This paper provides an overview of current research into alcohol and other drug (AOD) misuse in older people. The discussion draws together some professional opinion and advice on how to identify and manage late onset AOD misuse in people aged over 60.

**Introduction**

There have been a range of health promotion and disease prevention strategies targeted specifically at older people, including public campaigns addressing stroke and heart disease risk, and localised screening and interventions targeting diabetes, heart disease, dementia, falls, depression and many other conditions. However, prevention strategies aimed at increasing the awareness of older people and health care providers of the risks associated with AOD use, including the risks associated with mixing medications with other medications and/or alcohol, are sorely lacking.

In addition, research into populations engaging in risky or problematic AOD use has largely neglected those aged over 60. This heterogeneous grouping of older people has been explored intermittently over the last 30 years. However, there remains a lack of awareness among primary health care, AOD, aged care and general practitioners about the extent and impacts of AOD use and misuse in people aged over 60.

**Drugs of concern**

From the literature, and from speaking with AOD practitioners, alcohol is the most commonly consumed (and misused) drug among people aged over 60 years. Prescription drugs,
including benzodiazepines, are the next most common (although at very low levels). A recent study identified that, in 2007, 15 per cent of people aged over 65 in Australia consumed alcohol daily and 5 per cent were at risk of short-term alcohol-related harm. A reported 3 per cent of older people use pain killers or non-opioid analgesics for non-medical purposes, and 8 per cent consumed tobacco daily. Although the proportion at risk of short-term harm is substantially lower in the older population than in younger groups, the proportion of older people drinking daily is much higher.

These population prevalence data provide only a partial picture of the impact of AOD on older people, however there is a lot we do not know about the patterns of AOD among older people. Through examining ambulance and hospital admissions data we can begin to understand more about the sorts of drugs or alcohol consumption that may be causing the greatest levels of harm among older people. Recent analysis of Victorian hospital admissions and ambulance attendance data has identified an increase in the rate of older people experiencing significant harms associated with alcohol use. Ambulance attendances for alcohol intoxication (for people aged over 65) increased “from a rate of 3.3 persons per 10 000 persons in 2004 to 8.2 persons per 10 000 persons in 2008,” while hospital admissions increased from “4189 in 2004 to 5193 in 2008; from a rate of 64.5 persons per 10 000 persons in 2004 to 73.9 persons per 10 000 persons in 2008.”

Although older people are not as visible in their consumption of alcohol, Australian data indicates that they are more likely to consume alcohol daily than younger people, and are more likely to be consuming multiple prescription medications. Current data suggests that older people are not consuming substantial amounts of other drugs, however there is significant speculation that this may change over coming years as the “baby boomers” age (bringing with them the range of drugs they experimented with in their youth). Some research has suggested that older people will cease their use of illicit substances due to a “maturing/burning out of their addictions or dying early”, however further research has suggested that older people who use drugs adapt to enable continued use. Other research has indicated that “baby boomers” may be more likely to consume illicit substances into their 60s and 70s, than older generations before them. However, the research did note that older women are less likely to abuse illicit drugs, and are more likely to engage in problematic use of alcohol or prescription drugs.

A recent review of archived United States (US) data capturing the uses of alcohol, tobacco, illicit drug use and prescription drug use, identified that although the proportion of older people who used alcohol had remained stable, the proportion reporting use of illicit substances increased (from 1985 to 2006). Further investigation of the Treatment Episode Data Set (1998–2006) of people aged 55 and over has indicated a slow shift from alcohol as the sole primary drug of concern to recently include “illicit” substances. While there is no research in Australia regarding this anticipated trend, authors have speculated that these changes may eventuate here.

Current data suggests that older people are more likely to consume alcohol daily than other age groups.

What are the issues?

Older people are more likely to consume alcohol daily than other age groups.

There is a growing awareness of potential pharmaceutical drug misuse among older people.

There is concern that higher levels of illicit drug use will be seen among older people as the “baby boomers” enter their 60s, 70s and 80s.

Categorisation of misuse

Practitioners, and the literature, describe two categories of AOD misuse described in older people: those who have had problems with AOD for many years (early onset); and those who have recently developed problems with AOD (late onset). The categorisation is important in assisting health practitioners to identify problematic use and to determine the most appropriate treatment strategies.

People with early onset alcohol-related disorders are likely to experience a range of health impacts associated with heavy long-term use (five or more standard drinks a day) including acquired brain injury, liver failure, pancreatitis, gastrointestinal complaints, risk of functional impairment, osteoporosis, and an increased likelihood of psychiatric and medical co-morbidity in old age. Cumulative AOD-related harm is more evident in this group.

In contrast, late onset harm disorders are thought to be influenced largely by a recent positive or negative lifestyle change, such as retirement from full-time work, the loss of a spouse or close friends, loss of health, increase in free time, reduction of responsibilities, and changing peer group. Further to this, inappropriate prescribing practices can result in adverse drug reactions, or unintentional misuse of pharmaceutical drugs.
What are the issues?

- “Early onset” alcohol and drug misuse describes problems that have been in existence for many years.
- “Late onset” alcohol and drug misuse describes problems that have developed later in life.

Factors influencing consumption

There are no studies in Australia at present that map changing patterns of AOD use in older people. In the US, however, preliminary analysis of data (National Survey of Drug Use and Health, 2007; National Health Interview Surveys, 2001–04) has identified that more older people are consuming alcohol and more are consuming higher amounts of alcohol. Longitudinal research, also from the US, investigated change in level of alcohol consumption by older people, as they age (from 55 to 75 years of age). Findings suggested that those who consume at a higher level (more than the recommended intake for adults of 2+ drinks per day) in their late-middle years are more likely to reduce their level of alcohol consumption than those drinking at a lower level (at or below recommended guidelines). They also identified that those who drank to reduce pain were more likely to drink alcohol more frequently and in larger amounts than their peers.

A recent analysis of longitudinal data indicated that factors influencing high-risk consumption of alcohol in older adults included the attitudes of their social group, the level of financial resources and their life history of alcohol consumption. Specifically, a social group that is more supportive of heavy drinking increases the likelihood of risky alcohol consumption (more than three drinks per day or 14 drinks per week), as does access to more financial resources, and a history of high-risk alcohol consumption. Further to this, those who use alcohol as a tension or stress reduction strategy are more likely to engage in high-risk drinking. If there is no change in one or more of these factors, there is little likelihood of change in drinking behaviours.

Data from the US suggests that where those consuming higher amounts were, at baseline, smokers, had alcohol problems, used substances as a coping mechanism, used avoidance as a coping mechanism or had peers who approved of heavy drinking, a more rapid decline in alcohol consumption was noted, over the 10-year period. Data indicates alcohol consumption may decrease as people age, with researchers speculating that this is connected with a decline in health. Recent research indicated that only those consuming alcohol at high levels are likely to reduce consumption as they age, with Moos et al identifying in their small-scale longitudinal study that there is no significant connection between drinking three or more standard drinks per day (or more than 14 per week) and health problems. Further research is required to explore the connection between deteriorating health and changes in alcohol and drug consumption.

Lifestyle changes, such as retirement and bereavement have an impact on the way people view themselves and their place in the world, potentially resulting in depression and/or anxiety. These factors may also influence the way people choose to consume alcohol or other drugs.

Culture of alcohol and other drug use in specific groups

Despite the abundance of research and literature exploring the cultural meanings and uses of AOD among young people, there is a clear absence of this kind of exploration relating to older people. This is an area that requires further investigation, as the influence of culture, social norms and peer influences are as relevant for older people as young people.

There is limited literature about AOD use within culturally and linguistically diverse (CLD) communities and virtually none about older people from CLD communities. There is some suggestion that people with an Eastern European or Mediterranean background are likely to engage in heavier alcohol consumption than the broader population, as a result of cultural practices and norms.

Alcohol and other drug practitioners have suggested that alcohol consumption may have greater cultural significance within these groups, which becomes problematic when the ageing body becomes less able to process alcohol. They have also suggested that people within these cultures may not recognise their drinking behaviour as alcohol consumption, let alone problematic alcohol consumption. These issues present challenges for practitioners in identifying problematic use, and in developing an effective treatment plan, as they must not only address possible shame and stigma, but also challenge cultural norms.

What are the issues?

- There is limited information on the factors that influence alcohol or other drug consumption in older people.
- Researchers speculate that factors that may influence use (and misuse) include the attitudes of their social group, their level of financial resources, their life history of alcohol consumption, their health, and their use of alcohol as a coping strategy.
- More research is needed to better understand the motivations for use and misuse of alcohol and other drugs by older people.
Health impacts of alcohol and other drug use

Research is unable to clearly identify safe consumption guidelines for people aged over 60. However, a number of authors have identified the range of health impacts associated with risky or high risk alcohol consumption in older people, including alcoholic liver cirrhosis, haemorrhagic stroke, falls, supraventricular cardiac arrhythmias, alcohol dependence and alcoholic liver cirrhosis. practitioners have identified a slightly higher proportion of older women seeking assistance for AOD problems, perhaps as a result of a range of changing life circumstances, including loss and grief.

There is some evidence to suggest that moderate levels of alcohol consumption (including red wine) may have benefits related to heart health,37,38,44 dementia45 and overall health status,46 however further research is required in this area before conclusive statements can be made.

Specifically, researchers have identified that high levels of alcohol consumption have negative impacts on heart health, stroke risk, hip fracture (particularly in women) and cognitive performance.47–49 Evidence suggests that moderate levels of drinking may also increase the risk of stroke.38

Alcohol consumption guidelines

The current National Health and Medical Research Council (NHMRC) Australian guidelines “to reduce health risks from drinking alcohol” (2009) do not provide a recommended daily or weekly intake for older people, rather noting that, given the possible harms associated with alcohol consumption in older people, and the impact of alcohol consumption on certain health conditions or medications, older adults should consult their health practitioner to discuss the most appropriate level of alcohol consumption for them.

Some research also suggests that alcohol has a greater impact on the female body than on the male body. Although there is limited evidence, research suggests that the female metabolism and lower body-water content impairs the body’s ability to metabolise and process alcohol (and other drugs).12,35,40–43 Practitioners have identified a slightly higher proportion of older women seeking assistance for AOD problems, perhaps as a result of a range of changing life circumstances, including loss and grief.

What are the issues?

- **Health consequences associated with alcohol consumption include alcoholic liver cirrhosis, haemorrhagic stroke, falls, supraventricular cardiac arrhythmias, alcohol dependence and alcoholic liver cirrhosis.**
- **There is limited evidence supporting health benefits associated with moderate alcohol consumption.**
- **The use of alcohol in combination with prescription medication can result in adverse health impacts for older people.**

Prescription guidelines

Prescribing guidelines, such as the eMIMS drug alert interactions notifications, Stockley’s drug interactions1 or the older age-specific Beers criteria (USA),2 provide guidance on the types of drug interactions and potential adverse reactions that prescribers should be aware of. However, research and anecdotal evidence suggests that this is not consistently applied or well managed for many older people.4,6

Ageing bodies gradually lose their ability to metabolise AOD, are more likely to be experiencing a range of co-occurring health conditions, and are more likely to have multiple drugs prescribed to manage these conditions.5,13 As a result of this, the level of consumption of AOD that may cause harm is lower for older people than for younger people, the impacts (both physical and mental) may not be identified as easily and strategies to manage AOD use may be different.47,48 Research has indicated that many older people continue to consume alcohol when prescribed medications, irrespective or in ignorance of the potential impact of the combination of alcohol and these medications.49

Specifically, alcohol consumption in conjunction with some medications can result in adverse drug reactions,50 including falls, delirium and sedation.51,16

In addition to the conditions that are caused by AOD misuse, there are a number of health conditions commonly observed in older people that can be significantly and negatively impacted by AOD misuse, including mental health and wellbeing and suicide risk.41,51–59

There is a lack of literature examining the social and economic impacts of AOD misuse by older people. This is perhaps due in part to the assumption that older people are no longer in the workforce, and hence have a lesser impact on the economy. Similar assumptions may be made about their broader social influence. However, it is important to recognise that older people are still functional in society, and that AOD problems can have massive impacts on families, social networks, and that economic impact could be measured in terms of health dollars spent caring for increasing complexities as those with AOD use problems age through the health system.
Treatnent seeking

There are fewer older people within the specialist AOD treatment system (less than 5 per cent, but increasing very slightly from 2006/07 to 2008/09)60, and few specialists able to speak with authority on this issue. This may be a result of this being a hidden issue that is not identified through either a lack of awareness of the issue, a reluctance to discuss the issue, or a sense of shame associated with admitting a problem.

In the US, the number of older people requiring treatment for a substance use disorder has been estimated to increase in coming years.61,62 This is considered to be due partly to the size of the “baby-boom” cohort (born between 1946 and 1964) and the higher rate of substance use among this group.61, 62 and also the greater observed inclination of “baby boomers” to discuss personal and mental health concerns.

Unfortunately, there is a frequently reported reluctance to ask older people about their AOD consumption17,63,64 which means that much problematic substance use is going unidentified. Further compounding this, research suggests that practitioners may mistake symptoms of alcohol-related harm for other health problems common in old age; for example, falling, infections, digestive problems,49 depression, anxiety or other psychiatric problems.63

Effective responses

Ashley and Rankin65 discussed a range of prevention activities that may be effective with the older population. Included in these were health promotion activities, such as public education, appropriate warning labels and population-specific education activities; and preventive health services, including early identification and early and effective interventions. Currently in Victoria, Australia, there is little activity in any of these areas, with the exception of a pilot program developed by Peninsular Health, the Older Wiser Lifestyles (OWL) program (see case example 1 on the next page).

Early identification

One of the most consistent themes arising from the literature is that of early identification of late onset AOD problems. It is recommended that this occur in primary health care settings as older people are more likely to be in contact with a local general practitioner, community health centre or other primary health care professional. 2,5,27,49,50,66-70

Identifying alcohol misuse

Clinicians suggest that the best way to identify alcohol misuse in older people is to ask a few very simple questions about amount and frequency of consumption and to blend these questions with other questions about their health and wellbeing. However,

Practical tip 1: Screening for alcohol or other drug misuse

What to ask

Audit C, ASSIST or even a simple question about alcohol and drug use.

When to ask

When doing any assessment, but particularly when someone comes in after a fall, gastric condition for example.

How to ask

As part of assessment, without special emphasis, “nonchalantly”.  

Note: Assessment MUST include a good medication assessment with the understanding that the risk of adverse drug interactions is extremely high when more than four medications are being taken at one time.

What are the issues?

There are very few older people currently within the specialist alcohol and other drug treatment system however this may be the result of a lack of identification of problematic use.

Health care practitioners must be aware that the indicators of alcohol-related harm may be different for older people, as discussed earlier, and that practitioners need to be cognisant of possible drug interactions or compounding co-morbidities.

Simple screening tools such as the AUDIT or AUDIT-C will provide an indication of alcohol consumption, as defined by the standard drinks identified as safe for the average adult. However, they do not provide an indication of these complicating factors, and have a low sensitivity with older adults.21 Fink et al (2002) developed the Alcohol Related Problems Survey (ARPS) to provide health practitioners with a tool that accounts for the impact of a range of health conditions and medications common in older people on alcohol consumption. The OWL team at Peninsula Health are currently adapting this tool for Australian contexts and trialling it in Peninsula Health primary health care settings. Although it takes approximately 20 minutes to complete, one of the benefits of the ARPS tool is that it is available in an online format; with the computer completing the complicated calculations that generate the level of risk. Alemago, Niles and Treiber22 have investigated the applicability of computer-based screening and self-assessment for older people, and have identified that, when older people are provided with a simple program and guidance, this can be an effective approach.
In the US there are a number of programs running (particularly in Florida where there are a high proportion of people aged over 60) which aim to identify AOD misuse in older people at an early stage, and which offer brief interventions at the time of identification.

Examples of treatment and/or screening programs

Case example 1: The OWL Program
The Older Wiser Lifestyles (OWL) program, developed by Peninsula Health, provides specialist AOD treatment to older adults on the Mornington Peninsula. The program has two arms:
- Screening and brief intervention
- Treatment

Key features of the program include:
- Screening older people presenting to a range of services within Peninsula Health’s catchment area
- Educating health practitioners in asking about AOD
- Providing health practitioners with the questions to ask

The service was established as primarily an outreach-based service, recognising that many older adults struggle to attend office-based appointments. The service intended to focus on creating partnerships with service providers already engaged with this population. Since its establishment OWL has developed strong relationships with local cognitive, dementia and memory services, aged mental health, Home and Community Care (HACC) programs, falls services, hostels, villages and nursing homes.

Approximately 90 per cent of referrals to the OWL program are self-referrals, with people learning about the program through associated services or advertising conducted through the local media. Approximately 150 people accessed the OWL program in 2010–11. An evaluation of the effectiveness of the OWL program is currently underway.

For further information about the OWL program call 03 9784 8100.

Case example 2: Florida BRITE
In Florida, US, the Brief Intervention and Treatment for Elders (BRITE) program was developed to identify problematic substance use, and offer effective brief interventions for older people. The BRITE program operates in emergency and primary health care settings for people aged 55 years and older and aims to identify non-dependent but risky substance use. Key features of the program include:
- Use of the ASSIST screening tool
- Inclusion of questions and considerations of medicine interactions, medication compliance, physiological changes and social isolation
- A “healthcare educator” conducts screening where possible
- Healthcare educators train other primary care personnel to conduct screenings

Evaluations of the BRITE program have found that the program may be effective in identifying problematic AOD use and providing brief interventions for older people. In addition, prescription medication misuse was most prevalent among people screened through the program, followed closely by alcohol misuse. Further information about the BRITE program can be found at www.brite.fmhi.usf.edu

Case example 3: Reconnexion
Reconnexion is a service that provides a range of services for people experiencing problems with their benzodiazepine use. Although these programs are not specifically designed for older people, their “go slow” approach is adaptable to the treatment needs of older people.

Key features of the programs offered by Reconnexion include:
- Withdrawal support, including counselling
- Strong links and combined case management with prescribing GPs
- Providing education and training for AOD workers in how to manage benzodiazepine withdrawal
- Referral to other AOD services
- Secondary consultation

Reconnexion has some resources that could be useful for practitioners, including:
- Training in insomnia management and relaxation
- The Better Sleep Booklet (for practitioners and clients)
- A relaxation CD

As the service is not targeted at older people, there is no publicly available data identifying the efficacy of this treatment program for older people.

For further information see www.reconnexion.org.au

Identifying other drug misuse
Although current data suggests that older people are less likely than younger people to be consuming drugs other than alcohol, researchers expect this to change over the coming years as the “baby boomers” age. It is also likely that current use/misuse of prescription medications is under-reported and unidentified. Practitioners have identified that they are seeing problems with benzodiazepine use by older people, either through long-term use and changing physiology that cannot metabolise the drugs as effectively, or because older people are prescribed benzodiazepines for insomnia, without other alternate strategies being attempted and when there may be other issues that require attention. There is limited literature available on this issue, and no specific tools have been developed to provide health care practitioners with assistance in identifying misuse.
Treatment approaches

There is very little empirical evidence on the most appropriate treatment approaches for older people. The few studies available indicate that age appropriate treatment components, age-specific programs, supportive and non-confrontational approaches, individualised techniques and the use of group therapies and self-help groups that emphasise social support\textsuperscript{13,24,73,74} are all effective and important in treatment programs for older people. In support of this, practitioners have provided anecdotal evidence of those elements that they believe are most effective in facilitating AOD treatment for older people. Practitioners note that treatment approaches must consider the reduced mobility of older people, and identify a range of strategies to ensure this does not impact the accessibility of treatment services to older people. Strategies that can be considered include disabled access at treatment services, outreach services that visit the older person in their home, or transport to and from treatment services. Even the smaller physical details should be considered carefully, for example, are the chairs a reasonable height to allow an older person to easily stand up? It is also important to ensure that there are ramps and lifts rather than stairs; hand rails and other appropriate supports are provided; appropriate print sizes are used on posters, pamphlets and other materials designed for older people; treatment or group rooms are close to the entry/exit point to minimise the amount of walking required; appropriate toilet facilities are provided; transport to and from the service is provided.

Older people may require longer in treatment than younger people.\textsuperscript{75} Practitioners report that it is important not to hurry them through assessment and treatment phases, as to get older people to engage you need to listen to their whole story, and consider the impact that alcohol or other drugs may have had on their memory, comprehension and ability to communicate.

Practical tip 2

Services can improve their accessibility to older people by:

- Install ramps and hand rails
- Use appropriately-sized text
- Provide appropriate seating
- Minimise distance to be travelled within the service
- Provide transport to and from the service

It is also worth considering having AOD workers working closely with other primary health care practitioners that older people may routinely encounter (e.g. GPs) as practitioners report that older people may be more inclined to access a “medical” facility or service than a counselling or AOD service. Practitioners also strongly emphasised the importance of engaging with a range of different aspects when providing treatment, including biological, mental health, social, physical (including housing) and spiritual elements. When discussing “the spiritual”, it is important not to focus on religion, but on how an individual may see themselves (who they are now, rather than who they have been). Conversations can focus on embracing this stage of life, rather than fighting, dreading or lamenting it, and ways to enhance quality of life (such as strengthening their ability to live independently for longer). Practitioners also report that focusing on “health” can become a motivating factor influencing older people to change their consumption habits, but that this is important in combination with a focus on social, familial and spiritual issues. However, it is important to note research has indicated that a focus on health alone may not be sufficient to change drinking behaviours.\textsuperscript{20}

Health promotion activities

There are few health promotion activities aimed at reducing risky drinking in older people, or educating older people, and the community, about the harms associated with the combination of medications and alcohol. The Australian Government has released a small number of information brochures drawn from the 2001 NHMRC Alcohol Guidelines (not the most recent guidelines), including a summary information sheet from www.therightmix.gov.au (2009), and www.alcoholguidelines.gov.au (2003). However, much of the information provided in these documents is based on standard consumption recommendations for average adults, with cautions around possible impacts on the ageing body. Further, all fact sheets sourced identify “some health benefits” associated with low to moderate levels of consumption.

Practical tip 3

Factors that facilitate treatment delivery to older people

- Gain skills in alternate strategies to manage insomnia and stress, e.g. insomnia management and basic relaxation
- Provide outreach services, including home visits and transport to/from treatment services
- Have flexible length of treatment available
- Consider age-specific group sessions, or embedding a social component into the treatment program
- Consider co-location of services or strong co-ordination of care providers, including primary health care and alcohol and drug support
- Ensure treatment incorporates the biological, mental health, social, physical (including housing) and spiritual needs of the client
If older people have confidence and capability to use computers and the Internet, and are looking for further information on the possible interactions between medications and other drugs, including medications, they may be able to source good reference material. The National Prescribing Service (NPS) (www.nps.org.au) provide information on how to read and understand common instructions associated with taking specific medicines, and on the potential impacts of mixing alcohol with prescription drugs.

The Substance Abuse and Mental Health Services Administration’s Older Americans Substance Abuse and Mental Health Technical Assistance Centre undertook a review of prevention and early-intervention programs operating in the US. They found few health promotion/universal prevention activities targeting older people with possible AOD problems, and very few of these had been evaluated. The bulk of activity associated with older people and AOD prevention tends to focus on screening and brief intervention. Practitioners recommend that further health promotion activities be undertaken, and focus on:

- Public education including clear messages about the risks associated with drinking
- Appropriate warning labels, especially for pharmaceutical drugs
- Population-specific education targeting high risk groups, or groups at high risk times and encompassing factors such as preretirement planning.

Conclusion

There is limited research and published evidence providing details about older people and AOD. The available evidence suggests that the ageing body responds differently to AOD, and that these changes are further compounded by changes in health and use of prescription and over-the-counter medications. However, there is substantial work required to identify the factors that motivate use and changes in use of AOD as people age, specific cultural differences, and the social, economic, physical and mental health harms associated with AOD use by older people. There is also further work required to identify the level of AOD consumption that is ‘safe’ or low risk for older people. Better understanding of these factors would facilitate the development of age-specific treatment programs and effective health promotion activities for older people.

There are few programs or services that are specifically designed to respond to the AOD treatment and support needs of older people, and fewer still that have been evaluated. There are also few practitioners who feel able to speak with authority on this issue. This paper has endeavoured to draw together the limited information on the issue and provide some tips on how practitioners can better tailor their service delivery to older people with problematic AOD use. It would be beneficial to undertake further research in this area to ascertain the most appropriate and effective treatment models for older people.

Finally, further research is required into the prevalence of AOD consumption among older people. We need a better picture of the level of problematic use, the nature of the drugs or alcohol and their associated harms to determine the degree and impact of problematic AOD use among older people on the health system.

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