Geriatric drinkers: Evaluation and treatment for alcohol overuse

One in six older adults self-report heavy drinking; fortunately older patients have been shown to respond well to brief alcohol use intervention protocols designed for the primary care clinic.

**ABSTRACT:** Alcohol overuse has a significant impact on the health and health care needs of geriatric patients. Systematic screening of all patients reduces the chance that alcohol overuse will be missed. Once identified, at-risk individuals can benefit from brief interventions in clinic or community settings.

Findings from the Canadian Addictions Survey (2004) indicate that 16% of adults age 55 and older report heavy drinking, defined as more than 14 drinks a week for men and 9 drinks for women, and almost half of these heavy drinkers report consuming more than 5 drinks on one occasion at least once a month. Alcoholic overuse has a significant impact on the health and health care needs of these individuals. It is associated with poor mental health functioning, as well as increased risk of suicide, liver disease, cancer, and falls. Although researchers have identified health benefits from light to moderate drinking, at-risk or heavy drinking is associated with increased mortality.

At-risk drinking patterns in geriatric patients must be identified to initiate treatment of this modifiable health risk. Geriatric patients often present with multiple medical problems exacerbated by alcohol and may not fit the expected profile of a chronic drinker. It is common for patients to minimize the impact of their alcohol use, and clinicians too may gloss over alcohol use assessment in the elderly patient. Drinking can increase in later life in response to loneliness and grief, or persist as an outlet used throughout adult life to dull emotional pain. Cognitively impaired seniors may drink more than they realize.

**Impact of alcohol overuse**

Alcohol overuse affects all age groups, but poses an additional risk to ill older adults in terms of adverse interactions between alcohol and both prescribed and over-the-counter medications, especially psychoactive medications such as benzodiazepines, anticonvulsants, and antidepressants. In a survey of 83,321 older outpatients, 19% of those taking prescription medications known to adversely interact with alcohol reported concomitant alcohol use.

Alcohol use can adversely affect comorbid diseases common in the elderly. Relatively low consumption levels can worsen common chronic medical problems such as hypertension.

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with five or more drinks for men and four or more for women constituting risky drinking. Four categories of alcohol use are described in Table 1.

**Assessment tools**

Many screening instruments have been developed to assess alcohol use patterns in adult patients. In a survey of 853 primary care physicians and psychiatrists, only 13% used formal alcohol screening tools routinely. The systematic screening of all patients reduces the chance that alcohol overuse will be missed. Self-administered computer or paper-based screening questions may be answered more truthfully than questions answered in person. Patients with dementia may pose a particular challenge for self-report, and collateral history will be particularly important. The Alcohol-Related Problems Survey (ARPS) was developed specifically for geriatric populations. This survey screens for alcohol’s effects among persons with declining health and increased medication use.

**Table 1. Canadian alcohol use categories.**

<table>
<thead>
<tr>
<th>Drinks* per week</th>
<th>Grams of alcohol per week</th>
<th>Ounces of alcohol per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstinence†</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Light drinking</td>
<td>7</td>
<td>0–96</td>
</tr>
<tr>
<td>Moderate drinking</td>
<td>7–14</td>
<td>96–190</td>
</tr>
<tr>
<td>Heavy drinking</td>
<td>&gt; 14</td>
<td>&gt; 190</td>
</tr>
</tbody>
</table>

*One drink = 13.6 grams of alcohol = 43 mL (1.5 oz) liquor, 142 mL (5 oz) wine, 341 mL (12 oz) beer.
†No drinking in the past year.

**Table 2. Common alcohol use screening instruments validated for clinical use.**

<table>
<thead>
<tr>
<th>Instrument – Identification Test</th>
<th>Population</th>
<th>Sensitivity</th>
<th>Specificity</th>
<th>Number of items</th>
<th>Time to administer (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUDIT – Alcohol Use Disorders</td>
<td>Adults</td>
<td>81%</td>
<td>86%</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>CAGE Questionnaire</td>
<td>Adults and adolescents</td>
<td>75%</td>
<td>92%</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>SMAST – Self-Administered</td>
<td>Adults and adolescents</td>
<td>90–98%</td>
<td>57–82%</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>Michigan Alcoholism Screening</td>
<td>Adults &gt;65</td>
<td>82%</td>
<td>62%</td>
<td>18</td>
<td>10</td>
</tr>
<tr>
<td>ARPS – Alcohol-Related</td>
<td>Adults &gt;65</td>
<td>82%</td>
<td>62%</td>
<td>18</td>
<td>10</td>
</tr>
</tbody>
</table>

ing heavily within the past week, but this test is not available in all laboratories. Blood alcohol and urine alcohol testing are only useful for detection of drinking within the previous 24 hours.25

Treatment
Community resources for alcohol treatment vary greatly by region. Although the senior-specific addictions treatment available in larger centres may appeal to some patients, the literature supports good outcomes for mixed-age treatment. Geriatric patients have also been shown to respond well to brief intervention protocols designed for the primary care clinic (see Figure).26,27

Two oral medications (naltrexone and disulfiram) are currently approved in Canada for treating alcohol dependence in the general adult population. Naltrexone is an opiate antagonist that targets the endogenous endorphin system, reducing both the pleasure derived from drinking and the craving to drink, while disulfiram blocks the action of aldehyde dehydrogenase and causes the accumulation of acetaldehyde when combined with alcohol for a deterrent effect. Both agents help patients reduce drinking, avoid relapse to heavy drinking, and achieve and maintain abstinence.

In a trial involving naltrexone and supportive psychosocial therapy, Oslin and colleagues (2002) compared older adults (mean age 62.6 years) with younger adults (mean age 41.7 years) in terms of compliance and treatment efficacy. The psychosocial therapy component focused on enhancing adherence to naltrexone use and motivational techniques to change addictive behaviors. Oslin found that the older adults did better in terms of treatment adherence and reduced relapse rates,26 significant findings given that adherence to naltrexone therapy can be poor because of gastrointestinal side effects. The side effects from disulfiram use are also of concern and can lead to serious and extremely unpleasant consequences. The accumulation of acetaldehyde is potentially dangerous in the elderly, and disulfiram should never be given to a patient with cognitive impairment. Pharmacological treatment for comorbid anxiety and depressive disorders should be considered, but is most effective after initial alcohol reduction. Many geriatric drinkers do not benefit from additional medication, and clinicians may consider offering brief but effective behavioral support to promote recovery.27,28

Reduction of alcohol intake can have multiple health benefits for patients with alcohol use disorders. There is demonstrated gradual improvement of cognitive ability with increasing duration of abstinence.29 However, in a clinically healthy population of abstinent alcohol-dependent subjects, learning and memory deficits have been reported to persist despite prolonged periods of abstinence.30 Such deficits in executive functioning, learning, and concentration may lead to poor treatment outcomes even in alcohol-dependent individuals who appear to be healthy and wish to limit their drinking. Early intervention while cognitive deficits and comorbidities may be reversible is by far the better option.

Summary
Alcohol overuse in the elderly is a common and significant problem that often goes unrecognized. Clinicians can help geriatric patients avoid serious health consequences by making thoughtful inquiries, using a screening tool, and developing an appropriate treatment strategy.

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Competing interests
None declared.

References
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