OLDER ADULTS & SUBSTANCE USE DISORDER

Jonathan Bertram

Faculty/Presenter Disclosure

- **Faculty:** Jonathan Bertram

- **Relationships with commercial interests:**
  - **Grants/Research Support:** none
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  - **Other:** none

Disclosure of Commercial Support

- **This program has received financial support as stated by the Freeport Education Day organizers**
- **I have received an honorarium from the Freeport Education Day organizers**
- **<u>Potential for conflict(s) of interest</u>:**
- **NONE TO MY KNOWLEDGE**

Mitigating Potential Bias

- NONE

Learning Objectives

- **To establish the effects of substance use on a population level in older adults (CCSA report 2018)**
- **2) To recognize signs of substance abuse in my patients and feel comfortable to address it with them.**
- **3) To apply specific considerations for older adult withdrawal management and addictions management across common substances**

Older adults & mental health/addictions (CMHA, 2010)

- Adults over 65 constituted 13.5 percent of Ontario (1.7 million people)

- By 2036, expected to rise to approximately 23.2 percent (4.1 million)

Substance complications with aging

- Lower threshold for complication due to Distribution, Metabolism, Excretion
  - Opioids- kidney
  - Benzos- body fat % ⬆
  - Alcohol- body water % ⬇
- Opioids- of Older Adults using opioids (excluding post-surgical use) the most common form of use is daily (CTADS 2013)
- Alcohol (CTADS 2013)
  - 11% Older Adults (55+) more likely to drink every day (compared to 4% younger cohort)
  - Binge Drinking (5 or more) in Older Adults more likely to associate with Alcohol Use Disorder

Morbidity/mortality- CCSA 2018

- Vehicular Accidents
- Acute Cognitive Changes
- Drug-drug interaction

- Hospitalization & Death

Vehicular accidents

- **Systematic review of medication use and MVC risk, 15 different medications (of a larger group of 53 medications investigated) were associated with an increased risk of MVC (Rudisill & Zhua 2016). These included 13 opioid and sedative-hypnotic medications, some of which are commonly used among the older adult population.**
  - First time sedative hypnotic use well established (Hansen et al., 2015), first time opioid use intimated but not as well studied
  - Motor vehicle collisions (MVCs) are the leading cause of accidental deaths in the 65-74 age group (Public Health Agency of Canada).

Acute cognitive changes

- Clegg and Young (2010) carried out a systematic review of drugs to be avoided in people at risk of delirium. Delirium risk appeared to be increased by **BZDs**, **opioids** in addition to dihydropyridines (calcium channel blockers) and possibly by antihistamines.

Drug-drug interactions

- **CIHI, 2013 study: For older adults identified as having an adverse drug-related hospitalization, the third most common drug class was opioids.**

- **The most common co-occurring toxicity was with BZDs (19%) and the second most common was acetaminophen, including both combination products and acetaminophen alone (14 %).**

- The combination of opioids and BZDs significantly increases the risks of harms such as overdose, respiratory depression and death (Karaca-Mandic et al., 2017).

Hospitalization & Death

- **In Canada adults 65 and older had the highest opioid-related hospitalization rates in 2014–2015 (CIHI 2016).**
  - Accidental poisonings, especially during therapeutic use, accounted for the highest proportion of hospitalizations (55%) in this population.
  - Older Adults accounted for nearly a quarter of hospitalizations for opioid poisoning during this period, even though this age group represents only 16% of the Canadian population.
- **142% increase in days spent in the hospital due to opioid use disorders among older adults, between 2006 to 2011 (Young & Jesseman, 2014).**

BRIEF INTERVENTION

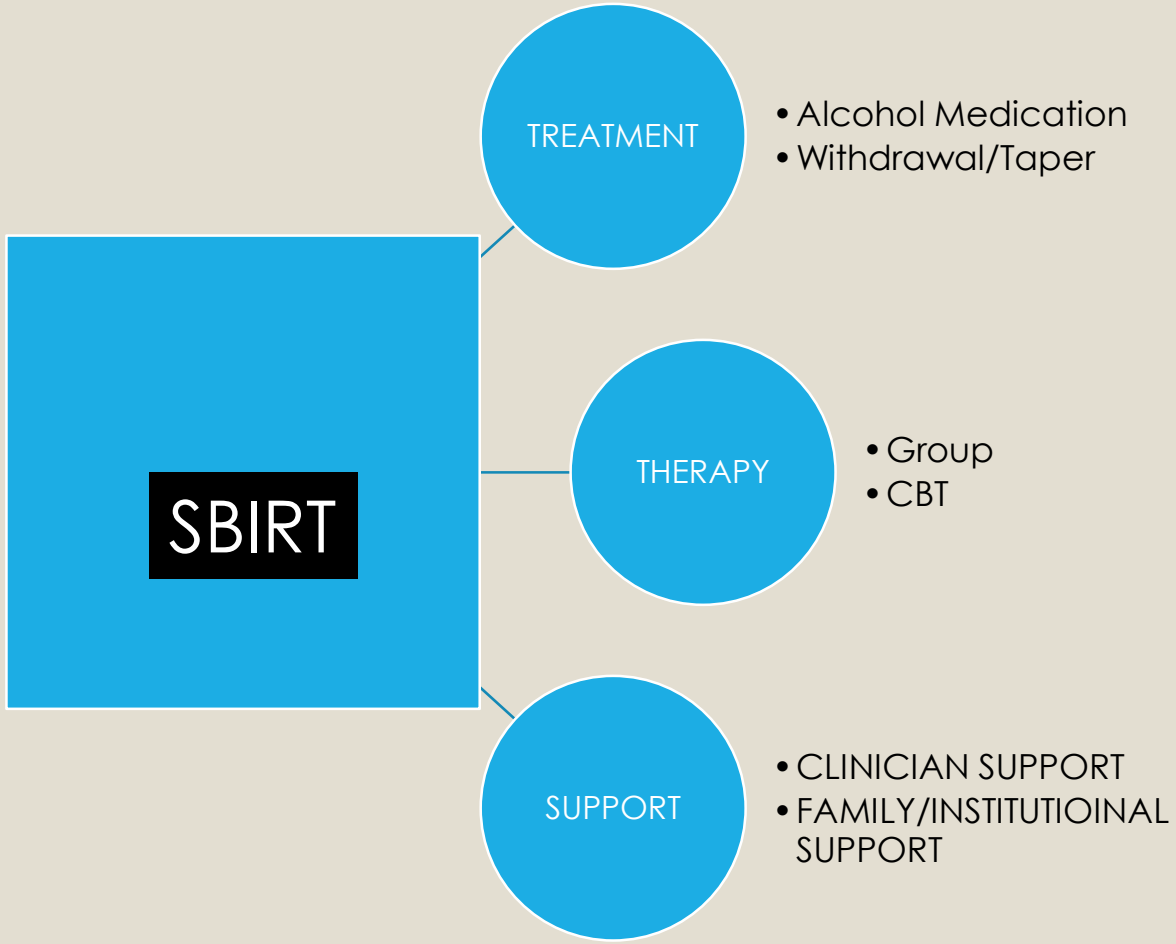
- Brief intervention can work for a variety of substances
- Decreased use, binging, sustainable beyond 1 year (Fleming, 1999)
- Least intrusive intervention, appropriate even in acute settings

Table 5 NIAAA advise and assist brief intervention[35]

- State your assessment conclusions and recommendations clearly (eg, "you are drinking more than is medically safe")
- Assess the patient's readiness to reduce level of use
- Negotiate a drinking goal
- Generate a plan to meet the goals
- Provide educational materials developed by the NIAAA (include risks particular to patients with anxiety disorders)
- Follow up and reassess progress toward goals at the patient's next visit

NIAAA, National Institute on Alcohol Abuse and Alcoholism.

SCREENING, BRIEF INTERVENTION, & referral to TREATMENT (SBIRT)



Approach to Screening

- Non judgmental language
- Assume substance being used- reframe overuse as normal
- Focus on physical symptoms coincident or consequent to use

Different approaches

- Opioid screening
  - PDUQ- Patient Drug Use Questionnaire
- Alcohol identification and treatment
  - SAMI, GMAST…
- Cannabis- CUDIT

Case: Arthur – part-time bookkeeper

- Arthur lives alone in a 3rd floor apartment outside Bowmanville
- His use of prescription opiates first started after experiencing pain secondary to gallstones 10 years ago. A cholecystectomy was recommended but Arthur feared taking time off work without pay.
- The intermittent episodes led to the use of hydromorphone as prescribed by his gastroenterologist at the outset and continued by his FMD
- His family MD retired a few years ago and he sees different walk-in doctors.

Case: Arthur (cont'd)

- He describes breakthrough pain that presents up to five times per day, he uses a 12 mg long acting hydromorphone in response and has been using regular hydromorphone for the last 5 years.
- While he has no identified mobility issues he admits that living on the 3rd floor is worrisome for him when the elevator is out.

McMaster Guidelines (2017)

WHEN INITIATING

- Always prescribe the lowest effective dosage of opioid medication. Doses >50 morphine milligram equivalents (MME) per day warrant careful reassessment and documentation.
- Doses >90 MME per day warrant substantive evidence of exceptional need and benefit. (This advice excludes treatment with methadone.) ONTARIO ***GUIDELINES*** = 200 MME
- When discharging patients from acute-care settings, or post-operatively, prescribe only the quantities of opioids, sedatives or stimulants that the patient will need before community follow-up will be resumed.
- Order at least annual random urine drug testing (rUDT) and/or random pill counts for all adult patients on long-term opioids, sedatives or stimulants.

Case: Arthur (cont'd)

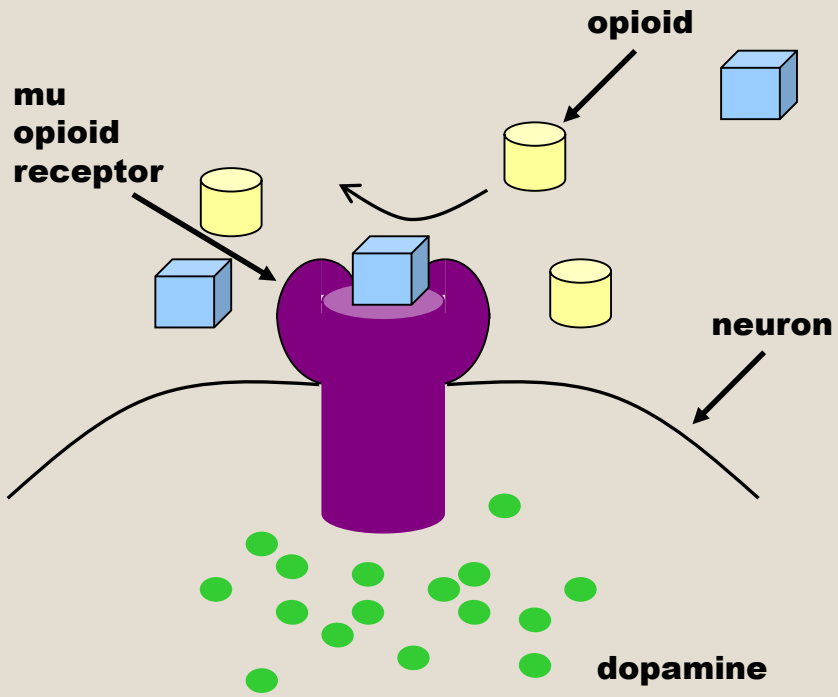
- After going through the PDUQ with Arthur he does admit to using in anticipation
- Anticipation includes anticipation of pain, anticipation of anxiety
- He admits to withdrawal in the mornings and if he goes without for most of the day
- His use interferes with finances, with attending work

DSM 5 Criteria

- Continuing to use opioids despite negative personal consequences
- Repeatedly unable to carry out major obligations due to use
- Recurrent use of opioids in physically hazardous situations
- Continued use despite persistent/recurring social or interpersonal problems Tolerance
  - need for markedly increased amounts to achieve intoxication
  - markedly diminished effect with continued use of the same amount
- Characteristic Withdrawal or the substance is used to avoid withdrawal
- Persistent desire or unsuccessful efforts to control/cut down

- Spending a lot of time obtaining, using, or recovering from using opioids
- Using greater amounts or using over a longer time period than intended
- Stopping or reducing important activities due to opioid use
- Consistent use despite acknowledgment of difficulties from using opioids
- ***Craving or a strong desire to use opioids (New criterion added)***

Pharmacology of buprenorphine: Affinity for Opioid Receptor



Graphics adapted from NAABT, Inc. (naabt.org)
via CAMH ODT course

- If buprenorphine already bound:
- Will not be "displaced" by other opioids
- Reinforcing effects of additional opioids are negated

Buprenorphine Maintenance Treatment indications

- Buprenorphine is a safer maintenance drug than methadone in the elderly. (Kahan et al., Opioid Fact Sheet 2014)
- PREVIOUS LUC 437 included high risk for methadone toxicity because of
  - Elderly
  - Benzodiazepine use
- Buprenorphine may be prescribed by primary care physicians without methadone training, although training is recommended.

BMT indications

- Higher risk of overdose (especially at initiation)
- Acquires opioids from multiple sources – other doctors, friends and relatives, the street
- Currently misusing alcohol or other sedating drugs
- Injecting or crushing oral tablets

Opioid withdrawal in Older Adults

- Outpatient management may not be appropriate for older individuals who are frail, live alone with limited family support or who have multiple medical problems and prescribed medications (Liskow et al, 1989).

- Withdrawal management in an outpatient setting from any addictive substance could pose significant risks for older adults, such that withdrawal management should be carefully supervised, ideally in hospital (Conn & Bertram, in press) or an adequately supervised setting

Difficult conversations

- When they don't admit to **that** problem…

- Discussing in context of the help they are seeking- Arthur probably can identify **pain** and **withdrawal**
- Informing the individual of the objective consequences of use regardless of nature of use
- Observing the importance of prescribing guidelines as a limitation on the tools we can use

Case: Gary- 65 y.o. Retired Transport Worker

- Lives with his spouse who works as a train engineer. They live in a 2 storey house and he is alone during the day and when she works away for multiple days overnight.

- After retirement at 60, Gary‘s idle time increased and was left with little in the way of purposeful activity. He spends a lot of time watching sports on TV. He might have a beer with the game. When you ask about how often he goes to the beer store of LCBO, he responds that it’s rare.

Dial-A-Bottle… Alcohol Screening

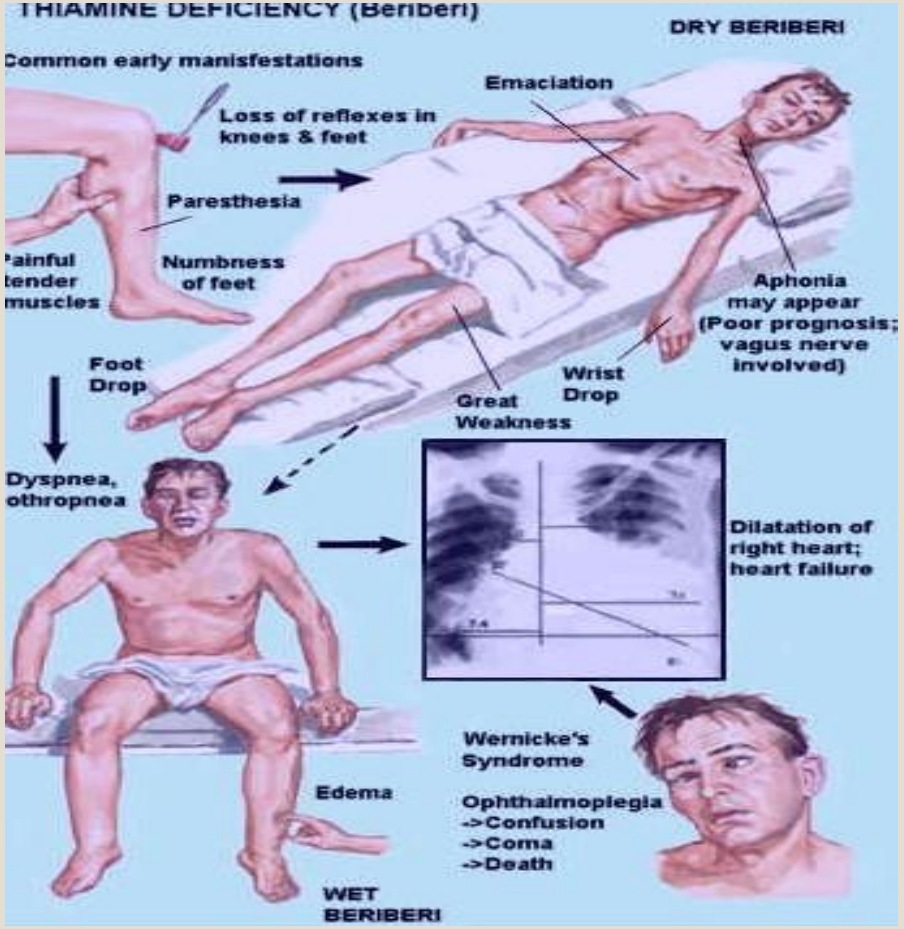
- Older adults may have cognitive issues interfering with their insight into the risks of alcohol.

- They may also want to talk about their sleep more than they want to talk about alcohol…

Examples of language from Senior Alcohol Misuse Indicator (SAMI)

- Have you recently (in the last few months) experienced problems with any of the following:
- Appetite or weight…Sleep…Difficulties with memory?
- Do you enjoy wine/beer/spirits? Which do you prefer?
- As your life has changed, how has your use of wine/beer/spirits changed?
- You mentioned that you have difficulties with… [from answers to questions 1 a) and b)]. I am wondering if you think that wine/beer/spirits might be connected?

Neurological complications



WERNICKE'S	THIAMIN DEFICIENCY	THIAMIN
KORSAKOFF'S	UNKNOWN	ABSTINENCE
DEMENTIA	ALCOHOL INDUCED CHANGES	ABSTINENCE

HARMS: Wernicke's

- High dose THIAMINE as outpatient should be up to 300 mg oral per day

HARMS: WITHDRAWAL

Elderly can have more prolonged withdrawal and higher risk of delirium

Higher risks in withdrawal of:

- cognitive impairment (including delirium)
- daytime sleepiness
- weakness
- high blood pressure
- FALLS

***Some elderly may not be suitable* for outpatient w/d**

because following would have to be true:

- Adequate social support
- No significant withdrawal symptoms
- No comorbid illness
- No complicated withdrawal (no seizures, no delirium)

W/D Treatment- Settings

- Withdrawal Treatment- prevention of seizure/complications!
  - Diazepam/Lorazepam/Thiamine
- Inpatient (supervised)
- Outpatient (supervised)
  - Day Detox- morning withdrawal sx's
- Outpatient (ambulatory) must be negotiated very carefully and often NOT an option
  - Gabapentin can help attenuate sub-acute withdrawal

Withdrawal Management

- With risk of withdrawal seizure , individual should be managed in a supervised setting with CIWA-guided diazepam/lorazepam administration
- When recent withdrawal has been minor- short course, tightly prescribed rx (3-5 days, ≤ 30 mg on first day with declining doses thereafter)
- CAN'T DRINK ON IT
- This medication is NOT the same as **ANTI CRAVING MEDICATIONS**

Table 1. Clinioal Manifestations of Aloohol Withdrawal[5]

Phase/Symptoms	Onset after last drink	Duration
Early Withdrawal Tremulousness Anxiety Palpitations Nausea Anorexia	6-8 h	1-2 d
Withdrawal Seizures Tonic-Clonic Seizures	6-48 h	2-3 d
Alcoholic Hallucinosis Hallucinations Visual Tactile Auditory	12-48 h	1-2 d
Delirium Tremens Tachycardia Hypertension Low-grade fever Diaphoresis Delirium Agitation	48-96h	1-5 d

h=hours; d=days
Reprinted with permission from *N Engl J Med*. Management of drug and alcohol withdrawal. 2003;348:1786.

Anti-Craving Medications

FEATURES	MARKERS
Reduce urges to have a drink	Contribute to decreased days drinking
Reduce pleasurability with drink (reducing likelihood of a second or beyond)	Contribute to increased days without relapse

Can be useful for the reduction of drinking where a person's cognitive impairment limits their exploration of change

Changing Behaviour/Reducing Impact: Anti-Craving Medications

- Most effective medications in our clinic:
  - ***Naltrexone*** **6$ per day BEST EVIDENCE 65 YRS + *CONTRAINDICATED***
  - ***Acamprosate*** **6 $ per day (FIRST LINE FOR ABSTINENCE, OFF LABEL FOR REDUCTION)**

- Moderately effective medications in our clinic
  - ***Gabapentin*** **affordable (SECOND LINE FOR ABSTINENCE & REDUCTION)** *off-label*
  - ***Topamax*** **affordable** *off label* **CONCERNING SIDE EFFECTS in ELDERLY**
  - ***Baclofen*** **affordable** *off label* **CONCERNING SIDE EFFECTS in ELDERLY**
  - *Antabuse* **NOT RECOMMENDED FOR ELDERLY**

Cognitive behavioural therapy (CBT)- Schonfeld 2000

- CBT in an age-matched group of veterans -16 weekly sessions
- At 6-month follow-up, program completers demonstrated much higher rates of abstinence compared to non-completers
- Modules to teach coping skills for
  - social pressure / being at home and alone
  - feelings of depression and loneliness
  - anxiety and tension / slips or relapses

CASE: JC

- 70 year old female, prescribed benzodiazepines since 21 years old
- Family MD currently prescribing Clonazepam 2mg bid, dispensed every 30 days
- Reports her use has increased over the years- Might take up to 3 times per day
- Asking for help: family MD cutting her off as discovered aberrant use

BZD - Common clinician perspective

(Cook et al., 2007)

Table 1

Categories Underlying Use of Benzodiazepines in the Elderly

Categories
Physician minimization of benzodiazepine use as a problem
No addiction seen in this population
Little recognition of adverse effects other than addiction
Continuation is compassionate; discontinuation is harsh
Low-priority relative to medical problems
Justification of short- and long-term benzodiazepine use
Effectiveness for anxiety and sleep problems
Belief that stable dosage equals safe and effective
Attempt to discontinue will fail
Anticipated resistance from patients

CASE: JC

- Actual use = 2 tabs three times per day up to a maximum of 8-10 tabs per day secondary to anxiety, including anticipatory anxiety
- "I've had anxiety my whole life, I won't be able to function without them" (benzodiazepines)
- Discussion of taper or medical detox ensues… anti-depressant?

Treatment of Benzodiazepine dependence or misuse:

- (1) inpatient detoxification and medicalized aftercare
- (2) outpatient withdrawal taper
- (3) treat secondary psychiatric problems like anxiety or insomnia
- (4) long-term low dose benzo maintenance
- (5) AA or NA

Increasing Cannabis use

- 2006/07 to 2012/13 (USA)
- 57.8% relative increase for adults aged 50-64
- 250% relative increase for those aged ≥ 65

- *6.9% of older cannabis users met criteria for cannabis abuse or dependence, and the majority of the sample reported perceiving no risk or slight risk associated with monthly cannabis use (85.3%) or weekly use (79%).
    - (Kaskie et al, 2017)

CHOI ET AL, 2016

- Of a 50+ age group, 3.89% were past-year marijuana users and 0.68% had marijuana use disorder.
- Marijuana users, especially those with marijuana use disorder (17.54% of past-year users), had high rates of mental and other substance use disorders.
- Controlling for other potential risk factors for stress, including health status and mental and other substance use disorders, marijuana use and use disorder were still significantly associated with more life stressors and lower perceived social support, possibly from low levels of social integration
- *** 28% of Canadians reported having used cannabis regularly in the past 3 months (Health Canada, 2013)**

Cannabis Screening **(CCSMH 2018; CEP 2018)**

- CUDIT (Cannabis Use Disorder Identification Test)
- CAST (Cannabis Abuse Screening Test)

Cannabis

The Cannabis Use Disorder Identification Test – Revised (CUDIT-R)

Have you used any cannabis over the past six months? **YES / NO**

If **YES**, please answer the following questions about your cannabis use. Circle the response that is most correct for you in relation to your cannabis use over the past six months:

1.	**How often do you use cannabis?**				
	Never 0	Monthly or less 1	2–4 times a month 2	2–3 times a week 3	4 or more times a week 4
2.	**How many hours were you "stoned" on a typical day when you had been using cannabis?**				
	Less than 1 0	1 or 2 1	3 or 4 2	5 or 6 3	7 or more 4
3.	**How often during the past 6 months did you find that you were not able to stop using cannabis once you had started?**				
	Never 0	Less than monthly 1	Monthly 2	Weekly 3	Daily or almost daily 4
4.	**How often during the past 6 months did you fail to do what was normally expected from you because of using cannabis?**				
	Never 0	Less than monthly 1	Monthly 2	Weekly 3	Daily or almost daily 4
5.	**How often in the past 6 months have you devoted a great deal of your time to getting, using, or recovering from cannabis?**				
	Never 0	Less than monthly 1	Monthly 2	Weekly 3	Daily or almost daily 4
6.	**How often in the past 6 months have you had a problem with your memory or concentration after using cannabis?**				
	Never 0	Less than monthly 1	Monthly 2	Weekly 3	Daily or almost daily 4
7.	**How often do you use cannabis in situations that could be physically hazardous, such as driving, operating machinery, or caring for children:**				
	Never 0	Less than monthly 1	Monthly 2	Weekly 3	Daily or almost daily 4
8.	**Have you ever thought about cutting down, or stopping, your use of cannabis?**				
	Never 0		Yes, but not in the past 6 months 2		Yes, during the past 6 months 4

Scores of 8 or more indicate hazardous cannabis use.
Scores of 12 or more indicate a possible cannabis use disorder, for which further intervention may be required.

For further interpretation see:

Adamson S, Kay-Lambkin F, Baker A, et al. An improved brief measure of cannabis misuse: The Cannabis Use Disorders Identification Test – Revised (CUDIT-R). Drug Alcohol Depend 2010: (In Press).

Behavioural THERAPY- first line

- Mindfulness Based Relapse Prevention
- Motivational Interviewing
- Cognitive Behavioural Therapy
- ***increasing evidence with Cannabis-tailored CBT curriculum that we have piloted at CAMH**

Pharmacotherapy- adjunctive

- As a complement to more established first line treatments may be helpful in reducing cannabis withdrawal symptoms and cannabis cravings
  - Gabapentin
  - NAC (N-Acetyl Cysteine- used off-label in some Addictive Process Treatment)
  - Nabilone (limited studies over 4 weeks for withdrawal)

- CAMH Addiction Medicine Service (AMS)
  - **Fax referrals to Access CAMH:** 416-979-6815.
- CAMH Pain and Chemical Dependency Service (iPARC)
- Bowmanville Complex Pain & Addiction Service
  - 222 King St, East Bowmanville Family Health Organization
  - **Physician or Self referral for Addictions only**
  - **Physician Referral for Pain AND Addictions**