Stirring The Pot

Supporting Students with Early Psychosis and the Impacts of Cannabis Use Among Youth

Early Psychosis Intervention Ontario Network
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Outline

• Ilyas – Part 1
• Psychosis – What, Who, When, How?
• Early Warning signs on Campus
• What is early psychosis intervention?
• How to support students with psychosis
• Cannabis
• Ilyas – Part 2
Ilyas’ Story – Pt 1
What Is Psychosis?
What Is Psychosis?

• A medical condition
• Psychosis is a symptom, not a diagnosis

<table>
<thead>
<tr>
<th>POSITIVE SYMPTOMS</th>
<th>NEGATIVE SYMPTOMS</th>
<th>COGNITIVE SYMPTOMS</th>
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<tbody>
<tr>
<td>Something ADDED.</td>
<td>Something MISSING.</td>
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<tr>
<td>Hallucinations</td>
<td>Apathy</td>
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<td>Delusions (false beliefs)</td>
<td>Reduced socializing</td>
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<td>Disorganized thoughts and speech</td>
<td>Restricted facial expression</td>
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<td>Difficulties with attention, concentration, memory, planning, and organization</td>
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Look beyond the surface. If any of these are interfering or blocking what you want to do, contact your family physician or your local Early Psychosis Intervention program.
Who Does It Affect?

- Affects 3/100 people
  - As common as type 2 diabetes

- Most common in young adults – 16-30 year olds

- Equally as common in males and females
  - First episode for females in usually later than for males
Causes

• Genetically based
  ◦ >60% of clients have no family history

• Biochemical abnormalities
  ◦ Dopamine appears to be significant

• Abnormal brain structure
  ◦ E.g., larger lateral ventricles, abnormalities in pattern of blood flow and electrical activity

• Environmental influences
  ◦ Viruses, prenatal or antenatal difficulties, immigration, trauma and urban living

• Street drug use
  ◦ Marijuana in particular has been associated with increased risk of schizophrenia
The Stress Vulnerability ‘Bucket’
What you might see on campus

- Discomfort around people - avoiding class (especially with group work)
- Difficulty concentrating in class
- Difficulty with reading comprehension
- Falls behind – effects on self esteem
- Higher degree of movement from one program to another and to another
- Low mood and lack of facial expression – turn people off
- Avoids events in dorm and on campus
- Decreased hygiene
- Lack of interest in many activities
- Spending more time in room alone
- Difficulty with sleep – affects concentration
- May initially present with expressed depression or anxiety
- If not living on campus – increased isolation, difficulty connecting with campus services
Assessing and Engaging Students

- Psychosis rarely presents in “neat parcels”, and students rarely volunteer the information
- Observation…observation…observation
- Avoid overly textbook or medical language
- Open-ended, non-leading questions
- General description of experience
- Use language adolescents understand:
  - “uncomfortable”
  - “worries about safety”
  - “confused”/ “figure things out”
- General to specific
- Understand cultural context within which information is presented
- Refer to local EPI service
- Consider engaging family if applicable
Early Psychosis Intervention

- Specialized services for young people experiencing early symptoms of psychosis
- 63 programs located throughout the province
- Provincial standards
  - Comprehensive assessment
  - Psychosocial support
  - Intensive follow up – medical + case management
  - Family support
  - Focus on recovery and hope
  - Research and education
- Different than general psychiatry
- Multidisciplinary care to support health and vocational recovery
Why is this important?

- The sooner, the better! The longer the duration of untreated psychosis, the higher the risk of:
  - Derailing of life goals and functioning (Relationships, School, Work)
  - Hospitalization
  - Suicide
  - Substance abuse
  - Disability
- Psychosis is treatable, people can and do recover!
Supporting Students with Psychosis Return to School

- Dispel myths and stigma – can be hard to return to school
- Remember psychosis is a brain disorder.
- Medications are a foundation of treatment; consider the side-effects of medications.
- Allow for difficulties in concentration and thinking.
- Provide academic accommodations as required.
- Support reintegration; campus life, back to classes, residence.
- Connect with the student’s EPI service providers (with consent)
- Maintain a positive, encouraging stance with students.
Working with EPI Services

• Multidisciplinary teams to support recovery and help young adults work towards their goals – which often focus on education
• EPI services advocate for students to connect with accessibility services
• Ability to provide on-site visits
  ◦ Accompany to appointments with accessibility services, teachers, learning strategists, health team
  ◦ Check in sessions at school – how are things going?
• Frequent regular contact: With both the student and the support services team
• Sharing recovery plans
• Peer support options
• Crisis Supports: change in health impacting function at school, exam deferrals, OSAP applications and deferrals
What accommodations might help and why?

- Classroom
- Exams
- Assignments
- Financial assistance
- Scheduling/Timetable
- Academic
- Withdrawal from class accommodations
- Accessibility workshops
- Residential accommodations
- Provision of support services
- Assessment for provision of adaptive technology

- Not always a straightforward process – barriers from the student and the school can occur
Remember:

- More than 1 in 4 families is touched by psychosis.
- Don’t dismiss change as adjustment to post-secondary school or substance misuse.
- Pay attention to family, friends, dons, & faculty etc. concerns.
- Psychosis is treatable!
- Early intervention is important and closely tied to recovery.
- Culturally competent care is important.
- Your responsibility does not end with referral.
  - Your ongoing support and reintegration into school and campus living is essential part of recovery.
All aboard the Cannabis!
What is Cannabis? - 400+ compounds

- **Δ-9-Tetrahydrocannabinol (THC)**
- **Cannabidiol (CBD)**
- **Cannabinol (CBN)**
- **Cannabigerol (CBG)**
- **Cannabichromene (CBC)**

- Myrcene
- Linalool
- α Bisalol
- Borneol
- Caryophyllene
- α Pinene
- β Pinene
- Camphene
- Terpineol
- Δ-3-carene
- Limonene
- Eucalyptol
- Humulene
- Trans-neroliol
Cannabis - Not your grandmother’s weed
Cannabis – It tastes awful and it…it…zzzzzz!
Administration

- Eat it (Cookies, brownies)
- Smoke it (Joints, bongs, hash oil)
- Drink it (Tea)
- Vap it
- Swallow it (pills)
- Dab it
- Rub it (topical)
- Even insert it…?(suppositories)
Cannabis in Canada – We’re #1! We’re #1!

• Canada highest rate of teen cannabis use in the developed world (WHO, 2010)
  ◦ Canadian teens 2x more likely to use than adults
  ◦ Up to 10% of grade 12 students smoke pot every day
  ◦ 28% Canadian children aged 11-15 admit to using in past year
    ▪ 23% in US legalized states, 17% in Netherlands
  ◦ 19% Ontario post-secondary students have used in past 30 days (ACHA, 2016)

• The most potent cannabis the world has ever known
  ◦ Up to 30x higher THC content than that smoked at Woodstock
  ◦ Shatter has up to 80% THC content

• Anecdotally, cannabis is the #1 drug that youth are seeking treatment for

• We’re only beginning to understand the effects of this
  ◦ There is a LOT we don’t know

• Legalization “National Experiment”
Cannabis - Increase in THC

Biol Psychiatry. 2016
Cannabis - Survey says...

“Medical marijuana is scientifically proven as cure for _______”

“You can’t get addicted to pot”

“The effects only last a couple days”

“I study better high”

“It’s totally safe to drive stoned. I just drive slower”

“It’s legal now so it must be good for you”
Cannabis – Short and long term cognitive impacts

• Heavy cannabis use in youth found to cause a number of cognitive impairments
  ◦ Attention/concentration, working memory, thinking speed, and memory
• Structural changes in brains of 18-25 year olds who smoked pot at least once/week
  ◦ Significant changes in the brain (thinning of cortex) among users 16 or younger vs non-users

• So what?
  ◦ Evidence suggests structural changes may or not be permanent
  ◦ Loss of intelligence (lower IQ)
  ◦ The brain needs to “work harder”
  ◦ Teens who smoke pot daily are 60% less likely to finish high school or university
• Still lots we don’t know – individual, doses…
• Impacts less severe for older users (25+)
Cannabis and psychosis

- Cannabis use in adolescence significantly increases the likelihood of developing psychosis later in life
  - Doubles the risk
- Genetic studies have shown some people are more vulnerable to use and impacts than others
  - History of mental illness in family
- Cognitive difficulties are often worse for individuals with psychosis
- Increased risk of relapse with use – even if they are in treatment
- Cannabis induced psychosis and cannabis withdrawal can be psychiatric emergencies requiring visits to ED
- Components:
  - Risk of psychosis, euphoria and addiction linked to THC
  - Cannabidiol
    - Non-psychoactive, has shown promise for protective factors for substance induced psychosis, an anti-inflammatory, and an experimental treatment for cancer
Cannabis and Psychosis

From Harry’s Journey: courtesy of Dr. Suzanne Archie
Cannabis and other areas

• Mental health:
  ◦ Appears to be greater risk for depression, anxiety, suicide and depression:

• Physical Health:
  ◦ Lungs: Marijuana contains twice as much tar as cigarette smoke associated with increased risk of lung cancer, bronchitis and emphysema
  ◦ Sex: Association of marijuana use with increased rates of sexual risk behavior and sexually transmitted diseases (STDs).

• Pregnancy:
  ◦ Marijuana can have an effect on child’s development, cognitive functioning, behavior, substance use, mental health and overall wellbeing that can last into teenage years
  ◦ No safe amount
Cannabis Myth – Driving

• Compromises reaction time, attention, visual ability and judgment
• Number of people driving under influence has increased
• No reliable roadside test
Cannabis - Medicinal Marijuana

- Is it the same as prescription medicine?
  - No.
  - Authorized, not prescribed
  - No drug identification number (DIN)
  - Less standardized product
  - Imprecise dosing
Cannabis – Medicinal Marijuana

Of 79 trials, only 4 judged to have low risk of bias

Increased risk of short-term side effects

Low quality evidence in general

Moderate quality evidence for pain and spasticity in MS
## Cannabis – Medicinal Marijuana

### Supportive Evidence
- Reducing chemotherapy-induced nausea and vomiting
- Reducing chronic pain
- Reducing spasticity in MS
- 15 different indications as *possibly* viable for medical by Health Canada but no sound evidence yet

### Side Effects
- Motor impairment
- Cognitive difficulties
- Anxiety
- Paranoia
- Cannabis use disorder
- Overdose
- Psychosis
Cannabis – Addiction

- Cannabis can be addictive
- 9% of cannabis users develop an addiction to it – TWICE as likely among youth than adults (Anthony, J.C., 2006)
  - Relative risk for nicotine (68%), alcohol (23%), cocaine (21%)
- More and more young people are seeking treatment and support
- 1/5 people seeking addiction treatment have cannabis related issues (CRISM)
- Early psychosis programs seeing a profound increase in cannabis use
Other Considerations for Youth – the Grey Zone

• Advertising / marketing geared towards youth

• Education
  ◦ Evidence vs. “Evidence”
  ◦ Online opinion
  ◦ Meaningful (not fear based)

• Non-legal markets
  ◦ Street, Online dispensaries…

• Culture of use
  ◦ Family, peers, media…

• People are using…youth need to be a part of the solutions
EPION Advocacy

• Public Education
• Treatment
• Package warnings
• Legal age
• Limiting TCH content
• Information and training for healthcare providers
• Research

December 20, 2016
The Honourable Jane Philpott
P.C., M.P. Minister of Health
House of Commons
Ottawa, Ontario K1A 0A6

Dear Minister,

We are writing as the executive of the Early Psychosis Intervention Ontario Network (EPION) to apprise you about a recent forum that we convened on cannabis and psychosis. EPION is funded by the Ontario Ministry of Health and Long-Term Care to support training and networking amongst the over 50 early psychosis programs across the province that treat young people experiencing a first episode of psychosis and their families.

We are aware that the Task Force on Cannabis Legalization and Regulation has released their report after significant deliberations and the federal government will be moving ahead with legislation and regulation in 2017. We understand that many adult users, in fact the majority, are able to use marijuana without experiencing harmful effects. We feel compelled, however, to write this letter because of the strong messages heard at our recent forum from researchers who presented empirical evidence, clinicians who struggle to understand how to manage this understudied drug, and families who are helping their loved ones recover from an episode of psychosis.

This letter documents scientific concerns about the increased risk of psychosis associated with regular marijuana use among youth. By ‘regular marijuana use,’ we mean three times a week or more. At the end of this letter you will find seven recommendations which we very much hope can be taken into consideration as the government works on legislation and regulation.

Attached to this letter, please find a description of EPION’s role and work.
EPION Resource for:
- Young people
- Families
- Care providers
#mycannabisIQ.ca – EPION Resource for clinicians

**Start Here**

**One: The Client**

Know who you’re talking to:
- Abstaining
- Using
- Refusal Skills
- What to say?

**Two: The Science**

Know what you’re talking about:
- About Cannabis
  - Tetrahydrocannabinol (THC) vs Cannabidiol
  - Age of use
  - Mental health history
  - THC vs CBD
- Brain Development
- Health Outcomes
  - Appropriate uses for Medical Cannabis
  - CBD and psychosis

**Three: The Strategies**

Know what you’re going to do:
- Alternative Choices
  - Cognitive Behavioral Therapy
  - Mindfulness
- Refusal Skills
- Avoidance Skills

**Functional Outcomes (why people use)**

**Recommended Reading Legend**

The following resources are available on mycannabisIQ.ca

2. The Disease of High: The Nature of Things with David Suzuki. CBC Documentary and Dream Film. 2015. DVD available via dreamfilm.com/curtis/thedownsideofhigh.html
Cannabis – Harm Reduction

• Evidence based, client centred approach - policies or programmes that focus directly on reducing the health and social harms associated with substance use

• Reduce
  ◦ Problems with thinking, memory or physical co-ordination
  ◦ Impaired perceptions or hallucinations
  ◦ Injuries, accidents due to impairment
  ◦ Mental health problems and dependence
  ◦ Chronic respiratory or lung problems
Cannabis – Harm Reduction

• Marijuana use has health risks best avoided by abstaining
• Delay marijuana use until later in life
  ◦ 25+
• Identify and choose lower-risk cannabis products
  • high potency products, with high tetrahydrocannabinol (THC) content are more likely to result in harms
  • choose products with lower THC/higher CBD content
• Choose safer ways of using
  • Smoking marijuana, especially when combined with tobacco, can harm your lungs and respiratory system
    ◦ Avoid harsher smoking practices (e.g. holding breath)
  • Choose other methods, such as vaporizers or edibles instead – but, recognize that they also come with risks (e.g. edibles are safer for your lungs, but you may consume larger doses and experience more severe impairment because effects are delayed)
Cannabis – Harm Reduction

- **Limit and reduce how often you use**
  - Frequent use (daily or almost daily) is strongly linked to a higher risk of health and social problems

- **Don’t use and drive**
  - Driving while impaired by marijuana increases your risks of being involved in a motor-vehicle accident
  - Wait at least 6 hours after using marijuana before driving
  - Combining marijuana and alcohol further increases impairment
Cannabis – Harm Reduction

• Avoid marijuana use altogether if you are at risk of mental health problems or are pregnant
  ◦ If you, or a family member, has a history of psychosis or substance use disorder, your risk of marijuana related mental health problems increases
    ▪ A conversation around mental health and addictions in your family
  ◦ Pregnant women should not use marijuana because it could harm the fetus or newborn
• Avoid combinations of these risks
A few additional resources

- MyCannabisIQ.ca
- Weedmyths.ca
- CannabisAndPsychosis.ca
- Cannabisresearch.mcmaster.ca
- ...

help4psychosis.ca
References

EPION is a network of people who work in early psychosis intervention (EPI) services in Ontario, individuals who have received EPI services, and their family members and caregivers.

We help strengthen early intervention services across Ontario and support the implementation of the MOHLTC’s Early Psychosis Intervention Program Standards, released in May 2011.

Today’s Presenters:
Crystal Morris
Ilyas Khamis
Brian Cooper

November 22, 2018