

## GUEST EDITORIAL

# Detecting alcohol problems in older adults: can we do better?

### Extent of the problem and risk factors

Alcohol problems in older adults aged 65 years or over, in the United Kingdom and internationally, have risen steadily over the past decade. These are a common but underdiagnosed and under-recognized problem. A UK survey in 2008 found that 21% of men and 10% of women aged 65 years and over reported drinking more than four and three units of alcohol respectively on at least one day per week (National Health Service Information Centre, 2010). A recent Royal College of Psychiatrists Report (2011) cited research that showed there has been a rise in the number drinking over weekly recommended limits by 60% in men and 100% in women between 1990 and 2006 with the number of people aged over 65 years requiring treatment for a substance misuse problem, set to more than double between 2001 and 2020, all of which points to a significant public health problem both now and in the future (National Health Service Information Centre, 2009).

There has been a significant rise recently in alcohol-related deaths, particularly in older males in the United Kingdom (Office for National Statistics, 2012) and among older adults across Europe (Hallgren *et al.*, 2010). In spite of the level of alcohol-related harm in this population and the need for research and intervention, public health initiatives related to alcohol use disorders often focus on younger age groups, with problems in older adults left under-detected or misdiagnosed (O'Connell *et al.*, 2003). A review of literature in this area concluded that two-thirds of alcohol problems in older adults remain undetected by physicians (Beullens and Aertgeerts, 2004). In the United Kingdom, the Royal College of Psychiatrists (RCPsych; 2011) Older Persons Substance Misuse working group published a report called Our Invisible Addicts (College Report CR165). They reported that older adults present with complex patterns of alcohol misuse interacting with the misuse of prescribed or over the counter medications. Importantly, they emphasized that one-third of older adults with alcohol use disorders develop these in later life.

Numerous triggers can initiate heavy drinking in later life. These include bereavement, mental stress, physical ill health, loneliness and social

isolation, loss of occupation or income, disability or decline in functioning, boredom, anxiety, insomnia, family conflict, low self-esteem, sensory deficits, poor mobility, and cognitive impairment. (Alcohol Concern, 2002; Dar, 2006). Other risk factors identified in older adults include being male, being of a higher social class, being a widower or divorced older man, or married older woman, experiencing social exclusion or homelessness, and genetic factors (Cooper *et al.*, 1999). In addition, a complex two-way relationship between stressors and drinking behavior in older adults has been reported (Brennan *et al.*, 1999).

Older adults may be unaware that recommended amounts of alcohol consumption reduce with age. Retirement has been reported as a time of life associated with increased alcohol consumption, although whether retirement itself is the causal factor has not been clearly identified (Adams *et al.*, 1996). Gaining an understanding of this, as well as the risk factors in older adults for harmful drinking, will allow better understanding of the problem and a more appropriately targeted approach.

### Benefits of detecting and treating

The incidence of alcohol use disorders in older adults is high enough to justify routine enquiry, especially as older adults are particularly vulnerable to the adverse effects on health and quality of life of alcohol (Dar, 2006). Potential benefits of treating alcohol use disorder in this group include improved health, reduced rates of associated illnesses, reduced risk of falls and accidents, and more satisfying relationships. Reducing alcohol intake leads to a marked improvement in cognitive functioning in older adults without dementia (Brandt *et al.*, 1983).

The Invisible Addicts report (RCPsych, 2011) recommends screening every person aged over 65 years as part of a routine health check and makes a call for separate guidance for older adults about safe drinking limits with a suggested maximum of 11 units per week for men and seven units per week for women. It refers to a paucity of research and evidence for treatment interventions, and services relating to the management of substance use disorders in older adults however also report that available studies have shown that older adults

can and do benefit from treatment and in some cases have better outcomes than younger people and may remain in treatment for longer. For example, a study from Camden and Islington Alcohol Support Association (CASA), older persons' service in North London, found that 72% of older adults showed improved self-care and psychosocial functioning following alcohol reduction treatment (Taber, 2001), and another study (Rao, 2013) reported that 38% of older adults with alcohol-related problems referred to community mental health teams achieved abstinence from alcohol or controlled drinking at six-month follow-up.

Older adults may benefit from psychological treatments, including social approaches, family therapy interventions, and cognitive-behavioral approaches (Alcohol Concern, 2002). Fleming *et al.* (1999) demonstrated that two 10–15 minute counseling sessions that included advice, education, and contracting using a workbook resulted in a 34% reduction in seven-day alcohol use, a 47% reduction in mean number of binge-drinking episodes during a 12-month follow-up period compared with pre-intervention levels of alcohol consumption, and a 62% reduction in the percentage of older adults drinking more than 21 drinks per week.

There may be less pressure for an older individual to give up or reduce alcohol intake as they may have little or no pressure to work and experience fewer family responsibilities. It has been suggested that a harm reduction model may be a better conceptual fit for older at-risk drinkers who may not see their drinking as an addiction requiring total abstinence in the way that a 12-step program conceptualizes at-risk drinking (Lee *et al.*, 2009). Therefore, it may be that effective treatment of older adult drinking will require the development of a different conceptual framework.

With accumulating evidence supporting the effectiveness of treating alcohol use disorders in older adults, there is a value of developing effective screening tools to identify such issues, as well as developing age appropriate interventions and services.

### Barriers to detection and treatment

Notwithstanding good evidence for effective interventions, there are numerous barriers to detection and treatment of alcohol misuse disorders in older adults (Table 1).

A major barrier refers to societal myths that state that older adults are unable to change their habits or should not be denied something, which may be felt to be their only pleasure, particularly if they feel the person may not have long to live.

Inadvertent age discrimination may also lead to reluctance by alcohol services to treat older adults who may therefore have less access to services. There is a need for development of age appropriate services (Rao, 2011). There is also a particular call for public health campaigns specifically targeting older adults as research shows that older adults are one of the least well-informed groups when asked about alcohol units, and are also the least likely to know about the risks relating to alcohol consumption (Lader and Steel, 2010).

Hallgren *et al.* (2010) have suggested that alcohol consumption in older adults is a subject which has until recently fallen between the gaps of aging research on the one hand, and alcohol and drug research and policy on the other. It is disappointing that in spite of identifying the need to research the consequences of lower levels of alcohol consumption on the physical and psychosocial health of older individuals and the need to expand or modify existing tests (Fink *et al.*, 1996), little progress has been made in this area. Most of the available research originates in the United States and a proportion of this is limited to white males in US Veterans hospitals (RCPsych, 2011).

Healthcare practitioners' awareness and attitude toward alcohol use in older adults are also an issue. (Dar, 2006). Professionals may not be aware of the extent of the problem or may have had inadequate training about detection and interventions and importantly may feel awkward about asking older patients about their alcohol consumption. In one study, a third of included patients with an alcohol problem had not had an alcohol history taken (Mears and Spice, 1993). Professionals may also feel that they do not have sufficient time to carry out screening or intervention (Yarnall *et al.*, 2003). This suggests that development of validated short screening measures is needed.

Emerging evidence from available guidance describes the concept of "mainstreaming," meaning that staff in whatever setting should be equipped to deliver integrated care for this group (Rao and Shanks, 2011). This has implications for training and development of the workforce. Rao and Shanks described a training program within South London and Maudsley which equips professionals working on mental health of older adults, teams with skills to screen for the presence of alcohol problems, establish therapeutic relationships, assess needs and implement low-intensity interventions, and recognize those patients with complex needs who require referral to specialist dual diagnosis services for higher intensity interventions. This has resulted in a shift in culture among staff. The concept of "if you don't think about it then you won't see it" is useful (RCPsych, 2011).

**Table 1.** Barriers to detection of alcohol misuse problems in older adults**Societal Factors**

Attitudes and assumptions of society

Ageism

Stigma

Governmental policies focusing only on younger people

Lack of appropriate research in older adults due to:

apparent preoccupation with younger adults

lack of funding opportunities

lack of appropriate interventions to evaluate

stigma preventing individuals from participating in research

stigma preventing clinicians from putting patients forward for research

lack of ownership of the problem between different services

difficulty demonstrating cost-effectiveness as problem spread across various services

**Professional Factors – Individual**

Discomfort with the topic and unwillingness to ask

Failure to recognize symptoms

**Professional Factors – Organizational**

Lack of clinical guidelines and diagnostic criteria

Lack of suitable detection tools specifically for older adults

Lack of training opportunities for professionals

Problem may fall between social and medical agendas

**Patient Factors**

Individual may not seek treatment or may feel ashamed or in denial

Cognitive problems

Absence of informant history or collusion by family/carer

May present in numerous settings

Symptoms may mimic or be hidden by symptoms of physical illness, or be attributed to aging

Another barrier is that diagnostic criteria may also not be directly applicable to older adults with alcohol use disorders. International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD 10) and Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM 5) are often considered the gold standard for research, but several of the items used in the diagnostic criteria (such as impairment of social, occupational, or recreational activity) may not be relevant to older adults (Beullens and Aertgeerts, 2004). Further, alcohol intake may not be as dramatically elevated as in younger adults, and symptoms and signs of dependence and withdrawal may be less clear, or confused with mental illness or normal aging (Graham, 1986). Importantly, intake at relatively modest levels may cause problems owing to physiological changes in older adults while not developing physiological dependence. Frequency, quantity, and pattern of consumption may be more appropriate considerations in the assessment of alcohol disorders in older adults and are not included in either DSM-IV or ICD-10 (RCPsych, 2011).

Official guidance in the United Kingdom makes minimal reference to older adults and alcohol use disorders. This institutional neglect of the issue also acts as a barrier. The National Institute

for Health and Care Excellence (NICE; 2011) guidance report, *Alcohol Use Disorders: Diagnosis, Assessment and Management of Harmful Drinking and Alcohol Dependence*, makes only brief reference to the needs of older adults in respect of the need to reduce the threshold for alcohol misuse when using screening instruments and assessing the severity of alcohol dependence and the need to consider in-patient care more readily for detoxification. It not only acknowledges the higher risk of alcohol-related harm in older adults but also stresses that there is no reason why drug treatments should be considered clinically ineffective in this age group.

A similar situation can be seen in countries other than the United Kingdom, for example, including Australia (Australian Government Department of Health, 2013) and Canada (Giesbrecht *et al.*, 2013), confirming that this is an international problem. Very few countries have specific guidance on alcohol consumption for older adults. A Swedish National Institute of Public Health report (Hallgren *et al.*, 2010) pointed out that most European Union member states do not currently have alcohol consumption guidelines developed specifically for older adults with Italy being the only exception.

The National Institute on Alcohol Abuse and Alcoholism (NIAAA, 2008) in the United States recommends a limit of one standard drink a

day for older men and women. Department of Health guidance in the United Kingdom reports a recommended level of three to four units of alcohol a day for men and two to three units of alcohol a day for women, but does not mention the vulnerability of older adults nor offers any additional guidance for this age group (Department of Health, 2013). However, on a positive note, the recent Government Alcohol Strategy (HM Government, 2012) makes reference to the need to examine further whether separate guidance on recommended limits in adults aged 65 years and over is needed. The RCPsych report (2011) suggested that recent evidence shows the upper safe limit for older adults to be 11 units a week with no more than three units in one session.

In a recent UK study conducted by Knott *et al.* (2013), age-specific drinking recommendations from the RCPsych were applied to available data from 2008. They found that when using this practice, the number of older drinkers classified as hazardous consumers rose to a level greater than that found among young adults aged 16–24, representing 1.2 million people aged over 65 years and a 3.6-fold increase over the existing definitions. Similarly, those drinking in excess of these proposed daily-recommended limits increased 2.5-fold to over 3 million in 2008. This study demonstrates the importance of age-specific guidelines, and the need for more research and public health campaigns in this area.

## Tools for detection

When selecting tools for detecting alcohol use disorders, it is important to consider ease of use, patient acceptability, sensitivity, and specificity in this age group, in particular (O'Connell *et al.*, 2004). There are many different methods available for attempting to identify alcohol use disorders in older adults, including simple clinical enquiry, laboratory tests, and structured assessments. However, most alcohol screening instruments are not designed specifically for the older population and each method of detection has its own limitations. Table 2 outlines the main available methods and describes the advantages and disadvantages of each.

One of the main issues with using such screening tools is that the definition of hazardous consumption used for younger adults does not accurately apply to the older population, who may experience significant harm with much lower levels of alcohol use. Traditional screening tests largely focus on high levels of alcohol beverage use and dependence, therefore potentially not identifying

the consequences of lower levels of alcohol consumption on the physical and psychosocial health of older individuals (Fink *et al.*, 1996). Alcohol in this population is also far more likely to be used in combination with medications, medical illness, or pre-existing diminished physical, emotional, or social function. Older adults have higher sensitivity and higher blood levels with lower alcohol consumption (Smith, 1995), and therefore the amount of alcohol consumed is not a reliable measure of alcohol problems. As various symptoms and syndromes, including falls and accidents, cognitive impairment, insomnia, self-neglect, and depression, may be useful indicators of alcohol use disorders (Reid and Anderson, 1997), it may be better to examine such behavioral and health indicators rather than focusing too much upon the actual amounts of alcohol consumed.

The role of stigma should not be underestimated, and therefore the reliability of self-report is a significant issue (Dar, 2006). Older adults have a particularly marked tendency to under-report their drinking, often missing out alcoholic drinks, which they regard as medicinal to alleviate other health problems (Naik and Jones, 1994). Furthermore, if they are isolated, there may be no collateral history or family may not be aware of the extent of their alcohol use, making detection even more difficult.

Alcohol screening in this group of people may be further complicated by the presence of cognitive impairment and such patients may be unsuitable for alcohol services due to poor insight and motivation and being unable to engage in interventions or retain information. Services have particular difficulty in meeting the needs of older adults with dementia and cognitive impairment associated with alcohol misuse (Cox *et al.*, 2004). The symptoms of alcoholism may also be confused with other physical or mental health problems. It can present in a large number of non-specific ways, including accidents, depression, insomnia, confused states, and self-neglect, many of which are also linked with the aging process and therefore may mimic other geriatric illnesses (Alcohol Concern, 2002).

Screening for alcohol misuse in older adults can be conducted in a number of clinical settings, including primary care, specialist services, and accident and emergency. Each environment poses its own particular challenges and barriers. Within primary care, physicians will increasingly come across alcohol-related problems in the growing population of older adults (Conigliaro *et al.*, 2000). Time pressures also present an issue with considerable time and resources needed to carry

**Table 2.** Assessment tools available for detecting alcohol misuse disorders in older adults

CLINICAL ASSESSMENT USING ALCOHOL HISTORY		
MAIN FEATURES	ADVANTAGES	DISADVANTAGES
<p>Ask patient if they have consumed alcohol within past 3 months. If yes, take a full alcohol history. A cutoff of 14 units for older men and women showed a sensitivity of 0.92 and specificity of 0.98 for identifying problem drinking and consumption of alcohol on 3 or more days per week was also associated with high risk of adverse consequences (Mears and Spice, 1993).</p>	<p>Easy to do as part of clinical assessment. May be more sensitive than some of the available screening methods, e.g. CAGE and laboratory testing (Mangion <i>et al.</i>, 1992).</p>	<p>Not structured and relies on skill of clinician.</p>
SCREENING QUESTIONS		
<p>“On any single occasion during the past 3 months, have you had more than 5 drinks containing alcohol?” (Taj <i>et al.</i>, 1998). Two single-item screeners (Dawson <i>et al.</i>, 2010): Past year frequency of drinking 5+/4+ drinks on one occasion and maximum drinks consumed on any day. Two screening questions (Cyr and Wartman, 1988): “Have you ever had a drinking problem?” and “When was your last drink?”</p>	<p>Useful starting point if risk of harm at lower levels of alcohol consumption is considered. Accurately identifies patients at risk or who meet accepted criteria for alcohol abuse or dependence. Simple to administer and quick to do. Preferred by primary care physicians due to ease of use.</p>	<p>These studies did not specifically look at an older population, and are therefore not validated in this population. Low values of maximum quantity that maximized sensitivity and specificity among individuals aged 65 years and older support a lower risk drinking threshold for individuals in this age group (Dawson <i>et al.</i>, 2010).</p>
LABORATORY TESTS		
<p>Blood testing, e.g. Mean Cell Volume (MCV), gamma-glutamyl transferase levels (Gamma GT) and aspartate aminotransferase (AST).</p>	<p>May show damage relating to alcohol use in older adults at lower levels of consumption, therefore being a more sensitive test in the older adults (Caputo <i>et al.</i>, 2012). Objective measurement Useful as corroborative evidence as high sensitivity but low specificity (Mears and Spice, 1993).</p>	<p>Di Bari <i>et al.</i> (2002) found CAGE and MCV/Gamma GT to be positive in only a minority of at-risk drinkers. There was a very low concordance of both tests being positive. Participants aged over 75 years drank less but had similar prevalence of CAGE and MCV/Gamma GT positive. Invasive test – but only minimally Low sensitivity and specificity (Mangion <i>et al.</i>, 1992).</p>

Table 2. Continued.

CAGE QUESTIONNAIRE		
MAIN FEATURES	ADVANTAGES	DISADVANTAGES
<p>Cutting down, annoyance by criticism, guilty feelings, and eye openers (Ewing, 1984). Positive result is indicated by 2 positive responses. Developed for use in primary care setting.</p>	<p>Widely used (Culberson, 2006). Easy to remember and administer and easy to score. A score of 1 or more had sensitivity of 86% and specificity of 78% for detecting alcohol issues in medical outpatients aged &gt;60 years (Buchsbaum <i>et al.</i>, 1992). In older adults aged 70–75 years, a cutoff score of 2 or more was associated with sensitivity of 29.2% and specificity of 92.7%, this improves to sensitivity of 70% and specificity of 91.6% with a cutoff score of 1 or more (Rozzini and Trabucchi, 1993). CAGE is valuable for screening for dependence in the older adults using cutoff of 1 or more (Berks and McCormick, 2008). May have a better role as corroborative evidence alongside other methods such as high sensitivity but low specificity (Mears and Spice, 1993). A study comparing CAGE with MAST showed both to have low sensitivities in older adults at conventional cutoff points but CAGE was more effective overall (Jones <i>et al.</i>, 1993).</p>	<p>Not developed specifically for older adults. Focuses on dependence and not harmful use. Looks at lifetime use and not current habits, so if used should be combined with assessment of current consumption. Low sensitivity (Mangion <i>et al.</i>, 1992). Identified fewer than half of the heavy drinkers in a group of over 60-year olds – using cutoff of 1 may increase sensitivity (Adams <i>et al.</i>, 1996). Only a small number of at-risk drinkers aged over 65 years scored 1 or more on CAGE (Di Bari <i>et al.</i>, 2002). Less than half of those screening positive on either the SMAST-G or the CAGE screened positive on both measures, suggesting they may be capturing different aspects of alcohol misuse. Using a combination of tools may be beneficial (Moore <i>et al.</i>, 2002a). May be of useful limitedness as older adults may not be aware that current level of intake is hazardous or harmful and as such may never have felt guilty or tried to cut down (Culberson, 2006).</p>
<b>ALCOHOL USE DISORDERS IDENTIFICATION TEST (AUDIT)</b>		
<p>Not evaluated for use in older adults; however, has been cross culturally developed by WHO in the 1980s (Saunders <i>et al.</i>, 1993). Administered as interview or completed by the patient. It contains ten questions, the first three questions cover alcohol consumption (amount and frequency). Responses are scored from 0 to 4, giving a maximum possible score of 40. Score of 8 was used as a cutoff score.</p>	<p>Its strength lies in its ability to identify those who have problems with alcohol but may not yet be dependent (Berks and McCormick, 2008). Takes only a few minutes to complete. Provides information on current quantity and frequency of drinking (Culberson, 2006). In aged over 65 years, a cutoff score of 8 or more had sensitivity of 0.48, this improved to &gt;0.85 with a cutoff of 5 or more (Aalto <i>et al.</i>, 2011). Cutoff of 8 had sensitivity of 0.67 and specificity of 0.95 in aged over 65 years (Gomez <i>et al.</i>, 2006). A study in older male Koreans found that AUDIT had greater diagnostic power than SMAST-G and CAGE (Ryou <i>et al.</i>, 2012). Anesthesiologists identified 6.9% of alcohol use disorders using clinical assessments compared with 18.1% for AUDIT (Kip <i>et al.</i>, 2008).</p>	<p>Not developed specifically for older adults and has performed poorly in older adults in some studies and the lack of yes/no answers may complicate scoring (Culberson, 2006). In older male hospital patients, a cutoff of 8 or more had sensitivity of 33% and specificity of 91%. Cutoff of 4 or more improved sensitivity only to 59% and specificity decreased to 41%. The AUDIT was outperformed by MAST-G and CAGE (Morton <i>et al.</i>, 1996). Asking about meeting responsibilities may not be useful in an older population and items concerning the amount of alcohol consumed again may not be appropriate in older adults due to harm at lower levels of consumption.</p>

**Table 2.** Continued.

AUDIT-C		
MAIN FEATURES	ADVANTAGES	DISADVANTAGES
<p>The AUDIT-C (consumption) is a shortened version of the AUDIT, using the first three questions only, i.e. how often the person drinks, how many drinks on a typical day, and how often the person drinks six or more drinks on one occasion.</p>	<p>Audit-C was shown to have nearly identical sensitivity as the full audit in the general primary care population (Bradley <i>et al.</i>, 2007). Shorter and quicker to administer. Optimal cutoff of AUDIT-C score was 4 in over 65-year olds (Aalto <i>et al.</i>, 2011).</p>	<p>Not developed specifically for the older population.</p>
MICHIGAN ALCOHOLISM SCREENING TEST – GERIATRIC VERSION (MAST-G) AND SHORTENED VERSION (SMAST-G)		
<p>MAST-G contains 24 yes/no questions, and SMAST-G contains 10 yes/no questions. Items on the test cover the physical signs of excessive drinking, the connection between drinking and emotional states, problems controlling level of consumption, and the reactions of others to the person’s drinking. It can be self-administered or completed by the physician. It focuses more on harmful drinking than alcohol dependence. It may be more sensitive to picking up problems in older adults as it puts less reliance on the effects of alcohol misuse on routine and commitments and more emphasis on the effects of alcohol misuse on family relationships, the involvement of losses, and bereavement in the development of alcohol use disorders, the physical effects of drinking, and the interplay between psychological difficulties and development of alcohol use disorders (Naegle, 2008).</p>	<p>The original MAST-G instrument from which the SMAST-G was derived has a sensitivity of 93.9% and specificity of 78.1% when measured against DSM-III-R criteria (Blow <i>et al.</i>, 1992). SMAST-G may be useful due to its brief nature. Scoring is simple (Naegle, 2008). Blow <i>et al.</i> (1998) found SMAST-G to have sensitivity of 85% and specificity of 97% compared with DSM-III-R diagnosis of alcohol abuse or dependence. In male veterans aged 65 years or over, scores of 5 or more were associated with 70% sensitivity and 81% specificity using DSM-III-R as gold standard (Morton <i>et al.</i>, 1996). A study investigating the effectiveness of MAST-G, SMAST-G, and 2-item mini MAST-G in identifying hazardous drinking among older adults with CVA, aged over 50 years found all the measures to be useful with comparable sensitivity. (Johnson-Greene <i>et al.</i>, 2009). The SMAST-G correctly identified 52 to 85% of older adults with alcohol problems and 93 to 97% of older adults who do not have alcohol problems (Blow <i>et al.</i>, 1998; Moore <i>et al.</i>, 2001). Hirata <i>et al.</i> (2001) investigated use of MAST (non-geriatric version) in geriatric outpatients in Brazil compared with DSM-III criteria and found sensitivity of 91.4% and specificity of 83.9%.</p>	<p>Takes 10 minutes to administer, which might limit its usefulness in clinical practice and does not differentiate current from past drinking or change in consumption over time, and does not include any quantity–frequency questions. Professionals may be unaware of its existence (Naegle, 2008). Moore <i>et al.</i> (2002a) found that less than half of those screening positive on either the SMAST-G or the CAGE screened positive on both measures, suggesting these screening tools may be capturing different aspects of alcohol misuse. Those screening positive on SMAST-G drank less than those positive on the CAGE and SMAST-G may be better at identifying those drinkers. They recommend using a combination of screening measures to identify higher numbers of older persons with AUDs. A study comparing CAGE with MAST (Jones <i>et al.</i>, 1993) showed both to have low sensitivities in older adults at conventional cutoff points, but they report that the CAGE was significantly more effective than the MAST in discriminating between older medical outpatients with and without alcohol abuse or dependence. They did not include the Geriatric version of MAST.</p>

Table 2. Continued.

ALCOHOL-RELATED PROBLEMS SURVEY (ARPS) AND SHORT ARPS (SARPS) AND COMPUTERIZED-ARPS (CARPS)		
MAIN FEATURES	ADVANTAGES	DISADVANTAGES
Developed by Fink <i>et al.</i> (2002a) in primary care clinics to specifically screen older adults aged over 65 years. Self-administered questionnaire – 60 items. Includes items on presence of medical and psychiatric conditions, symptoms of disease, smoking behavior, medication use, physical function and health status, quantity and frequency of alcohol use, episodic heavy drinking, symptoms of alcohol abuse and dependence, driving after drinking, and gender. It moves away from focus on dependence and abuse to identify a much larger population who are at risk due to comorbidities, medication use, and functional status. Also, identifies dependent drinking.	Found to be more sensitive than the AUDIT and the SMAST-G at identifying those at risk (Moore <i>et al.</i> 2002b). Validated against CAGE, SMAST, and AUDIT and correctly identified those who screen positive on these tests 91%, 75%, and 100% of the time respectively. Majority of ARPS identified hazardous or harmful drinkers did not screen positive on CAGE, SMAST, or AUDIT. These drinkers had medical conditions or used medications that placed them at risk, none of which was addressed by the other three screens (Fink, 2002b).	Sixty items to complete, and uses scoring rules system, which may limit its usefulness in busy clinical settings (Culbertson, 2006). Takes 16 minutes on average to complete.
ALCOHOL, SMOKING, AND SUBSTANCE INVOLVEMENT SCREENING TEST (ASSIST)		
Developed by WHO. Aims to screen for problematic or risky substance use. Eight questions covering tobacco, alcohol, cannabis, cocaine, amphetamines type stimulants, inhalants, sedatives, hallucinogens, opiates, and other drugs (Khan <i>et al.</i> , 2012).	Khan <i>et al.</i> (2012) demonstrated significant correlations with other measures of alcohol use disorders using ASSIST in French geriatric outpatients (aged over 65 years). Screens for a wide range of substance use disorders and detects substance use, abuse, and dependence. User friendly and quick to administer.	Covers other substances in addition to alcohol, which may be less acceptable to an older population.



out all preventative and screening services in this population. Other common barriers include inadequate reimbursement for work undertaken, patient refusal, and a lack of physician expertise (Yarnall *et al.*, 2003).

The emergency department offers a useful place for detection with a high proportion of attendees presenting with alcohol-related problems. There is a continued upward trend in alcohol-related admissions to hospitals in England among older adults aged over 65 years in the last decade. In 2010, there were over half a million alcohol-related admissions of over 65-year olds, more than double the number in 2002. In males aged over 65 years, there has been a 175% increase between 2002 and 2010 and in women a 145% increase over the same period (Institute of Alcohol Studies, 2014). There is an ideal opportunity to identify alcohol use disorders in emergency department attendees, who often present at times of crisis and can be frequent utilizers of services. The REDUCE project based at St Mary's Hospital in London now regularly screens older patients when they present at A and E (Age Concern, 2002). However, screening within emergency departments can present problems (D'Onofrio and Degutis 2004/2005), which include the busy environment and limited time. Staff may feel it is not their role or lack confidence to address this issue. They may also feel that interventions are ineffective and resources may not be available to carry out screening. Emergency departments may also focus solely on the presenting problem, thus missing an opportunity for intervention.

There is also an opportunity for screening in other settings. Henni *et al.* (2013) investigated underdiagnosis of alcohol problems in older adults within acute inpatient geriatric units. They showed high levels of alcohol use disorders (at risk, harmful use, or dependence), but crucially only very few had been asked about their alcohol consumption. They concluded that screening should be conducted for every inpatient.

### Conclusions: opportunities for detection

Notwithstanding barriers and challenges in this area, there are numerous current opportunities to improve the care of older adults with alcohol use disorders. First, there is a need for coherent public health messages and awareness campaigns giving clear guidance to older adults as well as professionals about safe levels of alcohol consumption in older adults and this should be backed up by evidence and research. Second, the benefit of reducing alcohol consumption in

older adults needs to be stressed so that any message is motivational and encourages individuals to change. Guidance about daily consumption and harm associated with increased frequency of heavy drinking should be provided.

Associated with this, there is an on-going need to challenge public attitudes, attitudes of professionals, and media portrayal of such problems, and the voluntary sector plays a key role in this area and will continue to play a crucial role in raising awareness of this issue. Excessive alcohol consumption is an international issue and individual countries will need to make their own responses. There is also a need for good quality research in this area across a number of clinical settings with all interested parties needing to be involved.

There is a particularly obvious need for better detection tools for specific use in older adults to identify both early and late onset drinkers and identify harmful drinking in addition to alcohol dependence. No one screening tool is adequate on its own, nor is it an adequate substitute for taking good history. Health and social care professionals need to be aware that alcohol use disorders in older adults may present in different settings. There is a need for vigilance in considering the possibility of alcohol use disorders in older adults that they are in contact with. If older adults with alcohol use disorders are identified more frequently, there will be a need for better available treatments and services.

### Next steps and future research

Notwithstanding assumptions of poor outcome in this population, in fact, research evidence suggests that appropriate treatment can be highly beneficial. Existing instruments for screening and diagnosis specifically for older adults are available but have their limitations and are not widely used. We advocate a more active approach to case finding and more realistic approaches to treatment based upon good research. In order to improve this situation, we suggest that there needs to be a change in societal attitudes, leading to reduced stigma around drinking in late life: a public health response, age-appropriate models of treatment, and higher priority for research in this age group. Alcohol abuse is an international problem affecting many countries, so there is potential for collaboration in finding effective approaches and interventions.

In summary, there is a need for coherent and targeted public health campaigns, on-going efforts to overcome stigma, better research, better tools for detection of the problem, and better available treatments and services.

**Conflict of interest**

None

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