Curbing the Rising Tide of Substance Abuse Among Older Adults

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Presentation Overview

Baby Boomers & Substance Abuse
Nature & Extent of Problem
Risks & Benefits of Alcohol Use
Lifetime Patterns
Screening Approaches
Screening, Brief Intervention, & Referral to Treatment (SBIRT) & Other Strategies
14.5% of U.S. population is age 65+; expected to increase up to 21.7% by 2040

75 million baby boomers (born between 1946–1964; now age 54–72)

64 million Gen Xers (now age 38–53)

Individuals age 85 and older are the fastest growing segment of the population
Aging Adults in Utah

• Currently, 10% of UT residents are over 65

• That number will double in the next 50 years

• UT’s 60+ population will grow 30% by 2030

• 85+ population is fastest growing group

Source: US Census Bureau
The Demographic Imperative

• The baby boom cohort (1946–1964) is the fastest growing sector of the U.S. population.\(^1\)

• Substance use disorders (SUDs) in older adults are expected to double, from 2.8 million in 2002–2006 to 5.7 million by 2020.\(^2\)

• Older adults are prescribed and use more medications than any other age group, and use more than one-third of all the medications in the United States.\(^3\)

Baby Boomers’ Impact

• Roughly 10,000 people will turn 65 today, and about 10,000 more will cross that threshold every day for the next 13 years.
• By 2030, 1 in 5 Americans will be 65 or older.
• This causes enormous pressure on retirement systems, health care facilities, and other services.
• There are major implications for MH/SA prevention and treatment.

Ethnic/Racial Diversity

• Currently, 18% of older adults are members of racial or ethnic minority groups:
  – 8% African American, 6% Latino, 3% Asian or Pacific Islander, and <1% American Indian or Native Alaskans
• By 2030, 26% of older Americans will be members of racial or ethnic minority groups.

Administration on Aging, 2006
Ethnic/Racial Diversity (Cont.)

• Changes in ethnic diversity will affect:
  – access and barriers to prevention and treatment,
  – older adults and care provider dynamics, and
  – the need to understand cultural differences in the perception of MH/SA problems, care preferences, and response to interventions.
Need for Substance Abuse (SA)/Mental Health (MH) Services

- Approximately one-third of older people who need SAMH services receive them.
  - Most receive MH care from a primary care physician (PCP).
- Less than one-third of older nursing home residents who need SA/MH services receive them.
- Demand for SA/MH services is likely to increase because the baby boom cohort tends to:
  - use these services more frequently than the current older adult cohort.
  - be less stigmatized by seeking services.

Extent of the Problem
Substance Abuse and Older Adults

#1  Most common addiction: Alcohol (~2–18%)
#2  Nicotine (~9%)
#3  Psychoactive prescription drugs (~2–4%)
#4  Other illegal drugs (marijuana, cocaine, narcotics) (<1%)
Recent report (September 2017) showing increases in national rates of drinking, heavy drinking, and alcohol use disorder in U.S. adults
Any Alcohol Consumption

Grant ... Hasin, JAMA Psychiatry 2017
Alcohol Use (12+ drinks in a year),
Adults age 55 and older

Hasin 2018, unpublished
DSM-IV Alcohol Use Disorder (Abuse or Dependence)

Prevalence of 12-Month DSM-IV Alcohol Use Disorder:
2001-2002, 2012-2013

- NESARC 2001-2002
- NESARC-III 2012-2013

Age Group:
- 18-29
- 30-44
- 45-64
- ≥65

Grant... Hasin, JAMA Psychiatry 2017
Older Adult Heavy Drinking Trends in Utah

![Graph showing trends in heavy drinking among older adults in Utah from 2001 to 2016. The graph compares the drinking trends for those aged 55-64 (blue line) and 65+ (red line). The data points are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>55-64</th>
<th>65+</th>
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</thead>
<tbody>
<tr>
<td>2001</td>
<td>3.1</td>
<td>1.7</td>
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<tr>
<td>2002</td>
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<tr>
<td>2007</td>
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<tr>
<td>2009</td>
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<td>1.3</td>
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<tr>
<td>2010</td>
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<tr>
<td>2011</td>
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<tr>
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<tr>
<td>2014</td>
<td>4.1</td>
<td>2.8</td>
</tr>
<tr>
<td>2015</td>
<td>4.3</td>
<td>1.5</td>
</tr>
<tr>
<td>2016</td>
<td>5.3</td>
<td>1.5</td>
</tr>
</tbody>
</table>

The trends show an overall decrease in heavy drinking among those aged 55-64, while there is a slight increase among those aged 65+. The highest years for both age groups are 2016, with the lowest years being 2007 and 2009 for those aged 55-64, and 2006 for those aged 65+.]

[Graph image]
Pain and Alcohol Misuse

• Older problem drinkers reported
  – more severe pain
  – more disruption of daily activities due to pain
  – more frequent use of alcohol to manage pain compared to older non-problem drinkers

• More pain associated with more use of alcohol to manage pain
  – Relationship is stronger among older adults with drinking problems than those without.

Brennan et al., 2005
Functional Impairment and Alcohol

• Among older men and women (60 and older)
  – More than 7 drinks per week associated with impairments in instrumental activities of daily living (IADLs)
    • Impairments to lesser extent with advanced activities of daily living (AADLs)
  – More than 3 drinks per occasion associated with IADL impairments.

(Moore et al., 2003)
Substance Abuse Among Older Adults

An estimated 1 in 5 older Americans (19%) may be affected by combined difficulties with alcohol and medication misuse.
Medication Misuse and Alcohol

- Medications with significant alcohol interactions
  - Benzodiazepines (BZDs)
  - Other sedatives
  - Opiate/opioid analgesics
  - Some anticonvulsants
  - Some psychotropics
  - Some antidepressants
  - Some barbiturates.

Bucholz et al., 1995; NIAAA, 1998
Nonmedical Use of Prescription Drugs Among Older Adults

- Estimated that up to 11% of older women misuse prescription drugs
- Factors associated with prescription drug abuse in older adults
  - female sex, social isolation, history of a substance use or mental health disorder, and medical exposure to prescription drugs with abuse potential
- At least 1 in 4 older adults use psychoactive medications with abuse potential
- By 2020, nonmedical use of prescription drugs among adults aged >= 50 years will increase dramatically.
Opioid Risks in Older Adults: A Public Health Crisis

- Increased suicide and mortality rates\(^1\)
- Opioid overdose deaths now exceed deaths involving heroin and cocaine combined.\(^2\)
- Opioid involvement in suicides has doubled since 1999. Rates are highest for individuals aged 45–64 years, Whites, and in the West.\(^2\)
- High rates of illicit opioid use and prescription opioid misuse.

U.S. Drug Overdose Death Rates, per 100,000 population, 1999–2016

Opioid Risks in Older Adults

- Higher prevalence of pain
- More clinic visits due to pain
- Higher rates of psychoactive drug use compared to earlier cohorts

↑ in opioid addiction
= in overdose deaths
↑ in suicide rates
BZD Risks in Older Adults

- Fall risk in older adults\(^1,^2\)
- Impaired cognition\(^3\)
- Overdose deaths\(^4\)
- Motor vehicle accidents\(^5\)
- Reduced efficacy of psychotherapies for insomnia and post-traumatic stress disorder.

Over 68 trials showed that short-, intermediate-, and long-lasting BZDs consistently induced cognitive impairments with evidence of a dose-response relationship.

3. Tannenbaum C., et al., *Drugs*.
Prescribing and Use Patterns for BZDs

• Older primary care patients (aged ≥ 60) who received new BZD prescriptions from PCPs for insomnia (42%) and anxiety (36%)

• After 2 months, 30% used BZDs at least daily

• Both those continuing and those not continuing daily use reported significant improvements in sleep quality and depression, with no difference between groups in rates of improvement

• A significant minority developed a pattern of long-term use.

Simon & Ludman, 2006
High Risk: Combining BZDs and Other Medications

• New Beers Criteria from American Geriatrics Society is a measure for central nervous system (CNS)-active polypharmacy (includes opioids, antidepressants, antipsychotics, BZDs, Z-drugs)
  o Higher burden = greater risk for falls\(^1\) and cognitive decline\(^2\)

• **BZDs + opioids = #1 pharmaceutical combo for overdose deaths\(^3\)**

• FDA: Black box warning in 2016 due to increased risk of respiratory suppression and death from opioids + CNS depressants, including:
  o BZDs
  o Antipsychotics
  o Muscle relaxants

2. Wright et al. (2009). *JAGS*.
A chart from the 2017 Massachusetts Department of Public Health Chapter 55 Overdose Report shows the presence of benzodiazepines in opioid deaths between 2014 and 2016. — Massachusetts Department of Public Health
The Opioid Crisis: Not Just an Urban Problem

- There has been an increasing use of opioids and prescription painkillers in rural areas.
- Since 1999, the rate of overdose deaths involving an opioid has nearly quadrupled.
- Drug-related deaths are 45% higher in rural areas than in urban areas.
- Opioid-related overdose deaths have increased over the past 15 years in both rural and urban areas, with exponential increases in rural areas from 2013 to 2014.
- Men in rural areas are using more opioids than women in rural areas, but more women are dying from opioid overdose.
Rise in opioid misuse among rural older adults is due to a variety of reasons

- **Demographic:** Rural populations tend to be older than populations in urban areas
  - 16% of rural Americans age 65+
  - Have higher proportion of those 85 and older, who are more likely to have chronic diseases and disabilities

- **Economic:** Low income, unemployment, and substandard housing

- **Education:** Health illiteracy a big issue with opioid misuse.
Barriers to Treatment and Services

• There is a lack of MH and SA treatment providers and facilities in rural areas.

• States with proportionally large rural populations compared to urban populations have greater shortages of MH providers and fewer facilities to provide treatment services.

• Rural areas lack basic SA treatment services as well as supplemental services.

• The vast majority of rural residents live in counties that do not have detox services.
Impact on Rural Communities

• As middle age and older adults continue to age in their communities, the aging services network and other systems, like Adult Protective Services, will likely deal with more complex clients straining already fragile systems.

• The opioid crisis and demographics will place enormous pressure on health care, emergency response, law enforcement, and others.
Alcohol Abuse: Risk Factor for Psychiatric Illness

• Older adults are **three times more likely** to develop a mental disorder with a lifetime diagnosis of alcohol abuse.

• Common dual diagnoses include:
  - Depression (20–30%)
  - Cognitive loss (10–40%)
  - Anxiety disorders (10–20%).
Comorbidity with Mental Health Disorders

- Concurrent alcohol use and depression may be more common in late life than in younger adults.
- Concurrent moderate or at-risk use may be a much greater problem than dependence.
- Fragmented care is particularly problematic in late life.
Suicide in Older Adults

- 65+: highest suicide rate of any age group
- 85+: twice the national average (CDC 1999)
- Men > Women; Whites > African Americans
- Peak suicide rates:
  - Suicide rate goes up continuously for men
  - Peaks at midlife for women, then declines
- 20% older men saw PCP on day of suicide
- 40% older men saw PCP on week of suicide
- 70% older men saw PCP on month of suicide.
Alcohol Use and Suicide

• Alcohol abuse is more prevalent in older persons who are separated, divorced, or widowed

• Highest rates of completed suicides:
  – Older white males who are depressed, drinking heavily, and who have recently lost their partners.
Alcohol Use in Older Adults
World Health Organization
Drinking Definitions

- **Harmful drinking**: Use of alcohol that *causes* complications (includes abuse and dependence)
- **Hazardous drinking**: Use of alcohol that increases *risk for* complications
- **Non-hazardous drinking**: Use of alcohol without clear risk of complications (includes beneficial use)
Biological Factors

Alcohol and drugs affect older adults differently due to biological changes associated with aging.

What’s the Harm in a Few Drinks?

• Epidemiologic data suggests moderate drinking can be beneficial for
  – Heart disease
  – Possibly preventing neurocognitive disorders
  – Low/moderate daily alcohol use most beneficial
  – Social aspects

• Potential confounds
  – Sample selection (fit elders with healthy lifestyles)
  – Surrogate for something else (nutrition, exercise)
  – No clinical trials data.
Aging, Drinking, and Consequences

• Aging-related changes make older adults more vulnerable to adverse alcohol effects.
  – Higher blood alcohol content (BAC) from a given dose
  – More impairment at a given BAC
  – Interactive effects of alcohol, chronic illness, and medication

• Implications for older adult drinkers
  – Moderate levels of consumption can be more risky
  – More consequences from maintaining consumption
  – Increased consumption may quickly result in consequences.
What is a Drink?

My Doctor said "Only 1 glass of alcohol a day". I can live with that.
What’s a Standard Drink?

A standard drink in the United States is any drink that contains about 14 grams of pure alcohol (about 0.6 fluid ounces or 1.2 tablespoons). Below are U.S. standard drink equivalents. These are approximate, since different brands and types of beverages vary in their actual alcohol content.

<table>
<thead>
<tr>
<th>12 oz. of beer or cooler</th>
<th>8–9 oz. of malt liquor</th>
<th>5 oz. of table wine</th>
<th>3–4 oz. of fortified wine (such as sherry or port)</th>
<th>2–3 oz. of cordial, liqueur, or aperitif</th>
<th>1.5 oz. of brandy (a single jigger)</th>
<th>1.5 oz. of spirits (a single jigger of 80-proof gin, vodka, whiskey, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>~5% alcohol</td>
<td>~7% alcohol</td>
<td>~12% alcohol</td>
<td>~17% alcohol</td>
<td>~24% alcohol</td>
<td>~40% alcohol</td>
<td>~40% alcohol</td>
</tr>
<tr>
<td>12 oz.</td>
<td>8.5 oz.</td>
<td>5 oz.</td>
<td>3.5 oz.</td>
<td>2.5 oz.</td>
<td>1.5 oz.</td>
<td>1.5 oz.</td>
</tr>
</tbody>
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https://www.niaaa.nih.gov/guide
NIAAA Drinking Limits

MEN 18-65
No more than: 14 drinks per week
AND no more than: 4 drinks per day

WOMEN 18-65
No more than: 7 drinks per week
AND no more than: 3 drinks per day

ALL AGE 66+
No more than: 7 drinks per week
AND no more than: 3 drinks per day
What Conditions May Be Caused or Worsened by Alcohol Use?

1 or more drinks per day
Gastritis, ulcers, liver, pancreas problems

2 or more drinks per day
Depression, gout, GERD, breast cancer, insomnia, memory problems, falls

3 or more drinks per day
Hypertension, stroke, diabetes, gastrointestinal diseases, cancer of many varieties
Lifetime Patterns of Drinking
Lifetime Moderate Drinker

DRINKING LEVEL

High

Low

Young          AGE          Old
Early-Onset Problem Drinker

DRINKING LEVEL

Low

High

Young

AGE

Old
Early-Onset Pattern of Elderly Alcoholism

- More likely to be men (2/3)
- Long-standing behavioral problems
- More physical problems
- Numerous attempts at treatment
Early-Onset Pattern of Elderly Alcoholism (Cont.)

• Family members likely to have experienced “burnout”
• Personality characteristics similar to young alcoholics
• More often drop out of treatment.
Late-Onset Problem Drinker

![Graph showing the increase in drinking level with age from young to old.](image)
Late-Onset Pattern of Elderly Alcoholism

• More likely to be women (2/3)
• Problem drinking began within several years of multiple losses
  – Death of spouse
  – Physical impairments
  – Diminished social support
• Greater life satisfaction than early onset
• More likely to believe treatment will be successful.
Lifetime Patterns of Drinking: Focus for Interventions
Screening Approaches
Barriers to Identification

- Ageist assumptions
- Failure to recognize symptoms
- Lack of knowledge about screening
- Attempts at self-diagnosis or description of symptoms attributed to aging process or disease
- Many do not self-refer or seek treatment
  - Although most older adults (87%) see physicians regularly, an estimated 40% of those who are at risk do not self-identify or seek services for SA.
Signs and Symptoms of Alcohol Problems

- Anxiety
- Blackouts, dizziness
- Depression
- Disorientation
- Mood swings
- Falls, bruises, burns
- Family problems
- Financial problems
- Headaches
- Incontinence
- Increased tolerance to alcohol
- Legal difficulties
- Memory loss
- New problems in decisionmaking
- Poor hygiene
- Seizures, idiopathic
- Sleep problems
- Social isolation
- Unusual response to medications.
Screening and Assessment Tools

• Alcohol Consumption
  – Quantity, frequency, binge drinking
  – AUDIT-C

• Alcohol Consequences
  – CAGE, AUDIT, MAST, SMAST
  – Elder-specific: MAST-Geriatric Version, SMAST-G

• Health Screening Survey
  – Includes other health behaviors:
    • Nutrition, exercise, smoking, depression
Screening and Assessment Tools (Cont.)

• Additional screening and assessment instruments show promise:
  – Alcohol-Related Problems Survey (ARPS)
  – Shorter version of the Alcohol-Related Problems Survey (shARPS)
  – Computerized Alcohol-Related Problems Survey (CARPS) system (now CARET)

• Combines screening assessment with health education.
Screening and Assessment Recommendations

➢ Every person over age 60 should be screened for alcohol and prescription drug abuse as part of a regular physical examination.

⇒ “Brown Bag Approach”

➢ Screen or rescreen if certain physical symptoms are present or if the older person is undergoing major life transitions.
Screening and Assessment Recommendations (Cont.)

- Ask direct questions about concerns
  - Preface question with link to medical conditions of health concerns
  - Do not use stigmatizing terms (e.g., alcoholic)
SBIRT

- Screening
- Brief Intervention
- Referral to Treatment
Relationship Between Alcohol Use and Alcohol Problems

- **Low Risk**
  - None

- **At-Risk**
  - Light
  - Small

- **Alcohol Use**
  - Moderate
  - Severe
  - Heavy

- **Alcohol Problems**
  - Dependent
The Spectrum of Interventions for Older Adults

- A: Not Drinking
- B: Light-Moderate Drinking
- C: Heavy Drinking
- D: Alcohol Problems
- E: Mild Dependence
- F: Chronic/Severe Dependence

- Prevention/Education
- Brief Advice
- Brief Interventions
- Pre-Treatment Intervention
- Formal Specialized Treatments
Who Can Conduct Brief Alcohol Interventions?

- Physicians
- Nurses/nurse practitioners
- Physician assistants
- Social workers
- Psychologists
- Health educators
- Home health workers
- Other allied health providers.
Where Can Brief Alcohol Interventions Occur?

- Primary care
- Emergency department
- Hospitals
- Workplace
- Senior centers
- Congregate housing
- Home health care
- Substance abuse treatment programs
**Definition**: Time-limited (5 minutes to 5 brief sessions) and targets a specific health behavior (e.g., alcohol, prescription psychoactive)

**Goals**: Reduce use  
Facilitate getting additional

*Relies on use of screening techniques*
Support for Brief Interventions With Older Adults

Project GOAL (Guiding Older Adult Lifestyles)

Physician advice for older adult at-risk drinkers led to reduced consumption at 12 months

*(University of Wisconsin; N = 156; 35–40% change)*

Health Profile Project

Elder-specific motivational enhancement session conducted in home reduced at-risk drinking at 12 months

*(University of Michigan; N = 454; 35% change)*
Key Components of Brief Interventions

• Screening
• Feedback
• Motivation to change
• Strategies for change
• Negotiated agreement
• Follow up (and/or referral) if needed
• *Uses a workbook*
Elements of Brief Intervention

- **FRAMES**
  - Feedback
  - Responsibility
  - Advice
  - Menu
  - Empathy
  - Self-efficacy
Feedback

• Present information to older adult
  – Based on history, exam, labs, etc.
• Increase awareness of adverse consequences
• Help make the case for change in drinking, med use, or illicit substances.
Responsibility

- Older adult has the ultimate responsibility for change
- Practitioner cannot force older adult to change
- Older adult chooses goals, not practitioner
  - Should be realistic
  - Clarify client’s goals
  - Develop discrepancy.
Advice and Menu

• Give clear, concrete advice to change
• Give choices (menu)
  – Three is ideal
  – Making a choice is first step to making a change in behavior.

“Lose some weight, quit smoking, move around more, and eat the carrot.”
Empathy

• Listen carefully
• Clarify older adult’s meaning
• Do not impose practitioner’s values on older adult.
Self-Efficacy

- Build up older adult’s belief in ability to succeed
- Be optimistic
- Simple goals early
  - Success breeds success
  - Increases self-confidence.
Current Knowledge

• Brief interventions (BI) can reduce alcohol use for at least 12 months among older adults
• Motivational enhancement is effective
• Approach is acceptable to older adults and can be conducted in health clinics and in home
• BI appears to reduce alcohol-related harm
• BI appears to reduce healthcare utilization.
Bridging the Gaps: Implementation

• National imperative to implement evidence-based practices
• **Science-to-service gap**: Scientifically proven effective practices are not widely used
• **Implementation gap**: Positive outcomes achieved by research are not replicated in the field
• **Both effective interventions and successful implementation are necessary** for positive outcomes.
A Framework for Enhancing the Behavioral Health of Older Adults

Key steps:

• Using data
• Mobilizing partners, collaborating, and planning
• Selecting and implementing programs
• Attracting trainers and providers.
The Power of Data

Individual-based Assessments

Population-based Assessments

[Images: Doctor and patient; Group of people]
Individual Assessment

- Individual-based assessments identify:
  - Who is in need of services
  - The type and level of person-centered services needed.
Population Assessment

- Population-based assessments identify:
  - The scope of the problem at the community, regional, state, and tribal levels
  - The types of interventions needed to enhance the health of older adults in general.
Prevention in the form of early identification of and early intervention for SA in older adults is crucial.

For those with serious problems/addiction: TREATMENT WORKS!

National focus on MH and SA prevention and treatment is critically important as the baby boom generation reaches later adulthood.
Resources

WWW.SAMHSA.GOV

WWW.NIAAA.GOV
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