Risky Drinking in Older Adults: Towards Better Awareness and Screening in Clinical Practice

Kim-Michelle Gilson
Centre for Health Equity, Melbourne School of Global and Population Health
University of Melbourne

Abstract: Alcohol consumption in older adults is understudied compared to younger age groups. This is despite older adults being more vulnerable to alcohol-related harms at low consumption levels. Prevalence studies suggest that older adults drink more frequently than any other age group and between 1-15% drink harmfully. Little attention has been paid to the clinical identification of risky drinking among older clients. This article aims to increase awareness about older adults’ alcohol use, including the associated harms, and will provide an overview of the assessment of risky drinking in clinical practice. It is recommended that clinical guidelines are developed for psychologists and other health professionals working with older adults on how to raise discussions about alcohol use and accurately identify misuse.

Keywords: alcohol, risky drinking, older adults, screening

Introduction

Alcohol use in older age has received much less attention than its use in both adolescents and younger adults (Johnson, 2000). Until recently, alcohol use and misuse among older adults was a relatively neglected research and clinical topic (Menninger, 2002). It is stated that alcohol consumption declines with age and the proportion of non-drinkers increases (Moos, Schutte, Brennan, & Moos, 2009). However, a number of important findings suggest that alcohol consumption by older adults is very much a current behaviour.

Community-based studies across Europe and the US show that 50-70% of older adults consume alcohol. Although National Drug Strategy Household (NDSH) surveys in Australia have shown a decrease in the proportion of daily drinkers across the lifespan, the group most likely to drink daily continues to be those aged 70 or older for both males and females. The most recent 2013 NDSH survey also identified that 20% of those aged 50-59 and 18% of those aged 60-69 years exceed the National Health and Medical Research Council (NHMRC; 2009) guidelines for lifetime risk (Australian Institute of Health and Welfare [AIHW], 2014). A study by Gilson, Bryant and Judd (2014) conducted on 370 older adults in Australia also found support for the frequency of drinking, their findings showed that 46% drank weekly with 27% of these drinking four or more times per week.
A growing body of literature also highlights the high prevalence of concurrent medication and alcohol use; it is estimated that up to 19% are adversely affected by combined alcohol and medication misuse (Blow, Bartels, Brockmann, & van Citters, 2005). Research on alcohol use in older adults is particularly scarce in Australia, and the knowledge and understanding of older-age drinking has largely been derived from a predominantly US-based literature.

The low priority given to the investigation of drinking alcohol in older adults is concerning, given that the proportion of people over the age of 65 is currently 12% of Australia’s population, and this is estimated to increase to 16% by the year 2016, and to 20.5% by 2026 (Australian Bureau of Statistics [ABS], 2000). Such demographic changes are expected worldwide. These predicted population increases in older adults should be considered with the knowledge that more recent birth cohorts (i.e., the baby boomers) are consuming more alcohol than earlier generations (Blow, Brockman & Barry, 2004; Bartels et al., 2005). Recent survey data has also indicated that alcohol-related deaths have increased markedly among older adults, especially within Europe (Hallgren, Högberg, & Andréasson, 2010). This necessitates an improved understanding of how to assess alcohol use in older age sooner rather than later. The aim of this article is to increase awareness about risky drinking in older adults and provide guidance on how to screen and assess drinking behaviour in clinical practice.

**Prevalence of Problem Drinking**

The prevalence of problem drinking within older adults has been difficult to establish, and estimates range anywhere from 1-15% and higher (National Institute on Alcohol Abuse & Alcoholism, 1998; Blow & Barry, 2002; Moore et al., 2006). A number of factors contribute to this variation, however it is largely because different methods of assessment are used and there is a lack of consistency in the definition of problem alcohol consumption in older adults. It has been argued that such definitions need to be age-specific because of older adults’ increased sensitivity to low levels of alcohol.

Blazer and Wu (2009) examined older adults from a US general population, aged 65 and above and found 13% of men and 8% of women drank at-risk (defined as greater than 2 drinks per day) and 14% of men and 3% of women binge drank (defined as five or more drinks in one sitting, on at least one day in the past month). In terms of Australian data, the 2013 National Drug Strategy Household Survey assessed the level of at-risk drinking using recently updated national guidelines. This identified 33% of those aged 50-59 years, 23% aged 60-69 and 9% aged 70 and above years consumed levels of alcohol that put them at-risk of injury and harm on a single occasion of drinking (more than 4 drinks on 1 occasion) in the previous year. Nearly 20% of 60-69 year olds and 12% of 70+ year olds had more
than two standard drinks a day (AIHW, 2014). A study by Gilson et al. (2014) found that risky drinking in older Australian drinkers (N = 292, Mean age of 71 years) was prevalent in 6.6 to 31.7% of women and 21.6 to 44.8% of men depending on the criteria applied to define risky drinking. Higher estimates were identified with the AUDIT-C screening instrument (Bush, Kivlahan, McDonell, Fihn, & Bradley, 1998) compared to applying safe alcohol guideline recommendations. Another study (Gilson et al., 2016) also found that 22.2% of older drinkers were identified as problem drinkers using an instrument that measured the number of psychosocial problems experienced from alcohol (e.g. skipping meals), with a higher prevalence for men (30.4%) than women (15.6%). In another Australian study, Draper et al. (2015) found in a sample of 210 older adults (aged 60 and above) that 17.1% screened positive for risky alcohol use.

Understanding Alcohol-Related Harms in Older Adults

Although estimates of risky drinking in older adults are much lower than those in younger populations, paying attention to alcohol consumption in older adults is important because of their heightened vulnerability to alcohol-related harms. With age, the ability to process alcohol decreases due to physiological changes such as decreases in body mass and greater fatty tissue that lead to a higher blood alcohol concentration for a given dose compared with younger adults (National Institute on Alcohol Abuse and Alcoholism, 1998). Liver enzymes that metabolize alcohol also become less efficient with age, leading to increased sensitivity to alcohol (Blow & Barry, 2002).

Older women are particularly susceptible to the adverse effects of alcohol. Compared to men, women’s bodies have less water and less lean muscle mass, and their liver enzymes break down alcohol more slowly (Blow & Barry, 2002; Nolen-Hoeksema, 2004). As a result of these biological differences, the same dose of alcohol can place older women at greater risk of harm than older men.

In addition to the age-related physiological changes that increase sensitivity to alcohol and thus alcohol-related harms, there are also age-related factors such as a greater number of comorbid conditions and concomitant medication use that increase the harm associated with modest levels of alcohol in old age (McCaul et al., 2010; Moore et al., 2009). Small amounts of alcohol can adversely interact with medications that affect the absorption and metabolism of alcohol and consequently lead to a number of harmful side effects (Onder et al., 2002; Barnes et al., 2010). This is particularly problematic in old age where a significant proportion of older adults take multiple medications on a daily basis.

Increased alcohol use can also indirectly affect the general health of older adults by placing them at direct risk of injury e.g., falls. The increased risk of falls has been well documented, with two
thirds of alcohol-related hospital admissions in those over 84 years being a consequence of falls after drinking alcohol (Australian Government Department of Veterans’ Affairs, 2012). Alcohol-related falls are most likely to occur when alcohol is used in combination with medications such as benzodiazepines (Blow et al., 2005). Alcohol misuse has also been associated with various health problems in older adults such as liver damage, gastrointestinal problems, nutritional malabsorption, hypertension, diabetes and stroke (Chermack, Blow, Hill, & Mudd, 1996; Chikritzhs & Pascal, 2005).

Identifying Risky Drinking in Older Adults

According to Blow (1998) alcohol use problems among older adults represent an invisible epidemic, and the Royal College of Psychiatrists in the UK have referred to this group as invisible addicts (Royal College of Psychiatrists, 2011). These statements underlie the position that not only is alcohol use and misuse increasing with each new generation of older adult, but the identification of alcohol misuse often goes unrecognized in this population group (Crome, Crome, & Rao, 2011).

There are several reasons for overlooking alcohol misuse in older adults, such as the lack of age specific screening instruments for older adults, views by health professionals that alcohol use is too infrequent among older adults, or that the amount of alcohol poses little harm and health professionals easily overlooking signs of alcohol misuse for other health problems given that alcohol misuse in older adults often manifests in non-specific symptoms such as irritability, weight loss, increased falls, depression, anxiety, digestive problems and changes to eating patterns (Aira, Hartikainen, & Sulkava, 2005). There could also be issues of limited training on how to engage with older adults in conversations about their drinking behaviour, and what referral pathways and treatment can be accessed given the positive identification of risky drinking. There might also be other presenting health conditions that require prioritisation in treatment and insufficient time to discuss drinking behaviour. In addition, there may be stigma perceived by older adults making them more likely to conceal alcohol use (Blow, 1998). Indeed, research on brief intervention trials with older adults in the US has demonstrated that some of the barriers to their implementation included stigma from the perspective of older adults; lack of health care and other professionals trained in screening and brief interventions and chronic medical conditions that may make it more difficult for providers to recognize the role of alcohol (Oslin, Slaymaker, Blow, Owen, & Colleran, 2006; Schonfeld et al., 2010).

There is much less of a focus on assessing the criteria for a Substance (Alcohol) Use Disorder (DSM-5) in older adults who are experiencing alcohol-related harms. New research is needed to examine the relevance of the revised criteria in the DSM-5 to older adults. Historically, the DSM-IV criteria for Alcohol Abuse Disorders were considered irrelevant for older people who may be less likely
to encounter the social, legal and occupational complications associated with alcohol use disorders (O’Connell, Chin, Cunningham, & Lawlor, 2003).

National guidelines developed by various government agencies advise the public of what constitutes ‘safe’ drinking limits and can provide a framework for pre-screening risky alcohol use within clinical practice. The guidelines can categorize individuals as low or at risk drinkers depending on how their alcohol consumption falls within these limits.

Recommendations from the NHMRC (2009) in Australia state that adults in the population should not drink more than two standard drinks each day (one standard drink is 10g alcohol) in order to reduce their life-time risk of harm from alcohol-related disease or injury, and no more than four standard drinks on a single occasion in order to reduce the risk of alcohol-related injury arising from that drinking occasion. These guidelines are shown in Figure 1.

**Guideline 1: Reducing the risk of alcohol-related harm over a lifetime.**

*Drinking no more than 2 standard drinks on any day reduces the lifetime risk of harm from alcohol-related disease or injury.*

**Guideline 2: Reducing the risk of injury on a single occasion of drinking.**

*Drinking no more than 4 standard drinks on a single occasion reduces the risk of alcohol-related injury arising from that occasion.*

*Figure 1. Australian guidelines (1 and 2) to reduce health risks from drinking alcohol (NHMRC, 2009)*

Of relevance to the current article is that the NHMRC guidelines do not distinguish between older and younger adults in the specific levels that are recommended for the safe drinking of alcohol, thus no quantified drinking limits are given for older people. This is in contrast to the National Institute on Alcohol Abuse and Alcoholism (NIAAA) in the United States that recommends older adults should not consume more than one standard drink (14 grams) per day or seven drinks a week, and no more than two drinks on any drinking day (Dufour, Archer, & Gordis, 1992; Dufour & Fuller, 1995; Dar, 2009). These guidelines are based on the physiological and metabolic changes associated with ageing (Royal College of Psychiatrists, 2011). The Alcohol Advisory Council of New Zealand (ALAC, 2008) has also adopted the NIAAA’s guidelines for older adults given that no specific guidelines otherwise exist.
Screening Instruments

In addition to the application of guidelines to help identify whether alcohol consumption is risky in older adults, various brief screening instruments are available. These provide clinician’s with a set of questions to assess whether an individual’s alcohol consumption is harmful; each measure has a specific cut-off point that is applied to the total score in order to categorise the level of risk. A significant issue has been identifying the optimum cut-off point for these screens in older adults, given their increased sensitivity to alcohol-related harms.

A systematic review by O’Connell et al. (2004) identified the CAGE (Cut down on drinking, Annoyed by criticism, Guilty feeling and Eye opener; Ewing, 1984), as the most widely used instrument for older adults followed by the Alcohol Use Disorders Identification Test (AUDIT; Saunders, Aasland, Babor, de la Fuente, & Grant, 1993), and the Michigan Alcohol Screening Test-Geriatric version (MAST-G; Blow et al., 1992). These instruments do not assess quantity or frequency of alcohol consumption but more behavioural, socio emotional and physiological problems associated with alcohol misuse.

The AUDIT-C (Bush et al., 1998) is recommended as a superior measure for detecting hazardous drinking in older adults relative to other available instruments i.e., the CAGE and MAST-G (Rakshi, Wilson, Burrow, & Holland, 2011). This is given the instruments’ focus on assessment of quantity and frequency of alcohol use and large evidence base on sensitivity and specificity analyses for establishing cut-off points to detect hazardous drinking. The AUDIT-C adopts the first three items of the AUDIT and is shown in Figure 2. It can be easily self or clinician completed and takes minimal time in busy clinical practice. A cut-off score of four and above has been found useful for identifying drinking that is hazardous to health in older adults (Towers et al., 2011; Gilson et al., 2014).

Moore et al. (1999) has argued that because medication, declining health and age related physiological changes increase older adults’ vulnerability to alcohol-related risks at relatively low consumption levels, then information regarding the use of medications, health status, and functioning should all be considered in the measurement of risky drinking. To address this, Fink et al. (2002) developed the Alcohol-Related Problems Survey (ARPS) an 18-item self-administered screening measure that focuses on the relation between alcohol use and medical problems, medication use, and functional status. Although this measure has excellent sensitivity, the scoring relies upon an algorithm to combine responses and determine the level of risk, which is not easily implemented in clinical practice.
Given that alcohol use and misuse is prevalent in older age and the risk of harm is high, it is important that clinicians working with older adults discuss their drinking behaviour. This is not only to identify misuse, but it may be clear that some older adults should not consume alcohol at all or decrease their limits if taking active prescription medications and have medical conditions. Several barriers have been highlighted in this article for actively discussing alcohol use with older individuals, including a lack of awareness and knowledge by clinicians (Aira et al., 2005) and stigma by older adults in reporting their consumption levels.

Blow and Barry (2014) suggest that a number of actions may assist clinicians, such as embedding questions on alcohol use in the recent past (e.g. week or month) within the context of other health behaviours (i.e., exercise, weight, smoking, alcohol use) and paying attention to nonverbal behaviours that suggest the individual may be uncomfortable disclosing actual use. Secondly, including

**Recommendations for Assessing Alcohol Use in Clinical Practice**

1. **How often do you have a drink containing alcohol?**
   0. Never
   1. Monthly or less
   2. 2-4 times a month
   3. 2-3 times a week
   4. 4 or more times a week

2. **How many standard drinks containing alcohol do you have on a typical day?**
   0. 1 or 2
   1. 3 or 4
   2. 5 or 6
   3. 7 to 9
   4. 10 or more

3. **How often do you have six or more drinks on one occasion?**
   0. Never
   1. Less than monthly
   2. Monthly
   3. Weekly
   4. Daily or almost daily

Figure 2. AUDIT-C items for detecting hazardous alcohol use (Bush et al., 1998)
simple pre-screening questions first that provide an easy transition into more detailed and formal screening measures, for example “Do you typically drink beer, wine or other alcoholic beverage?” and “Do you use regularly use prescription medicines for pain? Anxiety? Sleep?” This can also lead in to discussion and further questioning about concurrent medication and alcohol use. To address older adults’ stigma and ensure that the therapeutic relationship is not affected by initial questioning of alcohol use, it is important that the clinician carefully tailors the questions to each individual client and where possible, gives examples of common situations where alcohol is consumed in old age e.g. celebrations, social gatherings or life events that are likely to affect drinking behaviour e.g., retirement, loss, and illness.

Formal screening questions (such as the AUDIT-C) can then be used, but are best incorporated into other screening procedures that are already in place rather than stand-alone assessments. It is important for clinicians to decide whether to assess quantity and frequency of use as with the AUDIT-C screening instrument or simply the behavioural symptoms of misuse, or both. Screening is also ideally applied in combination with health education (Nguyen & Matern, 2001); such as providing older adults with information about safe alcohol limits and what may constitute harmful drinking patterns. Providing a list of medications that interact with alcohol may also be useful, which can be further discussed between the older adult and their general practitioner (GP). While the provision of information and education is important to raise awareness and impart knowledge, by themselves it is recognised that information and education do not lead to sustained changes in alcohol-related behaviour (Anderson, 2009). However, education can be a tool for awareness and raising support, and an important feature of a broader alcohol strategy (Anderson, Scafato, & Gulluzzo, 2012).

It is also important to recognise in the screening of older age drinking, that there may have been a history of earlier life drinking that can contribute to poorer health outcomes in older age. This means that although some older adults may currently abstain from alcohol, their health status may have been influenced by earlier alcohol use. Therefore including one or two key questions drinking behaviors in earlier to mid-life important, as these can subsequently lead onto discussions of the potential health effects observed in the present moment.

Hunter and Lubman (2010) suggest a number of stages when it might be helpful for GPs to enquire about older adults’ alcohol use, many of which can be applied to clinical psychology practice. While it is essential in the initial assessment to cover alcohol use, i.e. at first consultation, it is also important to ask questions at regular time points such as every six weeks, or after a fall or when presenting with depression, anxiety, sleep, confusion, memory or gastrointestinal problems. All of these are the non-specific symptoms of alcohol misuse in older adults.
Conclusion

This article has provided an overview of the alcohol use, associated harms, and methods of assessing alcohol use and misuse in clinical practice with older adults. Screening and education practices should be carefully considered in the near future otherwise risky alcohol problems in future generations of older adults could go unnoticed if attention is not given to this issue soon. Consequences of this may include harmful interactions with medications, poorer health and other psychosocial problems. Future work is recommended in the area of clinical guidelines for health professionals working with older adults on how to assess alcohol in a manner that is both acceptable and effective for detecting risky drinking.

References


