Substance Abuse in Older Adults
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Substance abuse is a major public health problem that is frequently overlooked in clinical settings, particularly when dealing with older adults. Indeed, from a historical point of view, substance abuse was often not considered to be a problem in older adults - but this assumption has never been accurate.

While substance abuse is less common among older adults than in younger age groups, alcohol use disorders affect a substantial number of elders: some 3% (507,000; 2010) of older men and nearly 1% (225,700; 2010) of older women. These numbers are of particular concern because older individuals are more susceptible to the toxic effects of alcohol and to the potential interactions between alcohol and the many prescription and non-prescription medications that are so widely used by older adults.

There is also evidence that illicit drug use by older adults is increasing as part of a cohort phenomenon related to the baby boom generation reaching retirement age. Abuse of legal prescription medications, including benzodiazepines, opioids, and others, is also a growing problem. Some segments of the geriatric population, such as veterans, have particularly high rates of substance abuse.

Detection
The key feature of substance use disorders is addiction, which means there is a loss of control over the intake of a substance. However, not all patients demonstrate addiction and there is a broad range of other sign and symptoms that may indicate a substance abuse problem (Table 1). Though most of these signs and symptoms are non-specific, if present in older individuals they warrant further investigation.

In most cases, this investigation requires specific inquiry by the clinician. Questions should include the nature and quantity of substances used, but be aware that the quantity of alcohol or other substances is sometimes less important than evidence that use continues in spite of adverse effects, or a desire to stop using the substance. Most often, such loss of control can be inferred when social deterioration or substance-induced health problems have failed to lead to abstinence (Table 1).

Detection

Table 1. Non-Specific Warning Signs and Symptoms of a Substance Abuse Disorder

<table>
<thead>
<tr>
<th>Domain</th>
<th>Signs and Symptoms</th>
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<tbody>
<tr>
<td>Activities of Daily Living</td>
<td>Incontinence, poor hygiene/nutrition</td>
</tr>
<tr>
<td>Executive Function</td>
<td>Decision-making problems, financial problems, legal problems</td>
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<tr>
<td>General Function</td>
<td>Bruises from falls, burns, sleep problems, tolerance to medication effects</td>
</tr>
<tr>
<td>Neuropsychiatric</td>
<td>Anxiety, depression, disorientation, dizziness, headaches, seizures, mood swings, memory loss, syncope</td>
</tr>
<tr>
<td>Social</td>
<td>Social isolation</td>
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Another approach when there is suspicion of a substance abuse disorder is to administer a screening questionnaire. However, field-tested screening tools validated for use with older adults only exist for alcohol abuse (Table 2).

Table 2. Alcohol Abuse Screening Tests for Older Adults

- Alcohol Use Disorders Identification Test
- CAGE Questionnaire
- Short Michigan Alcoholism Screening Test (Geriatric Version)

TIPS for Dealing with Substance Abuse in Older Adults

- Don’t forget to consider substance abuse in older adults - especially when there are warning signs like problems with activities of daily living, executive function, or social interactions, or when injuries or neuropsychiatric symptoms occur.
- When patients are found to have substance abuse problems, consider treatment with brief office-based motivational interviewing or extended cognitive behavioral therapy.
- Avoid prescribing disulfiram to older adults due to potentially lethal effects if alcohol is also consumed. Anti-craving drugs (e.g., naltrexone or acamposate) should be prescribed as part of a full substance abuse rehabilitation program.
- Withdrawal of an abused substance should take place slowly unless there are toxic effects, in which case withdrawal should occur more rapidly. However, when an older adult has been taking a substance of abuse at stable low doses over a period of years with no toxic effects, withdrawal may not be necessary.
With concern regarding acute intoxication, blood or breath analysis tests for alcohol and urine drug screening tests can also be used, keeping in mind that synthetic opioids (e.g., hydromorphone and fentanyl) are not detected with routine urine drug screens. Special testing (e.g., gas chromatography) is required for ascertainment of chronic abuse. Routine blood tests may detect elevated gamma glutamyl transferase (GGT) or red cell mean corpuscular volume (MCV).

**Treatment**

Substance use disorders require treatment for several reasons. Beyond the social deterioration and acute dysfunction (accidents, legal and financial problems) that may occur, chronic excessive use is associated with accelerated cognitive and functional decline. Acute intoxication may result in criminal behavior and incarceration. Finally, substance use in older adults raises the risk of suicide, and older men have the highest suicide risk of all gender and age groups.

**Psychotherapy** can be used with patients of any age who have alcohol use disorders. Brief interventions such as motivational interviewing, provided in two 15-minute office visits with telephone follow-up, or even one single brief intervention session, can reduce alcohol use one year later.

For older adults in particular, 12- and 16-week cognitive behavioral therapies, in groups or individually, have some effectiveness for alcohol-addicted individuals; this benefit can probably be extrapolated to other substance addictions. Alcoholics Anonymous and other 12-step programs have been notoriously difficult to assess for efficacy; studies have suggested mixed results, at best, for older adults with substance addictions.

**Pharmacotherapy** with disulfiram (Antabuse), the classic aversive agent for treatment of alcohol abuse disorders, is not recommended for older adults because the adverse effects of alcohol, when consumed while taking disulfiram, can be lethal in older individuals. Newer medications, such as naltrexone and acamprosate, which have an anti-craving effect, have not been extensively studied in older adults. There is no reason to suspect that they should not have the same modest benefits as they do in younger individuals.

These anti-craving medications are only effective, however, when used as part of a full alcohol rehabilitation program. Furthermore, patients must be carefully evaluated before prescribing these drugs, particularly acamprosate, which undergoes renal excretion and thus requires dose adjustment in the presence of impaired renal function; it is contraindicated in renal failure.

**Medication Withdrawal** When the substance abuse problem relates to a prescribed medication, the medication should be tapered and discontinued if side-effects cause serious dysfunction, or if the patient has developed tolerance that will predictably result in dose escalation and the possibility of toxicity and death. Generally, detoxification should be handled as a long term measure. A slow decrease in daily dosage is more likely to avoid development of craving and subsequent relapse and, therefore, is preferred to an accelerated schedule. Obviously, however, a slow decrease in dosage is not an option when toxicity is already present.

In older patients who are on prescribed medications without evidence of tolerance or toxicity, an argument can be made to leave well enough alone. For instance, an older patient who has been on a low-dose benzodiazepine for 15 years “to help with my nerves” has likely developed a psychological dependence, but also is unlikely to start escalating the dose. Because of the potential of drug-drug interactions down the line, a gradual weaning would be desirable. But it may also be reasonable to continue the medication at this low dose as a change in the regimen might cause major anxiety for the patient and/or a disruption of the patient-provider relationship.

**References and Resources**


- If a vulnerable elder presents with a substance use disorder, then the patient should be asked about or treated for depression, or referred to a mental health professional within 2 months of diagnosis of the condition.

- If a vulnerable elder has a new diagnosis of osteoporosis, then during the initial evaluation period, an underlying cause of osteoporosis should be sought by checking medication use and current alcohol use.

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