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SUBSTANCE USE AND OLDER ADULTS

CHAPTER 2: PREVALENCE OF ALCOHOL, TOBACCO, AND OTHER DRUG USE PROBLEMS AMONG OLDER ADULTS

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The Demographic Imperative and Social Work Practice in the Addictions

- ◆ The proportion of older people in the population is increasing rapidly.
- ◆ Tomorrow's older adults will have different experiences, attitudes, and substance use patterns than did previous cohorts of older adults.

Cohort issues will loom large in the area of social work practice in the addictions over the next several decades. The presence of an increasing number of older adults in the AODA treatment arena will create a moving target for social work educators and professionals. The characteristics of the current cohorts of older adults may or may not resemble those of future cohorts. For example, it is not clear if patterns of alcohol and drug use will drop in future cohorts as they traditionally they have in older cohorts. Advances in health care and preventative medicine may change the incidence in the health problems that traditionally motivated older people to decrease their use of alcohol and other drugs. Today's middle-aged cohorts are accustomed to using pharmaceuticals, both prescription and over the counter, to treat a variety of illness and discomforts. Alcohol and illicit drugs have also been part of life for the "baby boom" generation, and alcohol and drugs are expected to be part of later life for this group. One indication of this trend is the increasing proportion of older patients in methadone treatment programs (Rosen, Smith, & Reynolds, 2008).

◆ Future cohorts of older adults will comprise increased numbers of persons from ethnic/racial identity groups.

The number of older adults who belong to minority ethnic/racial identity groups is on the rise. By 2050 the Census Bureau predicts that 21% of people older than 65 will be a member of a minority group and that African Americans will constitute a large proportion of that population (Ford & Hatchett, 2001). Older populations of Asians and Latinos are also expected to increase as are the number of people who openly self-identify as gay or lesbian.

Social work professionals in the addictions must refine their skills to address issues of culture and ethnicity in their work with older adults. Instead of using a narrow range of cultural variables, professionals will need to adopt a greater range of diversity options in the categories of economics, sexual orientation, education, religion, and ethnic origin (Yali & Revenson, 2004).

Substance Use, Abuse, and Dependence Continuum and Definitions

◆ Definitions of substance use and abuse are especially important to understanding the impact of substances on older adults' health and wellbeing.

Substance use, misuse, abuse, and dependence can be placed along a continuum ranging from total abstinence to psychological and physiological dependence (Doweiko, 2002; McNeese & DiNitto, 2005). Definitional issues often blur the lines among and between continuum categories. The Diagnostic and Statistical Manual of Mental Disorders Fourth Edition Text Revision (DSM-IV-TR) (American Psychiatric Association, 2000) terminology presents problems for detection and diagnosis of substance use problems among older adults. However, DSM-IV-TR does offer standardization of definition and terminology from which to begin a discussion of substance use/abuse/dependence among older adults.

• Substance use among older adults is both a current problem and a future concern.

In comparison to younger age groups, relatively little attention has been paid to the issues of substance use and abuse among older adults. Over several decades theorists have discussed drug and alcohol use as a self-limiting disease so that addicts "mature out" before later life (Menninger, 2002). However, evidence indicates that current cohorts of older adults experience substance-related problems and disorders. In fact, substance abuse among older adults has been labeled "an invisible epidemic" (U.S. Department of Health and Human Services, 1998). The number of older adults with substance-related problems is expected to increase rapidly and dramatically over the coming decades. This demographic trend signifies an important area for researchers and practitioners, since it strongly suggests an increased need for substance abuse treatment services over the next 15 or so years (Korper & Council, 2002; Bartels, Blow, Brockman, & Van Critters, 2005; Bartels, 2006).

Prevalence of Substance Use, Abuse, and Dependence among older adults

◆ Substance use and abuse among older adults involve a range of substances both legal (alcohol, tobacco, and prescription medications) and illegal (street drugs).

◆ Currently, substance use of any kind is less common among older than younger cohorts, but the aging of the baby boomer cohorts is expected to increase the prevalence rates of substance use and abuse among older adults.

Both demographic trends and epidemiological studies indicate an increase in the numbers of older adults with possible accompanying changes in the use patterns of both legal and illegal substances. Korper and Rasken (2003) forecast an escalation from the approximately 1.7 million current dependent and abusing adults over age 50 to 4.4 million by 2020. Bartels (2006) describes this age cohort change as a "demographic tsunami" that will require additional attention to issues of substance use and commonly occurring mental disorders such as depression. Studies of clinical populations, especially those in health clinics and nursing homes, have yielded higher estimates of substance abuse than representative samples of community dwelling older adults (Callahan & Tierney, 1995). Setting, definitions of use categories, and age categorizations are all important for understanding epidemiology of substance use, misuse, abuse, and dependence.

- Prospective cohort studies are necessary to understand how patterns of substance use may change with age and how culture and living conditions will influence substance use, misuse, abuse, and dependence.
- ◆ Prospective cohort studies are needed to understand and better prepare social workers to address gender and racial/ethnic differences in incidence and prevalence of substance-related disorders.

Future prospective epidemiological research will need to include adequate samples of older adults (50+) as well as standard definitions for substance use (Johnson, 2000). Prevalence rates for substance use and abuse range widely depending on setting and population (Bartels, Blow, Van Citters, & Brockmann, 2006), and differences between community-based and institutionally-based prevalence studies need to be carefully interpreted. Few epidemiological studies have examined gender or racial/ethnic differences in substance use (Cummings, Bride, & Rawlins-Shaw, 2006). However, the National Survey on Drug Use and Health (NSDUH) is an important source of information on the emerging trends of substance use, misuse, abuse, and dependence among older adults.

Alcohol Use Prevalence

◆ In the 2006 NSDUH, among older age groups, the prevalence of alcohol use decreased with increasing age, from 63.5% among 26 to 29 year olds to 48.0% among 60 to 64 year olds, to 38.4% among people aged 65 or older (Substance Abuse and Mental Health Services, 2006).

◆ In the 2002 and 2003 NSDUH, 45.1% of persons 50 or older reporting drinking alcohol.

Alcohol is the most commonly used and abused substance among all age groups in the United States. Alcohol use and abuse is less common among older adults than younger age groups, and approximately 60% of current cohorts of older adults are abstinent. However, larger percentages of people moving into later life have used alcohol through their lives and are expected to continue to drink alcohol as they age. Even though alcohol-related problems are not as common among older adult populations, a significant number of older adults experience substance-related problems, and problems can occur at low levels as well as higher levels of alcohol use.

Problem Use of Alcohol among Older Adults

- ◆ In the 2006 NSDUH, persons aged 65 or older had lower rates of binge drinking (7.6%) than did adults in other age groups. The rate of heavy drinking among persons aged 65 or older was 1.6%. Binge drinking is defined as five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days (includes heavy use) (Substance Abuse and Mental Health Services (2006).
- ◆ Unhealthy drinking patterns (monthly use exceeding 30 drinks per typical month and "heavy episodic drinking" of four or more drinks in any single day during a typical month in the previous year) were found in 9% of older Medicare beneficiaries. More men (16%) than women (4%) reported unhealthy drinking patterns (Merrick et al., 2008).
- ◆ Estimates of problem-related drinking among community dwelling older adults ranges widely from 1% to over 15% (Project Mainstream, 2005).
- ◆ In one study, 24% of frail elderly under the care of a county Health and Social Services Department actively used alcohol, and, of those who used alcohol, 17% fell into the category of problem drinkers (Project Mainstream, 2005).

The National Epidemiological Survey on Alcohol and Related Conditions (NESARC) is based on a representative sample of the U.S. population and provides estimates on alcohol and drug use, abuse, and dependence, and associated disabilities. NESARC's design is a longitudinal study of 43,093 non-institutionalized Americans. Older adults are represented in this study and provide a base for studies focused on late life use and abuse of alcohol and drugs and on associated problems. Although most publications based on NESARC data are not focused on older adults, they provide important questions for future research on alcohol and drug use among this group. Of particular note are studies of life course trajectories (Sher, Gothan, & Watson, 2004),

studies of alcohol dependence subtypes (Moss, Chen, & Yi, 2007), alcohol treatment utilization (Cohen, Feinn, Arias, & Kranzler, 2007), the relationship of transitional life events on recovery (Dawson, Grant, Stinson, & Chou, 2006); and the relationships between drinking patterns and co-occurring disabilities (Dawson, Li, & Grant, 2007; Saha, Chou, & Grant, 2006).

Alcohol Use among Minority Groups

- ◆ Research reviews indicate that determining risk factors for alcohol problems based on gender and racial/ethnic identity is an imperfect science. In some studies, African American women are at the lowest risk of alcohol problems and White men are at the highest risk, but in others there are no differences between racial groups (Cummings, Bride, & Rawlins-Shaw, 2006).
- ◆ Whereas general population studies that do not differentiate by sexual orientation have shown declining rates of drinking in older adults, studies among sexual minority populations have found that rates do not appear to decline with age (Hughes & Eliason, 2002). Population-based studies suggest that alcohol dependence and alcohol-related problems are significantly higher among lesbian and bisexual women than among heterosexual women, and that rates are elevated, but not always significantly greater, between homosexual/bisexual men and heterosexual men (Cochran, Keenan, Schober, & Mays, 2000; Cochran & Mays, 2000; Drabble, Trocki, & Midanik, 2005).
- ◆ Data from the 1991-1993 national Survey on Drug Abuse indicated that older Native Americans, South Americans, and non-Hispanic Whites had higher prevalence rates for alcohol abuse than did other racial/ethnic groups (Gurnack & Johnson-Wendell, 2002).

For substance abuse treatment professionals, today's older adults do not constitute a large percentage of their client population and this is particularly true for minority older adults. However prevalence studies indicate that a proportion of older adults use alcohol and experience problems related to drinking. Given the demographic changes in the U.S. age structure in the next 10-15 years and the cohort changes in alcohol use, social workers must be prepared to screen and treat alcohol-related problems among older adults with a special emphasis on members of racial ethnic, and sexual orientation identity groups. Acculturation and acculturative stress and the use of substances among older adults are also important areas of interest.

Alcohol Use Guidelines and Older Adults

- ◆ A U.S. Department of Health and Human Services 1998 report indicates that many older adults who experience alcohol-related problems do not meet standard criteria for abuse or dependence.
- ◆ Alcohol use and medication interaction is a common problem among older adults (U.S. Department of Health and Human Services, 1998).
- ◆ Epidemiological research should further explore the relationship between drinking limits and physical and psychosocial health in samples of community-dwelling older people.

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the Center on Substance Abuse Treatment (NIAAA, 1995; U.S. Department of Health and Human Services, 1998) have issued age-specific drinking guidelines to decrease alcohol-related vulnerabilities and to recognize the evidence on beneficial health effects of drinking, especially for males (Chermack, Blow, Hill, & Mudd, 1996). These guidelines recommend that men age 60 and older consume no more than one standard drink per day or seven standard drinks per week and no more than two standard drinks on any drinking day. For women the limit is less than one standard drink per day. However, when Blow and colleagues (2000) conducted a large cross-sectional study of 37 primary care clinics to determine the relationship between alcohol consumption and health function among older adults, they found that the relationship between health function and alcohol consumption was complex. Low-risk drinkers fared better than abstainers on measures of physical and psychosocial health. At-risk drinkers did not necessarily have poor physical health function, but at-risk drinkers showed poorer mental health functioning than low-risk drinkers. In a sample of 8,883 older people enrolled in a community insurance plan, Pringle and colleagues determined that ill health most often preceded reductions in alcohol use (Pringle, Heller, Ahern, Gold, & Brown, 2006). Evidence on health conditions and alcohol consumption from a large population-based cohort study has raised the need for additional studies on the relationships between alcohol consumption and disability risk for older men and women (Lang, Guralnik, Wallace, & Melzer, 2007).

Tobacco Use Prevalence

- ◆ In the 2006 NSDUH, 26.7% of the population aged 50 to 54 had smoked cigarettes in the past month compared to 22.7% of 55- to 59-year-olds, 18.6% of 60- to 64-year-olds, and 9.5% of people aged 65 and older.
- ◆ Combined 2002 and 2003 NSDUH data indicated that an estimated 17.1% of persons aged 50 or older (13.7 million persons) had smoked cigarettes in the past month.

◆ Among older adults, the leading cause of premature death is cigarette smoking, and mortality linked to tobacco smoking is expected to increase worldwide (World Bank, 1999).

The American Lung association has targeted today's older adults for special attention because of the cohort's smoking rates and the severity of morbidity and mortality related to tobacco use (2007). Older adults are more likely than younger adults to be chronic smokers with longer histories of tobacco use.

Tobacco Use among Minority Groups

- ◆ In a small study of African Americans aged 50 to 91, who attended senior activity centers (n=102), current smokers were, on average, younger than nonsmokers, and males were more likely than females to be current smokers (Williams, Lewis-Jack, Johnson, & Adams-Campbell, 2001).
- ◆ Population-based studies indicate that smoking is higher among both lesbians and gay men than among heterosexual women and men (Burgard, Cochran, & Mays, 2005; Dilley et al., 2005; Greenwood et al., 2005; Gruskin, Greenwood, Matevia, Pollack, & Bye, 2007; Tang et al., 2004).

As with alcohol use prevalence studies, there are many unknowns about tobacco use among older adults and how changes in demographics will affect prevalence rates in future cohorts of older adults. For example, it will be important to understand the differences and similarities between tobacco use patterns of men and women in older populations and how those patterns change with age in each cohort. The success of smoking cessation efforts in general points toward hope for declines in tobacco use among older adults.

Illicit Drug Use Prevalence

- ♦ Among adults aged 50 to 59, the rate of current illicit drug use increased between 2002 and 2005, then remained unchanged in 2006. For those aged 50 to 54, the rate increased from 3.4% in 2002 to 6.0% in 2006. Among those aged 55 to 59, current illicit drug use showed a mixed trend with no significant difference between the rates in 2002 and 2006. (NSDUH, 2006).
- ◆ According to the combined 2002 and 2003 NSDUH data, estimated 1.8% of older adults (1.4 million persons) had used an illicit drug in the month prior to completing the survey. Marijuana was the most commonly used illicit drug (1.1%), followed by prescription–type drugs used non-medically (0.7%), and cocaine (0.2%).

Illicit drug use includes the use and abuse of marijuana/hashish, cocaine, inhalants, hallucinogens, heroin, or any prescription-type psychotherapeutic drug used non-medically. The literature on the epidemiology of illicit drug use among older adult populations is limited. The lack of standard definitions, the under-sampling of older population groups, and variations across settings all contribute to the lack of information about illicit drug use among older people. Professionals and the general public both are often misinformed about older adults' use of illicit drugs, and a disproportionate number of people who abuse illicit drugs die prematurely (Neumark, Van Etten, & Anthony, 2000). Illicit drug use among older adults has long been thought of as a relatively rare phenomenon; however, illicit drug abuse is expected to increase with future cohorts (Addiction Treatment Forum, 2003; Simoni-Wastila & Yang, 2006).

- ◆ These patterns and trends may partially reflect the aging of the baby boom cohort, whose lifetime rates of illicit drug us—especially marijuana use—are higher than those of previous cohorts (Substance Abuse and Mental Health Services Administration, 2006).
- ◆ Emerging research on middle-aged cohorts indicates that patterns of illicit drug use continue throughout life (Anderson & Levy, 2003).
- Future prospective epidemiological research needs to include older adults and to monitor changes in illicit drug use among these older cohorts.

The extent to which future cohorts of older adults continue to use marijuana is an area of special interest for substance abuse treatment professionals. Medical use or self medication uses of marijuana by older adults with chronic health problems is another area for further research in the coming cohorts.

Illicit Drug Use among Minority Groups

- ◆ In younger age groups, marijuana use is higher among sexual minority women and men, and other illicit drug use and abuse appears to be particularly pronounced among sexual minority men (Cochran Ackerman, Mays, & Ross, 2004; Stall et al., 2001; Woody et al., 2001).
- ◆ Analysis of the 1991-1993 National Survey on Drug Abuse found that older Native Americans, Puerto Ricans, Mexicans, and non-Hispanic Blacks had higher prevalence rates for misuse of illicit drugs than other racial/ethnic groups did (Gurnack & Johnson-Wendell, 2002).
- ◆ Data from the Treatment Episode Data Set (TEDS) indicate increased prevalence of cocaine use among older African Americans in treatment for substance abuse (Gurnack & Johnson-Wendell, 2002).

Minority group status is confounded with social variables including economic, education, and social opportunities. Studies of minority group status and drug use must be seen in the context of these other social variables and used to develop more effective prevention and treatment options for older minority adults (McNeece & DiNitto, 2005).

Prescription Medications and Medication Misuse Prevalence

- ◆ Poly-pharmacy is a broadly based term used to describe medication use that is not clinically warranted (Zarowitz, 2006) and prescription stimulants, sedatives, tranquilizers, and analgesics are all subject to misuse.
- ◆ Lack of a standard definition for prescription drug abuse has caused limitations in epidemiological research (Isaacson, Hopper, Alford, & Parran, 2005).
- ◆ Estimates are that the nonmedical use of psychoactive prescription drugs by adults age 50 and older will increase from 911,000 in 2001 to nearly 2.7 million in 2020 (Colliver, Compton, Gfrorer, & Condon, 2006).

The risk for medication non-compliance, defined as the extent to which the patient's use of medications is in line with the prescriber's directions, is great among older adults for a number of reasons, including number of medications prescribed, cognitive and communication deficits, inadequate education about the medication's effects, and increased chance of side effects (Russell, Conn, & Jantarakupt, 2006).

- ◆ In the 2003 NSDUH, older adults (65 years and older) comprised 13% of the population but used approximately 33% of all prescribed medications in the U.S. (National Institute on Drug Abuse, 2007).
- ◆ Risks associated with medication error include adverse physical reactions, cognitive impairments, falls, and bone fractures (National Institute on Drug Abuse Research Report Series, undated).
- ◆ Intentional medication overuse among older adults may be associated with efforts to deal with chronic, untreated, or undertreated pain.
- ◆ Further research is needed on the exposure to abusable prescription medications and the prevalence of prescription drug abuse and dependency among older populations. The settings for research should include individuals in long-term care facilities and emergency rooms, as well as those in the community (Simoni-Wastila & Yang, 2006).

Older adults are more likely than any other age group to use both prescription and over-the-counter medications. Many prescription drugs are counter-indicated with alcohol use. Medication misuse among older adults may be intentional or unintentional. The area of medication mismanagement, especially if it is unintentional, is not one that

has been addressed by substance abuse treatment professionals. In treating older adults, professionals will need to be knowledgeable about medications, medication interactions, and possible medication mismanagement problems—both intentional and unintentional.

Herbal Remedies

- Herbal remedies have become an important aspect in self-care among older adults.
- ◆ Approximately 25% of Asians and Hispanics in a large population study reported using herbal remedies. Close to 10% of African American and White older adults reported use of herbal remedies (Arcury et al., 2007).

Herbal and other home remedies have not been included in many studies of drug use among older people. Further research is necessary to understand the role these remedies play in development of medication misuse and substance-related disorders among older people. In addition to prescription medications misuse, herbal remedies are increasing in popularity, especially among specific ethnic groups, and may also be misused. Cultural beliefs and traditional healing and health customs often involve use of substances indigenous to an older adult's homeland. Many herbal substances may have toxic side-effects, harmful additives, or interact adversely with prescription medications. Some older members of specific cultural groups may depend heavily on herbal remedies even though they may have lived in the U.S. for many years. Traditionally, substance abuse professionals have not addressed medication management and herbal remedy use. However, this is likely to increase as an area of substance abuse treatment among older (and younger) adults in the population.

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Curriculum Resources

The following resources include recommended key curriculum resources, course readings, and Web resources.

Suggested Readings:



- Johnson, I. (2000). Alcohol problems in old age: A review of recent epidemiological research. International Journal of Geriatric Psychiatry, 15, 575-581. A brief, but clear overview of the types of epidemiological studies available. Students can learn about the differences in samples and study settings as a way to appreciate both the strengths and limitations of epidemiological research.
- Korper, S. P., & Raskin, I. R. (2003). The impact of substance use and abuse by the elderly: The next 20 to 30 years. In Substance use by older adults: Estimates of future impact on the treatment system (OAS Analytic Series #A-21, DHHS Publication No. (SMA) 03-3763). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies. Korper and Raskin provide an extensive overview of the need for further research and service development to address the growing numbers of older adults who use and abuse substances. This is not introductory reading, but may be helpful to instructors as background material.
- Substance Abuse and Mental Health Services Administration. (2007). Results from the 2006 National Survey on Drug Use and Health: National Findings (Office of Applied Studies, NSDUH Series H-32, DHHS Publication No. SMA 07-4293). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies. A comprehensive look at findings from the 2006 national study. All age groups are included, and instructors and students may be interested in comparisons of older adults with other age groups.

Films & Media:

Alcohol and Other Drug Problems among Older Adults. This 10-minute video combines a PowerPoint-style presentation with a video of Dr. Frederic Blow providing an overview of problems with drug and alcohol use in older adults. The video is only available from this Web site and is in a very small format; consequently, it may be challenging to show in some classroom settings. May be ideal as a homework assignment or for a time when all students have access to a computer with an internet connection.

Availability: Free from http://preventionpathways.samhsa.gov/res_videos.htm

Teaching modules:



Older Adults and Alcohol Problems

Module IOC of a larger curriculum entitled Social Work Education for the Prevention and Treatment of Alcohol Use Disorders.

This curriculum is well-grounded in research and provides user-friendly overheads, notes, and handouts. The first segment of the curriculum includes an overview of prevalence, patterns of use, and risks associated with use (including use with medications).

Availability: Free from the National Institute on Alcohol Abuse and Alcoholism (NIAAA).

Download from http://pubs.niaaa.nih.gov/publications/Social/main.html

Adult Meducation: Improving Medication Adherence in Older Adults.

This curriculum, co-developed by the American Society on Aging (ASA) and the American Society of Consultant Pharmacists, provides on-line and downloadable curriculum on the prevalence of medication non-adherence and other issues related to drug use and misuse among older adults. Download from www.AdultMeducation.com.

Web Resources:



American Society on Aging (ASA) - Alcohol, Medication, and Other Drugs

(AOD)-http://www.asaging.org/asav2/aod/index.cfm.

The Web site provides links to free trainings and technical assistance on abuse of AOD for providers in California to help them better serve their clients. Included in this Web site are links to facts, resources, Web-based trainings, and an "Ask the Experts" section.

Substance Abuse and Mental Health Services Administration (SAMHSA) - http://www.samhsa.gov/.

This Web site is a useful resource for free publications (many that can be downloaded) targeting both professionals and community members. Materials from this Web site include epidemiology information as well as "how-to" resources for professionals working with older adults who may be impacted by substance abuse issues.