age 3
Day et al. 2011; Goldschmidt et al 2004, 2008; Sonon et al 2015; Wilford et al 2010 USA: MHPCD	<ul> <li>first trimester heavy use associated with subtle deficits in verbal reasoning scores at age 6</li> <li>offspring of heavier users more likely to report delinquent behavior at age 14</li> <li>subtle negative effects on school performance</li> <li>subtle deficits in visual-motor coordination</li> </ul>
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	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

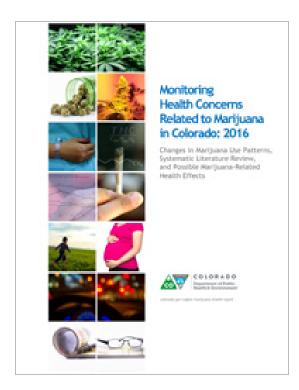
- Prevention of accidental use by children
- qualitative study: parental cannabis use, perceptions of benefits and harm, and harm reduction strategies (Donoghue 2015)
  - Parents reported no adverse impacts on parenting
  - Yet, children's awareness of use and access occurred earlier than parents thought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



## Methodological Challenges

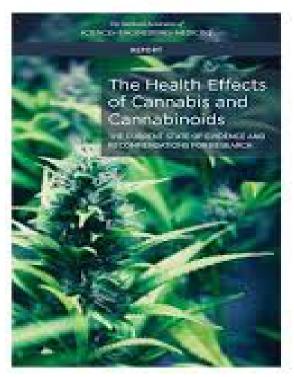
- Confounding factors
  - Tobacco, alcohol, other substances
  - Socio-demographics
- Small samples of women who use prenatally
- Clinical trials unethical
- Self-report
- Lack of data on quantity, potency, method of ingestion
- interpreting animal studies





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).



## 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</p>
- Limited messaging may reflect challenges with the evidence





### **Colorado: Good to Know Campaign**

### 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.





To learn more, visit GoodToKnowColorado.com/Baby.



There is no known safe amount of marijuana use while pregnant. That's because, no matter how it's used (smoked, eaten, etc.), THC (Tetrahydrocannabino 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.



### A FRAMEWORK FOR THE Legalization and regulation of Cannabis in Canada

### THE FINAL REPORT OF THE TASK FORCE ON CANNABIS LEGALIZATION AND REGULATION



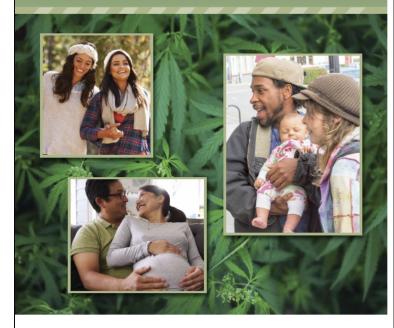
"Studies have found associations...between frequent cannabis use during pregnancy and certain adverse cognitive and behavioural outcomes in children" (p.16)



### Canada

### Some Canadian examples

#### Risks of Cannabis on Fertility, Pregnancy, **Breastfeeding and Parenting**





by/par health nexus santé

OBSTETRICIANS AND **GYNAECOLOGISTS** GYNECOLOGUES

May 9th, 2017

#### SOGC Position Statement: Marijuana Use during Pregnancy

Cannabis (marijuana) is the most commonly used illicit drug among pregnant women. Legalization of cannabis in Canada may reinforce the reputation of cannabis being a harmless drug and result in an increase of use among pregnant women.

Evidence-based data has shown that cannabis use during pregnancy can adversely affect the growth and development of the baby, and lead to long-term learning and behavioural consequences. There have



g that cannabis use during pregnancy raises addition to the adverse health consequences smoking. Pregnancy is a critical time for the used by cannabis exposure can be life-long.

or contemplating pregnancy should abstain



Evidence on the long-term effects of cannabis use during pregnancy largely comes from three prospective, longitudinal cohort studies that evaluated the outcomes of cannabis use during pregnancy on child development and behaviour. These studies include:

- Ottawa Prenatal Prospective Study (OPPS: Fried, 1995, 2002)
  - Maternal Health Practices and Child Development (MHPCD) Study (Day, Leech, & Goldschmidt, 2012; Day et al., 1991)
  - (El Marroun et al., 2009)

The results of these studies, and their comparisons across groups, need to be interpreted with caution, as the tetrahydro cannabinol (THC) content in cannabis has increased over the past few decades. Furthermore, the available research findings on cannable use during pregnancy are limited by a number of factors. This research demonstrates an association, but not causality; confounding actors including polysubstance use, and social and economic factors, may influence outcomes. For example, cannable is often used with other drugs, such as alcohol and tobacc both of which have negative effects on pregnancy and the health of the fetus. In addition, significant effects were largely associated with heavy, projonged use. Clearly there is a critical need for further research addressing the potential long-term consequences associated with cannabis use during pregnancy.

been linked to cannebis use by pregnant women, cannabis can increase the effects of alcohol use during pregnancy. Developing clinical guidelines for health care professionals on discussing the health effects of cannabis for women and pregnant women will be important and these need to be linked to discussions on the effects of alcohol, tobacco, opioids, and other substances.

erse health effects of cannabis use during templating pregnancy. nancy be encouraged to discontinue cannabis gly discouraged during pregnancy, in favor of

during pregnancy ise during lactation and breastfeeding. cannabis on preenancy and lactation. lable to ensure that those who are pregnant or sed by cannabis.

Generation R Study

While no pattern of congenital anomalies has





meilleur départ

Cannabis Use During Pregnancy May 2017 Effects of Cannabis Use during Pregnancy

The Canadian government plans to legalize cannabis by July 1, 2018. With the impending legalization of cannabis, it is 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 age 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 decreases in memory function, attention, and 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 exposure through other routes of use. Current evidence is also limited by: reliance on self-report, the presence of cofounding factors, and small samples 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.beststart.org/resources/ alc reduction/RisksOfCannabis A30-E.pdf or https://www.canada.ca/en/health-canada/services/substanceabuse/controlled-illegal-drugs/health-risks-of-maniuana-use.html

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



# 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



## 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



## 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

### **1**. Midwives

- 2. Nurses
- 3. Physicians
- 4. Pregnancy outreach workers
- 5. Sexual health workers
- 6. Substance use service providers
- 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

13 Regional meetings

- 9. Charlottetown
- 10. St John's
- 11. Whitehorse
- Yellowknife
- 13. Iqaluit





### Women and Alcohol

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#### Alcohol

Alcohol is the mostly widely used drug in Ganada It is created en grains, fruits, or vegetables are for The use of alcohol has been traced as far back as 8000 BC.

- Although alcohol comes in different forms (e.g., beer, wing rum, cookes), it has the same effect. Pure (othy) alcoholis a clear, coloutoo itaad.
- Alcohol is a "depressent" due that slows down the parts of your brain that affect your thinking and behaviour as well as your breaching and heart rate.
- For many people, drinking alcohol releases tension and reduces inhibition, making themfold more at case and outgoing.
- Drinking can also make you'real 'drunk' printowcated. Sians of being drunk include flushodskin, impaintd judgment, reduced inhibition, reduced muscle control, skewed refloxes, problems walking, slumed speech, and/ouble or bluered vision.
- Signs of being heavily intoxicated include difficulty standing, throwing up, blacking out, and having no memory of what you said or did while drinking. Heavy drinking can lead to comaand death.
- Drinking can sometimes result in a hangover' about right to ten hours after your last drink. Symptoms on include headache, nausea, diamfera, dehydiation, shakiness, and vomiting.
- It is possible to develop a physical dependence (addiction) ne alcohol

#### Canada's Low Risk Drinking **Guidelines for Women**

ng to drink is a personal choice. Th ing and reduce their immediate and long ten tol related harm. The guidelines suggest that

- You should have no more than 2 drinks aday
- You should plan to have some non drinkingday

#### Alcohol and Your Health

### Women and Tobacco

#### Tobacco

- There are many types of tobarco. Ninctiana tobarcan, or common tobacco, is used tomake cigarettes, cigars, and bidls. There are also alternatives to and impout-ac electronic cigaruttus, wrandposor hockats, and smoled ess/orms of tobars such as snuff, drewing tobacco, and snus. In some cultures, tobacco has been used traditionally inceremonies, rituals, and prayer.
- Tobacco is a stimulant that produces a feding of well-being creases your heart rate and blood presso constricts your bloodvessels, initiates your lungs, and affects your ability to taste and anell.
- Nicotine is the addictive chemical found in tobacco. There as over 4000 other chemicalsincigarettes and digarette smoke. Second-hand smokels the sincke from the end of a clearette
- and the smoke that smokers breathe out. It contains took homicals including lar, nicotine, carbon monoxide, assoric, and cyanide. Norsmokers who breathe it in also absorb these substances and are atrisk for serious health

#### Tobacco and Your Health

- Telbarro use has a wirtenance of efforts on health and somerisks specific to worsen'shealth.
- Some of the serious effects on general healthinclude: · Cancer: Cancers linked to smoking include mouth.
- throat, lungs, parceas, bladder, and kidney carcer. Women who smoke are also at risk of having beast carce at an oarlier age and much higher risk for developing rical and vulvar cancer. Long disease Smoking can lead to chronic obstructive
- pulmonary diseases (0090) such as emphysema, promchities and asthematic bronchitis.
- · Heart disease and stroke: Women who smoke are at nonased risk for both stroke and cardiovascular disease including high blood pressure and heart attack. Using traceptives (birth control pills) can increase the and cos ve cardiovascular effects of smoking by increasing risk of having a heart attack, a stroke, or blood clots.
- Tobacco use canaffect your bladder health thinary urgency (the need to pre-suddenly) and frequency (the need to pre-more often than usual) is more common in women who smake.



#### Tobacco and Your

vour periods irregular, contrib bleeding between periods, or during or before your period, your menstrual cycle shorter.

#### Tobacco and Pregnanc · There is no known safelevel of tobacc

- including prognant women. When a woman smokes or uses tob the nicotine, carbon monoxidi; and oth har blood stream pass into the fetus. The getting the food and oxysen it needs to
- Tobacco use during programay can have your baby, inducting foaming difficulties lung diseases, and increased charce of defects such as deft lip orcleft pakes. Smoking during prognancy also increase premature birth, stillbirth and having a baby. Pre-term and low birth weight bab to have health problems or disabilities an of women who smoke during program develop nicotine dependency later in life

waith care provider about support an time replacement therapy (e.g., nico be helpful for some preamant women ing. Some research shows that of

### Women and Cannabis

#### **Cannabis and Pregnancy**

- Using cannabis while pregnant may affect the fetus. more is known about the short- and long-term effect of cannabis on fetuses, babies and young children, it is safest to avoid using cannabis while pregnant, wi breastfeeding, and around children. If you are using cannabis for medical reasons, talk to
- health care provider about whether the benefits of cannabis for medical purposes outweigh the pote risks to you and your fetus.
- If you have problems stopping or reducing your recreational cannabis use while pregnant, talk to you health care provider about services in your commun that can support you
- When you are pregnant, whenever possible, avoid a room with people who are smoking cannabis. Some women are interested in using cannabis duri
- pregnancy to treat nausea or 'morning sickness'. Th is some research showing that women who use can report relief from these symptoms; however, more research is needed to understand the potential heal risks. Talk to your health care provider if you have questions about this.
- Scientists are still learning about the effects of cann use during pregnancy on babies, children, and yout Some research shows that babies born to mothers v use cannabis during pregnancy are more likely to be smaller than other babies and have low birth weigh smaller than other bables and nave low orth weigh research shows that cannabis use during pregnancy affect children's behaviour (with attention problem hyperactivity), brain development (problems with n or learning at school), and the likelihood that they v cannabis and other drues as a teenace

Until more is known abou the short and long-term effects of cannabis on fetuses, babies and youn children, it is safest to avoid using cannabis while pregnant.

#### Women and Prescription Opioids

#### Prescription Opioids

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

- Opioids are a type of medication often prescribed to treat acute and chronic pain.
- Opioids are drugs that are made from the opium poppy plant or made in a lab from chemicals.
- Some common opioid medications include morph axycodone (e.g., Oxycontin®, Percodan® or Percocet®), hydrocodone (e.g., Hycodan®, Tussionex®), hydromorpi (e.g., Dilaudid \*), fentanyi, methadone, tramadol, and

prenorphine Prescription opioid medications come in various forms. tablets, capsules, syrups, solutions, patches, and suppositories Opioids can be very effective in reducing pain. They can also produce a feeling of well-being or euphoria ("high").

Opioid medications can be dangerous at high doses as they can cause drowsiness, slow your breathing, and lead to a com

#### Prescription Opioids and Your Health

- Side effects of prescription opioids can include sedation (feeing drowsy or sleepy), nausea, vomiting, and constipation. You can also build a tolerance to these drugs and may require higher amounts to manage your pain.
- If you suddenly stop or decrease the amount of medicatio you are taking, you may experience physical symptoms of withdrawal. These symptoms usually last a few days to a week
- Opioids are depressant drugs which means that they slow down the part of the brain that controls breathing. All opioid drugs are dangerous when taken in large quantities or when taken with other drugs that are depressants, such as alcoho and benzodiazepines, such as clonazepam (Rivotril\*) and lorazepam (Ativan\*).
- Prescription opioid medications can be dangerous when misused. Misusing can occur when you: Use opioids with alcohol or other medications with
- seciative effects Take more medication than prescribed for you Change how your medication is taken (e.e., snorting or

injecting) Take medication that was not prescribed for you Long-term use of prescription opioid medications in women can cause hormonal changes, infertility, anxiety and depression. Changes in your hormones may affect your period and interest in sex.

Long-term, frequent use of opioids to treat headaches can result in "medication overuse headache", a reboun headache caused by excessive use of headache relief

#### Prescription Opioids and Pregnancy

- Using prescription opiaid medications during pregnancy can have risks. If you could became pregnant, are thinking about getting pregnant, or as soon as you are aware that you are pregnant, it is important to talk to your health care provider. Taking opioids during pregnancy can increase the chance that your baby will be born too early, be born at a low birth weight or experience symptoms of withdrawal from the medication you are taking.
- If your baby experiences symptoms of withdrawel, he or she will need medical observation and possibly treatment. Not all babies will experience withdrawel and not all require medical treatment for it. Most babies who experience symptoms of withdrawal will have no long term effects on their health and development
- Scientists are still learning about the overall safety of using long-term opioids during pregnancy. Some opioids in certain doses may cause birth defects such as: clubfoot, or problems with the baby's heart, brain and spine (neural tube defects). or lungs.
- Depending on your situation, you may want to discuss alternate forms of pain management with your health care
- You should not decide to stop taking opioids on your own or go "cold turkey" as stopping their use can cause harms during pregnancy such as early labour or making it difficult for the fetus to get enough oxygen.
- If you have an addiction to opioids, it is recommended that you take methadone or buprenorphine under the care of your healthcare provider during pregnancy as these medications are less risky for you and your fetus.
- If you think you might be dependent or addicted to prescription opioid medications, talk to your health care provider about support and services in your community that can help you.





#### http://bccewh.bc.ca/

#### high") and relaxation, changes in perception and sens of time, and increased appetite. Some people also experience anxiety, panic, and mild paranola. Cannabis affects your short-term memory, attention, and motor skills, and slows your reaction time Cannabis and Your Health Medical cannabis is prescribed to treat health issues such as nausea and vomiting, chronic pain, and symptoms associated with HIV/AIDS and multiple scierosis. Symptoms of withdrawal from cannabis, if they occur, are usually mild and may include sleep disturbance, irritability and loss of appetite. Regular cannabis smoking is associated with chronic cough and phiegm. Quitting smoking, or using non-smoked forms of cannabis, is likely to relieve these symptoms.

amount of THC it contains.

drinks.

Cannabis (e.g., weed, cannabis, hashish, hash, pot) is

produced from the Cannabis sativa plant and can be

noked, inhaled as a vapor, or ingested in foods o

that makes you feel 'high,' but cannabis also contains more than 400 other chemicals.

Depending on how much THC is in the cannabis, how

you use it and how your body responds, the short-term effects of cannabis can last around 1-4 hours. There are

different types of cannabis and the effects depend on the

Using cannabis can produce feelings of euphoria ("being

ol (THC) is the chemical in cannabi

- Quitting smoking saily in programy ca and reduce many of these risks. If you h or reducing your tobacco use while pro Some research suggests that cannabis use can affect on and the length of your menstrual cycl

ot a safe method to puit smoking du the watere containschemicals inked to defects. There is not enough essach of the smoking cesation medications varanticline) during prognancy. Talk to yo provider if you have questions about que

## **Reproductive Health**

### Cannabis

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)



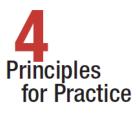
Annotated bibliography of articles on 4 levels of FASD prevention, published annually, downloadable from www.canfasd.ca

### Women Centred

Respect women's context, pressures and goals when delivering care

### Trauma Informed

Recognize that experiences of trauma and violence are strongly associated with smoking



#### Reducing Support women to improve their overall health by reducing tobacco

use, improving

violence, facing

stigma, etc

nutrition, escaping

Harm

**Equity Informed** 

Help women address barriers to health such as poverty, low literacy and inadequate support

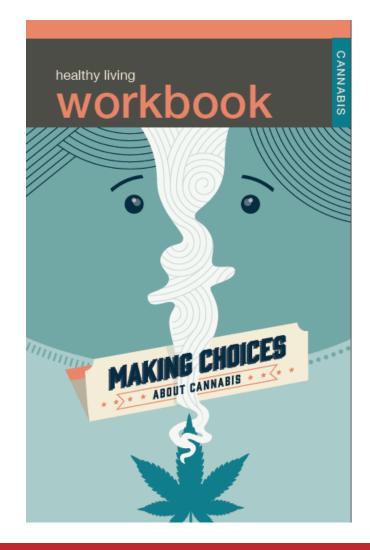
Alberta Health Services http://www.albertaquits.ca/files/AB/f iles/library/Rep\_Yrs\_Infographic\_Fi nal\_28229.pdf





## Brief support

- Stein, M. D., Hagerty, C. E., Herman, D. S., Phipps, M. G., & Anderson, B. J. (2011). A brief marijuana intervention for nontreatment-seeking young adult women. *Journal of Substance Abuse Treatment*, 40(2), 189-198. doi:10.1016/j.jsat.2010.11.001
- de Dios, M. A., Herman, D. S., Britton, W. B., Hagerty, C. E., Anderson, B. J., & Stein, M. D. (2012). Motivational and mindfulness intervention for young adult female marijuana users. *Journal of Substance Abuse Treatment*, 42(1), 56-64. doi:10.1016/j.jsat.2011.08.001



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 Relational – focus on safe, respectful, nonjudgmental, least intrusive relationships, and trusting relationships with providers

Inter-

disciplinary;

developmental

lens – addressing

women's and

children's needs

holistically

Kindness; compassion Co-Creating

Women-

**centred** – women set their

own goals for

service

National Evaluation of Multi-service Programs Reaching Pregnant Women at Risk

#### reduction – focus on minimizing harm and promoting

safety

Harm

8 programs across Canada including

3 in BC – HerWay Home, Sheway

and Maxxine Wright

informed appreciating that many women have experienced serious trauma

Trauma

### Culturally grounded -

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



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 examin Focus groups were cond with diverse women who use. Real scenarios were sought about how the wo tions and the actions t Through the use of three tified four major discours 'bad mother', 'thwarted revealed the multiple a made sense of their live child bond and the im mothers with substance discourses highlighted th tudes, practices and stig trying to do the right th

Key words: child v mothering/motherhood, substance use

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

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NANCY POOLE, DIP. CS, MA Director, Research and Knowledge Translation, British Columbia Ce Women's Health, Vancouver, British Columbia, Can s

#### Victimized or Validated?

#### Responses to Substance-Using Pregnant Women

LORRAINE GREAVES AND NANCY POOLE

Les femmes qui utilisent des substances nocires durant leur grossessont souvent sigmaticise es jugies par le discours public, On a l'impression que c'est la santé et les droits du fretus qui sont primorliause, et non la santé de la femme. Les auteures préconitent une politique et un raitement qui sullident à la fois la santé de la mère et de l'enfant

Routledge

Taylor & Francis Group

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

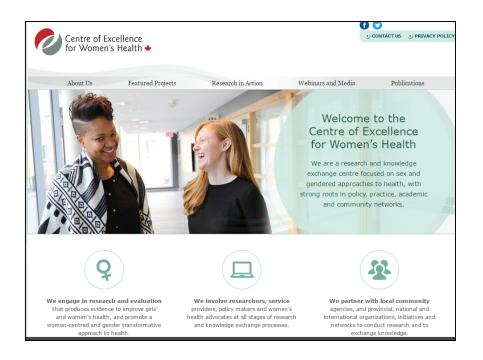
during their last pregnancy. These are likely underestimates, as surveys may miss accessing women facing serious health, economic, housing, and other social problems. In addition, the significant societal stigma regarding pregnant women's use of alcohol, drugs, and tobacco may also prevent some women 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 Secing substance-using pregnant women primarily as "vessels" often leads to seeing them as entirely responsible for their situation 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 a set of attitudes and practices that offen puts substance-using pregnant women second, and sometimes casts their rights in conflict with those of the fetus or child. It also affects the way programs have been developed



## Contact CEWH

- Website: Dialogue to Action project <u>http://bccewh.bc.ca/featured-</u> <u>projects/dialogue-to-action-on-</u> <u>discussing-alcohol-with-women-</u> <u>project-2/</u>
- Blog: Girls Women Alcohol and Pregnancy <u>https://fasdprevention.wordpress.</u> <u>com/</u>
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- Brooks, E., D. C. Gundersen, E. Flynn, A. Brooks-Russell and S. Bull (2017). "The clinical implications of legalizing marijuana: Are physician and non-physician providers prepared?" <u>Addictive Behaviors</u> 72: 1-7.
- Brown, S. J., F. K. Mensah, J. A. Kit, D. Stuart-Butler, K. Glover, C. Leane, D. Weetra, D. Gartland, J. Newbury and J. Yelland (2016). "Use of cannabis during pregnancy and birth outcomes in an Aboriginal birth cohort: a cross-sectional, population-based study." <u>BMJ open</u> 6(2): e010286.
- Chabarria, K. C., D. A. Racusin, K. M. Antony, M. Kahr, M. A. Suter, J. M. Mastrobattista and K. M. Aagaard (2016). "Marijuana use and its effects in pregnancy." <u>American Journal of Obstetrics & Gynecology</u>.
- Chakraborty, A., N. S. Anstice, R. J. Jacobs, L. L. LaGasse, B. M. Lester, T. A. Wouldes and B. Thompson (2015). "Prenatal exposure to recreational drugs affects global motion perception in preschool children." <u>Scientific reports</u> 5.
- Coleman-Cowger, V. H., G. L. Schauer and E. N. Peters (2017). "Marijuana and tobacco co-use among a nationally representative sample of US pregnant and non-pregnant women: 2005-2014 National Survey on Drug Use and Health findings." <u>Drug and Alcohol Dependence</u>.
- Day, N. L., S. L. Leech and L. Goldschmidt (2011). "The effects of prenatal marijuana exposure on delinquent behaviors are mediated by measures of neurocognitive functioning." <u>Neurotoxicology and</u> <u>teratology</u> 33(1): 129-136.
- de Moraes Barros, M. C., R. Guinsburg, C. de Araújo Peres, S. Mitsuhiro, E. Chalem and R. R. Laranjeira (2006). "Exposure to marijuana during pregnancy alters neurobehavior in the early neonatal period." <u>The</u> <u>Journal of pediatrics</u> 149(6): 781-787.
- Donoghue, K. J. (2015). "Perceived harms and benefits of parental cannabis use, and parents' reports regarding harm-reduction strategies."



- Dotters-Katz, S. K., M. C. Smid, T. A. Manuck and T. D. Metz (2017). "Risk of neonatal and childhood morbidity among preterm infants exposed to marijuana." <u>The Journal of Maternal-Fetal & Neonatal</u> <u>Medicine</u>: 1-7.
- El Marroun, H., H. Tiemeier, E. A. Steegers, V. W. Jaddoe, A. Hofman, F. C. Verhulst, W. van den Brink and A. C. Huizink (2009). "Intrauterine cannabis exposure affects fetal growth trajectories: the Generation R Study." Journal of the American Academy of Child & Adolescent Psychiatry 48(12): 1173-1181.
- El Marroun, H., H. Tiemeier, E. A. Steegers, J. W. Roos-Hesselink, V. W. Jaddoe, A. Hofman, F. C. Verhulst, W. van den Brink and A. C. Huizink (2010). "A prospective study on intrauterine cannabis exposure and fetal blood flow." <u>Early human development</u> 86(4): 231-236.
- Goldschmidt, L., G. A. Richardson, J. Willford and N. L. Day (2008). "Prenatal marijuana exposure and intelligence test performance at age 6." <u>Journal of the American Academy of Child & Adolescent</u> <u>Psychiatry</u> 47(3): 254-263.
- Goldschmidt, L., G. A. Richardson, J. A. Willford, S. G. Severtson and N. L. Day (2012). "School achievement in 14-year-old youths prenatally exposed to marijuana." <u>Neurotoxicology and teratology</u> 34(1): 161-167.
- Gundersen, T. D., N. Jørgensen, A.-M. Andersson, A. K. Bang, L. Nordkap, N. E. Skakkebæk, L. Priskorn, A. Juul and T. K. Jensen (2015). "Association Between Use of Marijuana and Male Reproductive Hormones and Semen Quality: A Study Among 1,215 Healthy Young Men." <u>American Journal of Epidemiology</u> 182(6): 473-481.



- Gunn, J., C. Rosales, K. Center, A. Nuñez, S. Gibson, C. Christ and J. Ehiri (2016). "Prenatal exposure to cannabis and maternal and child health outcomes: a systematic review and meta-analysis." <u>BMJ open</u> 6(4): e009986.
- Hayatbakhsh, M. R., V. J. Flenady, K. S. Gibbons, A. M. Kingsbury, E. Hurrion, A. A. Mamun and J. M. Najman (2011). "Birth outcomes associated with cannabis use before and during pregnancy." <u>Pediatric research</u> 71(2): 215-219.
- Hayes, J. S., R. Lampart, M. C. Dreher and L. Morgan (1991). "Five-year follow-up of rural Jamaican children whose mothers used marijuana during pregnancy." <u>The West Indian medical journal</u> 40(3): 120-123.
- Jarlenski, M., J. Zank, J. Tarr and J. C. Chang (2017). "Public health messages about perinatal marijuana use in an evolving policy context." <u>Substance abuse</u> **38**(1): 48-54.
- Klonoff-Cohen, H. S., L. Natarajan and R. V. Chen (2006). "A prospective study of the effects of female and male marijuana use on in vitro fertilization (IVF) and gamete intrafallopian transfer (GIFT) outcomes." <u>American Journal of Obstetrics and Gynecology</u> **194**(2): 369-376.
- Leemaqz, S. Y., G. A. Dekker, L. M. McCowan, L. C. Kenny, J. E. Myers, N. A. Simpson, L. Poston, C. T. Roberts and S. Consortium (2016). "Maternal marijuana use has independent effects on risk for spontaneous preterm birth but not other common late pregnancy complications." <u>Reproductive</u> <u>Toxicology</u> 62: 77-86.
- Mark, K., A. Desai and M. Terplan (2016). "Marijuana use and pregnancy: prevalence, associated characteristics, and birth outcomes." <u>Archives of women's mental health</u> 19(1): 105-111.



- National Academies of Sciences, E., and Medicine, (2017). The health effects of cannabis and cannabinoids: The current state of evidence and recommendations for research. Washington, DC, The National Academies Press.
- Okereke, C. and S. Onuoha (2015). "Effect of Ethanolic Extract of Cannabis sativa on Progesterone and Estrogen Hormones in Female Wistar Rats." <u>Reprod Syst Sex Disord</u> 4(150): 2.
- Ordean, A. (2014). "Marijuana Exposure During Lactation: Is It Safe?" <u>Pediatrics Research International</u> Journal 2014: c1-6.
- Pacey, A., A. Povey, J.-A. Clyma, R. McNamee, H. Moore, H. Baillie and N. Cherry (2014). "Modifiable and non-modifiable risk factors for poor sperm morphology." <u>Human Reproduction</u>: deu116.
- Russo, E. (2002). "Cannabis treatments in obstetrics and gynecology: A historical review." Journal of Cannabis Therapeutics 2(3-4): 5-35.
- Schempf, A. H. and D. M. Strobino (2008). "Illicit drug use and adverse birth outcomes: is it drugs or context?" <u>Journal of Urban Health</u> 85(6): 858-873.
- Smith, A. M., O. Mioduszewski, T. Hatchard, A. Byron-Alhassan, C. Fall and P. A. Fried (2016). "Prenatal marijuana exposure impacts executive functioning into young adulthood: An fMRI study." <u>Neurotoxicology and teratology</u>.
- Sonon, K. E., G. A. Richardson, J. R. Cornelius, K. H. Kim and N. L. Day (2015). "Prenatal marijuana exposure predicts marijuana use in young adulthood." <u>Neurotoxicology and teratology</u> **47**: 10-15.
- Statistics Canada (2016). Canadian Tobacco, Alcohol and Drugs Survey (CTADS) 2015. Ottawa, On, Statistics Canada.



- Teyhan, A., D. Evans and J. Macleod (2017). "The effect of in utero exposure to alcohol, tobacco and cannabis on educational attainment in adolescence: findings from ALSPAC, a UK cohort study." <u>International Journal for Population Data Science</u> 1(1).
- van Gelder, M. M., J. Reefhuis, A. R. Caton, M. M. Werler, C. M. Druschel and N. Roeleveld (2010).
   "Characteristics of pregnant illicit drug users and associations between cannabis use and perinatal outcome in a population-based study." <u>Drug and alcohol dependence</u> 109(1): 243-247.
- Varner, M. W., R. M. Silver, C. J. R. Hogue, M. Willinger, C. B. Parker, V. R. Thorsten, R. L. Goldenberg, G. R. Saade, D. J. Dudley and D. Coustan (2014). "Association between stillbirth and illicit drug use and smoking during pregnancy." <u>Obstetrics and gynecology</u> 123(1): 113.
- Warshak, C., J. Regan, B. Moore, K. Magner, S. Kritzer and J. Van Hook (2015). "Association between marijuana use and adverse obstetrical and neonatal outcomes." <u>Journal of Perinatology</u> 35(12): 991-995.
- Wesselink, A. K., S. Mahalingaiah, E. E. Hatch, K. J. Rothman, E. M. Mikkelsen and L. A. Wise (2015).
   "Marijuana use and fecundability in an internet-based prospective cohort study." <u>Fertility and Sterility</u> 104(3, Supplement): e236.
- Westfall, R. E., P. A. Janssen, P. Lucas and R. Capler (2006). "Survey of medicinal cannabis use among childbearing women: Patterns of its use in pregnancy and retroactive self-assessment of its efficacy against 'morning sickness'." <u>Complementary Therapies in Clinical Practice</u> 12(1): 27-33.
- Whan, L. B., M. C. L. West, N. McClure and S. E. M. Lewis (2006). "Effects of delta-9tetrahydrocannabinol, the primary psychoactive cannabinoid in marijuana, on human sperm function in vitro." <u>Fertility and Sterility</u> 85(3): 653-660.



- White, A. J., D. P. Sandler, A. A. D'Aloisio, F. Stanczyk, K. W. Whitworth, D. D. Baird and H. B. Nichols "Antimüllerian hormone in relation to tobacco and marijuana use and sources of indoor heating/cooking." <u>Fertility and Sterility</u>.
- Willford, J. A., L. S. Chandler, L. Goldschmidt and N. L. Day (2010). "Effects of prenatal tobacco, alcohol and marijuana exposure on processing speed, visual–motor coordination, and interhemispheric transfer." <u>Neurotoxicology and teratology</u> 32(6): 580-588.
- Zammit, S., K. Thomas, A. Thompson, J. Horwood, P. Menezes, D. Gunnell, C. Hollis, D. Wolke, G. Lewis and G. Harrison (2009). "Maternal tobacco, cannabis and alcohol use during pregnancy and risk of adolescent psychotic symptoms in offspring." <u>The British Journal of Psychiatry</u> **195**(4): 294-300.

