



Introduction to the Senior Alcohol Misuse Indicator (SAMI) tool:

**A senior-friendly approach to screening for alcohol use
in older adults**

Dr. Bonnie Purcell, Ph.D., C. Psych.

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Outline

- Definitions and epidemiology of drinking
- Risk factors for alcohol misuse in older adults
- Common symptoms and health consequences
- Screening definitions and practices
- SAMI with 2 case examples
 - 1 community
 - 1 long-term care

Low Risk Drinking Guidelines

- In Canada:
 - No more than 2 standard drinks per day
 - Weekly maximum of 14 drinks for men, 9 for women.
- For healthy individuals
 - Serious health problems (i.e. liver disease, psychiatric illnesses)
 - Taking certain medications (i.e. sedatives, sleeping pills, pain killers, anti-hypertensive drugs, psychoactive drugs)
 - Personal or family history of alcohol use disorders
- How do seniors fit in?

Drinking and Older Adults

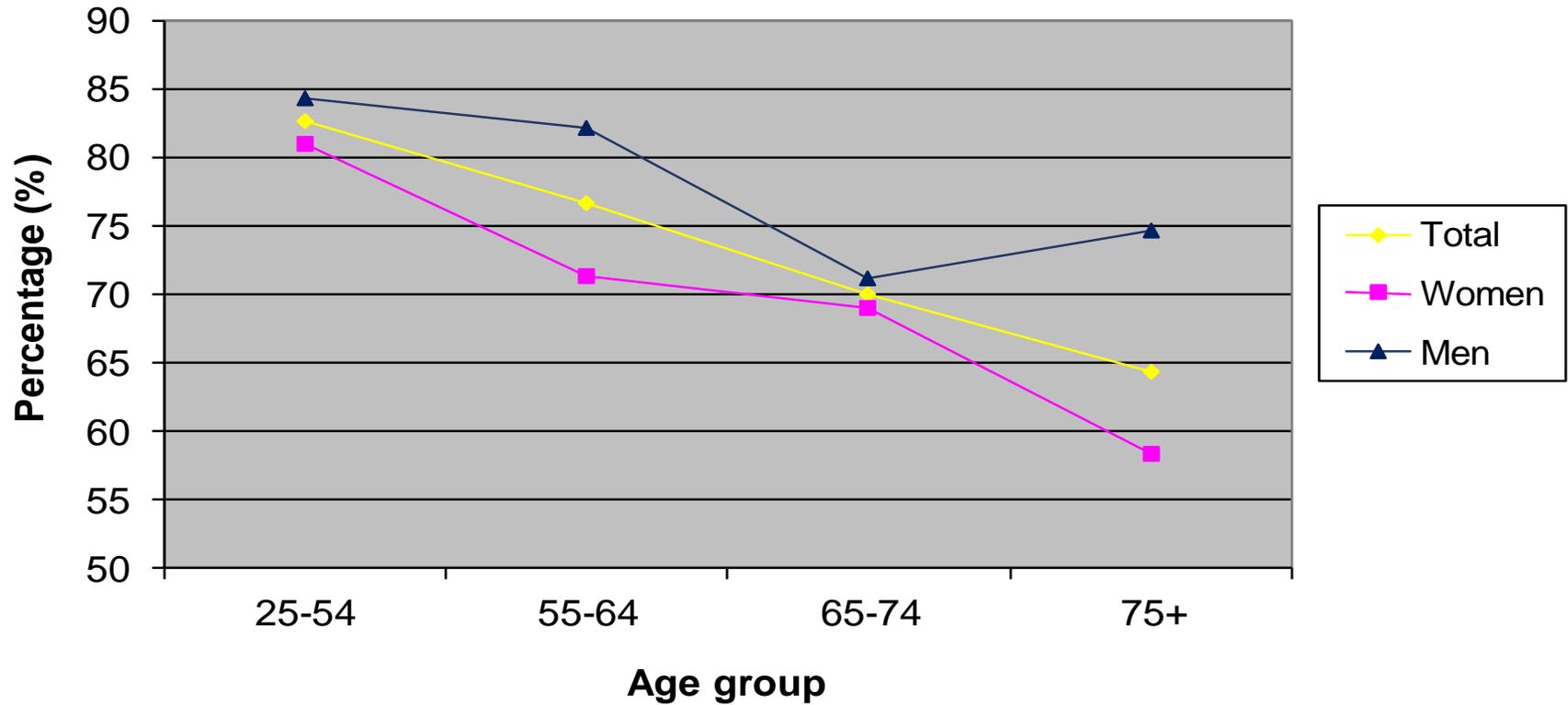
- Moderate consumption levels for healthy older adults
 - 1 drink/day



- Supported by U. S. Department of Health and Human Services

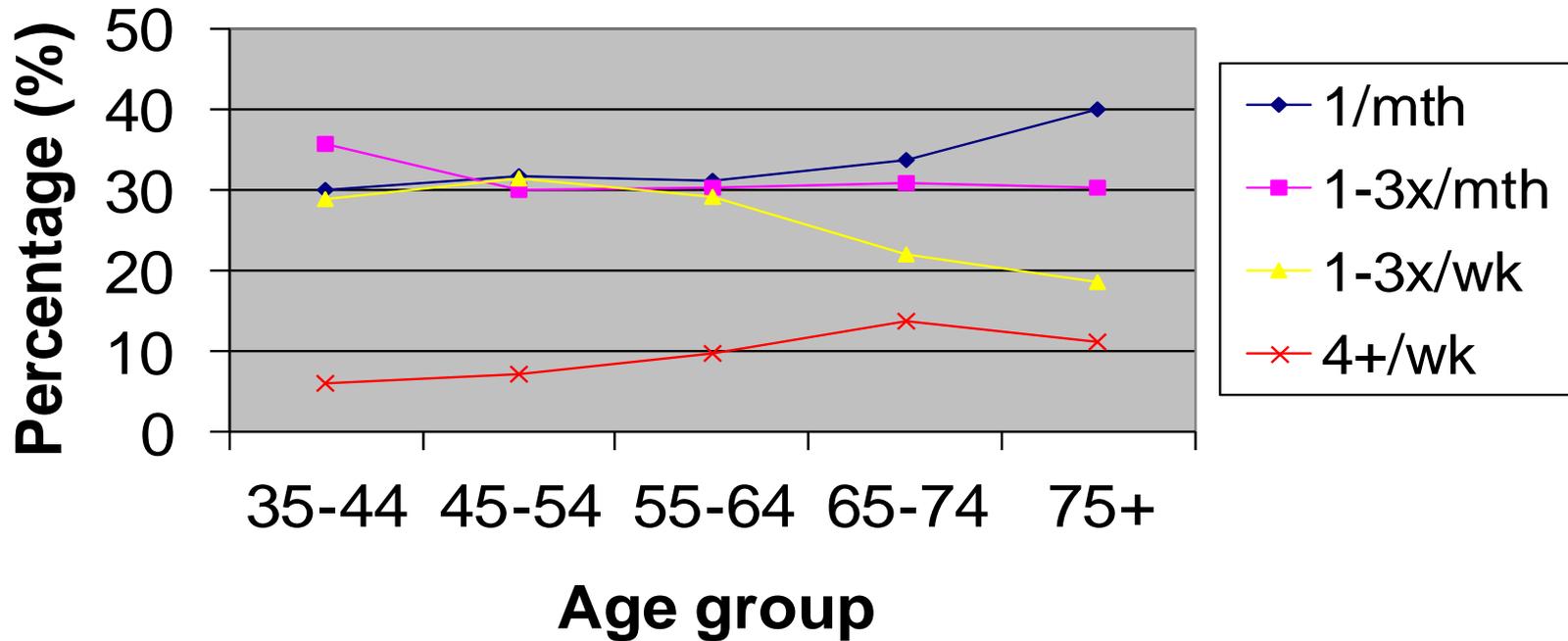
(Dufour et al., 1992; Dufour & Fuller, 1995; Chermack et al., 1996)

Prevalence of Past-Year Drinkers in 2004



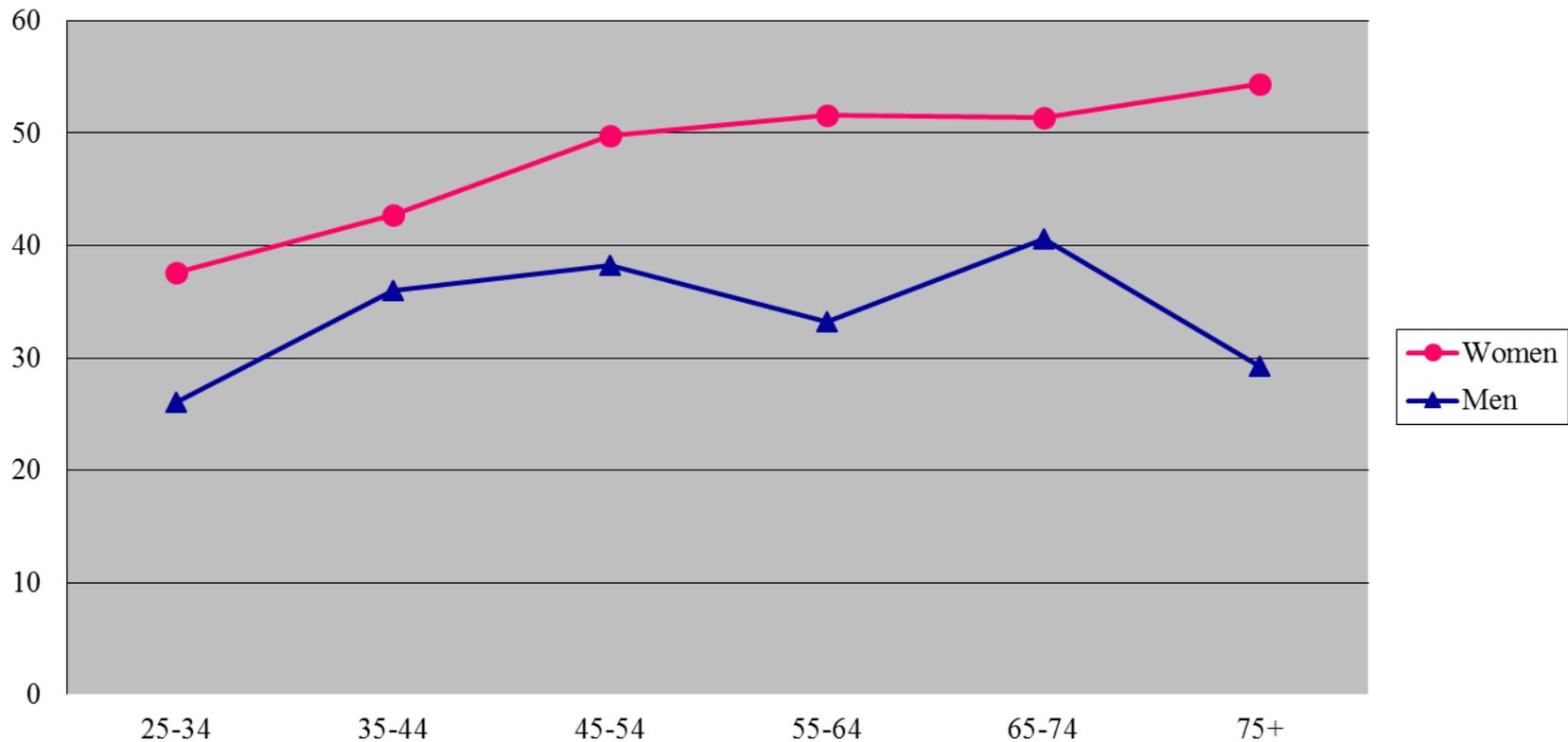
Canadian Addiction Survey (2008)

Prevalence and Frequency of Past-Year Drinking



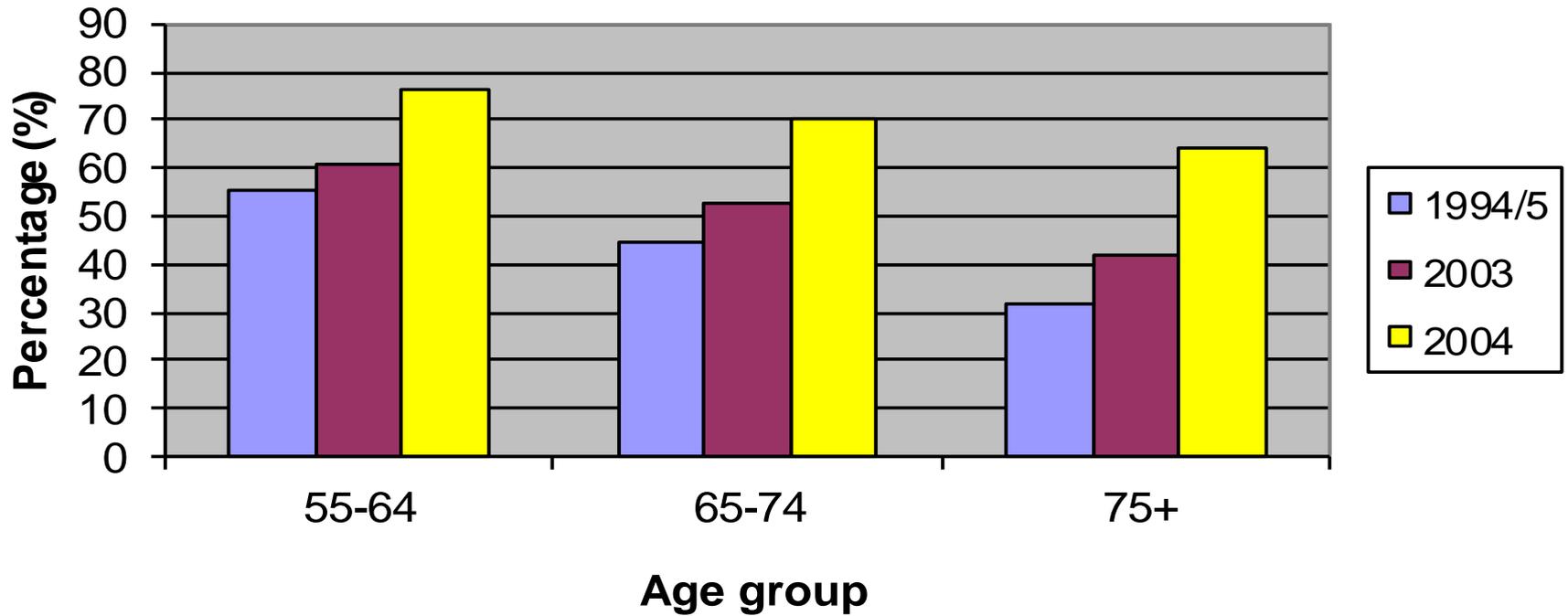
Canadian Addiction Survey (2008)

Percentage of Respondents who “Almost Always” Drank with Meals among Past-Year Drinkers (by Age Group)



Canadian Addiction Survey (2008)

Change in the Prevalence of Past-Year Drinkers



Project Seagull (2007), Canadian Addiction Survey (2008)

Spectrum of Alcohol-Related Behaviour

- DSM-V: Alcohol Use Disorder (AUD)
 - Previous definitions of abuse or dependence
- ICD-10 and WHO
 - Hazardous and harmful drinking
- Oslin (2004)
 - Heavy drinking
 - At-risk or problem drinking
 - Low-risk/abstinence



Prevalence of Alcohol-Related Problems Among Seniors

- Current alcohol use disorders have been found in 6-14% of seniors 50 years of age or older
(Adams, Magruder-Habib et al. 1992; Thomas and Rockwood 2001)
- Up to 25% of older adults (50+) living in the community are problem or heavy drinkers
(Brody, 1982; Liberto et al., 1992)
- Between 50% and 60% in medical inpatients and institutionalized seniors respectively
(Gaitz & Baer, 1971; McCusker et al., 1971; Moore, 1972; Brody, 1982; Liberto et al., 1992)

Biological Risk Factors



- Smaller amounts of alcohol required for intoxication
 - Decline in lean mass
 - Reduced water content in the body
 - Decrease in gastric alcohol dehydrogenase enzyme
- Prolonged effects
 - Decline in kidney and liver functions

Psychosocial Risk Factors

- Retirement
 - Role of occupation as status, self-esteem
 - Change in standard of living
- Major losses
 - Loved ones
 - Divorce/separation
 - Empty nest
 - Decreased social network
 - Physical health/vigor
 - Meaning of life
- Coping strategies



Symptoms of Alcohol Misuse in Seniors

- Memory problems, confusion
- Loneliness, depression
- Loss of sex drive
- Poor hygiene, malnutrition
- Falls
- Incontinence, diarrhea
- Fatigue
- Social isolation



Health Consequences

- Injury from falls
- Liver disease
 - 50% of elderly patients with cirrhosis died within a year
- Heart problems
 - MCI, heart disease, blood pressure, arrhythmias, atrial fibrillation, strokes
- Gastrointestinal disorders
 - Nausea, vomiting, ulcers
- Sexual dysfunction
- Nutritional deficiencies
- Cancer
- Risk of mortality
- Cognitive deficits
- Dementia



Prescription Drugs and Alcohol

- Up to 83% of seniors between 55 and 79 years of age use at least one prescription medication
(Statistics Canada, 2014)
- Among senior drinkers, up to 87% take at least one prescription medication
 - Between 21-35% older adults consume alcohol while taking high-risk medication (i.e., increased potential for adverse interaction with alcohol)
– (Holton et al., 2017; Pringle et al., 2005)
 - Between 45-65% of older adults using alcohol-interactive medications report concomitant alcohol use
(Breslow et al., 2015; Cousins et al., 2014)

Medications and Alcohol

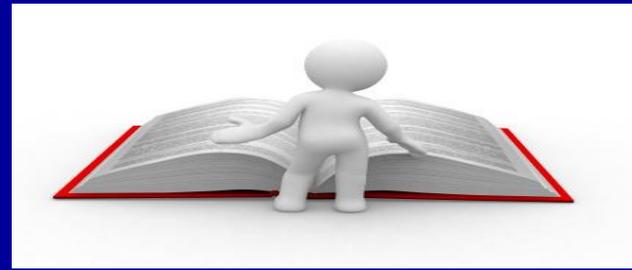
- The combination of even moderate amounts of alcohol and the commonly prescribed and over-the-counter medications can result in:

- Increased sleepiness
- Impaired coordination
- Slurred speech
- Mental confusion
- Increased risk of falls
- Rapid intoxication



(Addiction Research Foundation, 1998)

Definitions



- *Screening* is the exercise of making a probability estimate that a given individual has a specific condition obtained from *brief questioning*
- Making a *diagnosis* requires a *full and complete assessment* (which is, often, lengthy) to determine whether a given individual has a specific condition
- *Sensitivity* refers to the accuracy of a test in identifying an individual with a particular problem
- *Specificity* refers to a test's accuracy in identifying persons who do not have a problem.

Screening



- Physicians speak to patients about their alcohol use less frequently than about other health-related behaviors
(Arndt et al., 2002)
 - 47% regularly asked about alcohol intake on a single occasion
 - 13% used a formal screening tool
(Friedmann, McCullough et al. 2000)
- Physicians and nurses routinely inquire about alcohol usage only for patients who specifically present with alcohol problems
(Happell et al., 2002; Johansson et al., 2002; Aira et al., 2003)
- Physicians are able to detect 60% of young patients with alcoholism
 - Only 37% senior patients with alcoholism
 - Senior alcoholism patients less likely than younger patients to have treatment recommended
(Curtis et al., 1989)

Issues with Screening for Alcohol-Related Problems Among Seniors

- Quantity/frequency of use questions
- Occupational and legal problems
- Standardized definitions with younger populations
 - Differential presentation in seniors
- Self-recognition of a problem



(Graham, 1986)

General Approach to Alcohol Use Screening



- Nonjudgmental, nonthreatening
 - Be sensitive to stigma associated with alcohol-related problems in older cohort
- Make assumption that resident consumes alcohol (i.e., normalize)
- Put in context of medical health, nutrition
 - Older adults more open to discuss physical health
 - May need to see how alcohol affects their health

(SAMHSA, 1998)

General Approach to Alcohol Use Screening



- Avoid using stigmatizing terms (“alcoholic”)
- May need to speak with family, friends for collateral information
 - Especially if the senior displays:
 - Denial
 - Defensiveness
 - Cognitive impairment
 - Ask about family history of drinking problems

(SAMHSA, 1998)

Development of the Senior Alcohol Misuse Indicator (SAMI) tool

- Master's project at the University of Toronto and the Centre for Addiction and Mental Health (CAMH)
- Goal:
 - Develop and validate a senior-specific screening tool to identify alcohol-related problems
- Audience:
 - Health care practitioners providing outreach care
 - Necessitated language be non-confrontational
 - Priority to remain welcome in the home

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):

- | | | |
|--|---|--|
| <input type="checkbox"/> Changes in sleep? | <input type="checkbox"/> Changes in appetite or weight? | <input type="checkbox"/> Dizziness? |
| <input type="checkbox"/> Drowsiness? | <input type="checkbox"/> Difficulty remembering things? | <input type="checkbox"/> Poor balance? |
| | | <input type="checkbox"/> Falls? |

1b. Have you recently (in the last few months) experienced problems with any of the following

(if yes, please check box):

- | | | |
|---|--|---|
| <input type="checkbox"/> Feelings of sadness? | <input type="checkbox"/> Lack of interest in daily activities? | <input type="checkbox"/> Feelings of worthlessness? |
| <input type="checkbox"/> Loneliness? | <input type="checkbox"/> 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

(For clinical use. Not included in scoring.)

**5. You mentioned that you have difficulties with _____ (from answers to questions 1a and b).
I am wondering if you think that [selected] wine/beer/spirits might be connected?** Yes No

SCORING KEY

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

Question 2

I enjoy **all three** of wine/beer/spirits OR

I enjoy **a combination of any 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 = _____/3

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

Question 2 & 3:

Yes, I do enjoy alcohol

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

=> If both responses provided, check box =>

Question 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 = _____

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SUBTOTAL 2 = _____/2

TOTAL SCORE = SUBTOTAL 1 + SUBTOTAL 2 = _____



Senior Alcohol Misuse Indicator (SAMI)

B Purcell

M C Flower

U. Busto

Brief description

The topic of alcohol use in the senior population is often associated with stigma, which may elicit denial and defensiveness from respondents. The Senior Alcohol Misuse Indicator (SAMI) is a brief, senior-specific screening tool designed to start a gentle, non-threatening conversation about alcohol consumption.

This approach may be helpful for those health care professionals that provide outreach care in seniors' homes and whose first priority is establishing and maintaining rapport, which may preclude asking confrontational questions about alcohol consumption. Follow-up by a skilled clinician for diagnostic and treatment purposes is required.

Download the Senior Alcohol Misuse Indicator (SAMI)

To use the fillable fields function in the questionnaire and scoring key:

Fill in the fields online and print OR download and save to your device / local drive.

Target population

Case Example: Ms. L



- 66 year old woman living with husband at home
- 8-year history of excessive drinking
 - Consumes 1 bottle red wine/day
 - Began as reaction to ↑ stress at work
- Referred for suicide ideation, depression, alcohol abuse
 - Stressful situation with daughter led to ↑ drinking, low mood, passive suicide ideation, extreme agitation w physical and verbal aggression, called crisis line, sent to hospital ED, but sent home after sobering up

Case Example: Ms. L



- Challenging situation with adult daughter with addiction
 - Manipulation from daughter of needing financial/instrumental assistance, enabling behaviour from Ms. L, disapproval from husband, judgment from others, feelings of hopelessness
 - Has voiced suicide ideation w plan, but no intent (i.e., walking into river, but fear of water)
- Strong family history of alcoholism
 - Both parents, brother were heavy drinkers (esp. in response to stress)
 - Verbal abuse and one incident of witnessed physical abuse between her parents

Case Example: Ms. L



- Medical history
 - Sciatica
 - Abdominal pain
- Psychiatric history
 - 5 previous overdoses and subsequent hospital admissions triggered by relationship difficulties
 - Most recent was 15 years ago, which prompted her third divorce
 - Has previously been treated w Campral
 - Current cognitive impairment?
- Geriatric Depression Scale: 10/15
- MoCA: 21/30

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2. Do you enjoy wine/beer/spirits? Which do you prefer?

Red wine

3. As your life has changed, how has your use of [selected] wine/beer/spirits changed

Increased

4. Do you find you enjoy [selected] wine/beer/spirits as much as you used to? Yes No

(For clinical use. Not included in scoring.)

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Yes No

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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 = 2 /3

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

Question 2 & 3:

Yes, I do enjoy alcohol

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

=> If both responses provided, check box =>

Question 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 = 1 /2

Sharing Positive Screening Results

- Describe impact that alcohol has on senior's health or functional status
 - “The screening results indicate that alcohol may be having a negative effect on your blood pressure”
- Spell out how reduction or cessation of use will improve senior's life
 - Maintain independence, improve sleep, improve cognition, decrease falls, reduce confusion
- Be prepared with options for addressing problem

Case Example: Mr. C



- 72-year-old widower, living in LTC for past year
- Long-standing history of alcohol dependence, but sober for four weeks prior to moving to LTC from hospital in 2011
- Doctor's orders for 1-2 beers/day, but has daughter sneak in extra cans when visiting
 - Mr. C hides these extra cans throughout his private room, nursing staff go through his belongings while he is out
 - Also consumes 1-2 beers when out with daughter (3x/wk)
- When intoxicated, Mr. C becomes agitated, verbally aggressive, and refuses personal care

Case Example: Mr. C



- Daughter is POA, lives just outside city limits
 - Denies bringing in any alcohol, despite being the only regular visitor for Mr. C
 - Refuses to talk about his drinking
- Oldest son was able to provide bigger picture of Mr. C, his daughter, and his drinking
 - Mr. C worked in high-stress “postal” career until retirement
 - Wife passed away shortly before retirement, his drinking increased afterwards
 - Long history to drinking: Drank up to 20 cans of beer per day
 - Significant family history of alcoholism
- Mr. C is a poor historian (Denial? Cognitive impairment?)

Case Example: Mr. C



- Medical issues:
 - Depression
 - Diabetes
 - Hypertension
 - Arthritis
 - Peripheral neuropathy
 - Glaucoma
- Geriatric Depression Scale: 4/15
- MMSE: 30/30

Case Example: Mr. C



- Mr. C was sitting in his wheelchair in his private room, watching TV
- He agreed to discuss with me how to make his experience in LTC better
 - I stated that I would like to get to know him and see how I might be able to help
- Spent 30 minutes obtaining psychosocial/medical history and establishing rapport
- Mr. C was in good spirits and readily smiled and laughed

Senior Alcohol Misuse Indicator (SAMI) Tool

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Yes, all of them.

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Less than used to

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

Yes No

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Yes No

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Question 5:

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SUBTOTAL 2 = 0 /2

Pros/Cons of the SAMI

- **Advantages**

- Friendly approach to discussion about alcohol use
- Senior-specific
- Quick to administer
- Uses sensitive language
- Developed with health care workers
- Not face-valid
- Sensitivity 78-84%
 - Better than the CAGE and SMAST-G at identifying at-risk and problem drinkers

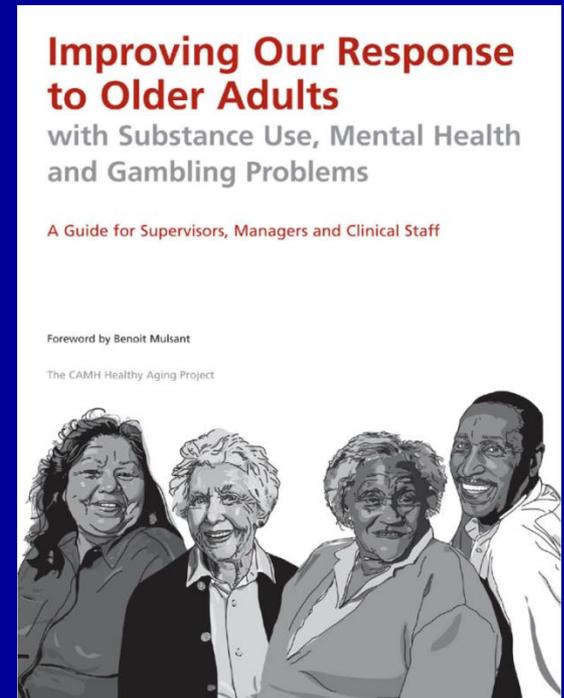
- **Disadvantages**

- Difficult to score
- Specificity 55%
 - Higher number of false positives
- More research needs to be conducted
 - Only two validation studies



Update on the SAMI

- Published in 2008
CAMH publication → → →
- Now available for free online
 - CAMH Portico
- Dissemination through:
 - CAGP conference Nov 2017
 - Geriatric Addictions Collaborative
 - CCSMH Alcohol Working Group
 - Development of alcohol guidelines for seniors



Harm Reduction

- Focuses on immediate harms in person's life, works on realistic goals
- Provides clinicians with way to begin establishing, maintaining therapeutic relationship
- Offers strategies on how to offer assistance, even when senior:
 - Feels “it's impossible to stop right now”
 - Is too cognitively impaired to participate in psychotherapeutic approach

Common Harm Reduction Targets

- Depression
- Safety
- Isolation
- Poor health
- Medication problems
- Poor nutrition
- Pain management
- Housing difficulties
- Finances
- Violence or abuse from others
- Risky sex
- Family



Case Example: Ms. L



- Began psychotherapy
 - Identified triggers: communication challenges, managing roles, stressful job
 - Ambivalence re: reducing her drinking
 - Worked on harm reduction approaches
 - Communication and assertiveness strategies, boundaries w son, keeping busy/distracted when cravings are at peak, introducing exercise
 - Walks in the other direction of LCBO, buying white wine
- Eventually quit job and moved to Arizona

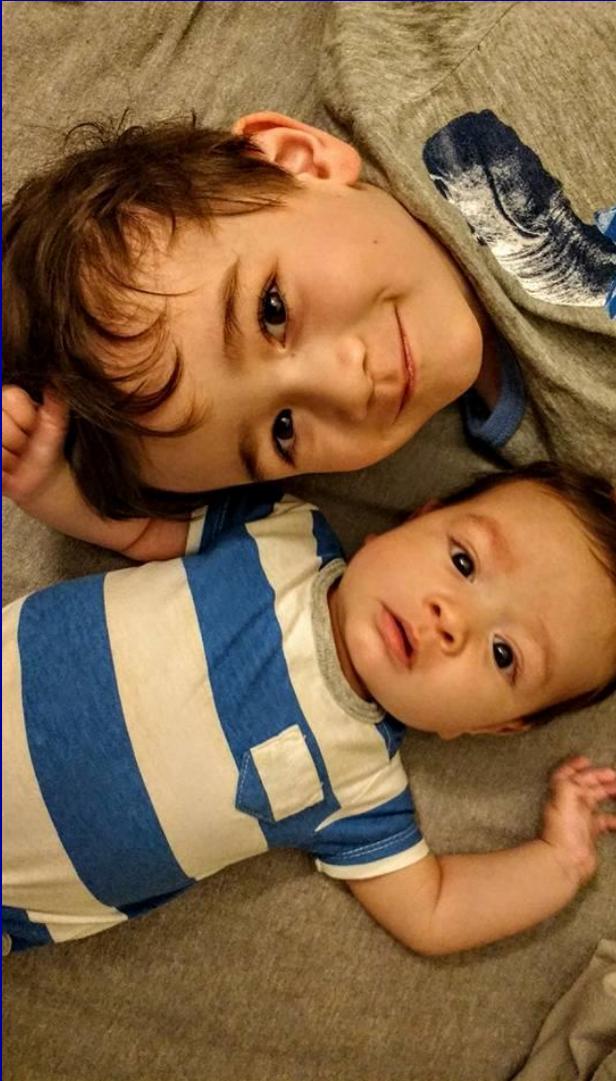
Case Example: Mr. C



- MoCA: 17/30
- Reward system
 - Positive reinforcement when complies with contract
 - Removal of reinforcement when breaks contract
- Provide choice as much as possible
 - When and what to drink
 - Possibly provide tool to help him open his own cans
- Reduced drinking limits after visit with daughter
- Treat depression
 - Cognitive impairment may make him unreliable to report depressive symptoms
- Invite and engage in meaningful activity
 - Cognitive impairment may make him less likely to initiate participation

Thank you for your Time!

Questions?



Email: bonnie.purcell@lhsc.on.ca