Addressing cannabis use with pregnant women:
Using gender-responsive approaches

Introduction

Cannabis is the most commonly used illicit drug among general[1] and pregnant populations[2,3]. Recent studies also show there are increasing trends in consumption in these population groups[1,4].

Local research[5] and a recent review in the United States[4] have also examined pregnant women's attitudes to cannabis consumption. These findings show that among pregnant women, 6.4% in the age group of 18 - 25 years and 1.3% aged between 26 and 44 years report use in the past month[4].

In Australia, the National Drug Strategy Household Survey results[6] show that community tolerance has increased for cannabis use, with higher proportions of people supporting legalisation and a lower proportion supporting penalties for sale and supply. More people are also in favour of cannabis being used in clinical trials to treat medical conditions (from 75% in 2013 to 87% in 2016) and support a change in legislation permitting the use of cannabis for medical purposes (from 69% in 2013 to 85% in 2016)[5].

Cannabis and Effects – Pregnancy

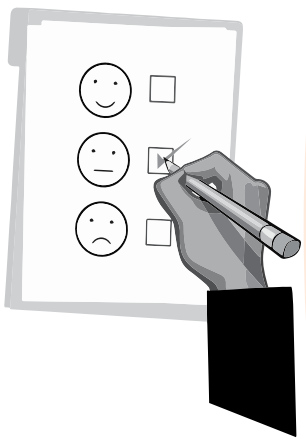
Louw[7] cites a range of authors who describe cannabis and its effects when consumed during pregnancy. These effects relate to its lipophilic properties, that it readily crosses the placental barrier and its impacts on fetal brain development. Louw also notes that cannabis has teratogenic potential, and its use can be associated with anencephaly and other adverse effects on neurodevelopment. Hayatbakhsh et al[8] also notes an association with low birth weight, preterm labour, small for gestational age and admission to the neonatal intensive care unit. Of note, these findings have controlled for potential confounders including tobacco smoking, alcohol consumption and use of other illicit drugs.

Attitudes To Cannabis Consumption During Pregnancy

Research findings[4,9], show there are perceived therapeutic effects and uncertainty regarding adverse perinatal consequences. Bayrampour et al. concluded that this uncertainty contributed to cannabis use. Additionally they suggest that a lack of communication from health care providers and the lack of counselling may contribute to a perception by pregnant women that cannabis is safe; that there were no general risks to their own or their babies' health.

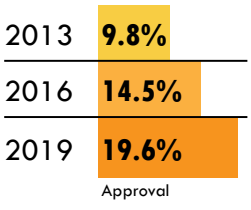
Local researcher Georgia Figg[5] examined the attitudes of Tasmanian women to cannabis consumption during pregnancy. Her findings also highlight women's uncertainty about adverse consequences, their perception that cannabis may have therapeutic effects as well as their lack of exposure to information on the effects of cannabis. Another notable finding is that a high proportion of respondents indicated a neutral attitude to the harmful or positive effects of cannabis.

In addition to risk perceptions, self-identified current use/dependence and higher scores for social norms were also significant predictors of favourable attitudes to consumption.

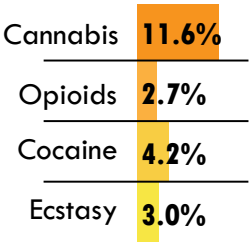


"...A high proportion of respondents indicated a neutral attitude to the harmful or positive effects of Cannabis."

Approval of regular adult use of Cannabis[6]



Most commonly used illicit drugs in last 12 months[6] in 2019



Addressing knowledge gaps: A window of opportunity

Figg's research[5] also showed a range of seemingly conflicting responses to a question on the harm of cannabis in pregnancy. A **risk perception rating** showed that cannabis was rated as the most harmful from a list of 23 substances (with a similar rating to alcohol, thalidomide and tobacco).

However, 15% of the same sample agreed that cannabis is good for morning sickness and 40% were neutral on this question. In addition, 12% believed that a small amount of cannabis was safe and 20% were neutral. 17% of the sample agreed that cannabis is less harmful than alcohol and 29% were neutral.

These neutral responses may reflect a lack of knowledge and information about cannabis. Figg concluded that:

> *"Providing pregnant women with information about the potential risks of cannabis use during pregnancy may help to reduce their actual use, particularly for those with neutral attitudes regarding cannabis use during pregnancy."*[5]

Bayrampour et al.'s findings[4] also support this approach where they suggest:

> *"...a discussion about health concerns associated with cannabis use may influence many women's perceptions of risk and help them to make a more informed choice in the face of uncertainty."*

Additionally, Bayrampour et al.[4] cites Jarlenski et al.[9] who noted that women reported the need for resources to understand specific effects of cannabis on the foetus as well as improved communication regarding this substance with health care providers.

"...A discussion about health concerns associated with cannabis use may influence women's perception of risk..."

Understanding Reasons For Use

Figg's[5] research showed that for the sample of women who reported using cannabis during pregnancy, many reasons influenced their use.

In a study of women[5] who reported using cannabis during pregnancy...

56% used cannabis to cope with stress and anxiety

51% used cannabis to relieve nausea

49% used cannabis to improve mood, reduce depressive symptoms, or to relax

36% used cannabis because they felt dependent

These findings highlight the importance of using women centred practice approaches.

These prioritise the development of a respectful and non-judgmental therapeutic relationship to respond to specific motivations and contexts for women connected with their cannabis use.

It is suggested that these approaches are absolutely crucial for effectively supporting the small cohort of women who may fit the criteria for a substance use disorder[10].

A recent study of primary care physicians' barriers to substance abuse screening found that the reasons for lack of screening included time constraints, lack of training on how to manage positive screening results, and lack of patient treatment resources.[11] The following guidelines are provided with the aim of overcoming some of these barriers.

Addressing Cannabis Use With Pregnant Women – Key Considerations:

- **Incorporate a gender responsive model of care when working with women in addressing any alcohol and other drug use.** This model is underpinned by a trauma informed and family inclusive approach and a strengths-based and resilience oriented framework.[12] Refer to NADA's resource: http://bit.ly/GenderResponsiveModelOfCare

- **Substance use is frequently linked with other health issues such as mental health, or other areas of women's lives, such as relationships.** Consider the screening process and a brief intervention as an opportunity to support women to potentially address multiple substances or multiple health issues.[13]

- **Currently there are significant gaps in the provision of accessible information** for women in primary healthcare settings to understand the effects of cannabis on their health and their babies' health[9,13]. Health care workers can address this gap by asking specifically about cannabis use in the screening process and assist women to make a more informed choice.[12]

- **Women are receptive to health care providers' recommendations** when the information presented is clear, helpful, evidence based and focusses on the risks to the baby, as opposed to focussing on legal consequences. This is shown to play a significant role in women's intentions to quit[9,14]. The 'Questions about Cannabis' resource is provided as a handout to talk through and share with patients.

- **Inadequate screening for substance use and punitive counselling are barriers** to women's understanding of the importance of seeking treatment for substance use.[10]

- **Additionally, there is recognition of the need for reducing the risk of adverse health outcomes from cannabis use** by utilising a harm reduction approach. In response to this is the release of the Lower-Risk Cannabis Use Guidelines by the American Public Health Association[15]. These guidelines have been adapted into a Plain English version and are included in the handout to talk through and share with your patients.

  Note that these harm reduction guidelines are written for the general population and include specific recommendations for pregnant women: primarily, to avoid the use of cannabis. Where abstinence is not an identified goal, these recommendations provide clear guidelines for harm reduction.

- **There are a number of practice approaches that can be used for brief intervention and support.** The '5A' model of brief interventions has been demonstrated as an effective approach in a range of contexts[16,17,18]. Brandon[19] recommends the '5A' approach for primary health care workers, in particular nurses, as an effective intervention for addressing substance use with pregnant women. Key talking points of this model have been adapted and are listed overleaf along with suggested approaches from the Doorways to Conversation[13] resource.

- **Screening tools can assist to identify low-risk, moderate-risk and high-risk use.** A review of evidence undertaken by NDARC[20] assessed a range of screening tools for their sensitivity and efficacy with pregnant women. When screening for cannabis use they suggest these tools and the recommended context for use:

  Alcohol Smoking and Substance Use Involvement Screening Test (ASSIST) Version 3:
  8 questions with a risk classification given for each substance. May be useful for further assessment.

  Indigenous Risk Impact Screen (IRIS):
  13 substance use and psychosocial domains. Not validated for use in pregnancy but may be useful for further assessment.

  Timeline Follow Back (TLFB):
  Number of questions varies depending on the time period being assessed. May be useful for further assessment.

Addressing cannabis use with pregnant women: Using the 5A's

Adapted for use from Nathoo[13] and Brandon[19]

ASK

Research shows that simply asking women about their substance use can motivate them to reduce or change their substance use[13].

- Ask permission: e.g. "Can I talk to you about substance use and health issues?" OR "I ask all my patients about cannabis use, would it be alright for me to do this?"
- Empathy - establish physical, emotional and cultural safety
- Nonjudgmental stance – 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
- Specifics: What substances, duration of use, extent of use

ASSESS

Assessment can take into consideration the intersection of substance use and mental health, trauma, impact of family violence or other factors contributing to substance use.

- Utilise screening tools such as ASSIST v3
- Level of stigma and fears about disclosure
- Previous attempts to discontinue use and outcome
- Willingness to discontinue use
- Willingness to seek help and to what extent
- Resources available and barriers to the pursuit of treatment

ADVISE

Advice can be provided in terms of building on existing knowledge, addressing concerns and keeping the conversation going.

- Potential effects of substance use on maternal health – Refer to 'Questions about Cannabis' handout to talk through: "If you have just found out that you are pregnant, here's some information to help keep you and your baby healthy."
- Potential effects of substance use on fetal health and development - Refer to 'Questions about Cannabis' handout
- Associations between substance use and birth outcomes - Refer to 'Questions about Cannabis' handout
- Effectiveness of treatment
- Internet resources for additional information – "There are lots of places where you can get more information. Can I show you some options?"

ASSIST

Providing assistance can take the form of a collaborative, co-ordinated and accessible approach.

- Prioritize immediate goals and maximize options
- Give specific referral sources in the community along with contact information – "Here is some information about a program that some of my patients have found useful"
- Problem-solve around barriers in pursuit of recommended level of treatment
- Acknowledge that harm reduction may be an identified goal and talk through and share Lower Risk Cannabis Use recommendations.

ARRANGE

Service providers help women develop a plan to improve their overall health and where indicated, address problematic substance use when they are ready.

- Schedule follow-up appointment
- Check in and check understanding – "What do you think about that?"
- At follow-up, repeat ask, assess, advise
- Provide encouragement if woman has not followed through on referral, problem-solve around barriers and elicit reasons to pursue treatment

Summary: Cannabis Lower Risk Use Guidelines

Adapted for use from American Journal of Public Health

Recommendation 1: The most effective way to avoid any risks of cannabis use is to abstain.

Recommendation 2: People who begin using cannabis at an early age, that is before 16 years and use cannabis intensively and frequently experience a range of adverse health and social effects in young adult life. This may be because frequent cannabis use affects the developing brain. It is recommended to delay initiation of cannabis use as long as possible.

Recommendation 3: Cannabis that contains high levels of THC are linked with higher risks of acute and chronic mental and behavioural problems. Where possible, it is recommended to know the composition and ideally to use cannabis with low THC content. CBD, another component of cannabis can reduce some of these negative effects and so it preferable to use cannabis containing high CBD:THC ratios.

Recommendation 4: Recent research has shown that synthetic cannabis cause more acute and severe adverse health effects, including some deaths. It is recommended that synthetic cannabis use should be avoided.

Recommendation 5: Regular inhalation of combusted cannabis has an adverse affect on respiratory health. It is generally preferable to avoid smoking cannabis. Alternatives that reduce these risks to respiratory health include the use of vaporizers or edibles. It should also be noted that the delayed onset of effect may result in the use of larger than intended doses and as a result increased adverse effects. (DEN suggests caution with this recommendation as there is emerging evidence of the harms of vaping when cannabis is combined with additives and flavourings.) [22]

Recommendation 6: It is recommended that the practice of "deep inhalation", breath-holding or the Valsalva manoeuvre, which increase the psychoactive ingredients' absorption when smoking, be avoided as this significantly increases the intake of toxic smoke into the lungs.

Recommendation 7: Daily or near-daily cannabis use is strongly associated with increased risk of adverse health and social outcomes. To reduce this risk it is recommended that cannabis is used occasionally, such as one day per week or on weekends only.

Recommendation 8: Cannabis use is associated with an increased risk of motor-vehicle accidents. It is recommended that use is avoided for at least 6 hours before driving or operating other machinery. The wait time may need to be longer, which is dependent on the individual, the quantity and the properties of the cannabis being used. Take note of local driving and drug testing laws which have legal consequences if cannabis is detected. Additionally, the combination of alcohol and cannabis further increases the risk of motor vehicle accidents and should be avoided.

Recommendation 9: There are some populations who are at probable higher risk for cannabis related adverse effects, who should not use cannabis. These include individuals with a predisposition for a family history of psychosis and substance use disorders, and also pregnant women (mainly to avoid adverse effects on the baby). These recommendations are based in part on precautionary principles.

Recommendation 10: Even though the data is limited, it is likely that the combination of some of the risk behaviours described above will magnify the risk of adverse outcomes from cannabis use. For example, early-onset use involving frequent use of high-potency cannabis is likely to disproportionately increase the risks of experiencing acute or chronic problems.

References

1 United Nations Office on Drugs and Crime (UNODC). World Drug Report 2018 Executive Summary: Conclusions and Policy Implications. Sales No. E.18.XI.9, https://www.unodc.org/wdr2018/prelaunch/WDR18_Booklet_1_EXSUM.pdf (June 2018, accessed 20 June 2019).

2 Schauberger CW, Newbury EJ, Colburn JM, et al. Prevalence of illicit drug use in pregnant women in a Wisconsin private practice setting. American Journal of Obstetrics & Gynecology 2014; 211: 255.e1-255.e4.

3 Metz TD, Stickrath EH. Marijuana use in pregnancy and lactation: a review of the evidence. Am J Obstet Gynecol 2015; 213: 761–778.

4 Bayrampour H, Zahradnik M, Lisonkova S, et al. Women's perspectives about cannabis use during pregnancy and the postpartum period: An integrative review. Preventive Medicine 2019; 119: 17–23

5 Figg G. Tasmanian Women's Attitudes Towards Cannabis Use During Pregnancy. Masters Thesis, University of Tasmania, 2018.

6 Australian Institute of Health and Welfare 2020, 'National Drug Strategy Household Survey 2019', https://www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey-2019/contents/table-of-contents.

7 Louw K-A. Substance use in pregnancy: The medical challenge. Obstet Med 2018; 11: 54–66

8 Hayatbakhsh MR, Flenady VJ, Gibbons KS, et al. Birth outcomes associated with cannabis use before and during pregnancy. Pediatr Res 2012; 71: 215–219

9 Jarlenski M, Tarr JA, Holland CL, et al. Pregnant women's access to information about perinatal marijuana use: A qualitative study. Womens Health Issues 2016; 26: 452–459

10 Harris AL, Okorie CS. Assessing Marijuana Use During Pregnancy. Nursing for Women's Health 2017; 21: 207–216

11 Van Hook S, Harris SK, Brooks T, et al. The 'Six T's': barriers to screening teens for substance abuse in primary care. J Adolesc Health 2007; 40: 456–461.

12 Network of Alcohol and Other Drug Agencies (NADA). Women's AOD Services Network Gender Responsive Model of Care November 2016, https://www.nada.org.au/wp-content/uploads/2017/12/womens_aod_network_model_of_care_for_web.pdf (2016, accessed 20 June 2019).

13 Nathoo T, Poole N, Wolfson L, et al. Doorways to Conversation: Brief Intervention on Substance Use with Girls and Women. 2018.

14 Mark K, Gryczynski J, Axenfeld E, et al. Pregnant Women's Current and Intended Cannabis Use in Relation to Their Views Toward Legalization and Knowledge of Potential Harm. Journal of Addiction Medicine 2017; 11: 211–216.

15 Fischer B, Russell C, Sabioni P, et al. Lower-Risk Cannabis Use Guidelines: A Comprehensive Update of Evidence and Recommendations. Am J Public Health 2017; 107: e1–e12.

16 Puschel K, Thompson B, Coronado G, et al. Effectiveness of a brief intervention based on the '5A' model for smoking cessation at the primary care level in Santiago, Chile. Health Promot Int 2008; 23: 240–250.

17 Vallis M, Piccinini-Vallis H, Sharma AM, et al. Modified 5 As. Can Fam Physician 2013; 59: 27–31.

18 Quinn VP, Hollis JF, Smith KS, et al. Effectiveness of the 5-As Tobacco Cessation Treatments in Nine HMOs. J Gen Intern Med 2009; 24: 149–154.

19 Brandon AR. Psychosocial interventions for substance use during pregnancy. J Perinat Neonatal Nurs 2014; 28: 169–177; quiz E1-2.

20 National Drug and Alcohol Research Centre. Supporting pregnant women who use alcohol or other drugs: a review of the evidence, https://ndarc.med.unsw.edu.au/sites/default/files/ndarc/resources/Supporting%20Pregnant%20Women%20who%20use%20Alcohol%20or%20Other%20Drugs%20-%20A%20review%20of%20the%20evidence.pdf (2014).

21 Patel, J & Marwaha, R 2020,'Cannabis Use Disorder', in, StatPearls, StatPearls Publishing, Treasure Island (FL), http://www.ncbi.nlm.nih.gov/books/NBK538131/>.

22 Centres for Disease Control and Prevention 2020, Outbreak of Lung Injury Associated with the Use of E-Cigarette, or Vaping, Products, https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html.

Drug Education Network Inc. 2020
Written by Maria Duggan.

Suggested Citation: *Drug Education Network Inc 2020, 'Addressing Cannabis Use with Pregnant Women'*