

## Comprehensive Care of Pregnant Women with Cannabis Use Disorders

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### LEARNNG OBJECTIVES

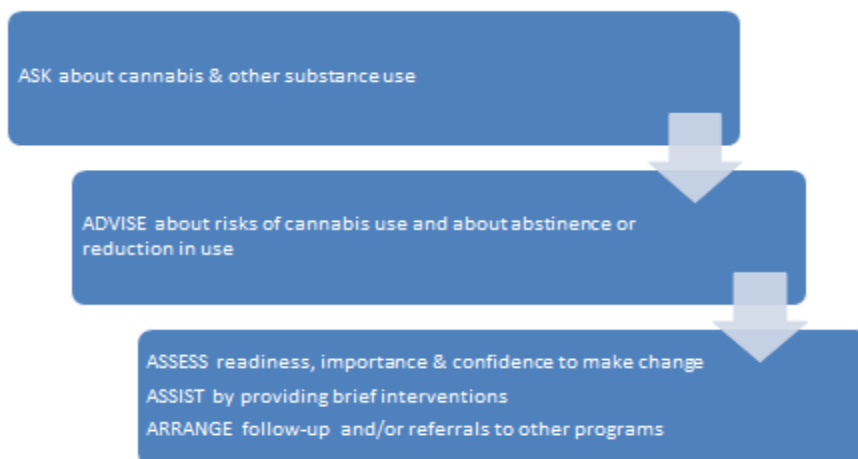
1. To describe the prevalence and factors associated with cannabis use.
2. To review the spectrum of cannabis-induced and cannabis use disorders.
3. To discuss identification of cannabis use during pregnancy.
4. To review short-term and long-term effects of perinatal cannabis use.
5. To review the management of cannabis use disorders.

### KEY LEARNING POINTS

1. Cannabis is the most prevalent illicit drug used during pregnancy with estimates varying between 2 and 5%.
2. Cannabis-induced disorders include cannabis intoxication, cannabis withdrawal and cannabis use disorders as defined by the Diagnostic and Statistical Manual, 5<sup>th</sup> edition (DSM-V).
3. Other cannabis-induced disorders include adverse effects of marijuana use that occur with higher doses and repeated use:
  - Cannabis-induced psychotic disorder: illusions or hallucinations, psychosis
  - Cannabis-induced anxiety disorder
  - Cannabis-induced sleep disorder
4. Perinatal cannabis use is associated with numerous negative short- and long-term outcomes.
5. Summary of pregnancy-related effects:
  - No consistent pattern of birth defects
  - No consistent pattern on risk of preterm birth or growth restriction
  - Weak evidence for association with low birth weight from meta-analysis
  - Some evidence for **dose-response relationship**: more likely to see above effects with heavier cannabis use
6. Summary of neurocognitive effects:
  - Dose-response relationships with effects more common among children of heavier users

- Age 3-4: Deficits in memory, verbal and perceptual skills, verbal and visual reasoning
  - Age 9: Impaired abstract and visual reasoning; poor performance on tasks requiring executive functioning; poorer reading, spelling and academic achievement
  - No impact on general intelligence
7. Summary of behavioural effects:
- Preschool age: findings indicate possible aggression and inattention at 1.5 – 4 years
  - Age 6: more evidence of negative relationship with hyperactivity, impulsivity and inattention
  - Age 10: increased rates of externalizing problems
  - Age 16 -21: increased risk of cigarette smoking and cannabis use initiation
8. Management of cannabis use disorders during pregnancy consists of brief interventions (BI). There is **moderate evidence** for benefits of BI in general population to reduce cannabis use and cannabis-related problems. There have been no studies about cannabis use involving pregnant populations. Advice should include the following:
- Pregnant women should be advised to quit cannabis use during pregnancy due to adverse effects on development and behavior.
  - Alternatively, if not able to abstain, reduced cannabis use should be considered due to document dose-effect relationships.
  - Abstinence recommended while breastfeeding.
  - Children exposed to cannabis in utero should be closely monitored for growth and development.

## Summary



## REFERENCES

1. Public Health Agency of Canada. Canadian Maternal Experiences Survey. Ottawa, 2009.
2. American Society of Addiction Medicine. The ASAM principles of addiction medicine. 5<sup>th</sup> edn. RK Ries, senior editor. Hong Kong, 2014.
3. Porath-Walker AJ. Clearing the smoke on cannabis: Maternal Cannabis Use during Pregnancy. Canadian Centre on Substance Use in Pregnancy. 2015.
4. Marijuana use during pregnancy and lactation. Committee Opinion No. 637. American College of Obstetricians and Gynecologists. Obstet Gynecol 2015; 126: 234-238.
5. Ordean A. Marijuana exposure during lactation: Is it safe? Pediatrics Research International Journal 2014: 1-6.
6. Sue Henry-Edwards, Rachel Humeniuk, Robert Ali, Maristela Monteiro and Vladimir Poznyak. Brief Intervention for Substance Use: A Manual for Use in Primary Care. (Draft Version 1.1 for Field Testing). Geneva, World Health Organization, 2003.
7. Saitz R, Palfai TPA, Samet JH. Screening and brief intervention for drug use in primary care. JAMA 2014; 312(5): 502-513.

## RESOURCES

1. Canadian Centre on Substance Abuse (CCSA)  
[www.ccsa.ca](http://www.ccsa.ca)
2. Centre for Addiction and Mental Health  
[www.camh.ca](http://www.camh.ca)
3. Motherisk clinical consultations by appointment or telephone advice 1-877-327-4636  
[www.motherisk.ca](http://www.motherisk.ca)
4. SOGC guideline on substance use in pregnancy  
[www.sogc.org](http://www.sogc.org)
5. Pregnancy-related issues in management of addictions project (PRIMA):  
[www.addictionpregnancy.ca](http://www.addictionpregnancy.ca)
6. Toronto Centre for Substance Use in Pregnancy (T-CUP), SJHC (416) 530-6860 fax (416) 530-6160, [ordeaa@stjoe.on.ca](mailto:ordeaa@stjoe.on.ca)