

A Literature Review of Screening & Brief Intervention in Older Adult Populations

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SUMMARY OF KEY FINDINGS

- The number of older adults in the United States is projected to almost double from 2012 to 2050.
- Rates of alcohol, marijuana, and prescription drug use and misuse are increasing in older adult populations.
- Older adults are particularly susceptible to the potential harms of substance use because of physiological changes in how the body processes alcohol and other substances as it ages. As such, drinking guidelines are lower for adults over the age of 60.
- Risk factors for older adult misuse of substances include depression, a history of substance use, social isolation, and chronic illnesses, among others.
- Misconceptions of substance use in older adult populations can hinder proper identification. Also, symptoms of a disorder may be overlooked and attributed to the normal aging process, leading to under diagnosis.
- There are screening tools available to detect substance use in older adults, including the MAST-G and the CARET.
- Brief interventions have been shown to be effective in reducing alcohol consumption in older adults, but more research is needed on the role of motivational interviewing with older adult populations.
- Compared to younger adults, older adults respond as well, or better, to treatment.

OVERVIEW

According to the US Census Bureau, the population of adults aged 65 and older is expected to almost double from an estimated 43.1 million individuals in 2012 to a projected 83.7 million in 2050 (Ortman et al., 2014). Despite this projected growth, substance use in older adult populations is an understudied area of research. A review of the most highly rated peer-reviewed journals in the substance abuse and gerontology fields found that articles focusing on substances in older adulthood comprised only 1% of all published articles from 2000 through 2010 (Rosen et al., 2013).

In the literature, different definitions of ‘older adults’ are used. Many researchers focus on the ‘Baby Boomer’ generation (those born between 1946-1964, who will be roughly 53 to 71 years old in 2017), while others examine individuals who are over a specific age. Most commonly, researchers study persons aged 65 or older because that represents the age when many individuals are retired, and social or living arrangements are unique (Gordon et al., 2003). In this review, to be comprehensive and to examine individuals who are transitioning to older adulthood, research on adults aged 50 and older is included.

ALCOHOL USE

Over the past 30 years, estimates of at-risk and problem drinking in older adult populations have ranged from 1% - 16%, depending on the criteria for problem drinking, how older adults were defined, and the methods used (Barry & Blow, 2016). According to the 2015 National Survey on Drug Use and Health (NSDUH), from 43

to 60% of older adults used alcohol, 10 to 28% binge drank at least once in the past 30 days, and from 3 to 7% binge drank at least five or more days in the past 30 (SAMHSA, 2016). Within these ranges, rates were lower for individuals 65 and older than for individuals between 50 and 64.

Of particular concern, rates of alcohol misuse are increasing in older adult populations. An analysis of NSDUH data gathered from 2005 to 2014 showed significant increases over time in the prevalence of alcohol use, past-month binge drinking, and past-year alcohol use disorders among older adults, with binge drinking increasing for individuals aged 50 to 64 and alcohol use disorders increasing for those aged 65 and older (Han et al., 2017).

MARIJUANA USE

In 2015, from 1.4 to 6.8% of adults aged 50 and older used marijuana in the past month – with rates lowest in the 65-and-older group (SAMHSA, 2016). Marijuana use rates in older adult populations have increased substantially – in 2011, about half of older adults aged 50 to 64 reported marijuana use at least once in their lifetime, which is a dramatic increase from the 23.5% rate reported in 2000 for this age range (Black & Joseph, 2014). There are several reasons why marijuana use may be increasing in older adult populations, including: 1) permissive cultural norms around drug use for the baby boomer generation who grew up during the 1960s and 1970s; 2) less concern about potential negative impacts of marijuana later in life because older adults are typically no longer establishing themselves in the workforce and raising children; 3) increased use of marijuana to treat and cope with physical and mental health concerns; 4) increased acceptance of marijuana; and 5) increased availability and access to marijuana stemming from decriminalization and in states that have legalized medical or recreational use (Black & Joseph, 2014; Choi et al., 2016; Kuerbis et al., 2014).

Increased use of marijuana in older adults is concerning – it may mask underlying social problems (Black & Joseph, 2014); result in increased risk for cardiovascular complications (Aryana & Williams, 2007; Hall, 2014); result in panic or anxiety attacks (Williamson & Evans, 2000); be coupled with alcohol, tobacco and other drug use (DiNitto & Choi, 2011); and pose serious risks for driving when under the influence, especially when consumed with alcohol (Hall, 2014; Williamson & Evans, 2000). Its use is related to increased life stressors and low perceived social support (Choi et al., 2016). Furthermore, individuals who initiated early and used regularly throughout their adult lives may experience cognitive declines, a cannabis dependence syndrome (about 1 in 10 chronic users), and other negative outcomes that stem from long-term, chronic use (Hall & Degenhardt, 2014; Solowij et al., 2002).

PRESCRIPTION DRUG USE

According to the 2015 NSDUH, from 48 to 49% of older adults used prescription psychotherapeutics¹ in the past year, and 2 to 5% misused them in the past year (SAMHSA, 2016). Older adults use more prescription medications, and for longer periods, than other age groups (SAMHSA 2012, Brief #5). Older adults may misuse prescription medications for different reasons than younger populations. Specifically, older adults may be more likely than other age groups use others' prescriptions, stockpile medications, access multiple physicians for prescriptions and take multiple medications or in different dosages than prescribed (Culberson & Ziska, 2008). Unintentional misuse can have serious consequences and can lead to physical dependence (SAMHSA, 2012, Brief #5). Social isolation, depression and history of substance abuse are all risk factors for older adult

¹Includes pain relievers, tranquilizers, stimulates, or sedatives.

abuse of prescription medications (Culberson & Ziska, 2008). Also, the concern for alcohol and medication interactions is significant in this population (Culberson & Ziska, 2008).

SUBSTANCE USE DISORDERS

Overall, substance use disorder (SUD) diagnoses for adults 50 or older is expected to be 4.9% by the year 2020, which represents a 44% increase from 2002-2006 (Han et al., 2009). However, many believe alcohol and substance misuse and abuse rates are underreported and that SUDs in older adult populations are underdiagnosed (Gunter & Arndt, 2009; Han et al., 2009). Actual rates of substance misuse and SUDs are likely to be higher than what is estimated in existing research due to difficulties with diagnosis in this population (see below).

MISCONCEPTIONS OF SUBSTANCE ABUSE IN OLDER ADULTS

Many preconceived notions regarding substance use in older adult populations are held by those in the medical field, by older adults themselves, and by family members. Some health professionals may hold biases or ageist stereotypes (such as the belief that older adults do not use illicit drugs) that may impact their ability to correctly identify when substance misuse is occurring (Lay et al., 2008; Sorocco & Ferrell, 2006). Some believe that older adults will not respond well to treatment options, despite evidence that older adults respond just as well, or better, to treatment than younger age cohorts (Bommersbach et al., 2015; SAMHSA, 2012; Satre et al., 2004). There also may exist a stigma and uncomfortableness associated with physicians asking an older adult about alcohol or drug use, or family members feeling ashamed of the issue (Kuerbis et al., 2014; Sorocco & Ferrell, 2006). The idea that confronting substance use, especially alcohol use, in older adults will diminish elderly individuals' joy and pleasure in their lives, thus decreasing their quality of life, is also discussed as a misconception that impacts identification and treatment (Sorocco & Ferrell, 2006).

SPECIAL CONSIDERATIONS FOR OLDER ADULT POPULATION

PHYSIOLOGICAL DIFFERENCES

Older adults process substances, especially alcohol, differently than younger and middle-aged adults. As the body ages, physiological changes alter the way we process alcohol. With many older adults also facing additional physical and mental health issues, the rates of comorbidity and the chances for substances to interact negatively with prescribed medications and exacerbate conditions are notable (Kuerbis et al., 2014).

As summarized by Kuerbis and colleagues (2014), several physiological changes occur in older adults that affect their ability to process alcohol and other substances so that similar amounts consumed in younger years may have more negative physiological impacts when consumed in later years. For example, reductions in the amount of body water in older adults can lead to increased sensitivity to alcohol, quicker intoxication, and less tolerance. Furthermore, older adults process opiates and benzodiazepines differently than younger adults. For example, decreases in lean body mass coupled with increases in body fat can lead to longer periods of drug effect. How older adults process substances and specific concerns in older adult populations (e.g., increased risk of falls and fractures, and interactions with other medications) should be taken into consideration when prescribing (Llorente et al., 2000; Malec & Shega, 2015). When prescribing opioids, initial dosages should be lower than what is recommended for younger and middle-aged adults, and a "start low and go slow" approach is advised (Malec & Shega, 2015).

RECOGNITION AND DIAGNOSIS

In older adult populations, alcohol and substance use is often overlooked and symptoms may be misdiagnosed as normal physical processes associated with aging, such as memory loss, dementia or depression (Satre, 2015). It can also be difficult to diagnose older adults using the standard DSM-5 criteria for a Substance Use Disorder, or Alcohol Use Disorder, as it includes potential issues that may be less relevant for some older adults, such as substances interfering in work or family commitments, or the dropping of important activities (Bommersbach et al., 2015). Limited time during visits with physicians, and potential feelings of uncomfortableness or awkwardness on the part of medical staff may also add to the difficulties in diagnosing substance use disorders in older adults (Bommersbach et al., 2015; Kuerbis, et al., 2014).

BABY BOOMER CONSIDERATIONS

The current cohort of older adults, especially the Baby Boomer generation, are demonstrating higher levels of alcohol and substance use than earlier generations of older adults (Blow & Barry, 2014). Researchers have discussed the potential impact of the Baby Boomer culture, including their values of acceptance and higher tolerance of alcohol and substance use that will be reflected in substance use rates as the generation ages (Black & Joseph, 2014; Blow & Barry, 2014).

RISK FACTORS FOR SUBSTANCE USE PROBLEMS IN OLDER ADULTS

Kuerbis et al. (2014) summarize research on risk factors for older adults using substances. These include physical risk factors such as biological sex (males are more susceptible to alcohol problems and females to prescription drug problems), chronic pain and illnesses, and taking a high volume of medications; psychiatric risk factors such as avoidant coping strategies, a history of alcohol problems, and a concurrent or past substance use disorder or psychiatric illness; and social risk factors such as experiencing the loss of a significant other, social isolation, and forced or unplanned retirement from the workforce.

SBIRT IN OLDER ADULTS

SCREENING

Health care providers are in a key position to help identify substance use issues because older adults more frequently seek primary and specialty care than younger populations (Blow & Barry, 2014).

Drinking guidelines have been developed for older adult populations. In 2012, SAMHSA issued a brief that provided the following guidelines for adults aged 60 and older:

- Men aged 60 or older should have no more than 7 drinks each week, or 3 drinks on a single occasion.
- Women aged 60 or older should have no more than 7 drinks each week, or 2 drinks on a single occasion.

The NIAAA website provides the following guidelines for adults aged 65 and older:

- Women and men age 65 or older should have no more than 7 drinks each week, or three drinks on a single occasion.

Lower thresholds or abstinence are recommended for certain older adults, including those with medication or physical conditions that are known to interact with alcohol, such as diabetes or heart disease (SAMHSA, 2012, Brief #2).

Screening tools have been developed specifically for older adult populations, and other more broadly used tools have been studied to confirm their effectiveness in identifying at-risk patterns of use in older adult populations. The Michigan Alcohol Screening Test – Geriatric version (MAST-G) was designed specifically for use with older adults, and the Comorbidity-Alcohol Risk Evaluation Tool (CARET) is especially adept at capturing risks associated with comorbid illnesses and medication interactions with substances that are commonly found in older adult populations (Kuerbis et al., 2014; Satre, 2015). The Alcohol Use Disorder Identification Test (AUDIT) and the CAGE-Adapted to Include Drugs (CAGE-AID) have also been shown to be accurate in detecting substance use concerns in older adult individuals, although the CAGE-AID does not distinguish between lifetime and current use (Hinkin et al., 2001; Kuerbis, et al., 2014). The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) has been validated with individuals aged 18 to 45 (Humeniuk, 2006) but has not been tested specifically with older adults (Kuerbis et al., 2014).

BRIEF INTERVENTION

Brief Interventions have been shown to be effective at reducing the amount of alcohol consumption in older adults (Fleming et al., 1999; Sorocco & Ferrell, 2006; Schonfeld et al., 2010; Briggs et al., 2011). Specifically, brief interventions that are driven by the chief concern or complaint of the older adult individual are discussed as one of the strongest approaches to achieve good outcomes (Hanson & Gutheil, 2004). The conversation often will revolve around a physical ailment or symptom, and include brief comments expressing concern (Barry & Blow, 2014; Satre, 2015). For example, if an older adult individual is concerned with repeated falls, the provider should address substance use as it pertains to reducing the risk of falls in a caring and non-confrontational way. Receiving information on how alcohol impacts an older adult individual's health, and recognizing the connection between substance use and health, may be the most important factors in motivating reductions in alcohol use (Borok et al., 2013).

Kuerbis et al. (2015) examined the effectiveness of personalized mailed brief feedback interventions on alcohol use in a small, randomized trial of adults aged 50 and older. After at-risk drinkers were identified, participants were randomly assigned to either one of two conditions: 1) receive individualized feedback regarding their risks associated with alcohol use, educational material on alcohol and aging, and a National Institutes of Health booklet on alcohol and health in the mail or 2) no feedback or materials sent. Results indicated that those who received the mailed feedback and materials were less likely to be classified as at-risk drinkers when re-screened three months later. Another study examined the efficacy of brief physician advice on reducing alcohol use among older adults who were classified as problem drinkers, finding that older adults significantly reduced their alcohol use after receiving brief advice in a primary care setting (Flemming et al., 1999). Moore et al. (2010) also demonstrated that receiving a personalized brief intervention reduced alcohol consumption to a greater degree than receiving educational materials only (although both groups reduced at-risk drinking).

Studies examining brief interventions that incorporate motivational interviewing or motivational counseling have been mixed on their effectiveness to change substance use in older adult populations. Suggestions for practitioners on how to provide effective brief interventions in older adult populations have been offered (Gordon et al., 2003; Hanson & Gutheil, 2004), but more rigorous studies examining the effectiveness of motivational interviewing in this population are needed (Kuerbis et al., 2015).

TREATMENT

Long term treatment outcomes for older adults demonstrate as good, or better, outcomes compared to younger adults (Satre et al., 2012; Bommersbach et al., 2015; Kuerbis, et al., 2015; Sahker et al., 2015). This is attributed to older adults' higher treatment retention rates, and staying in treatment programs longer (Barry & Blow, 2016). Treatment options discussed in the literature included cognitive-behavioral therapy; standard outpatient treatment groups; pharmacological options; and family therapy (Bommersbach et al., 2015; Kuerbis et al., 2015; Satre, 2015).

BARRIERS TO TREATMENT

Some age-specific barriers for successful treatment outcomes for older adults include small or limited social networks to support recovery and healthy changes in lifestyle (Satre et al., 2004); when treatment is not age-appropriate, or age-related adjustments are not made, like speaking slower or louder (Satre, 2015); required driving after dark to attend groups (Sorocco & Ferrell, 2006); and being homebound or having mobility concerns (Sorocco & Ferrell, 2006).

CONCLUSIONS

Substance use in older adult populations is an understudied area that warrants more attention. The number of older adults in the US population is increasing as well as older adult rates of substance misuse and disorders. The older adult population is especially vulnerable to the negative effects of substances considering the physiological changes that occur during this stage of life, and substance misuse is often overlooked in this population. Screening tools are available and brief interventions and treatment can be effective in reducing harmful use of substances, but more studies on effective strategies with older adults are needed.

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