



MASTER'S ADVANCED CURRICULUM (MAC) PROJECT  
SUBSTANCE USE AND OLDER ADULTS RESOURCE REVIEW  
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**CHAPTER 5: TREATMENT AND INTERVENTION**

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**Impact of Demographic Changes on Substance Abuse Treatment Systems**

- ◆ Expected changes in the age structure as well as the substance use patterns of the U.S. population over the next 15 to 20 years will have a dramatic impact on the substance abuse treatment system and the need for trained professionals in both aging and substance use disorders.
- ◆ Social workers and other substance abuse treatment professionals must develop appropriate treatment skills and effective treatment approaches to address older adults who experience substance-related problems.
- ◆ Alcohol, illicit drugs, non-medical use of prescription medications, and over-the-counter medications are both used and misused by older adults.

A number of older adults in need of treatment today are not receiving care because of the failure of professionals to recognize the problem, the reluctance of older individuals and families to access substance abuse treatment, and/or the lack of treatment options. Models developed from the National Household Survey on Drug Use and Health indicate that the number of adults aged 50+ in need of treatment will increase from 1.7 million in 2000-2001 to 4.4 million in 2020 (Gfroerer, Penne, Pemberton, & Folsom, 2003; Office of Applied Studies, 2005). More recent estimates have pushed the estimated number of older adults needing substance abuse treatment to 5.5 million (Han, Gfroerer, Colliver, & Penne, 2009). The cohorts of aging “baby boomers” (those born between 1946 and 1964) who have used and or abused alcohol and other drugs throughout life are expected to create a “demographic tsunami” for substance abuse and mental health treatment systems (Bartels, 2006). The most recent

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substance-specific and age-focused analyses of the National Surveys on Drug Use and Health have added to our understanding of prevalence of use and the impacts of various cohorts in middle-age and later life (Blazer & Wu, 2009a, 2009b, 2009c; Wu & Blazer, 2011). The Institute of Medicine, in their report on substance abuse and mental health treatment workforce needs of the aging population, termed this growth in treatment need as the “silver tsunami” (Institute of Medicine, 2012). It is clear that the substance abuse treatment needs of coming cohorts of older adults in the United States will be different and more extensive than those of the past cohorts (Blazer & Wu, 2009a, 2009b, 2009c; Wu & Blazer, 2011).

### **Substance Abuse Treatment Use among Older Adults**

- ◆ Substance abuse treatment facilities have always provided care to older adults, but, traditionally, the majority of people admitted for treatment have been younger than 50.
- ◆ The reasons for seeking treatment and admissions to treatment among older adults has been shifting.

In 2001, 143,900 persons admitted for treatment were aged 50 and older (8%); by 2005, 184,400 were aged 50 or older and represented 10% of all those admitted (Substance Abuse and Mental Health Services Administration (SAMHSA), 2007).

The Treatment Episode Data Set (TEDS) provides a description of persons older than 50 across the U.S. among three types of service treatment settings. TEDS data can be analyzed by specific age groups: 50 to 54, 55 to 59, 60 to 64, 65 to 69, and 70 and older. Among older adults, those admitted for treatment were more likely to be younger than older: 58% were between 50 and 54, 25% were between 55 and 59, and 17% were aged 60 and older. TEDS data from the early to mid-2000’s revealed the following characteristics of treatment admissions for older adults (SAMHSA, 2007):

- ◆ Alcohol was the most frequently reported drug of choice, and opiates were the second most frequently reported drug of choice among those older than 50. Alcohol remains the most frequently mentioned problem substance among both younger and older first time treatment admissions to substance abuse treatment facilities.
- ◆ Studies of treatment admissions, especially first time treatment admissions, show an increase in the role of cocaine, heroin, and marijuana among those aged 55 and older. Admissions studies are consistent with recent prevalence findings on the changing use patterns for these drugs among middle-aged cohorts.
- ◆ Findings of subthreshold alcohol dependence point to the need to address alcohol problems in groups that have some risk factors, but do not meet diagnostic criteria for substance-related problems.
- ◆ Alcohol was the primary substance for those aged 65 to 69 and 70+.

- ◆ Opiates were most frequently the drug of choice for persons aged 50 to 54 and 55 to 59. These groups also had the highest proportion of admissions for cocaine, marijuana, and stimulants.
- ◆ Admitted younger persons tended to report more extensive histories of substance abuse treatment than older ones did: 15 to 20% of the groups aged 50 to 64 had five or more prior treatments; 9 to 7% of the groups aged 65+ had had five or more prior treatments.
- ◆ Most admitted older persons were treated in ambulatory settings: 55% of the younger groups (aged 50 to 54, 55 to 59, and 60 to 64) were in ambulatory settings, and 61% to 63% of the older groups (aged 65+) were in ambulatory care. Older persons also sought treatment in detoxification and/or rehabilitation settings.
- ◆ Of those admitted for treatment, the oldest group (aged 70+) was more likely than the youngest group (aged 50 to 54) (13%) to include veterans (31%).
- ◆ Satre, Mertens, Areán, and Weisner (2003) reported that the older adults in treatment programs (aged 55+) had higher rates of alcohol dependence, lower rates of drug dependence, and lower psychiatric symptoms compared to the younger adults (40 to 54 and 18 to 39) in treatment. Differences in baseline characteristics may also influence treatment retention and outcomes.
- ◆ In a study of male veterans, the older men had similar alcohol consumption and dependence symptoms, but had fewer alcohol-related problems and fewer symptoms of psychiatric distress compared to younger men (Lemke & Moos, 2003b).

Lofwall, Shuster, and Strain (2008) offered a changing view of older adults entering substance abuse treatment in their analysis of 1992 to 2005 admissions data. These researchers found a consistent role for alcohol as a primary reason for seeking treatment as well as a growing profile for heroin and cocaine abuse in those aged 55 and older.

Following on this work, Arndt, Clayton, and Schultz (2011) examined first time treatment admissions in the 1998-2008 TEDS admissions data and compared two age groups: those 30 to 54 and those 55 and older. Alcohol was mentioned as a problem substance by the majority of both the older and younger groups. However, there was a trend over time for alcohol to decrease at a faster rate for older adults than for younger adults between 1998 and 2008 admissions data. It should be mentioned, however, that approximately 80% of the older group in 2008 and approximately 60% of the younger group mentioned alcohol as a problem substance for admission.

Despite the growth in use of other drugs among older cohorts, alcohol remains the most frequently mentioned drug among both younger and older cohorts seeking treatment for the first time. The Arndt et al. study raises some interesting information about the role of illicit drugs in first-time admissions among those aged 55 and older. Mentions of cocaine and of marijuana as problem substances increased between 1998 and 2008 in the older group. While the older group mentioned these two substances less frequently than the younger group,

there were increases in the older group during the 11 years of data. In the older group, cocaine was the illicit drug most often mentioned, followed by marijuana. The authors speculated, based upon the time between reported age of first use and first treatment admission, that there may be a number of community dwelling older adult cocaine users. Heroin was the third most mentioned drug with proportions of use close to marijuana. The authors conjectured that these older heroin users might be representative of a “successful heroin-dependent subgroup” (p. 709) that lives into later life and will challenge the idea that the number of older heroin users in older cohorts will be limited. This analysis did not find differences between older and younger admissions data for prescription drugs. The authors reason that abuse of prescription drugs may be a greater problem among older adults, but that abuse of these drugs may be addressed in treatment systems other than substance abuse facilities.

In their review of more recent epidemiological findings, Wu and Blazer (2011) reported similar findings: that illicit drug use—alcohol, opioids/heroin, and cocaine—play an increasing role in rates of treatment admissions, especially for those aged 50 to 64. Epidemiologic studies of alcohol use in community populations have provided evidence for the need to address alcohol treatment needs among those middle-aged and older adults who have some risk factors, but do not meet DSM-IV-TR diagnostic criteria.

In their analysis of 2005-2007 National Surveys on Drug Use and Health data, Blazer and Wu (2011) found that among the 50 to 64 age group, 11% had some level of problem with alcohol including dependence (1.9%), abuse (2.3%), and subthreshold use (7.0%). For the over-65 age group, 6.7% reported some level of problem with alcohol including dependence (0.6%), abuse (0.9%), and subthreshold use (5.2%). The two most common risk factors for the subthreshold groups were Tolerance and Time Spent Using. These data indicate a need for preventative approaches to address subthreshold alcohol use among middle-aged and older cohorts and may constitute a new target for alcohol use awareness and screening, especially brief screening and intervention as part of routine medical care.

### **Motivational Strategies for Assessment and Treatment**

- ◆ Hanson and Gutheil (2004) applied several types of motivational strategies to social work practice with older adults using alcohol. Their recommendations, while not empirically tested, provide useful information for the substance abuse practitioner interested in improving assessment skills with older adults.
- ◆ Supportive, non-confrontational approaches have been used in age-specific treatment programs for older adults and have been associated with positive outcomes (Blow, Walton, Chermack, Mudd, & Brower, 2000; Kashner, Rodell, Ogden, Guggenheim, & Karson, 1992; Satre & Leibowitz, 2015).
- ◆ Studies of Motivational Interviewing (MI) among older adults are limited. However, MI has been shown to be an effective technique for improving a number of lifestyle behaviors (Cummings, Cooper, & McClure Cassie, 2009).

- ◆ Telephone-delivered MI techniques have been found to be effective in reducing mental health symptoms in HIV positive adults 55 and older and in changing physical activities for adults 55 and older (Lovejoy, 2012; Lilienthal, Pignol, Holm & Voeltanz-Holm, 2014).
- ◆ MI can be combined with other treatment approaches in efforts to decrease barriers and increase participation in substance abuse treatment (Cooper, 2012).

Few empirical studies have addressed the use of motivational interviewing techniques with older adults. However, motivational interviewing has provided a strategy for behavior and attitudinal change in substance abuse treatment (Miller & Rollnick, 2002). Motivational strategies offer professionals a range of stages of change and specific steps to engage clients at each of these stages. In a small study designed to study referral approaches, D'Agostino, Barry, Blow, and Podgorski (2006) found that a multi-dimensional approach involving motivational counseling as one component had greater referral rates to alcohol treatment services. Incorporation of motivational strategies into randomized studies of treatment access and assessment will improve the knowledge base. Satre and Leibowitz (2015) illustrate the integration of MI techniques into mental health services and provide a case study of an older adult with alcohol-related problems and review not only an application of the MI framework in client care, but also the evidence base for MI approaches.

Motivational Interviewing has been shown to be effective in changing lifestyle factors among older adults. Several studies document improvements in physical activity, diet, cholesterol, blood pressure (Cummings et al., 2009). Their review showed that MI interventions were linked with positive outcomes in smoking cessation and use of nicotine replacement products in several studies using samples of older adults. In efforts to increase access to MI, several studies have delivered a course of MI over the telephone to community dwelling adults aged 55 and older (Lovejoy, 2012; Lilienthal et al., 2014). These studies are not focused on substance use or substance use treatment, but demonstrate the feasibility of using alternate methods of delivering MI in older populations and the efficacy of short term MI interventions to change behaviors and reduce mental health symptoms. Cooper's (2012) description of the HeLP program combines MI with cognitive-behavioral therapy (CBT) techniques to address substance abuse treatment needs among older adults. MI techniques are used to address the many barriers to detection and treatment while CBT approaches are intended to facilitate change in substance use behaviors.

### **Substance Abuse Treatment Outcomes for Older Adults**

- ◆ Age-specific treatment programs as well as age-specific components embedded in mixed-aged treatment programs became popular in the early to late 1980s (Dupree, Broskowski, & Schonfeld, 1984) and have continued in use with older populations (SAMHSA, 1998; Schonfeld et al., 2010).
- ◆ There continues to be a growing number of empirical investigations on the outcomes of various treatment approaches with older adults (Oslin, Pettinati, & Volpicelli, 2002;

Lemke & Moos, 2003a, 2003b; Satre, Mertens, Areán, & Weisner, 2004; Satre, Mertens, & Weisner, 2004; Oslin, 2005; Cummings, Bride, & Rawlins-Shaw, 2006; Kuerbis & Sacco, 2013).

- ◆ Emerging treatments include elder-specific Screening, Brief Interventions, and Referral to Treatment (SBIRT) and Relapse Prevention Models for older adults as well as combinations of traditional substance abuse treatments (Schonfeld et al., 2015; Schonfeld & McFarland, 2015; Lovejoy, 2012).
- ◆ Recent reviews of substance abuse treatment for older adults have examined not only age-integrated versus age-segregated approaches, but also levels and options of care in treatment (Kuerbis & Sacco, 2013).
- ◆ Older adults can benefit from age-integrated alcohol treatment programs at least as much as younger adults do (Lemke & Moos, 2002; Lemke & Moos, 2003a, 2003b; Lofwall, Brooner, Bigelow, Kindbom, & Strain, 2005; Kuerbis & Sacco, 2013).

The literature provides a growing, but still limited, number of research studies of substance abuse treatments developed for older adults with alcohol and other drug problems. Outcome studies are important, but often difficult to compare because of differences in age cut-offs, outcome variables, and treatment components. In many studies, the research design is weak, the sample sizes are small, and the sites vary between inpatient and outpatient settings, primary care settings, Veterans Affairs (VA) and community-based treatment. Earlier studies of elder-specific programming have indicated improved treatment adherence, compliance, and outcomes, and most often included other programmatic components such as individualized treatment planning and motivational strategies. However, it is unclear if the age requirement is the only active component in these studies or if these other components also contribute to the more positive attributes of elder-specific treatment efforts (Blow et al., 2000; Oslin, Pettinati, & Volpicelli, 2002).

Kuerbis & Sacco (2013) offer caution in summarizing the empirical literature on substance abuse treatment for older adults, but concur that older adults do as well as younger adults in treatment and that both age-specific and mixed-age treatments are associated with abstinence rates that mirror younger populations. Dose of treatment, regardless of type, appears to be associated with better outcomes for older adults. However, in some studies, participation rates of older adults in the treatment interventions was less than optimal (Gordon et al., 2003) and small sample sizes limited interpretation of findings.

Satre et al. (2004) compared 5-year outcomes from a managed care substance abuse treatment program and found age differences in drug dependence at baseline, 30-day abstinence rates, social supports, and treatment retention. The older age group (aged 55 to 74) was less likely to be drug dependent at baseline and had longer treatment retention than did younger groups (aged 40 to 54 and 18 to 39). The older group at the 5-year follow-up was more likely to report that family and friends did not encourage alcohol or drug use, and a larger percentage of the older group reported total abstinence in the past 30 days. In this study, older women were more likely than older or younger men to report 30-day abstinence.

In a related study (Satre, Mertens, & Weisner, 2004), a higher percentage of women than of men in the older group (aged 55 to 77) reported abstinence from alcohol and drugs at the 6-month follow-up from treatment (79% of women vs. 54% of men).

Elder-specific programming is associated with better compliance and outcomes, and most often includes other programmatic components such as individualized treatment planning and motivational strategies. It is unclear if the age requirement is the only active component in these studies or if these other components also contribute (Blow et al., 2000; Oslin, Pettinati, & Volpicelli, 2002).

The recent focus on integrated behavioral and physical health care has highlighted the role of physicians and other health care providers in the treatment of alcohol and other drug abuse (AODA) problems among the elderly. SAMHSA's Screening, Brief Intervention, and Referral to Treatment (SBIRT) initiative has been touted as an especially useful approach for intervention with older adults, especially if it is integrated within established community care and/or primary health organizations (SAMHSA, 2008). The Florida BRITE project provides empirical evidence on an elder-specific SBIRT service. SBIRT services provide universal screening for substance misuse, brief interventions, and referral services for those deemed at-risk as well as those who show evidence of the disorder (SBIRT, 2012; Schonfeld et al., 2015). SBIRT interventions have been found to be effective with younger age groups, can be used in a variety of service settings by a variety of service providers, and are consistent with the goals of integrated behavioral and physical health models of care. The Florida BRITE screening protocol included alcohol, prescription medication misuse, and over-the-counter medication misuse. Using five years of program data, Schonfeld and colleagues (2015) demonstrated the effectiveness of SBIRT procedures for older adults in detecting problem use and in decreasing substance use at 6 month follow up. The Florida BRITE project also demonstrated that SBIRT techniques could be successfully implemented in community and agency settings in addition to medical settings.

Few studies have analyzed any interaction between age group and treatment strategy. In one study, Rice, Longabaugh, Beattie, and Noel (1993) used random assignment to explore differences between three treatments: 1) extended cognitive behavioral treatment, 2) relationship enhancement, and 3) vocational enhancement. For adults aged 50 and older, extended cognitive behavioral treatment showed the best outcomes in increased percentage of days' abstinent and decreased percentage of heavy drinking days. The least favorable treatment outcomes for older adults were associated with vocational enhancement. In another study, Kashner et al. (1992) randomly assigned male veterans in alcohol treatment to mixed-age treatment or age-specific treatment. The age-specific treatment was built around principles of respectful and supportive interactions. Reported abstinence rates were twice as likely in the age-specific group, and the 60+ age group reported the most favorable responses.

Studies indicate that older adults can benefit from age-integrated alcohol treatment programs at least as much as younger adults do (Lemke & Moos, 2002; Lemke & Moos, 2003a, 2003b; Lofwall et al., 2005).

Recent epidemiological studies have highlighted the areas of prescription medication and illicit drug use among older populations. The most prevalent problem among older persons

interviewed for the Florida BRITE project was prescription medication misuse (Schonfeld et al., 2010). Untreated and undertreated pain has been implicated as a reason for much prescription opioid misuse among older persons (Levi-Minzi, Surratt, Kurtz & Buttram, 2013). Lofwall and colleagues (2005) compared a group of older (aged 50 to 60) and younger (aged 25 to 34) men and women enrolled in an ambulatory opioid maintenance program. In comparison with findings from general population studies, both older and younger people had increased rates of psychiatric and substance abuse or dependence problems and had worse general health. Health status and functioning, however, were worse in the older group than in the younger group. The treatment program did not include age-specific or age-appropriate program components, but the older people showed a strong positive response to the program, as measured by low percentages of opiate-positive urine tests. It is hoped that the growing tide of older persons and the increased recognition of treatment needs will facilitate additional treatment efforts for older adults in a variety of settings.

Relapse prevention efforts are useful components of recovery and there is a need to develop relapse prevention efforts tailored to the changing needs of older adults. Schonfeld and MacFarland's (2015) discussion and case study application reviews the use of relapse prevention with older people abusing alcohol and other substances.

- ◆ Future outcome-based research should differentiate between age segregation and age appropriate strategies in determining treatment adherence and program outcomes.
- ◆ Outcome studies should examine interactions between age group and treatment intervention type.
- ◆ Studies of older adults need to include more women and members of racial/ethnic and sexual minority groups to determine the most effective treatments for these groups.

Older adults benefit from alcohol treatment programs (Dupree, Broskowski, & Schoenfeld, 1984; Carstensen, Rychtarik, & Prue, 1985; Kofoed, Tolson, Atkinson, Toth, & Turner, 1987; Kashner et al., 1992; Rice et al., 1993; Schonfeld et al., 2000; Lemke & Moos, 2003a; Blow et al., 2000; Satre et al., 2004; Kuerbis & Sacco, 2013; Schonfeld et al., 2015) and opiate maintenance programs (Lofwall et al., 2005). Post-treatment, older women may have more favorable drinking outcomes than older men (Blow, 2000; Satre, Mertens, & Weisner, 2004). For at-risk older drinkers, an integrated system of care model may improve treatment engagement (Zanjani, Zubritsky, Mullahy, & Oslin, 2006; Schonfeld et al., 2015). Case management may be a useful tool to increase treatment engagement among older adults (Atkinson, Misra, Ryan, & Turner 2003; Oslin, Pettinati, & Volpicelli, 2002). Factors including social supports, type of substance dependence, treatment retention, and gender interact with age and may provide insight into the relationship between age and treatment outcome (Satre et al., 2004). Stages of change, treatment readiness, and motivational interviewing, concepts that have been adapted in AODA treatment for younger people, have been used in studies of health promotion with older people (Popa, 2005) and are beginning to be used in alcohol treatment studies with older people (Zanjani et al., 2006).



Another important area of research is the study of older adults with alcohol and other drug problems who are not in treatment. Walton, Mudd, Blow, Chermack, and Gomberg (2000) interviewed 78 older adult volunteers who met criteria for alcohol abuse or dependence and re-interviewed 48 of them 3 years later. Results showed that health problems (68%) and doctor recommendations (41%) were the most common reasons people changed their drinking habits. Only 11% of the sample resolved their alcohol problems when alcohol consumption and alcohol-related consequences were considered. Consideration of alcohol use and alcohol-related problems as a health issue may provide a fruitful avenue for intervention for older adults. Brief treatment advice, usually provided by a physician or other health care professional has been shown to be an effective intervention to reduce alcohol consumption in older and younger adults (Moyer, Finney, Swearingen, & Vergun, 2002). In a randomized community-based study, Fleming, Manwell, Barry, Adams, and Stauffacher (1999) found that two 10- to 15-minute physician-delivered education and counseling sessions decreased alcohol use, binge drinking, and excessive drinking over 12 months.

### **Prevention Efforts**

- ◆ With the expected increases in the population over age 60, and the emerging knowledge about substance use patterns in middle-aged cohorts, there is a renewed interest in prevention efforts in alcohol and other drug use and abuse.

Prevention efforts with older adults are important for several reasons: older adults can be negatively affected by consumption of smaller quantities of alcohol or other drugs, negative consequences of use may not be recognized as associated with use, adverse medication interactions may occur with any amount of alcohol use, and medication mismanagement among older adults is common. Health promotion and health education efforts with older adults should include these issues related to older adults' changing vulnerabilities. However, Blow, Bartels, Brockmann, and Van Citters (2005) reviewed evidence-based practice prevention practices and found no substantive evidence that universal prevention programs for prevention or reduction of alcohol misuse are successful for older adults. These authors echo the support for brief interventions, especially those set in health care settings, as effective tools to reduce alcohol misuse and hazardous drinking. The experience of the Florida BRITE project, however, illustrates the role of preventative screening and targeted interventions for substance use detection and treatment in older populations (Schonfeld et al., 2015). Additionally, effective prevention avenues to decrease medication mismanagement include computer-based tools to increase the older person's knowledge about potential drug interactions (Blow et al., 2005). Team efforts including health care professionals both in health care institutions and in the community may prove to be effective. The process of implementing evidence-based practice to prevent substance abuse and mental health problems among older adults requires organizational change and involvement of provider and service delivery systems (Blow & Barry, 2014).

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