Translating evidence on cannabis, alcohol and reproduction

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Overview

1. Evidence for use of brief intervention on cannabis, alcohol and other legal substances to educate and support change

2. Messaging about cannabis and alcohol

3. Knowledge exchange principles when doing brief intervention
   – Sex and gender informed
   – Trauma informed
   – Harm reduction oriented
   – Equity informed

Drawing on the following projects:
Brief Intervention

- Evidence from a literature scan and 12 pan-Canadian dialogic sessions with health and social care professionals
- Discussing substance use with girls, women and their support networks in the perinatal period
Dialogue + Action, Women and Substance Use Project

Goal
To facilitate health and social care providers to incorporate brief intervention on alcohol and other substance use in their daily practice with girls, women, and their partners in the preconception, interconception and perinatal periods

Activities
1. An environment scan of current practices and exchange of ideas about good practice through 13 regional consultations with 8 types of practitioners
2. A review and summary of existing evidence on brief intervention with girls and women, including strategies for engaging their partners and support networks

Financial assistance for this project came from the Public Health Agency of Canada. The views expressed herein do not necessarily represent those of PHAC
We invited and engaged 8 professions

- Midwifery
- Public Health Nurses
- Indigenous Healthcare
- Pregnancy Outreach Workers
- Physicians
- Sexual Health Service Providers
- Anti-Violence Workers
- Substance Use Workers
Brief intervention does not need to be lengthy or intensive
- can be part of routine intake and assessment,
- part of care for a specific issue, or
- integrated into health promotion and wellness activities
- many women and girls make changes because they were asked about their substance use
Brief intervention can be expanded to address multiple substances or multiple health outcomes

Discussing multiple substances at the same time can lead to effective and engaging interventions
Risks for multiple health outcomes overlap and a combination approach recognizes how substance use can be connected with other health issues.

Depression or experiences of violence may be barriers to changing substance use and require interventions that consider multiple concerns simultaneously.
Many evidence based approaches to discussing substance use are already being used by practitioners in Canada.

<table>
<thead>
<tr>
<th>APPROACH</th>
<th>KEY THEME</th>
<th>RELEVANCE TO BRIEF INTERVENTION</th>
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<tbody>
<tr>
<td>CLIENT CENTRED*</td>
<td>Start “where client is at” Collaborate with client Client identifies what’s important</td>
<td>Girls and women have the capacity to find their own goals and solutions, with support from service providers.</td>
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<tr>
<td>WOMEN CENTRED (OR PERSON CENTRED)</td>
<td>Holistic Women are experts on their own lives Addresses gender inequities Strengths based</td>
<td>Women are at the center of all decision-making related to their health. Service providers recognize the unique needs, roles and responsibilities that women may have and collaborate with them in developing holistic approaches to change.</td>
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<tr>
<td>PATIENT CENTRED</td>
<td>Care in collaborative, coordinated, and accessible Patients and families are active participants in decision-making Patient participation and feedback in service delivery</td>
<td>Service providers focus on the needs of girls and women rather than the diagnosis. Collaboration and shared decision-making help to identify health goals that are realistic and achievable.</td>
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<tr>
<td>STRENGTHS BASED</td>
<td>Focus on individual strengths as opposed to deficits Resilience and ability to cope with adversity Optimism and hope for healing</td>
<td>Service providers identify “what works” by asking girls and women questions about their skills, interests, and what they are already doing to take care of themselves. Focus on “how to do more of what works” rather than on identifying and eliminating problematic substance use. Avoid diagnoses and pathologizing language that emphasize deficits and what’s wrong.</td>
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<td>HARM REDUCTION</td>
<td>Prioritize immediate goals and maximize options User involvement Cross system collaboration Human rights/self-determination Improve determinants of health Strengths based</td>
<td>Service providers help girls and women develop a plan to improve their overall health and to address problematic substance use when they are ready. Consider offering support in areas that intersect with substance use such as contraception, safer sex, anxiety, and self-esteem.</td>
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<tr>
<td>MOTIVATIONAL INTERVIEWING</td>
<td>Client centered Behaviour change as a process Empathy and non-judgement Works with where the client “is at”</td>
<td>Ask permission before discussing the topic. Service providers summarize girls’ and women’s substance use in an accepting and non-judgmental way. Ask open-ended questions about what they like or dislike about substance use, how they might make changes in the context of their own lives and in their own way.</td>
</tr>
<tr>
<td>TRAUMA INFORMED</td>
<td>Physical, emotional and cultural safety Choice and collaboration with client and service systems to prevent re-traumatization Trustworthiness Strengths based</td>
<td>Substance misuse may be an attempt to cope with past or current experiences of violence and trauma. Service providers offer support in developing alternative ways of coping and referral to trauma treatment, if appropriate.</td>
</tr>
<tr>
<td>CULTURAL SAFETY</td>
<td>Critical reflection Challenges power imbalances between client and practitioner Trust, respect and safety Equity/access to health care for all</td>
<td>Recognize how relationships between girls and women and service providers have been shaped by colonization, residential schools and other practices and policies of cultural and social assimilation. Challenge discrimination and racism and support Indigenous ways of knowing.</td>
</tr>
<tr>
<td>INDIGENOUS WELLNESS**</td>
<td>Strengths based Land, lineage, language Purpose, meaning, hope, belonging Human rights/self-determination</td>
<td>Adapt holistic approaches that support Indigenous girls, women, and their communities. Focus should be on the whole person, rather than solely physical health, by creating balance of spirit, emotion, mind, and body. Wellness models support Indigenous girls and women's self-determination.</td>
</tr>
<tr>
<td>SOCIAL DETERMINANTS OF HEALTH</td>
<td>Social and economic factors affect individual health outcomes, including substance use Living and working conditions Population health Health inequities and health gradient</td>
<td>Girls and women may need help in meeting basic needs such as shelter, food, and income before they are able to address their substance use. Service providers recognize that the risks for and consequences of substance use are affected by community and population level factors.</td>
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Evidence on brief interventions for practitioners

- Regular and ongoing conversations about substance use reduce stigma and invite critical thinking
- Brief intervention can address multiple substances or multiple health issues
- Brief intervention does not require extensive time and resources
- The quality of the conversation can influence success
- There are multiple practice approaches that can be used for brief intervention

- Successful brief interventions are collaborative, non-judgemental and recognize people as experts on their lives
- Child welfare practices and policies can reduce barriers to successful brief interventions in perinatal period
- Brief intervention in the perinatal period can include women’s partners and social networks in synchronous ways
- Brief intervention with Indigenous girls and women should be culturally grounded
BRIEF INTERVENTION ON SUBSTANCE USE WITH GIRLS AND WOMEN

50 IDEAS FOR DIALOGUE, SKILL BUILDING, AND EMPowerMENT

DIALoGUE FOR CHANGE

- Brief interventions are collaborative conversations between an individual and a health care or social service provider about a health issue. This resource focuses on brief intervention on substance use with girls and women in the preconception and perinatal period.
- Brief intervention focuses on preventing and reducing harmful or risky patterns of substance use and can also include addressing underlying concerns that may be affecting substance use (e.g., depression, gender-based violence). Brief interventions may be formal or informal, structured or unstructured, short or long, a one-time event, or a series of conversations over a period of time.
- Because substance use has wide-ranging effects on many different aspects of life, service providers across a range of health care and social service settings can have an important role in addressing the potential harms of substance use and improving girls’ and women’s overall health.

Primary Care

Regular and ongoing conversations in primary care about substance use reduces stigma and normalizes substance use as part of life. Service providers are encouraged to have discussions with all women, not just those who they believe are more likely to have substance use problems.

ALCOHOL, TOBACCO, AND BREAST CANCER

Many women are interested in learning about their risk of breast cancer. Both active and passive smoking are significant risk factors for breast cancer. Alcohol is a known carcinogen (cancer-causing substance) and drinking alcohol consistently has been shown to increase the risk of breast cancer. Women can reduce their risk by quitting smoking, reducing the number of cigarettes they smoke, or eliminating their exposure to second-hand smoke. All women can drink less alcohol to reduce the risk of breast cancer for women at higher risk of breast cancer. They can choose to avoid alcohol entirely or drink occasionally.

CANNABIS

- Check topics relevant to your practice
  - Cannabis use and overall health and well-being
  - Medical vs. recreational cannabis use, different ways of consuming
  - Evaluating health claims, cannabinoid use as “releaf,” THC: CBN (tetrahydrocannabinol) vs. CBD (cannabinol)
  - Specific health effects, e.g., short-term memory, attention, motor skills, reaction time
  - Illicit reduction, e.g., lower-risk guidelines, second-hand smoke, avoiding synthetic cannabis, cannabis and driving
  - Controversies - preventing potential harm to fetus
  - Pregnancy - effects of cannabis, decisions about medical cannabis during pregnancy, health risks associated with using for nausea or morning sickness, exposure to second-hand smoke
  - Parenting - balancing use with caregiving responsibilities, role modeling and discussing cannabis use with children, second-hand smoke, safe storage
  - Other:

PRESCRIPTION OPIOIDS

- Check topics relevant to your practice
  - Prescription opioids as one component of pain management
  - Short- and long-term effects, e.g., feeling drowsy, nausea, constipation, tolerance, withdrawal, addiction and overdose potential
  - Specific health effects, e.g., hormonal changes (which can affect your period or interest in sex), infertility, “residential dose delusion”
  - Effects of mixing with other medications and drugs
  - Effects of mixing with other substances such as alcohol or sedatives, like benzodiazepines
  - Mental wellness - long-term effects on depression, anxiety, cognition
  - Pain and coping with stress, difficult life circumstances, gender-specific violence
  - Pregnancy - effects of cannabis, opioid treatment, Niacin/Pioglitazone Withdrawal
  - Breastfeeding - safety, monitoring, co-sleeping
  - Parenting - role modeling and discussing opioid use and misuse with children, safe storage
  - Other:

SELF-ASSESSMENT QUESTIONS FOR SERVICE PROVIDERS

1. Which substance use topics can I routinely address in my day-to-day practice?
2. How does addressing substance use fit within my model of care or program philosophy?
3. How does my particular role/relationship with girls and women influence the topics I am best situated to discuss?
4. Is it possible for me to address more than one substance or health concern in my conversations with girls and women?
5. Are there topics I could better address if I had additional organizational support? E.g., additional time, staffing, up-to-date community resource list.
Giving accurate information, supporting critical thinking, contrasting substances, avoiding moral panic

Sex/gender specific evidence on cannabis, alcohol and reproduction
Health effects of cannabis – background 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

http://bccewh.bc.ca/
<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></td>
<td>Chabarria et al 2016</td>
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<tr>
<td>Maternal hypertensive disorders</td>
<td></td>
<td>Metz et al 2017</td>
</tr>
<tr>
<td>NICU placement</td>
<td>Hayatbakhsh 2012; Warshak 2015</td>
<td>Mark et al 2016; Crume et al 2018</td>
</tr>
<tr>
<td>Birth defects</td>
<td>Van Gelder et al 2009</td>
<td>Warshak et al 2015</td>
</tr>
<tr>
<td>Study</td>
<td>Country</td>
<td>Results</td>
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<td>------------------------------------------</td>
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<tr>
<td>Chakraborty et al. 2015</td>
<td>New Zealand</td>
<td>Frequent maternal use associated with better global motion perception</td>
</tr>
<tr>
<td>El Marroun et al 2010; 2018</td>
<td>Holland: Gen. R</td>
<td>• No association with cognitive function/ behavioural problems age 3</td>
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<td></td>
<td></td>
<td>(El Marroun et al 2010)</td>
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<tr>
<td></td>
<td></td>
<td>• Preconception, maternal and paternal use associated with offspring</td>
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<td></td>
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<td>externalizing problems at age 7-1-(El Marroun et al 2018)</td>
</tr>
<tr>
<td>Day et al. 2011; Goldschmidt et al 2004,</td>
<td>USA: MHPCD</td>
<td>• First trimester heavy use associated with subtle deficits in verbal</td>
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<tr>
<td>2008; Sonon et al 2015; Wilford et al</td>
<td></td>
<td>reasoning scores at age 6</td>
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<tr>
<td>2010</td>
<td></td>
<td>• Offspring of heavier users more likely to report delinquent behavior</td>
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<tr>
<td></td>
<td></td>
<td>at age 14</td>
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<td></td>
<td></td>
<td>• Subtle negative effects on school performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Subtle deficits in visual–motor coordination</td>
</tr>
<tr>
<td>Smith et al 2006; 2016</td>
<td>Canada: OPPS</td>
<td>No differences on visuospatial task performance; observed differences in</td>
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<td></td>
<td></td>
<td>neural functioning/ blood flow on fMRI</td>
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<tr>
<td>Teyhan et al 2017</td>
<td>Australia</td>
<td>Maternal &amp; paternal use not associated with educational attainment</td>
</tr>
<tr>
<td>Zammit et al 2009, UK</td>
<td></td>
<td>Maternal use not associated with psychotic symptoms at age 12</td>
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Effects of alcohol use in pregnancy

- Risk of miscarriage or stillbirth
- Risk of low birth weight or premature birth

- Higher risk in adults of auto-immune conditions, heart disease, sleep disorders, vision and hearing problems, endocrine disorders, digestive/intestinal problems, migraines, mental health problems . . .

Cook et al, FASD Guidelines for Diagnosis Across the Lifespan, December 2015
Polysubstance Use

- Women who use cannabis during pregnancy more likely to smoke cigarettes and use alcohol (Ko et al 2018)
- Dual maternal cannabis and tobacco use associated with poor infant self-soothing, effects more pronounced for daughters (Stroud et al 2018)
- Co-use of tobacco and cannabis associated with increased risk of birth defects and small head circumference; not significant for cannabis use only (Coleman-Cowger et al 2018)
Methodological Challenges

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

Women and Cannabis

Cannabis and Pregnancy
- Using cannabis while pregnant may affect the fetus. Until more is known about the long-term effects of cannabis on women, babies and young children, it is best to avoid using cannabis while pregnant. For more information, visit the BC Centre for Excellence in Women's Health website at http://bccewh.bc.ca/

Cannabis and Your Health
- Inhaling cannabis is associated with long-term health issues such as lung cancer, chronic coughing, and respiratory problems associated with HIV/AIDS and multiple sclerosis. In some people, cannabis increases blood pressure and heart rate, which can affect those with cardiovascular disease. Several studies have found that cannabis use can help reduce chronic pain and anxiety in cancer patients. More research is needed to understand the effects of cannabis, and it is important to remember that even low doses can be harmful.

http://bccewh.bc.ca/
But we can still discuss cannabis use with women

Need for research on:
- amount, frequency, potency, method of ingestion, timing
- medical/therapeutic use; low to moderate use
- paternal cannabis use

Interim action: Discuss what is known and not known

“Credibility … was enhanced by acknowledging uncertainty about the risk to the fetus with low to moderate alcohol exposure. Rather than undermine an abstinence-based message, this information served as a clear rationale for the recommendation. An honest and scientific framing of the message and delivery by an expert source were also shown to minimize counterargument and strengthen the message’s persuasiveness.” (France et al., 2013, p.8)

http://bccewh.bc.ca/
Web resources

Colorado: Good to Know Campaign

SOGC Canada
https://www.pregnancyinfo.ca/learn-more/
Braiding together: evidence on brief intervention and perinatal cannabis/alcohol use, with broader equity oriented principles for practice
Approaches to include in brief interventions


**Sex and Gender**
Discuss both the biological and social issues affecting substance use. Support self determination, choices and empowerment.

**Harm Reduction**
Support girls and women to address immediate health and social goals, and consider their options for change in substance use.

**Principles for Practice and Policy Perinatal Substance Use**

- **Trauma Informed**
  Recognize that substance use may be related to past and current experiences of violence and trauma. Create safety and collaboration.

- **Equity informed & Culturally Safe**
  Help women address barriers to health such as poverty. Engage in reciprocal and respectful discussion of culture.
Sex/ Gendered Approach
How do sex and gender matter in substance use?

I. Mechanisms – differences in biological responses to drugs

II. Consequences and Impacts – socioeconomic and legal consequences of drug problems: employment, poverty, homelessness, gang activities, drug trafficking, sexual assault, domestic violence

III. Prevention Issues – differences in pathways, risk and protective factors, progression, transition and maintenance

IV. Treatment Issues – differences in access, readiness, retention, and outcomes

V. Reproduction/ Fertility / Parenting – different roles, biological concerns, social stigma, child custody

Sex, gender and cannabis

- There may be sex differences in the metabolism of cannabis, due to differences in muscle mass and fat distribution.
- Male and female users report differences in forms of ingestion, effects and withdrawal symptoms.
- Men who use cannabis are more likely to report dependence than women.
- Evidence regarding cannabis use and mental health is mixed; some studies report that depressive symptoms are greater among males, while other studies report an association with depression and anxiety only for females.
- Cannabis use has been associated with decreased pain sensitivity in men, but not in women.
- The evidence regarding the effects of cannabis use during preconception, pregnancy and parenting is mixed.

Canada’s Lower Risk Cannabis Use Guidelines do not yet provide sex specific recommendations.
Sex gender and alcohol

Gender influences on women’s drinking in pregnancy

- Partner drinking
- Using alcohol to cope with stress, poverty, interpersonal violence . . .
In health communication we often reinforce gender stereotypes, instead of challenging them.
Gender transformative: a preferred approach

- Gender transformative approaches have dual goals
- Improving gender equity at the same time as achieving health

- Often focus on
  - engaging men and boys
  - changing negative gender norms
  - empowering women and girls at multi levels

https://promotinghealthinwomen.ca/
Gender Transformative Approach

• Shares the weight of change between young men and women
• Links the outcome to broader community health.
A PROGRAM for MEN who want to be INVOLVED, HEALTHY and SMOKE FREE DADS

http://dadsingear.ok.ubc.ca/

https://www.dadsingearindigenous.ca/

Engaging men

Gender transformative approach

Kids with smoke free, involved parents are less likely to act out in school and smoke themselves. Remind yourself you don’t smoke anymore and be patient – quitting takes time.

www.dadsingear.ok.ubc.ca
Trauma Informed Approach
Using trauma-informed approaches

TRAUMA AWARENESS

Trauma awareness is the foundation for trauma-informed practice. Being ‘trauma aware’ means that individuals understand the high prevalence of trauma in society, the wide range of responses, effects and adaptations that people make to cope with trauma, and how this may influence service delivery (e.g., difficulty building relationships, missing appointments).

SAFETY & TRUSTWORTHINESS

Physical, emotional, spiritual, and cultural safety are important to trauma-informed practice. Safety is a necessary first step for building strong and trustworthy relationships and service engagement and healing. Developing safety within trauma-informed services requires an awareness of secondary traumatic stress, vicarious trauma, and self-care for all staff in an organization.

CHOICE, COLLABORATION & CONNECTION

Trauma-informed services encourage opportunities for working collaboratively with children, youth and families. They emphasize creating opportunities for choice and connection within the parameters of services provided. This experience of choice, collaboration, and connection often involves inviting involvement in evaluating the services, and forming service user advisory councils that provide advice on service design as well as service users’ rights and grievances.

STRENGTHS BASED & SKILL BUILDING

Promoting resiliency and coping skills can help individuals manage triggers related to past experiences of trauma and support healing and self-advocacy. A strengths-based approach to service delivery recognizes the abilities and resilience of trauma survivors, fosters empowerment, and supports an organizational culture of ‘emotional learning’ and ‘social learning.’
Aware

• A universal approach – not based on disclosure
• Aware of the:
  • effects of trauma
  • implications for service access
  • implications for service providers
Safety

• Creating safety to discuss challenges facing families
• Safety is central to TIP – physical, emotional, spiritual, cultural.
• Requires a move from confrontational and directive approaches
Choice & Connection

• TIP is relational practice
• Repairs overwhelming and power-over experiences
• Focus on nearly attachment
Poole, N., & Greaves, L. (Eds.). (2012). Becoming trauma informed. Toronto, ON: Centre for Mental Health and Addiction.
Harm Reduction Oriented
Reducing harms is not only about reducing harms directly associated with substance use.

These are the issues facing pregnant women accessing community-based one-stop services in a national study in Canada.

http://www.fasd-evaluation.ca/communitysystem-outcomes/
With women at higher risk

Use Motivational Interviewing practice and multiple options and connections for change

Collaboration
– avoid confrontation, focus on partner-like relationship

Evocation
– elicit, draw out motivation

Autonomy
– responsibility for change is left with the client, increase intrinsic motivation

Summary

- Brief intervention wisdom
- Accurate information on substances, recognizing differences and knowledge gaps
- Encouraging choice for “it’s safest not to use when pregnant”
- Integrating women-centred, trauma informed, harm reduction and equity oriented approaches
Welcome to the Centre of Excellence for Women’s Health

We are a research and knowledge exchange centre focused on sex and gendered approaches to health, with strong roots in policy, practice, academic and community networks.

We engage in research and evaluation that produces evidence to improve girls’ and women’s health, and promote a women-centred and gender transformative approach to health.

We involve researchers, service providers, policy makers and women’s health advocates at all stages of research and knowledge exchange processes.

We partner with local community agencies, and provincial, national and international organizations, initiatives and networks to conduct research and to exchange knowledge.

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https://fasdprevention.wordpress.com/