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Alcohol Use Among Older Adults

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ABSTRACT. Alcohol use problems among older adults have been called the "invisible epidemic." As the population of older adults continues to grow, there is an increased need to reexamine alcohol use in this population. The authors provide an overview on alcohol use in the over-60 age group. The main areas of focus included research on the prevalence of drinking in that population, as well as comments on the best practices in assessment and psychological treatment. Several screening assessments have been recommended for use with older adults, such as the CAGE questionnaire, Michigan Alcohol Screening Test–Geriatric version, Alcohol-Related Problems Survey, and the Alcohol Use Disorders Identification Test. The authors note age-appropriate psychological treatment interventions that include brief interventions, family interventions, motivational counseling, and cognitive behavioral therapies. Barriers to assessment and treatment are also discussed.

Key words: alcohol use, older adults, review

ALCOHOL USE AMONG OLDER ADULTS is associated with two prominent myths. The first myth is that alcohol use in this population is an infrequent problem. The second is that, when an older adult is diagnosed with an alcohol problem, treatment success is limited. A significant amount of research data has dispelled both of those myths. In terms of use, alcohol abuse among older adults is one of the fastest growing health problems facing this country (Substance Abuse and Mental Health Services Administration [SAMHSA], 1998). In terms of treatment, even a one-time brief encounter of 15 min or less can reduce nondependent problem drinking by more than 20% (SAMHSA). In this article, we provide an overview of research on the prevalence of alcohol abuse, as well as the best practices in assessment and psychological treatment of alcohol abuse for this population.

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Prevalence

Do older adults drink? The simple answer to this question is "yes." Approximately 49% of adults aged 60 years and older drink alcohol (National Institute for Alcohol Abuse and Alcoholism [NIAAA], 1997). Among individuals between the ages of 60–64 years who responded to the annual national survey on drug use and health sponsored by SAMHSA (2004), 49.9% used alcohol in the past month, and 35.3% of individuals aged 65 or older used alcohol in the past month. In terms of binge drinking and heavy drinking, 6.9% of adults aged 65 or older reported binge drinking and 1.8% reported heavy drinking. *Binge drinking* is defined as five or more drinks on the same occasion on at least 1 day in the past month, and heavy drinking is defined as five or more drinks on the same occasion on each of 5 or more days in the past 30 days. Among community dwelling, noninstitutionalized older adults, 2–15% have been shown to exhibit symptoms consistent with alcoholism (Adams, Barry, & Fleming, 1996; Gomberg, 1992).

The estimates of alcohol use among older adults increase significantly for medical patients. Among older primary care patients, 10–15% were found to meet the criteria for problem drinking (drinking levels that led to medical, social, or psychological problems; Oslin, 2004; Callahan & Tierney, 1995). In addition, a prevalence rate of 8.6% for alcohol dependence according to the *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition (*DSM-IV*; American Psychiatric Association [APA], 1994) criteria was observed among 140 patients in a geriatric mental health outpatient clinic (Holroyd & Duryee, 1997), and 23% of veterans with substance abuse diagnoses in VA hospitals are over the age of 55 (Moos, Mertens, & Brennan, 1993). In other words, a minimum of 1 in every 10 older patients in a medical setting most likely suffers from an alcohol problem.

Given the rapidly changing U.S. demographics, the prevalence of alcohol problems may be even greater in this population in the years to come. By 2030, it is estimated that there will be 70 million older adults, representing 20% of our population (Administration on Aging [AOA], 2000). The generational cohorts who grew up in 1930s, 1940s, and 1950s were raised during a time period in which social norms concerning drinking were more conservative, whereas alcohol use has become more common and acceptable in the generations since the 1960s (SAMHSA, 1998). Given those cohort differences, the changes in demographics may lead to a future increase in alcohol problems among older adults.

Assessment

Barriers to Assessment—The Invisible Epidemic

Alcohol problems among older adults have been called the *Invisible Epidemic* (SAMHSA, 1998). A number of factors contribute to this invisibility. First, alcohol problems among older adults are difficult to diagnose. Many symptoms

of alcohol problems mimic those of other disorders common among this age group, such as depression and dementia. Second, alcohol use problems are sometimes overlooked because of stereotypes and biases held by health practitioners. For example, clinicians are less likely to screen for alcohol use problems among older individuals, women, the educated, and those with higher socioeconomic status. The third reason is the tendency for both patients and practitioners to avoid the topic of alcohol because it is uncomfortable to discuss. The patient and his or her family often may feel reluctant to seek help because they are ashamed. Some families consider the alcohol problem to be a private matter, preventing them from seeking help. A fourth contributing factor to the invisible epidemic is ageism. Different quality-of-life standards are applied to older individuals. For example, it is often thought that drinking may be one of the only pleasures retirees have in their daily lives.

Drinking Patterns Among Older Adults

To make this epidemic more visible, it is important to be aware of drinking guidelines and the three general categories of drinking behavior. Each older adult can be placed in one of the following three general categories of drinking behavior: (a) low-risk or abstinence, (b) problem drinking, and (c) heavy drinking (Oslin, 2004). Low-risk or abstinent drinkers are those who follow standard drinking guidelines or choose not to drink. A standard drink consists of 12 oz of beer, 1.5 oz of hard liquor, 5 oz of wine, or 4 oz of sherry, liqueur, or aperitif (SAMHSA, 1998). Standard drinking guidelines for adults 65 and older state that individuals should not consume more than one standard drink per day or seven standard drinks per week (NIAAA, 1995). In addition, the consensus panel for the Treatment Improvement Protocol Series (#26; SAMHSA), which focuses on substance use among older adults, encourages no more than one drink per day, with a maximum of two drinks on a special occasion, and slightly lower limits for older women (SAMHSA). That recommendation is for older adults who are healthy and do not take any medication that may interact with alcohol.

Older adults meet the criteria for problem drinking when they drink at a level that leads to adverse medical, psychological, or social consequences, or increases the risk of experiencing any of those problems (Oslin, 2004). Other terms to describe problem drinkers include *at-risk* use and *abusive* drinking. Clinicians need to be aware that the threshold for at-risk drinking and the distinction between heavy and problem drinking narrows with age. At-risk drinkers differ in the severity of their symptoms from those who meet the criteria for alcohol dependence. Appendix A shows the *DSM-IV,* text revision (*DSM-IV-TR*; APA, 2000) diagnostic criteria for alcohol abuse and dependence.

Other drinking patterns among older adults include late versus early onset, continuous versus intermittent, and binge drinking. *Early-onset* refers to long-standing alcohol-related problems that begin before to the age of 40. *Late-onset*

refers to alcohol-related problems that begin after the age of 40. Individuals who exhibit an early-onset drinking pattern have a higher likelihood of having psychiatric comorbidity (i.e., other psychiatric disorders) and the continuance of abusive drinking patterns, whereas late-onset drinkers may drink in response to a life stressor. Although early-onset drinking patterns are more common, approximately one third of older adults who develop alcohol problems do so after the age of 60 (Barrick & Connors, 2002). Appendix B highlights the differences in clinical characteristics between early- and late-onset drinkers (SAMHSA, 1998). In terms of the continuous versus intermittent drinking comparison, a *continuous drinking problem* is ongoing, whereas an *intermittent drinking* problem refers to regular heavy drinking followed by a period of three or more years of abstinence. As discussed earlier, older adults also can exhibit a binge drinking pattern.

Some special considerations need to be given when applying diagnostic criteria to this age group. For example, not all of the *DSM-IV-TR* (APA, 2000) criteria apply to older adults, which makes diagnosis more difficult. Two examples of criteria that do not always fit include withdrawal and decrease in activities as a result of drinking. Many older drinkers do not develop the physiological dependence necessary for withdrawal. In addition, many older individuals may engage in fewer activities, but for reasons unrelated to drinking.

Negative Consequences of Drinking in Older Individuals

Understanding problem-drinking patterns in this age group is important given the negative impact of alcohol on our health as we age. Alcohol may accelerate aging-associated changes in physiological functioning (Oslin, 2004). Even relatively moderate amounts of alcohol increase the risk for health problems among older adults, including hypertension, sleep problems, and malnutrition (SAMHSA, 1998). In addition, this population is at an increased risk for falls, and the risk significantly increases when 14 or more drinks are consumed per week (Mukamal et al., 2004).

Older adults are also uniquely vulnerable to the effects of alcohol because of their high risk for drug or alcohol interactions. Older adults generally take more prescription and over-the-counter medications than do younger individuals. The aging body is more susceptible to adverse drug and alcohol interactions; slower metabolic and clearance mechanisms delay their resolution. Korrapati and Vestal (1995) provided a nice overview of drug-alcohol interactions and adverse consequences. For example, acetaminophen (the active ingredient in Tylenol) mixed with alcohol can lead to hepatotoxicity (liver toxicity) and heparin (anticoagulant, blood thinner) mixed with alcohol can lead to increased bleeding. Among a sample of adults 65–80 years of age, Onder et al. (2002) determined that, after adjusting for potential confounds, moderate alcohol consumption was associated with a 24% increase in the risk for an adverse drug reaction.

Identification and Screening of Alcohol Abuse Among Older Adults

Proper assessment and diagnosis are the two primary ways to address problem drinking among the older adult population. All adults aged 60 years or older should be screened for alcohol-use problems on a regular basis, preferably at their annual physical exam (SAMHSA, 1998). If patients are younger than 60 years of age, they should be screened if they are undergoing major life changes or exhibiting physical symptoms suggestive of an alcohol-use disorder.

The presence of certain life changes, psychological problems, and physical problems also indicates a need to screen for alcohol abuse. Some general risk factors for alcohol abuse among older adults include the following (Blazer, 1998): (a) psychological problems (particularly anxiety); (b) withdrawn, isolated, impulsive, or hypersensitive behaviors; (c) stressful life events; (d) environmental setting; and (e) culture. Examples of some stressful life events that warrant an alcohol screen include retirement, menopause, children leaving home ("empty nest syndrome"), assuming a caregiving role, and the death of a spouse or partner (SAMHSA, 1998). Environmental settings that place this population at risk include being homebound, as well as living in facilities with regular social hours, such as country clubs and assisted living facilities. In general, Caucasians tend to drink more alcohol, but African Americans and Hispanics tend to binge drink more often (SAMHSA). Understanding how culture influences alcohol use among older adults is particularly important given the comorbidity of certain health disorders with various cultural groups (e.g., treatment for cardiovascular disease, prominent among African Americans, can be hampered by drinking habits).

Clinical symptoms that also may be suggestive of an alcohol problem include the following (Egbert, 1993): therapy that is not working for a normally treatable medical illness (e.g., hypertension); insomnia or chronic fatigue related to poor sleep; diarrhea, urinary incontinence, weight loss or malnutrition; complaints of anxiety (related to undiagnosed withdrawal), with frequent use of or request for anxiolytics, sedatives, or hypnotics; unexplained postoperative agitation, anxiety, confusion, or new-onset seizures (also suggestive of withdrawal). Among older adults, there also are several cognitive signs of alcohol abuse such as consistent intellectual deficits on tasks that involve frontal lobe activity, perceptual-motor deficits, and memory deficits—particularly, short-term memory impairment (SAMHSA, 1998). Most interesting, verbal and arithmetic skills generally remain unimpaired among older adults with alcohol-use problems.

Screening Instruments for Older Adults

On the basis of research evidence, the consensus panel for the Treatment Improvement Protocol Series (#26), which focuses on substance use among older adults, recommended both the CAGE questionnaire (Ewing, 1984) and the Michigan Alcohol Screening Test–Geriatric version (MAST-G; Blow et al.,

1992) as useful assessments in this population (SAMHSA, 1998). The CAGE consists of the following four-item questionnaire: (a) Have you ever felt you should ***c***ut down on your drinking? (b) Have people ***a***nnoyed you by criticizing your drinking? (c) Have you ever felt bad or ***g***uilty about your drinking? (d) Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (an ***e***ye opener)? Positive responses receive a score of 1 and indicate lifetime problems, not necessarily current alcohol problems. A clinically significant score is 2 or more, but a positive response to any item should prompt further assessment. Consistent with the consensus panel, other researchers have found the CAGE to be a useful screening tool for older adults, especially when the threshold is adjusted for them (Conigliaro, Kraemer, & McNeil, 2000).

MAST–G (Blow et al., 1992) is unique in that it was specifically developed for use with older adults. An advantage of the MAST–G is that it includes the elder-specific consequences of drinking (Conigliaro et al., 2000). An example is item #20: Have you ever increased your drinking after experiencing a loss in your life? The MAST–G is one of the longer screening measures, consisting of 24 items in a yes or no response format; that type of format has been identified as a disadvantage in some settings because it takes too long to complete (Conigliaro et al.). Five or more yes responses are indicative of an alcohol problem. However, a shorter, 10-item version is also available: the Short Michigan Alcoholism Screening Test-Geriatric (SMAST–G). Two or more yes responses on the SMAST–G are indicative of an alcohol problem (Blow, 1991).

The Alcohol Use Disorders Identification Test (AUDIT; Babor, de la Fuenta, Saunders, & Grant, 1992) is a 10-item measure that has received significant empirical support for use with younger populations. Because of strong cross-cultural research that validates the AUDIT measure for use with various ethnic groups, the AUDIT is recommended for the screening of ethnic-minority older adults (SAMHSA, 1998). Two other screening measures that have received some empirical support are the Alcohol-Related Problems Survey (ARPS), and its shorter version the Short ARPS (shARPS; Moore, Beck, Babor, Hays, & Reuben [2002]). Moore and colleagues designed these measures to identify older persons whose use of alcohol, especially in combination with their medical comorbidities, may be placing them at risk of injury or causing them harm. Moore et al. found both the ARPS and shARPS to be sensitive screening measures for identifying older adults with a wide range of alcohol problems. Another advantage of these measures is that they identify specific risks associated with alcohol use not revealed by other screening measures, and therefore, may assist in treatment planning.

Screens for alcohol-use problems among older individuals are most effective when they include items that tap into elder-specific consequences and meaningful consumption thresholds (Conigliaro et al., 2000). For both of those components to be included in the screening process, one may need to use a combination

of measures. In fact, Carrington, Tinetti, O'Connor, Kosten, and Concato (2003) determined levels of agreement and concordance among five screening measures completed by a sample population of over 800 older adults that included both veterans and community-dwellers. Only modest levels of agreement and concordance were found among measures, suggesting the need for healthcare professionals to use a combination of measures when screening for alcohol problems in this age group.

Treatment

Barriers to Treatment

In addition to assessment barriers, there are also barriers to treatment (SAMHSA, 1998). Few elderly individuals are screened for alcohol problems, and, thus, many who need it are not treated. As with any health problem, treatment success depends on the availability of transportation to get to appointments. Many older individuals do not like to or should not drive after dark, and many alcohol treatment aftercare programs are held in the evening. Older adults living in rural settings lack public transportation, whereas those in urban settings may choose not to pass through dangerous areas of town to reach treatment facilities. A lack of social support and a shrinking circle of friends are also particularly relevant treatment issues for this age group; research has shown that an important factor in successful treatment is having at least one individual who believes in the patient's ability to change (Miller & Rollnick, 2002). Other barriers to treatment include inadequate insurance coverage and being homebound.

Appropriate Treatment Interventions for Older Adults

When an older adult has been identified with a substance use problem, the least intensive treatment options should be explored first (SAMHSA, 1998). The care provider should first express his or her concern when a drinking problem has been identified. It is important for the caregiver to be specific about drinking patterns and the health risks associated with drinking. After stating this concern, the patient should be advised on an appropriate course of action. In cases of alcohol dependency, older adults should be advised to stop drinking and to provide a history of failed attempts to cut down, of any contraindicated medical condition, and of any medications they are currently taking that may lead to adverse reactions with alcohol. Such individuals should be referred for additional evaluation and treatment. When making a referral, the patient should be involved in the referral decision and the discussion of treatment. If there is no evidence of alcohol dependence, older adults who drink above the recommended level should be provided with educational materials and, at least, advised to cut down on their drinking. Care providers should recommend specific limits, and ask the patient set specific drinking goals.

Treatment options to consider include brief interventions, family interventions, motivational counseling, and cognitive–behavioral therapies.

Brief interventions. A brief intervention consists of one or more counseling sessions, which may include motivation-for-change strategies, patient education, assessment and direct feedback, contracting and goal setting, behavioral-modification techniques, and the use of written material (SAMHSA, 1998). An advantage of brief interventions is that the technique is cost-effective, practical, and can be used in a variety of clinical settings (SAMHSA). There are nine suggested steps for conducting an elder-specific brief intervention (SAMHSA): (a) individual feedback on screening measure outcomes, (b) discussion of types of drinkers and the patient's drinking pattern, (c) possible reasons for drinking, (d) consequences of heavy drinking, (e) reasons to cut down or quit drinking, (f) sensible drinking limits and strategies for cutting down, (g) devising a drinking agreement, (h) discussing how to cope with risky situations, and (i) summary of session.

The FRAMES model developed by Miller and Rollnick (1991, 2002) is a motivation-to-change strategy that has been used to guide brief interventions designed to reduce drinking. FRAMES is an acronym for feedback, responsibility, advice, menu, empathy, and self-efficacy. This model has been adapted for use in brief interventions for older adults with alcohol problems (Barry, Oslin, & Blow, 2001). The FRAMES model provides useful feedback to the older adult from individual screening outcomes, places the responsibility to change drinking behavior on the patient, offers him or her specific drinking recommendations (advice) as well as a menu of options regarding ways to change drinking behavior, and it also demonstrates empathy and encourages a sense of belief in his or her ability to change (self-efficacy). Please refer to the manual for the complete treatment protocol for addressing the prevention and management of alcohol problems in older adults (Barry et al.).

Researchers have found brief interventions, similar to the one just described, to be extremely effective among older adults. For example, Project GOAL (an acronym guiding older adult lifestyles) examined the effectiveness of brief physician advice with at-risk drinkers aged 65 and older (Fleming, Barry, Manwell, Johnson, & London, 1997). Project GOAL was a randomized and controlled clinical study across 24 community-based primary care practices. The brief intervention consisted of two 10–15 min counseling visits with a physician and two follow-up scripted phone calls by clinic staff who provided advice, education, and contract. At a12-month follow-up, Project GOAL was found to yield a significant reduction in weekly alcohol use, episodes of binge drinking, and frequency of excessive drinking, in comparison with that of the control group. The effectiveness of brief interventions is supported by more recent studies as well. When adults aged 65 years and older who exhibited at-risk levels of drinking were provided with either a motivational enhancement or brief-advice intervention in a primary care setting, there alcohol consumption was significantly reduced (Gor-

don et al., 2003). Because of the effectiveness of brief interventions, experts recommend that brief interventions be tried before more intensive treatment options to reduce problem drinking among older adults (SAMHSA, 1998).

Family interventions. Family interventions, a type of substance-abuse treatment, have been used for some time (Johnson, 1973; Twerski, 1983). Under the guidance of a skilled counselor, significant people in the life of an individual with a substance abuse problem are educated about substance abuse and its prevention. Together, the family and counselor plan an intervention to provide a forum for the family to express their concerns to the individual about his or her drinking problem and to encourage treatment. An intervention ideally takes place at least 2 days before the substance abuser is to meet with the counselor (Johnson). An important aspect of this intervention is that the participants are taught to use the most effective style of communication when confronting the substance abuser. Communication styles during an intervention need to be emotionally neutral, factual, and supportive. When designing an intervention with an older adult, one must consider the following (SAMHSA, 1998): (a) only one or two significant people should participate in the intervention because the involvement of too many people may be too overwhelming, (b) confrontation by younger relatives should be avoided because it increases shame for the older adult, and (c) labels such as *alcoholic* should be avoided.

Motivational counseling. Motivational counseling involves motivational interviewing (MI) techniques and is based on the premise that how one talks with a client about behavior change affects the actual behavior change and future discussions about how and why the client might change (Rollnick, 2001). Contrary to typical patient education or medical models in which the counselor offers information about the risks of a behavior with the intent of persuasion, MI allows patients to digest information, evaluate their own risks, and take responsibility for their own change efforts, instead of being convinced to change by their provider (Resincow et al., 2002; Rollnick, Mason, & Butler, 1999). Therefore, MI-based interventions are suitable for an outpatient population of addicted people who are not ready for an action-oriented intervention.

Oslin, Pettinati, and Volpicelli (2005) recently demonstrated the effectiveness of a combined medication and motivational counseling approach with older adults. Treatment included random assignment to a double-blind placebo or naltrexone group. Naltrexone is a medication that has been found to prevent relapse and reduce cravings for alcohol. In addition, all participants received an intervention designed to enhance motivation to change. Older adults were found to have greater medication adherence and to attend more therapy sessions than did younger adults, resulting in less relapse. The nurse practitioner administered motivational therapy over a 3-month period and included a biopsychosocial evaluation, providing a report of the findings to the patient, conducting all sessions with empathy, determining the patient's needs, giving direct advice to the patient on coping with risky situations, and assessing the outcomes and needs over time.

Given the adaptability of motivational counseling to brief or short-term interventions, many healthcare practitioners encourage the use of such counseling techniques to deal with problem drinking among older adults. Hanson and Gutheil (2004) have highlighted practice strategies for social workers that draw on motivational interviewing principles and a client's motivational readiness to change for reaching out to older adults, assessing their needs, and encouraging assistance.

Cognitive–behavioral approaches. Cognitive and behavioral approaches have been shown to be effective in the treatment of many mental health problems among older adults, including substance abuse. Cognitive–behavioral approaches are often structured, short-term psychotherapies in which the client learns new skills (e.g., initiating adaptive behaviors, challenging unhelpful thoughts) to cope with and overcome an addiction to alcohol. The approaches include behavior modification, self-management techniques, and cognitive–behavioral therapies. The ultimate goal of each approach is to modify behaviors, but each place a different emphasis on the type of behavior modified. For example, the focus of behavior modification is on modifying overt behaviors, self-management techniques focus on modifying both overt and internal behaviors, and cognitive–behavioral therapies focus primarily on modifying internal behaviors. In cognitive–behavioral approaches, the client is taught to identify the antecedents, behaviors (i.e., internal and external), and consequences of his or her drinking.

One example of a successful cognitive–behavioral approach with this age group is the Gerontology Alcohol Project (GAP; Dupree, Broskowski, & Schonfeld, 1984). GAP is a standardized day-treatment program for older alcoholics in which both self-management techniques and cognitive–behavioral therapy are used. The treatment approach emphasizes self-management, skill acquisition, and social support. At a 12-month follow up, 75% of the participants in GAP maintained their drinking reduction goals and increased the size of their social support network. Cognitive–behavioral approaches also have been shown to be more effective than other treatment modalities. For example, Rice et al. (1993) found that, in comparison with relationship enhancement and vocational-enhancement therapies, cognitive-behavioral therapy, with an emphasis on developing coping skills for dealing with personal problems, was significantly more effective for adults ages 50 and over who were receiving treatment of substance use. Other cognitive–behavioral approaches that can be used for the treatment of alcohol abuse in this population include Dupree and Schonfeld's (1986) interview, which is designed to identify the client's drinking behavior chain (antecedents, behaviors, and consequences), and a more detailed age-appropriate approach outlined by Glantz (1995).

Treatment Success Among Older Adults

Regardless of which treatment approach is used when treating older adults with alcohol problems, providers need to be aware of the age-appropriate treat-

ment components associated with successful treatment of alcohol problems among older adults (see Appendix C; SAMHSA, 1998; Schonfeld & Dupree, 1996). One example of an age-appropriate treatment component is age-specific treatment. Several studies have demonstrated that age-specific treatments are more effective for older alcoholics than are treatments for mixed-age groups, as evidenced by higher attendance and treatment completion rates (Kashner, Rodell, Ogden, Guggenheim, & Karson, 1992; Kofoed et al., 1987). More recently, however, Oslin et al. (2005) demonstrated that mixed-aged treatment settings were effective in treating older adults with alcohol dependence only when other age-appropriate treatment components, such as a nonconfrontational style and individualized techniques, were used. Such findings suggest that as long as the treatment is age-appropriate, older adults can be successfully treated in mixed-aged treatment settings. Another example of an age-appropriate treatment component is the use of group therapies and self-help groups that place the emphasis on social support (Barrick & Connors, 2002), which allows older adults to be treated in a mixed-aged treatment setting.

Conclusion

Given the fact that older adults do suffer from alcohol problems, and the likelihood that alcohol problems in this age group will only increase with the change in demographics, healthcare professionals need to use the recommended assessment and treatment strategies to manage alcohol problems in the older population. Older adults suffering from alcohol problems can be treated successfully, often with a simple brief intervention. Future researchers should continue to streamline screening and brief intervention techniques that can be used in primary care settings.

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Appendix A
Diagnostic Criteria for Substance Abuse and Dependence (*DSM-IV-TR*; American Psychological Association, 2000)

Substance Abuse (1 or more of the following):	**Substance Dependence** (3 or more of the following):
• Failure to fulfill major role obligations • Physically hazardous • Legal problems • Persistent or recurrent social or interpersonal problems	• Tolerance • Withdrawal • Drinking more or longer than was attended • Unsuccessful efforts to cut down or quit • Great deal of time spent drinking • Giving up activities • Continued use despite knowledge of problem exacerbation

Appendix B
Clinical Characteristics of Early and Late Onset Drinkers (Substance Abuse and Mental Health Services Administration [SAMHSA], 1998)

Early Onset	Late Onset
• Likely male • From lower socioeconomic status • Drinks in response to stressors • Often has a family history of alcoholism • Experiences more severe cognitive-impairment • Is less treatment-compliant	• Likely female • From higher socioeconomic status • Drinks in response to stressors • Often does not have a family history of alcoholism • Experiences less severe cognitive-impairment • Is more treatment-compliant

Appendix C
Age-Appropriate Components for Treating Alcohol Abuse in Older Adults (Substance Abuse and Mental Health Services Administration [SAMHSA], 1998; Schonfeld & Dupree, 1996)

- Emphasize age specific, group treatment in a supportive, nonconfrontational environment.
- Attend to negative emotions such as depression, loneliness, and overcoming loss.
- Teach skills to rebuild social support networks.
- Employ staff who are experienced in working with elders.
- Link with aging services, medical services, and institutional settings.
- Slow the pace and content of treatment.
- Create a culture of respect for older clients.
- Provide a broad, holistic approach to treatment that recognizes age specific psychological, social, and health aspects.
- Maintain a flexible treatment program.
- Adapt treatment as needed in response to the client's gender.

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