Host

Karin Moen
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Mental Health Commission of Canada
Speakers

Dr. Fiona Clement
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University of Calgary

Dr. Rebecca Haines-Saah
Assistant Professor, Cumming School of Medicine
University of Calgary

Dr. Robert Gabrys
Research and Policy Analyst
Canadian Centre on Substance Use and Addiction
Agenda

- MHCC and our work in cannabis and mental health
- Cannabis and Mental Health: an Environmental Scan and Scoping Review
  - Dr. Fiona Clement, University of Calgary
- Clearing the Smoke on Cannabis: Regular Use and Mental Health
  - Dr. Robert Gabrys, CCSA
- CCSA’s Cannabis Public Education
- MHCC’s ongoing projects and next steps
- Q&A
  - Dr. Fiona Clement, Dr. Rebecca Haines-Saah, Dr. Robert Gabrys
About the MHCC

**Vision**
Mental health and wellness for all.

**Mission**
To raise awareness of the mental health and wellness needs of Canadians, and to catalyze collaborative solutions to mental health system challenges.
The MHCC, Cannabis, and Mental Health

Inform and Invest in Research

Center Lived and Living Experience

Share and Mobilize Knowledge
Collaboration and Partnership in Cannabis and Mental Health
Cannabis and Mental Health: an Environmental Scan and Scoping Review

Overview provided by Dr. Fiona Clement and Dr. Haines-Saah
on behalf of Dr. Corbett, B Farkas, M Hofmeister, R Diaz, J Taplin, Dr. Hill and Dr. Patten
Our Team

Ruth Diaz, MSc, Dr. Rebecca Haines-Saah, Brenlea Farkas, MSc, Dr. Matthew Hill, Dr. Fiona Clement, Dr. Scott Patten,
Dr. Caroline Corbett (not pictured)
What did we do?

- Canadian Data Assets
- International Data Assets
- Published literature
Canadian Data Assets

- Canadian Social Survey
- Canadian Addictions Survey
- National Cannabis Survey
- Canadian Tobacco Use Monitoring Survey
- Canadian Alcohol and Drug Use Monitoring Survey
- Aboriginal Peoples Survey
- Canadian Tobacco Alcohol and Drugs Survey
- Canadian Students Tobacco Alcohol and Drugs Survey
- Canadian Community Health Survey - Mental Health and Wellbeing
- Canadian Alcohol and Drug Use Monitoring Survey
- Canadian Health Survey on Children and Youth
- Canadian Ontario Child Health Study
Canadian Data Assets

- General Social Survey
- Canadian Addictions Survey
- Canadian Tobacco Use Monitoring Survey
- National Cannabis Survey
- Canadian Alcohol and Drug Use Monitoring Survey
- Canadian Alcohol, Alcohol and Drugs Survey
- Canadian Tobacco Alcohol and Drugs Survey
- Canadian Students Tobacco Alcohol and Drugs Survey
- Canadian Community Health Survey-Mental Health and Wellbeing
- Canadian Health Survey on Children and Youth
Prevalence of Cannabis Use by Age Past 12 Months, 2013-2017

[Graph showing the prevalence of cannabis use by age group from 2013 to 2017.]
Self-Reported Mental Health by Cannabis Use 2013 – 2017

[Chart showing percentage of self-reported mental health across cannabis use categories from 2013 to 2017.]
International Data Assets
Prevalence of past-year cannabis use over time

United States ages 12-17; Uruguay 13-17

Over 50 years of age
Published Literature: scoping review

- Wild-Type Animal Studies: 142
- Animal Models of Human Disease: 35
- Changes in the Human Brain: 229
- Mental Health in Community Populations: 493
- Mental Health in Clinical Populations: 247
## Take away messages

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Gaps</th>
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<tbody>
<tr>
<td><strong>Animals Studies</strong></td>
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<tr>
<td>• 177 studies (4 active Canadian labs)</td>
<td>• Mode of administration primarily injection.</td>
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<td>• Majority &gt; 6 animals</td>
<td>• Few studies examine cannabis in extract form or the primary cannabinoids (THC or CBD)</td>
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<td>• ~ 50% of studies employ rats</td>
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<td><strong>Human Studies</strong></td>
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<td>• Robust literature assessing the relationship between community populations of adults (over 18 years of age) across a range of mental health outcomes.</td>
<td>• Limited research using a design that can establish the directionality of the relationship between cannabis use and mental health outcomes.</td>
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<td>• People with Schizophrenia Spectrum disorder are the most commonly assessed clinical population.</td>
<td>• Limited research, in both community and clinical populations, considers populations that are likely to have unique needs (e.g. IRER, 2SLGBTQ, ACE)</td>
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<td>• Canadian Community Health Survey and the National Longitudinal Survey of Children and Youth both used and reported</td>
<td>• Limited research adopts a sex and gender lens. When it is adopted, there is no clarity about whether sex or gender is considered.</td>
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<td>• Both qualitative and quantitative methodologies primarily adopt a harm lens with very few studies assessing quality of life and well-being</td>
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Moving Forward

Strengthen and support all methodologies. Focus on understanding the directionality and causal nature of the relationship.

Canada has an opportunity to lead. Promotion of growth through funding and increased partnership will amplify the research.

Use already established data assets for rapid analysis. Continue production of robust datasets for research.

Embed the lived experiences of people who are using cannabis

Focus on the unique needs and possibly differential relationships specifically within seniors, 2SLBGTQ, IRER and those who are indigenous.

Focus on placing the relationship between cannabis use and mental health outcomes its complex context (e.g. within the context of other substance use, exposure to traumatic events, overlapping health and social inequities). The general harm lens is not nuanced enough.
Where can I find the reports?

Cannabis and Mental Health: an Environmental Scan and Scoping Review

Cannabis and Mental Health: Priorities for Research
https://www.mentalhealthcommission.ca/English/media/4273
Clearing the Smoke on Cannabis: Regular Use and Mental Health

Cannabis and Mental Health Webinar
Robert Gabrys
October 28, 2019
About CCSA

- **Vision:** A healthier Canadian society where evidence transforms approaches to substance use.
- **Mission:** To address issues of substance use in Canada by providing national leadership and harnessing the power of evidence to generate coordinated action.
- **Value Proposition:** Provide national leadership to address substance use in Canada. A trusted counsel, we provide guidance to decision makers by harnessing the power of research, curating knowledge and bringing together diverse perspectives.
- National non-profit organization with a pan-Canadian and international role.
Strategic Core Functions

- Providing National Leadership
  Create a common focus and purpose to achieve collective impact

- Advancing Research
  Synthesize and generate timely evidence to inform practice and policies

- Building Strategic Partnerships
  Bring people and knowledge together to develop collective responses and coordinated action

- Mobilizing Knowledge
  Expand the reach and adoption of new and emerging practices
CCSA’s National Priorities

- Cannabis
- Workforce Development
- Children & Youth
- National Treatment Strategy
- Substance Use & Mental Health
- Impaired Driving
- Indigenous Peoples
- National Alcohol Strategy
- Opioids & Prescription Drugs
- Stigma
Clearing the Smoke on Cannabis series

Clearing the Smoke on Cannabis
Regular Use and Mental Health

Key Points
- Regular cannabis use is associated with a lower risk of mental health problems.
- Regular cannabis use is linked to improved mental health outcomes compared to non-users.
- Regular cannabis use is associated with better social functioning and well-being.
- Regular cannabis use is associated with improved cognitive function and problem-solving.
- Regular cannabis use is associated with reduced risk of developing anxiety and depression.
- Regular cannabis use is associated with increased risk of developing schizophrenia.
- Regular cannabis use is associated with improved quality of life and reduced use of prescription medications.

For more information, visit www.ccsa.ca • www.ccdus.ca
Cannabis Use Disorder

Diagnostic Criteria for Cannabis Use Disorder (DSM-5)

1. Using more cannabis than intended
2. Trying unsuccessfully to control use
3. Spending a significant amount of time obtaining and using cannabis or recovering from its effects
4. Experiencing a strong desire or urge to use cannabis
5. Failing to fulfil major obligations at work, home or school because of cannabis use
6. Giving up or reducing important social, occupational or recreational activities because of cannabis use
7. Continuing use despite recurring physical or psychological problems caused by cannabis use
8. Continuing to use cannabis despite it causing problems in relationships
9. Using cannabis in physically hazardous situations
10. Increasing tolerance to cannabis’ effects
11. Developing withdrawal symptoms

Regular use: weekly or more frequent use over a period of months to years

Heavy use: daily or more frequent use, which can be a sign of dependence and cannabis use disorder
Psychosis and Schizophrenia

- Strong evidence linking cannabis use to psychosis and schizophrenia among individuals with a family history of these conditions.
- Although smaller, there appears to still be a risk for individuals without a family history of these disorders.
  - Early initiation of use
  - Heavy or daily use
  - Use of products high in THC content
Depression

- Risk of first depressive episode seems to be small.
  - Specific depression profile?
  - Cannabinoid exposure or an ineffective coping strategy?
- The link between depression and cannabis use disorder appears to be reciprocal.
Anxiety Disorders

• For most individuals who use cannabis, the risk of developing an anxiety disorder seems to be low.
• Individual differences play an important role.
• Social anxiety might increase the risk of developing cannabis use disorder.
Post-Traumatic Stress Disorder

• Cannabis use is common among individuals living with PTSD.
• Preliminary research supports some symptom relief.

But ...

• Cannabis use has been associated with poorer mental health outcomes among those with PTSD.
• Individuals with PTSD often present with problematic cannabis use and cannabis use disorder.
Limitations of Current Research

- Measurement of cannabis use has been limited.
- Causality has been difficult to establish.
- Individual differences have not been fully explored.
Conclusions and Implications

• Strong evidence linking regular cannabis use to increased risk of developing psychosis or schizophrenia.
• The evidence is less clear for mood and anxiety disorders.
• Regular cannabis use appears to do more harm than good for individuals experiencing mental illness.
• Public education directed towards individuals living with, or at risk of, mental illness is essential.
• Weighing the costs vs benefits of cannabis use.
Cannabis Public Education
Thank you for joining us today!

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