

# Managing medication and alcohol misuse by your older patients

## Age-appropriate screening and in-office interventions are sufficient in many cases

As the eldest post-World War II “baby boomers” turn 64 this year, relaxed social attitudes about substance use during their lifetimes may predict an increasing risk for substance use disorders (SUDs) in older Americans.<sup>1</sup> This presents challenges for psychiatric clinicians:

- Common screening tools used for younger patients might not adequately diagnose SUDs in patients clinically defined as elderly (age ≥65).
- DSM-IV-TR’s definition of substance use as causing clinically significant impairment or distress—such as occupational difficulties, legal problems, or decreased participation in social activities—might not apply to older patients, or these problems could be caused by other factors in older individuals.<sup>2</sup>

This article describes screening and treatment approaches shown to be most effective for identifying and managing primary SUDs in older patients. Our goal is to help you ask the right questions and provide appropriate care.

### Phase-of-life issues

Most older adults have a primary care physician, but their SUDs often go unrecognized.<sup>3</sup> Clinicians and family members might hesitate to ask about substance use or prescription medication misuse, and complications—such as falls or cognitive impairment—may be misattributed to normal aging. Thus, SUD screening of older individuals referred for psychiatric care is important.



#### **Shannon M. Drew, MD**

Assistant clinical professor of psychiatry  
Yale School of Medicine  
New Haven, CT

#### **Kirsten M. Wilkins, MD**

Assistant professor of psychiatry  
University of Oklahoma College of Medicine-Tulsa  
Tulsa, OK

#### **Louis A. Trevisan, MD**

Assistant clinical professor of psychiatry  
Yale School of Medicine  
New Haven, CT



## Substance use in older adults

### Clinical Point

A combination of psychosocial and biologic treatments may be most beneficial for older adults with substance use disorders

**Table 1**

## Comparing screening tools for alcohol use disorders in the elderly

Screening tool	Characteristics	Clinical usefulness
<b>CAGE</b>	4 items; self-report; most widely used/studied alcohol use screen; specificity > sensitivity	First-line; most useful if goal is to identify alcohol dependence; may miss misuse or hazardous use
<b>AUDIT-5</b>	5 items; self-report; specificity > sensitivity; a shortened version of the 10-item AUDIT	First-line; helpful for identifying hazardous use; sensitive for a broader spectrum of alcohol misuse than CAGE
<b>MAST-G</b>	22-item yes/no self-report; questions specific to elderly	First-line; designed to identify a population that drinks less than heavy drinkers
<b>SMAST-G</b>	10 items; shorter version of MAST-G with similar characteristics	Less sensitive and specific than MAST-G; may be useful when time is limited
<b>Cyr-Wartman</b>	2-question screen ("Have you ever had a drinking problem?" "When was your last drink?"); specificity > sensitivity	Use for brief screening; follow up with more thorough screening in case of positive response
<b>ARPS/shARPS</b>	18 items in ARPS (shARPS is shorter); self-report; classifies patients as nonhazardous, hazardous, or harmful drinkers; good sensitivity	Focuses on relationship of alcohol and medical problems, medication use, and functional status

ARPS/shARPS: Alcohol-Related Problems Survey/short version of ARPS; AUDIT-5: Alcohol Use Disorders Identification Test, 5-item version; CAGE: Cut down, Annoyed, Guilty, Eye opener; MAST-G: Michigan Alcoholism Screening Test—Geriatric version; SMAST-G: shorter version of MAST-G

Older adults respond with higher adherence rates when SUD treatment addresses age-specific issues—such as recent losses, medical problems, and challenges of keeping scheduled appointments or multiple providers/referrals. A combination of psychosocial and biologic treatments may be most beneficial. Although outcomes vary, some evidence indicates that age-specific programs for older alcoholics significantly improve abstinence rates at 6 and 12 months, compared with mixed-age programs<sup>4</sup> (see *Related Resources*, page 28).

We recommend that you incorporate phase-of-life considerations at all stages of treatment. These include:

- education regarding lowered alcohol intake recommendations
- assessment tools that use criteria relevant to older adults
- treatment interventions that involve age-specific groups and programming.

### Screening tools

In a routine office visit, a sensible approach is to screen for alcohol, tobacco, and pre-

scription medication misuse. First-line screening tools for alcohol abuse include the AUDIT-5, CAGE, or MAST-G (*Table 1*), accompanied by questions about medication side effects and observation of behavioral signs of medication misuse.

**Alcohol use disorders.** The spectrum of alcohol use disorders includes heavy drinking, hazardous use, harmful use, abuse, and dependence (*Table 2*). Taking into account older adults' physiology—these individuals have slower metabolism and smaller volume of distribution—National Institute on Alcohol Abuse and Alcoholism (NIAAA) alcohol consumption guidelines for the elderly differ from those for younger adults.

NIAAA guidelines for the elderly define hazardous use as >3 drinks in 1 sitting or >7 drinks in 1 week for both men and women. This is in comparison with guidelines for younger adults that define hazardous use as >5 drinks in 1 sitting (or >2 drinks/day) for men and >3 drinks in 1 sitting (or >1 drink/day) for women. The NIAAA recommendation considers a standard drink

ONLINE ONLY

Discuss this article at <http://CurrentPsychiatry.blogspot.com>

Table 2

## Spectrum of alcohol use disorders: Heavy drinking to dependence

Term	Definition	Recommended intervention for patients age $\geq 65$
<b>Heavy drinking</b>	>1 drink/day	Brief alcohol intervention
<b>Hazardous use</b>	>3 drinks in 1 sitting or >7 drinks/week; places patient at risk for adverse consequences	Brief alcohol intervention
<b>Harmful use</b>	Greater than hazardous use, with evidence of negative physical or psychological consequences	Brief alcohol intervention
<b>Abuse</b>	Signs of increasing use or decreasing functioning, including engaging in fewer activities, preoccupation with substance, continued use despite adverse consequences	Brief interventions (advise to cut down, educate regarding deleterious effects, and consider referral to substance abuse specialist for evaluation)
<b>Dependence</b>	Clear interference with daily function (such as increased falls, otherwise unexplained cognitive impairment); unsuccessful quit attempts; continued use despite adverse consequences	Refer to substance abuse specialist for treatment, including detoxification and age-specific rehabilitation program

to be 12 oz of beer, 5 oz of wine, or 1.5 oz of distilled spirits, each drink containing approximately 0.5 oz of alcohol.<sup>5</sup>

Not all screening tools developed to assess alcohol use have been studied extensively in older cohorts,<sup>6</sup> and some might not be useful in certain populations.<sup>7</sup> The CAGE screening tool, for example—although easy to administer and widely studied—has low sensitivity in psychiatric populations, does not address past vs current drinking problems, and does not distinguish age-specific criteria for problem drinking.

Consider using instruments specific to an older individual's comorbidities:

- the AUDIT-5 is appropriate for an older patient with psychiatric illness
- the ARPS (or the shorter shARPS) for an older individual with medical problems is likely to improve the rate of identifying problem drinkers.

**Drug abuse or medication misuse.** Illegal drug use is relatively rare in the geriatric population,<sup>8</sup> although the rates in patients age 50 to 59 increased from 2.7% in 2002 to 5.0% in 2007.<sup>9</sup> In part this may reflect a higher lifetime use of illicit drugs by the

baby boomers compared with previous generations.

Evidence also suggests an increasing risk for misuse and abuse of prescription drugs. One factor associated with this risk is medical exposure to prescription drugs with abuse potential. Among older adults in the United States:

- 10% are taking sedative-hypnotic medications
- 15% have been prescribed an opioid-analgesic medication.<sup>10</sup>

Other factors associated with prescription medication misuse and abuse by older adults include female sex, social isolation, history of substance use or psychiatric disorder, polypharmacy, and chronic medical problems.<sup>11</sup>

Very few screening instruments detect illicit drug use or prescription medication abuse. To screen older patients, ask about the drugs they are using (prescription and nonprescription), ask about side effects, and look for behavioral signs of medication misuse (*Table 3, page 24*).<sup>12,13</sup>

**Laboratory tests** for alcohol's metabolic effects can identify biologic markers of alcohol use disorders. An elevated mean

**Clinical Point**

In older adults, factors associated with drug misuse/abuse include female sex, social isolation, and chronic medical problems



## Substance use in older adults

### Clinical Point

Lab tests can identify biologic markers of alcohol use disorders; normal values are the same for older and younger adults

Table 3

### Behavioral signs of medication misuse by elderly patients

Excessive worry about whether the medications are working
Strong attachment to a particular psychoactive medication
Resisting cessation or decreased doses of a prescribed psychoactive drug
Excessive anxiety about the supply and timing of medications
Decline in hygiene or grooming
Daytime sleeping
Medical symptoms such as fatigue, weight loss, or insomnia
Psychiatric symptoms such as irritability, memory problems, or depression
<b>Source:</b> References 12,13

corpuscular volume (MCV) or gamma-glutamyl transpeptidase (GGT) above the upper normal value can indicate possible problem drinking, even without considering total alcohol intake. Normal lab values are the same for older and younger adults.

Evidence suggests a poor association between findings of the CAGE questionnaire and MCV and GGT tests. Di Bari et al<sup>14</sup> reported that biologic markers help identify older drinkers with compromised health status independent of a positive CAGE. This suggests that using a combination of tools to screen for psychosocial and biologic consequences could be more accurate than a single instrument in identifying older individuals with alcohol use disorders.<sup>14</sup> We often use a GGT and MCV, along with the CAGE and the AUDIT-5 or SMAST-G.

**Tobacco use.** Smoking rates decrease with age, but this trend may reflect early mortality among tobacco users. Nicotine dependence remains a significant public

health issue among the 7% to 9% of adults age ≥65 who smoke.<sup>15</sup> An estimated 70% of all smokers want to quit, and 46% make an attempt each year.<sup>11</sup>

The single most important step in addressing tobacco use and dependence is screening. After asking about tobacco use and assessing the patient's willingness to quit, you can provide appropriate interventions.<sup>16</sup>


### Treatment options

General treatment options to consider for older patients with SUDs include a brief outpatient intervention, referral to a substance abuse specialist or inpatient treatment, and appropriate pharmacotherapy (Table 4, page 27).

**Brief interventions** vary from relatively unstructured interactions in a physician's office to more formal therapy. Components of these interventions include expression of concern, assessment and feedback, and direct advice. For older patients with SUDs, psychosocial approaches can improve treatment outcomes. One useful example—designed for alcohol use disorders—is the BRENDA model (Table 5, page 27). Any trained health care staff member can administer this model, which is standardized with a comprehensive manual.<sup>17</sup>

Several brief intervention trials—including Project Guiding Older Adult Lifestyles (GOAL), the Health Profile Project, and the Staying Healthy Project—found that brief intervention results in significantly decreased alcohol consumption, sometimes even at 12-month follow-up.<sup>18</sup> These trials were conducted in primary care settings, but brief interventions likely would be effective in psychiatric practice as well. Project GOAL included two 10- to 15-minute sessions with a physician scheduled 1 month apart and a follow-up phone call 2 weeks after each visit. The Health Profile Project consisted of a single motivational enhancement session.<sup>19</sup>

**When to refer.** Severe cases may require evaluation by a substance abuse specialist

PSYCHIATRY 

For more information, go to [CurrentPsychiatry.com](http://CurrentPsychiatry.com)

Spiegel, alcohol biomarkers

● Current Psychiatry

**Table 4**

## Recommended treatments for substance use disorders in the elderly

Disorder	Treatment
<b>Hazardous use</b>	Assess for withdrawal symptoms; brief intervention
<b>Alcohol dependence</b>	Assess for withdrawal symptoms; Alcoholics Anonymous; use of BRENDA model ( <b>Table 5</b> ); pharmacotherapy (naltrexone, acamprosate); structured rehabilitation program with age-appropriate programming
<b>Prescription medication misuse*</b>	Assess for withdrawal symptoms; taper off medication (slowly and gradually); buprenorphine detoxification; brief intervention
<b>Opioid dependence</b>	Appropriate detoxification; drug-free trial; harm reduction approach with methadone or buprenorphine; age-appropriate psychosocial groups; Narcotics Anonymous

\*Sedative-hypnotic and opioid pain medications (such as oxycodone HCl)

of the need for detoxification from alcohol, benzodiazepines, or opioids. Referral is appropriate if the patient has:

- a history of complicated withdrawal, including withdrawal seizures or delirium tremens
- complicated underlying medical conditions, such as severe coronary artery disease, uncontrolled hypertension, or uncontrolled diabetes.

Because of age-related physiologic changes, the older population is at risk for a more protracted withdrawal with more severe symptoms, compared with younger patients.<sup>20</sup> Specialized care may include detoxification (outpatient or inpatient, depending on withdrawal symptom severity), day hospital program, or—in the case of a patient with a long history of substance use and multiple relapses—a longer-term residential program.

### Pharmacotherapy

Pharmacotherapy is an important component in the treatment of older adults with SUDs. Other elements include psychosocial interventions, brief interventions, cognitive-behavioral therapies, and supportive programs such as Alcoholics Anonymous or Narcotics Anonymous. Randomized controlled trials on the use of medications for SUDs in older patients are limited. As with any other medication trial in the elderly, start with the lowest possible dose and titrate slowly to treatment effect.

**Table 5**

### The BRENDA model: A brief psychosocial intervention for alcohol use disorders\*

<b>B</b> iopsychosocial evaluation
<b>R</b> eporting the assessment to the patient
<b>E</b> mpathy
<b>N</b> eeds identification
<b>D</b> irect advice
<b>A</b> ssessment of patient reaction to the advice

\*Any trained health care staff member can administer this model, which is standardized with a comprehensive manual  
**Source:** Reference 17

**Alcohol use disorders.** In our experience, naltrexone—an opioid antagonist—is the first-line agent to consider for alcohol dependence in older patients (**Table 4**). Oslin et al<sup>21</sup> found naltrexone, 50 mg/d, to be well-tolerated and effective in decreasing rates of relapse to heavy drinking in older adults.

Because of its potential hepatotoxic effects, use naltrexone with caution in patients with hepatic impairment. We recommend baseline liver function tests, with repeat testing in 3 to 6 months. Severe liver disease would be a contraindication for naltrexone, but consider risk vs benefit in individual patients.

Acamprosate—a glutamatergic medication—has been studied and approved for treating alcohol dependence in adults, although no study has specifically exam-

### Clinical Point

Several trials found that brief interventions can significantly decrease older adults' alcohol consumption



Listen to Dr. Varinder S. Rathore discuss new ways to quickly screen for substance abuse at [CurrentPsychiatry.com/pages.asp?id=6412](https://www.CurrentPsychiatry.com/pages.asp?id=6412)



## Substance use in older adults

### Clinical Point

**Naltrexone is a first-line agent for alcohol dependence in older patients; use it with caution in those with hepatic impairment**

## Related Resources

- Schultz SK, Arndt S, Liesved J. Locations of facilities with special programs for older substance abuse clients in the U.S. *Int J Geriatr Psychiatry*. 2003;18(9):839-843.
- National Association of Addiction Treatment Providers. [www.naatp.org](http://www.naatp.org).
- National Association of State Alcohol/Drug Abuse Directors. [www.nasadad.org](http://www.nasadad.org).
- Substance Abuse and Mental Health Services Administration. [www.samhsa.gov](http://www.samhsa.gov).
- American Academy of Addiction Psychiatry. [www.aaap.org](http://www.aaap.org).

### Drug Brand Names

Acamprosate • Campral	Naltrexone • ReVia
Buprenorphine/naloxone • Suboxone	Nortriptyline • Aventyl, Pamelor
Bupropion • Zyban	Oxycodone • OxyContin, Roxicodone, others
Disulfiram • Antabuse	Topiramate • Topamax
Methadone • Dolophine, Methadose	Varenicline • Chantix

### Disclosure

The authors report no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

ined its use in elderly patients. Acamprosate may offer an alternative for patients with severe liver disease or those who can't tolerate naltrexone.

Disulfiram is rarely used in the elderly because of potential risks of hypotension and cardiovascular adverse effects in a disulfiram-ethanol reaction. Topiramate—an anticonvulsant that potentiates gamma-aminobutyric acid—has shown benefit in treating initiation of abstinence from alcohol.<sup>22</sup> It is an incompatible treatment for the elderly, however, because it may cause cognitive impairment.

**Sedative-hypnotic misuse.** The goal in treating patients who misuse sedatives or hypnotics is detoxification, which usually is addressed with a gradual and slow

taper under controlled supervision in the outpatient setting.

**Opioid dependence.** Treatment options for opioid dependence are the same whether older patients are misusing prescription opioids or illicit ones such as heroin. Naltrexone, methadone, and buprenorphine/naloxone have been widely studied and used in younger adults but only minimally in the elderly.

Studies conducted in methadone maintenance clinics have found positive results when older patients are treated for opioid dependence:

- patients age  $\geq 55$  may have fewer problems and better outcomes with opioid treatment than younger patients<sup>23</sup>
- older age is 1 of only 2 variables (the other is no criminal justice involvement) found to be positively associated with longer duration in treatment.<sup>24</sup>

Older individuals are more sensitive than younger adults to the sedation and respiratory depression of opioids. Buprenorphine is the only opioid with a ceiling effect for respiratory depression, and it does not have an increased half-life in the elderly as do other opioids.<sup>25</sup>

Other potential side effects of these medications include urinary retention—particularly in elderly males with prostatic hyperplasia—constipation, and movement disorders.

Despite potential side effects, we find that opioid dependence is more successfully treated with agonist or partial agonist therapy than with blocking agents. Buprenorphine and methadone address urges and cravings to use opioids, resulting in greater treatment retention and

## Bottom Line

Incorporate phase-of-life considerations when managing substance use disorders in elderly patients. Recommend lowered alcohol intake, use assessment tools with relevant criteria, and provide age-specific treatment. Brief interventions during office visits can effectively treat nicotine dependence, alcohol use disorders, and prescription misuse. Combining psychosocial and biologic treatments may be most beneficial.

longer abstinence. Buprenorphine treatment is available in office-based practices of physicians who have received training and certification.

**Smoking cessation.** Pharmacotherapy and brief treatment interventions can be effective and should be offered to the older smoker. Nicotine replacement therapy, bupropion, varenicline, and nortriptyline help improve quit rates in younger adults, but studies of these agents in older adults are limited.

If monotherapy fails, try combining shorter-acting nicotine replacement therapy with longer-acting agents such as bupropion or varenicline. To our knowledge no dosing adjustment is necessary for the elderly, although we recommend low starting doses with gradual titration.

Some literature suggests nortriptyline as a second-line smoking cessation agent in the elderly. We do not recommend nortriptyline for smoking cessation in this population, however, because of tricyclic antidepressants' cardiac effects.

#### References

1. Patterson TL, Jeste DV. The potential impact of the baby boom generation on substance abuse among elderly persons. *Psychiatr Serv*. 1999;50(9):1184-1188.
2. Diagnostic and statistical manual of mental disorders, 4th ed, text rev. Washington, DC: American Psychiatric Association; 2000.
3. Oslin D, Pettinati H, Volpicelli J. Alcoholism treatment adherence. Older age predicts better adherence and drinking outcomes. *Am J Geriatr Psychiatry*. 2002;10(6):740-747.
4. Kashner TM, Rodell DI, Ogden SR, et al. Outcomes and costs of two VA inpatient treatment programs for older alcoholic patients. *Hosp Community Psychiatry*. 1992;43:985-989.
5. Alcohol and aging. *Alcohol Alert*, issue 40; April 1998. National Institute on Alcohol Abuse and Alcoholism. National Institutes of Health. Available at: <http://pubs.niaaa.nih.gov/publications/aa40.htm>. Accessed November 19, 2009.
6. Cyr MG, Wartman SA. The effectiveness of routine screening questions in the detection of alcoholism. *JAMA*. 1988;259(1):51-54.
7. O'Connell H, Chin AV, Hamilton F, et al. A systematic review of the utility of self-report alcohol screening instruments in the elderly. *Int J Geriatr Psychiatry*. 2004;19:1074-1086.
8. Simoni-Wastila L, Yang HK. Psychoactive drug abuse in older adults. *Am J Geriatr Pharmacother*. 2006;4:380-394.

9. Office of Applied Studies. Results from the 2007 National Survey on Drug Use and Health: national findings. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2008. DHHS Publication SMA08-4343, NSDUH Series H-34.
10. Simoni-Wastila L, Zuckerman IH, Singhal PK, et al. National estimates of exposure to prescription drugs with addiction potential in community-dwelling elders. *Subst Abuse*. 2005;26:33-42.
11. Reducing tobacco use: a report of the Surgeon General. Office of the Surgeon General. Public Health Service. U.S. Department of Health and Human Services. August 9, 2000. Available at: [http://www.surgeongeneral.gov/library/tobacco\\_use](http://www.surgeongeneral.gov/library/tobacco_use). Accessed November 19, 2009.
12. Blow FC. Substance abuse among older adults. Treatment improvement protocol (TIP) series 26. Substance Abuse and Mental Health Services Administration. Public Health Service. U.S. Department of Health and Human Services. Rockville, MD: Center for Substance Abuse Treatment; June 1998. Available at: <http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?book=hssamhsatip&part=A48302>. Accessed November 19, 2009.
13. Finfgeld-Connett DL. Treatment of substance misuse in older women: using a brief intervention model. *J Gerontol Nurs*. 2004;30(8):30-37.
14. Di Bari M, Silvestrini G, Chiarlone M, et al. Features of excessive alcohol drinking in older adults distinctively captured by behavioral and biological screening instruments. An epidemiological study. *J Clin Epidemiol*. 2002;55:41-47.
15. Centers for Disease Control and Prevention. Cigarette smoking among adults—United States, 2007. *MMWR*. 2008; 57(45):1221-1226.
16. Treating tobacco use and dependence: 2008 update. Office of the Surgeon General. Public Health Service. U.S. Department of Health and Human Services. Available at: <http://www.surgeongeneral.gov/tobacco>. Accessed November 19, 2009.
17. Starosta A, Leeman R, Volpicelli J. The BRENDA model: integrating psychosocial treatment and pharmacotherapy for the treatment of alcohol use disorders. *J Psychiatr Pract*. 2006;12(2):80-89.
18. Fleming M, Manuwell L, Barry K, et al. Brief physician advice for alcohol problems in older adults: a randomized community-based trial. *J Fam Pract*. 1999;48(5):378-384.
19. Barry KL, Blow FC, Cullinane P, et al. The effectiveness of implementing a brief alcohol intervention with older adults in community settings. Washington, DC: National Council on Aging; 2006.
20. Oslin D. Evidence-based treatment of geriatric substance abuse. *Psychiatr Clin North Am*. 2005;28:897-911.
21. Oslin D, Liberto JG, O'Brien J, et al. Naltrexone as an adjunctive treatment for older patients with alcohol dependence. *Am J Geriatr Psychiatry*. 1997;5:324-332.
22. Johnson BA, Rosenthal N, Capece JA, et al. Topiramate for treatment of alcohol dependence: a randomized controlled trial. *JAMA*. 2007;298:1641-1651.
23. Firoz S, Carlson G. Characteristics and treatment outcome of older methadone-maintenance patients. *Am J Geriatr Psychiatry*. 2004;12(5):539-541.
24. Magura S, Nwakeze PC, Demsky SY. Pre- and in-treatment predictors of retention in methadone treatment using survival analysis. *Addiction*. 1998;93(1):51-60.
25. Pergolizzi J, Boger RH, Budd K, et al. Opioids and the management of chronic severe pain in the elderly: consensus statement of an international expert panel with focus on the six clinically most often used World Health Organization step III opioids (buprenorphine, fentanyl, hydromorphone, methadone, morphine, oxycodone). *Pain Pract*. 2008;8(4):287-313.

### Clinical Point

**Patients age ≥55 may have fewer problems and better outcomes with opioid treatment than younger patients**