Healthy Aging 101 ADDRESSING SUBSTANCE USE AMONGST OLDER ADULTS: A SILENT EPIDEMIC

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Faculty/Presenter Disclosure

- **Faculty:** Marilyn White-Campbell

- **Relationships with financial sponsors:**

2. **Grants/Research Support:** Health Canada (Substance Use & Addiction Program) for National Best Practise Geriatric Addictions Project.

- CHIR grant "Opiates and Older Adults; A spotlight on the Opioid Crisis among seniors"
- Health Canada Substance Use Branch Controlled Subtances
- Grant " Cannabis and Older Adults Know the Facts"
  - **Speakers Bureau/Honoraria: none**
  - **Consulting Fees: none .**
  - **Patents:** none
  - **Other: none**

Disclosure of Financial Support

- **This program has received financial support from Health Canada Substance Use Branch in the form of research grant to establish National Guidelines for Substance Use disorders In Older Adults**
- **This program has received in-kind support from CAMH Center for Addiction and Mental Health in the form of admin support and NRT supplies for LTCH**

- **<u>Potential for conflict(s) of interest</u>: None**

Objectives:

- Define addiction and substance use disorder
- Explore signs & symptoms of addictions and substance use disorders
- Identify causes or risk factors
- Propose treatment options/ Harm Reduction

- Resources

The Disease Model of Addiction

- Addiction is a primary chronic disease of the brain
- It is disease because drugs modify the chemistry and the structure of cells and circuits involved with reward, motivation, and memory.
- In the addictive brain, drugs *hijack* normal learning pathways and activate the rewards circuits in response to drug-associated cues, which leads to cravings and compulsive drug seeking behaviours despite harmful consequences.
- The clinical significance of these brain changes is that the addiction, once established becomes a chronic illness with relapses and remissions.

The Disease Model of Addiction

- The idea that people with addictions voluntarily choose drugs of addiction doesn't make addiction any less of a disease
- There are many chronic diseases such as COPD, HTN, CAD, DM that originate from life style.
- Knowing that drugs of abuse can lead to addiction doesn't deter many from experimenting because the majority of people that try drugs don't become addicted.
- While the initial choice to use drugs of abuse may have been voluntary, changes to the brain from the use of these drugs make it difficult for the addicted person to stop using.

The moralizing addiction

- addiction is not a moral failure
- Addiction is a disease which needs support and treatment

What is an addiction?

- multifactorial disease caused by predisposing and precipitating factors
- Chronic Relapsing Condition
- Can be neurological changes to the brain which may be lasting

4 Cs:

- **c**raving
- loss of **c**ontrol of amount or frequency of use
- **c**ompulsion to use
- use despite **c**onsequences

Substance Use Disorder DSM-IV versus DSM-5

	DSM-IV Abuse[a]		DSM-IV Dependence[b]		DSM-5 Substance Use Disorders[c]	
Hazardous use	X	≥1 criterion	–		X	≥2 criteria
Social/interpersonal problems related to use	X		–		X	
Neglected major roles to use	X		–		X	
Legal problems	X		–		–	
Withdrawal[d]	–		X	≥3 criteria	X	
Tolerance	–		X		X	
Used larger amounts/longer	–		X		X	
Repeated attempts to quit/control use	–		X		X	
Much time spent using	–		X		X	
Physical/psychological problems related to use	–		X		X	
Activities given up to use	–		X		X	
Craving	–		–		X	

TYPES OF ADDICTIONS

- ALCOHOL
- PRESCRIPTION DRUGS OPIATES/ BENZODIAZEPINES
- CANNABIS
- ILLICIT DRUGS cocaine , Heroin , crystal meth
- NICOTINE
- CAFFEINE
- GAMBLING (Lottery tickets, bingo, casino etc)
- INHALENTS (HUFFING)
- INTERNET
- FOOD
- SHOPPING
- SEX

Why is Addiction different in the Geriatric Population?

- Additional care is required when applying DSM-V diagnostic criteria to older Adults
- significant problems with even low amounts of alcohol intake
- tolerance and withdrawal need not be present
- Physiological aging changes include proportion of body fluids (reduced) & metabolism (slower)
- NB prolongation of neurological consequences
- Medications
- Chronic illness/ dementia

Geriatric Considerations

They keep asking me to change but I can't remember what from!

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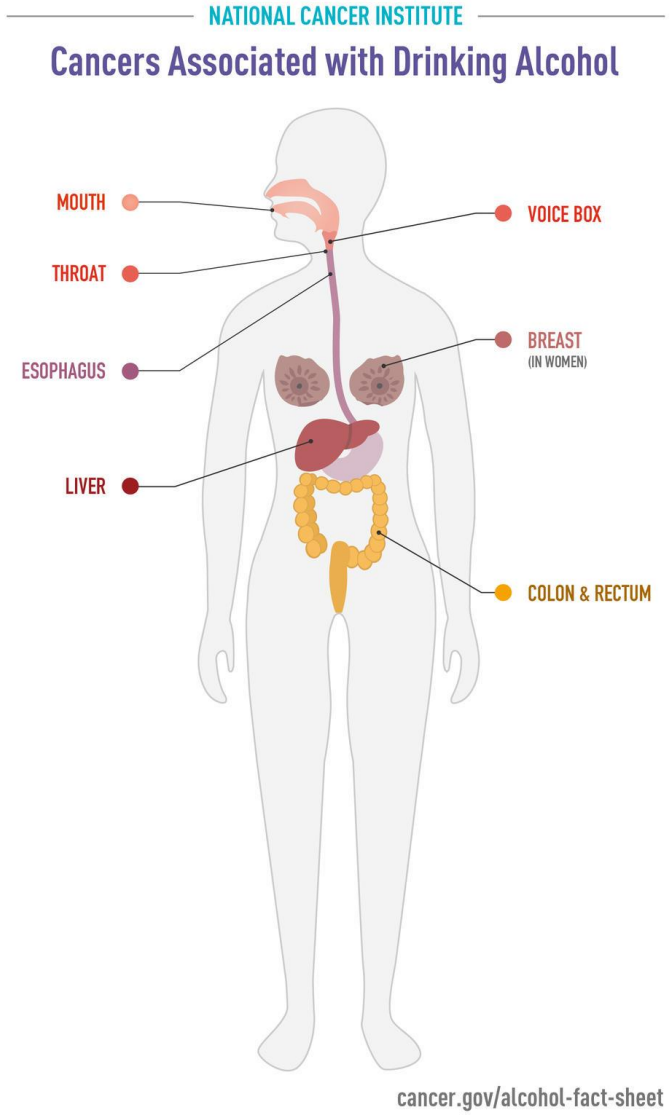
Alcohol is a level one Carcinogen

https://www.cbc.ca/news/health/alcohol-warning-labels-cancer-1.6304816



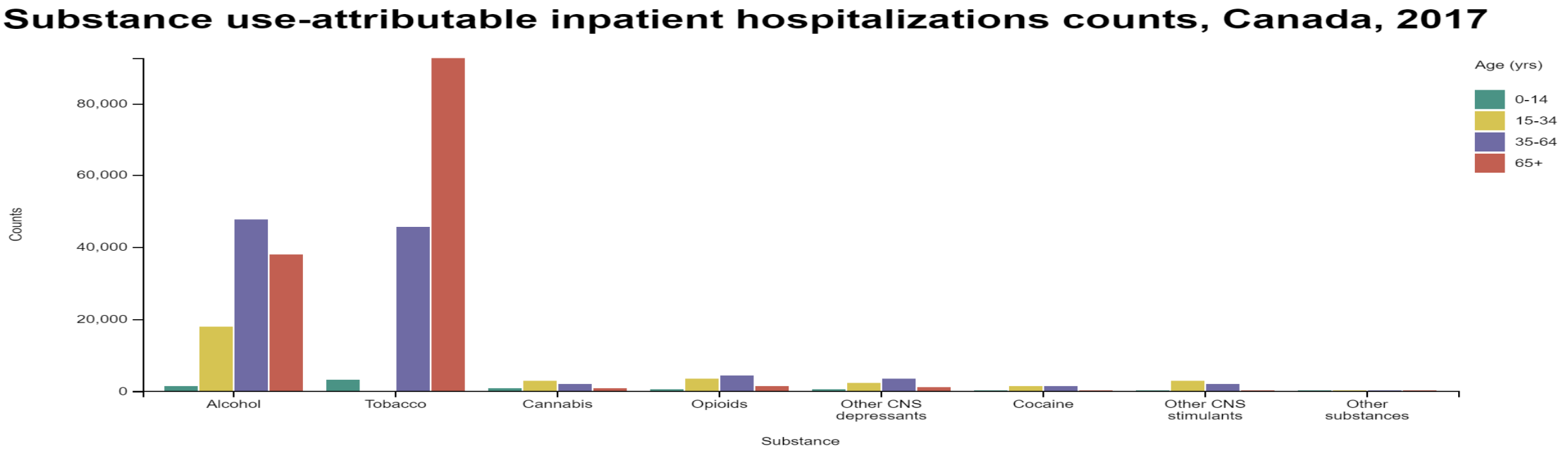
Alcohol is a level one Carcinogen. Why don’t we know about this?

- https://www.cbc.ca/news/health/alcohol-warning-labels-cancer-1.6304816

Which is the leading cause of substance attributable health care costs Canada?

- Alcohol
- Opiates
- Tobacco
- Cannabis

Why is this a silent epidemic?



Source: Canadian Substance Use Costs and Harms Scientific Working Group. (2020). Canadian substance use costs and harms visualization tool, version 2.0.0 [Online tool]. Retrieved from https://csuch.ca/explore-the-data/

Due to methodological improvements, the 2015-2017 estimates should not be directly compared to estimates for 2007-2014 in the archived database. Data for years 2007-2014 will be updated with these improvements and made available in the online data visualization tool in the near future. For more information, see the User Guide (https://csuch.ca/explore-the-data/userguide/).

For details on the methodology used to derive estimates, refer to the CSUCH technical report.

Other CNS depressants exclude alcohol and opioids, and other CNS stimulants exclude cocaine.

These estimates do not include costs or counts associated with inpatient hospitalization, day surgery, and emergency department costs or counts in the province of Québec. Therefore, all estimates should be considered conservative.

Inpatient hospitalization counts and costs for Ontario and Manitoba do not include hospitalizations recorded in the Ontario Mental Health Recording System (OMHRS) because this database does not use the ICD-10 classification system. This likely led to an underestimation of inpatient hospitalizations in those provinces.

In allocating hospitalizations for communicable diseases across the three substances that can be injected (opioids, cocaine and other CNS stimulants), the prevalence of heroin use was used to allocate hospitalizations to opioid use. This likely underestimated the number of communicable disease hospitalizations attributable to opioid use by a maximum of 0.28% of total hospitalizations attributable to opioids in 2015, with smaller impacts across other study years and substances. The estimates for communicable diseases should therefore be treated with caution.

Substance use-attributable overall costs, Canada, 2017

Substance	All Costs
Alcohol	$16,625,022,612
Tobacco	$12,283,543,585
Cannabis	$3,240,445,388
Opioids	$5,950,404,361
Other CNS depressants*	$1,859,922,139
Cocaine	$3,713,027,449
Other CNS stimulants**	$1,978,144,341
Other substances***	$325,705,232

** excluding alcohol and opioids*

*** excluding cocaine*

**** including hallucinogens and inhalants*

Source: Canadian Substance Use Costs and Harms Scientific Working Group. (2020). Canadian substance use costs and harms visualization tool, version 2.0.0 [Online tool]. Retrieved from https://csuch.ca/explore-the-data/

Due to methodological improvements, the 2015-2017 estimates should not be directly compared to estimates for 2007-2014 in the archived database. Data for years 2007-2014 will be updated in the coming months and made available in the "Current data" section of the navigation bar. For more information, see the User Guide (https://csuch.ca/explore-the-data/user-guide).

For details on the methodology used to derive estimates, refer to the CSUCH technical report.

Costs due to premature mortality were estimated by calculating future productive years of life lost due to death. See the CSUCH technical report for more detail.

Other CNS depressants exclude alcohol and opioids, and other CNS stimulants exclude cocaine.

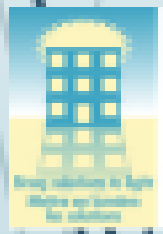
These estimates do not include costs or counts associated with inpatient hospitalization, day surgery, and emergency department costs or counts in the province of Québec, and lost productivity costs associated with premature mortality in the Yukon in 2017. Therefore, all estimates should be considered conservative.

Inpatient hospitalization counts and costs for Ontario and Manitoba do not include hospitalizations recorded in the Ontario Mental Health Reporting System (OMHRS) because this database does not use the ICD-10 classification system. This likely led to an underestimation of inpatient hospitalizations in those provinces.

In attributing hospitalizations for communicable diseases across the lower substance that can be injected (opioids, cocaine and other CNS stimulants), the prevalence of heroin use was used to allocate hospitalizations to opioid use. This likely underestimated the number of communicable disease hospitalizations attributable to opioid use (e.g., a prevalence of 0.38% of total opioid consumption attributable to opioids in 2015, with smaller impacts across other study years and substances). The estimates for communicable disease should therefore be treated with caution.

ALCOHOL USE DISORDER IN OLDER ADULTS

- PREVENTION
- SCREENING
- ASSESSMENT
- TREATMENT



Canadian Coalition for Seniors' Mental Health
To promote seniors' mental health by connecting people, ideas and resources.

Coalition Canadienne pour la Santé Mentale des Personnes Âgées
Promouvoir la santé mentale des personnes âgées en reliant les personnes, les idées et les ressources.

Case Study Mr. A

- 74 year old caregiver
- Increased drinking with burden of caregiving
- Multiple ED visits for alcohol falls and intoxication
- Complicated withdrawal resulting in delirium
- Increased behaviors while in patient
- Application to long term care
- Three weeks after admission pt rallies and discharges AMA
- several subsequent admissions with same sequelae
- What are the next steps

#6 SCREENING

Ensure that screening for AUD in older adults is age appropriate and employs active listening, is supportive, accounts for memory impairment or cognitive decline, is non-threatening, non-judgmental, and non-stigmatizing, and recognizes that DSM-5 criteria will under-identify due to reduced occupational or social obligations.

(GRADE: Moderate, Strength: Strong)

Why use geriatric specific tools?

- More accurate responses
- Language appropriate to seniors
- Asks about experiences relevant to seniors
- Identifies at risk drinkers/ problem drinkers / dependant drinkers
- Screening and interventions focused on lifestyle factors, including alcohol use, may be the most appropriate way to maximize health outcomes and minimize health care costs among older adults (Barry et al., 2001; Blow, CSAT, 1998b; Wetle, 1997).

Screening Tools

- Alcohol Use Disorders Identification Test (AUDIT)
- CAGE (not well tolerated in older adults)
- Shortened Michigan Alcoholism Test – Geriatric version (SMAST-G)
- Comorbidity Alcohol Risk Evaluation Tool (CARET)
- Senior Alcohol Misuse Indicator (SAMI)

Senior Alcohol Misuse Indicator (SAMI) Tool

1a) Have you recently (in the last few months) experienced problems with any of the following (if yes, please check box):

❑ Changes in sleep? ❑ Changes in appetite or weight? ❑ Drowsiness?
❑ Dizziness? ❑ Poor balance? ❑ Falls?
❑ Difficulty remembering things?

1b) Have you recently (in the last few months) experienced problems with any of the following (if yes, please check box):

❑ Feelings of sadness? ❑ Lack of interest in daily activities?
❑ Feelings of worthlessness? ❑ Loneliness?
❑Feelings of anxiety?
2. Do you enjoy wine/beer/spirits? Which do you prefer? _____
3. As your life has changed, how has your use of [selected] wine/beer/spirits changed?

4. Do you find you enjoy [selected] wine/beer/spirits as much as you used to?

❑Yes ❑ No

5. You mentioned that you have difficulties with… [from answers to questions 1a) and b)]. I am wondering if you think [selected] that wine/beer/spirits might be connected?

❑ Yes ❑ No

Senior Alcohol Misuse Indicator (SAMI) Tool
Scoring Key

Single responses (A score of 1 for each response):

Question #2:

I enjoy ***all*** of wine/beer spirits ☐

I enjoy ***a combination of two*** from wine/beer/spirits ☐

Question #3:

I have ***increased*** alcohol consumption from when I was younger ☐

Question #5:

Yes, there may be a connection between my alcohol use and health ☐

SUBTOTAL 1 = _____/4

Multiple responses (A score of 1 for each combination of responses):

Questions #2 & 3:

Yes, I do enjoy alcohol ☐

There has been ***no change*** in alcohol consumption ☐

=> If both responses provided, check box => ☐

Questions #1, 2, 3:

Yes, I have experienced ***5 or more*** symptoms ☐

Yes, I do enjoy alcohol ☐

Indicates any current alcohol consumption ☐

(regardless of any change in pattern)

=> If all three responses provided, check box => ☐

SUBTOTAL 2 = _____/2

TOTAL SCORE = SUBTOTAL 1 + SUBTOTAL 2 = _____

A score of 1 or above would flag the respondent as a possible at-risk or problem drinker.

SHORT MICHIGAN ALCOHOL SCREENING TEST – GERIATRIC VERSION (SMAST-G)

1. "When talking with others, do you ever underestimate how much you actually drink?"
2. "After a few drinks, have you sometimes not eaten or been able to skip a meal because you don't feel hungry?"
3. "Does having a few drinks help decrease your shakiness or tremors?"
4. "Does alcohol sometimes make it hard for you to remember parts of the day or night?"
5. "Do you usually take a drink to relax or calm your nerves?"
6. "Do you drink to take your mind off your problems?"
7. "Have you ever increased your drinking after experiencing a loss in your life?"
8. "Has a doctor or nurse ever said they were worried or concerned about your drinking?"
9. "Have you ever made rules to manage your drinking?"
10. "When you feel lonely, does having a drink help?"

SCORING

2 or more positive responses is indicative of an alcohol abuse problem (range of scores of 0-10 possible).

Contact source: Frederic C. Blow, Ph.D., University of Michigan Alcohol Research Center, 400 E. Eisenhower Parkway, Suite A., Ann Arbor, MI 48104, 734-998-7952

Alcohol Use Disorder Assessment

- Assessment should be comprehensive
- Include and follow-up with cognitive assessment

Alcohol Use Disorder Considerations for admission to LTCH

- Pre admission status (active or not active)
- Treat prior to admission or
- Treat as part of admission
- Families may be reluctant to admit there is a drinking issue due to stigma /Fear of refusal for admission
- risk of unsafe withdrawal upon admission if not disclosed.

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#9 ASSESSMENT

A comprehensive assessment is indicated for all older adults who have an AUD, have signs of harmful use, or who present with acute intoxication. The assessment should include: the use of a standardized alcohol use questionnaire to determine quantity and frequency of alcohol use and potential harms; a comprehensive assessment of medication and other substance use; determination of the presence of another substance use disorder; evaluation of physical, mental, and cognitive capacity, nutrition, chronic pain, social conditions, family/social supports, and overall functioning; collateral history. The assessment should be performed regardless of physical, mental, or cognitive co-morbidities with modifications as deemed appropriate.

(GRADE: Moderate, Strength: Strong)

#10 ASSESSMENT

Assess older adults with AUD for cognitive impairment using a validated tool every 12 months or as indicated. In cases of cognitive impairment, repeat the cognitive evaluation at 6 and 12 months after a reduction or discontinuation of alcohol, to assess for evidence of improvement. The treatment plan should specify the timeline and procedure for ongoing evaluation of clinical outcomes and treatment effectiveness.

(GRADE: Moderate, Strength: Strong)

Low Risk Drinking Guidelines for Older Adults

- For women 65 or older, no more than 1 standard drink per day with no more than 5 per week in total; for men 65 or older, no more than 1 – 2 standard drinks per day, with no more than 7 per week in total. Non-drinking days are recommended every week. (standard drink = 13.45 grams of pure alcohol – e.g. 5 oz. (142ml) of wine at 12% alcohol)

- Depending upon health, frailty, and medication use some adults should transition to these lower levels before age 65.

- As general health declines, and frailty increases, alcohol should be further reduced to 1 drink or less per day, on fewer occasions, with consideration given to drinking no alcohol.

GRADE: Evidence: Low; Strength: Strong

Reversibility in Alcohol Related Dementia

- In contrast to other common causes of dementia, it has been suggested that the ***decline in cognitive or physical functioning in alcohol-related dementia is relatively non-progressive in abstinent ex-drinkers, or even partially reversible***; this is supported by imaging studies.

Goldman MS. Cognitive impairment in chronic alcoholics. Am Psychol 1983; 38: 1045–54.

Alcohol Use Disorder Treatment

- Stage and gauge
- Behavioral and pharmacological
- Psychosocial support
- PAWSS (prediction of Alcohol Withdrawal Severity Scale)
- CIWA-Ar & BZRA's
- Tapering in controlled settings
- Thiamine
- Monitor and follow-up
- Concurrent care

#19 TREATMENT

Health care practitioners, older adults, and their families should advocate for adequate access and funding for treatment for AUD, specifically access to pharmacotherapy (naltrexone and acamprosate) and psychosocial therapies.

GRADE: Consensus

TREATMENT

- Naltrexone and acamprosate pharmacotherapy can be used to treat AUD in older adults, as indicated, with attention to contraindications and side effects. Naltrexone may be used for both alcohol reduction and abstinence, while acamprosate is used to support abstinence. In general, start at low doses and titrate slowly, with attention to open communication with the patient. Initiation may be done in the home, hospital, during withdrawal management, or in long-term care with subsequent transition to an appropriate placement.

- [GRADE: Evidence: High; Strength: Strong]

Naltrexone (Revia)

- Well tolerated
- NOW AVAILABLE on ODB formulary
- Safety:
  - No major liver side effects if the patient “sampled” alcohol Only half as likely to relapse
- Compliance/Adherence:
  - Older patients more likely than younger to take Naltrexone regularly(Oslin, 2002);less likely to relapse than younger;
  - better attendance at therapy sessions than younger patients taking naltrexone

NB Older adults appear to respond well to a medically oriented program that is supportive and individualised

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KINDLING EFFECT OF WITHDRAWAL

- Increasing severity of withdrawal following repeated withdrawal episodes
- Increasing risk of seizures on withdrawal with increasing number of withdrawal episodes
- Progressive brain damage excitatory neurotransmitters with each withdrawal episode
- May lead to permanent brain damage (dementia)
- Prompt treatment with benzodiazepines to prevent seizures may prevent further damage
- Thiamine

Case study: Mr A

- Next steps
- planned admission with consideration to need for supported withdrawal
- Delirium
- Approaches to care included one to one
- Use of anti craving medications
- Discharge home with follow-up with addiction medicine
- No relapse for two months until medications were stopped
- Abstinence resumed with initiation of Naltrexone
- Mr. A improved cognitively , was able to get drivers license back
- Improved relationships

#17 TREATMENT

As a harm reduction strategy for older adults in controlled environments, where medical withdrawal is not available or deemed appropriate, it is recommended that a managed alcohol taper be considered. Individualize the taper by 1 standard drink every 3 days (aggressive tapering), weekly (moderate tapering), or every 2–3 weeks (mild tapering) with CIWA-Ar monitoring to keep the withdrawal symptom score < 10. The approach should be individualized, incremental, and with an indeterminate timeline.

GRADE: Consensus

#18 TREATMENT

To prevent the development of Wernicke's Encephalopathy during withdrawal, at least 200 mg of parenteral thiamine (IM or IV) should be administered daily for 3–5 days.

GRADE: Low; Strength: Strong

#20 TREATMENT

Treatment response for AUD should be monitored though laboratory measures such as gamma-glutamyl transferase (GGT) and Mean Cell Volume (MCT).

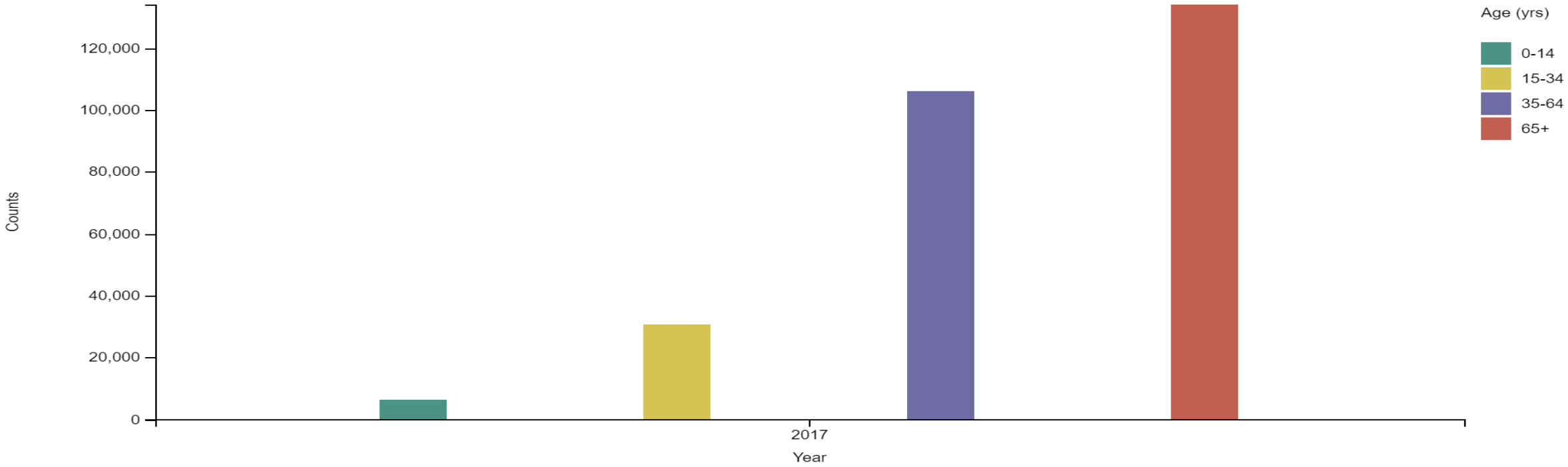
GRADE: Moderate; Strength: Strong

#22 TREATMENT

Peri-operative elective surgical management should include medically supported withdrawal or alcohol use taper pre-operatively, with post-operative treatment and consideration of anti-craving medication.

GRADE: Low; Strength: Strong

Substance use-attributable inpatient hospitalizations counts, Canada



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How to support transitions to long term care

- Ensure supported withdrawal of substance with follow-up
- Include plan for smokers to ensure safe transition
- Use of Addiction medicine to manage more complex pts

Withdrawal cognitively impaired

- Never initiate withdrawal with out medical supervision
- If no history of complicated withdrawal Primary care can monitor
- Weekly Taper alcohol intake slowly no more than 10 % of intake or 1 standard drink per week
- Behaviors around reduced amounts?
- redirect offer non alcohol based beverages
- **Cautious use of dealcoholized beverages with cognitively impaired not to be used instead of unless the person is already withdrawn from alcohol**

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Establish alcohol intake: how many standard drinks in a day?

CCSA 2019

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Screening tools

- SAMI Senior Alcohol Misuse Indicator https://www.porticonetwork.ca/documents/21686/0/SAMI+fillable/f6668443-559f-4ad8-9e5f-6de47a38e70a
- MOCA https://www.mocatest.org/
- GDS https://consultgeri.org/try-this/general-assessment/issue-4.pdf
- Morse Falls Scale http://www.networkofcare.org/library/Morse%20Fall%20Scale.pdf
- Fagerstrom Nicotine Dependence Scale
- http://ndri.curtin.edu.au/btitp/documents/Fagerstrom_test.pdf

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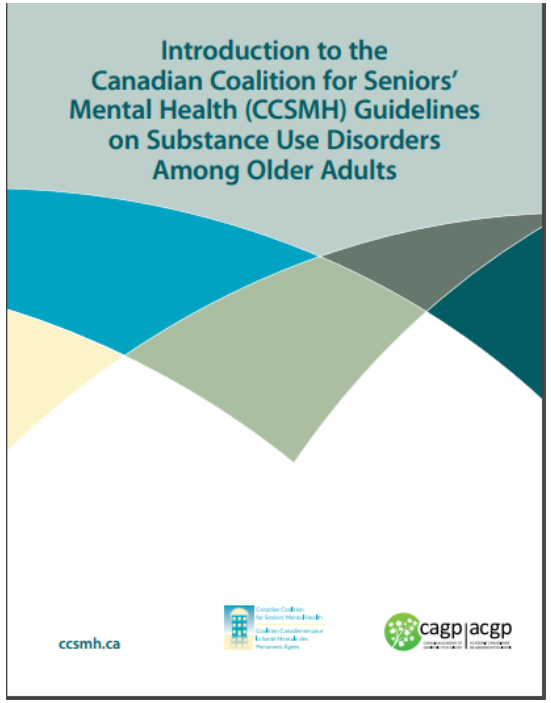
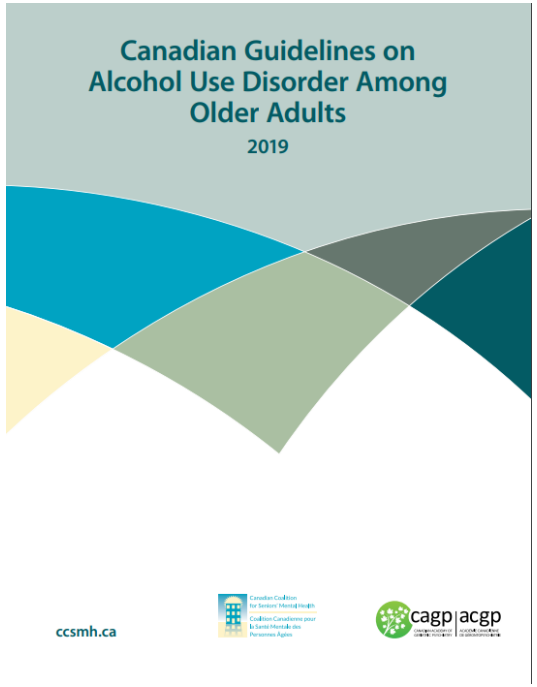
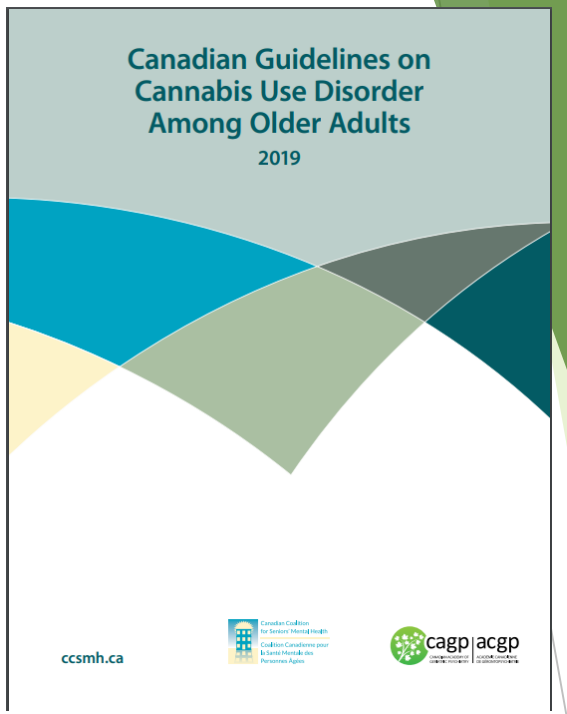
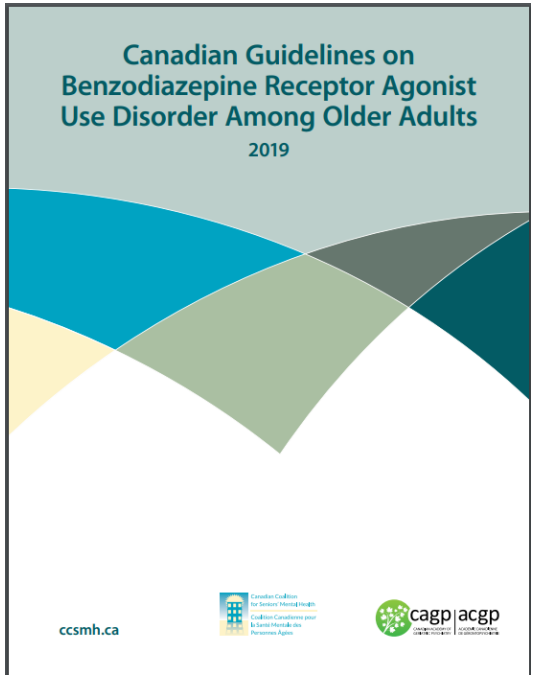


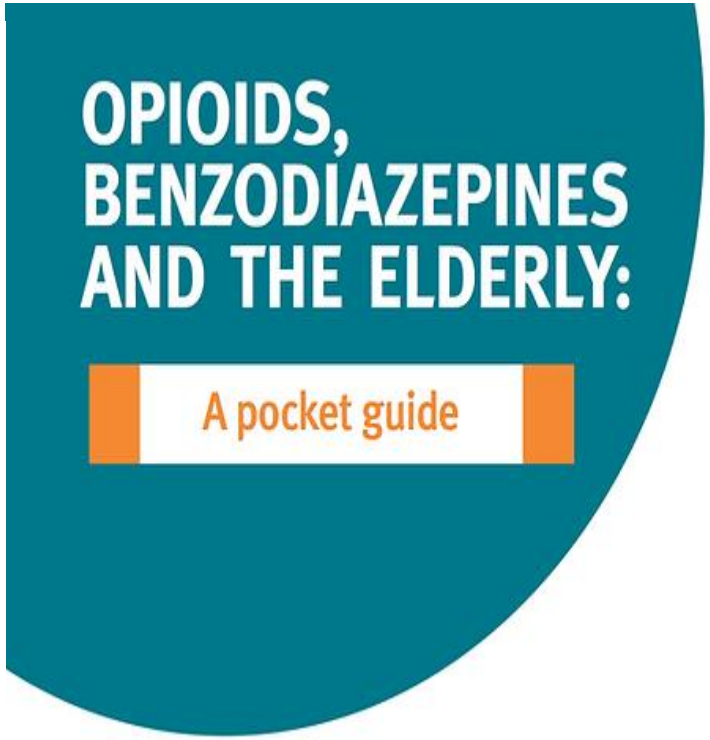






All available for download at www.ccsmh.ca

Alcohol https://www.nicenet.ca/product-page/management-of-alcohol-use-disorders-in-older-adults-what-doctors-need-to-know



NICE

www.nicenet.ca

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Thank you for listening

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