

Generational Shift and Drug Abuse in Older Americans

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Since the problem of substance abuse by older adults began to receive serious professional attention, the focus has been almost exclusively on alcohol abuse. This reality is changing as the “baby boomers” age. We examined data from the National Household Survey on Drug Abuse (1985) and the National Survey on Drug Use and Health (2006) comparing nationwide prevalence of both legal and illicit drugs. Use of drugs by category varied over the study period; some showed little change (e.g., alcohol) while others showed marked increase (e.g., marijuana, cocaine). We found that the population of older Americans in 2006 contained greater proportions of persons who had used or continued to use illicit drugs than did older Americans in 1985. Gerontologists and geriatric services will increasingly encounter older Americans who use or abuse illicit drugs.

Keywords: *baby boomer, illicit drugs, NHSDA, NSDUH, older Americans*

Introduction

Between now and 2030, the number of adults aged 65 and older in the United States will almost double, from around 37 million to more than 70 million, an increase from 12% of the U.S. population to almost 20% (U.S. Census Bureau, 2008; Institute of Medicine [IOM], 2008). While this is partly due to increasing longevity and partly to a declining birth rate, it is principally due to the maturing of the postwar “baby boom” of persons born in the United States between 1946 and 1964 (Sigel, 1996). In 2011, the first baby boomers will turn 65, and by 2030, the entire baby boom generation will be 65 or older.

This demographic change has great importance for America's healthcare system because older persons make considerably greater use of healthcare services than do younger Americans and have healthcare needs that are often more complex (IOM, 2008). IOM has warned that the American healthcare system is already struggling with the challenge of delivering high-quality services to older adults and that most of America's healthcare professionals lack adequate education and training with respect to the healthcare needs of older adults. Looking ahead, they note that, “the next generation of older adults will be like no other before it” (p. 15). America's aging baby boomers will have greater racial and ethnic diversity, higher levels of education, lower levels of poverty, fewer children, higher divorce rates, and more openness regarding their sexual orientation than any previous cohort of older Americans (He & Sengupta, 2005; U.S. Census Bureau, 2008; IOM, 2008). Unmentioned in the IOM report is any difference in substance abuse prevalence between baby

boomers and previous generations. The National Academies Keck Futures Initiative (2008) similarly ignores drug abuse as an issue in elderly persons, implying that it is an issue only in young people (p. 69). Given over a century of research, it has only been relatively recently that substance abuse by elderly people has been studied by either the substance abuse or the gerontological literature (Center for Substance Abuse Treatment [CSAT], 1998).

As Duncan (1994) has pointed out, it was long held that, with only a few isolated exceptions, substance abuse simply did not exist among the elderly population. Alcoholism was described as a self-limiting condition with an early-life onset that ended in either abstinence or death before old age was reached (Duncan, 1994), and the same was held to be true for heroin addiction (Winick, 1962). When researchers challenged this view in the last quarter of the twentieth century, a new consensus emerged asserting that alcohol abuse and misuse was the substance abuse problem of concern affecting 2.5 million older adults (CSAT, 1998). This growing recognition that the aged may suffer from alcohol abuse and alcoholism has not been limited to the United States, finding a place in the medical literature of such other nations as Germany (Lieb, Rosien, Bonnet & Scherbaum, 2008), New Zealand (Berks & McCormick, 2008), and Poland (Suwala & Gerstenkorn, 2007).

A recent review by Simoni-Wastila and Yang (2006) of the literature published in English between January 1990 and May 2006 found that, while there was growing literature on the epidemiology and treatment of alcoholism in older adults, there was very little that addressed the abuse of other drugs by the elderly population. While they urged greater attention to problems of misuse and abuse of prescription drugs by older adults, Simoni-Wastila and Yang also seemed to regard abuse of illegal drugs by this population as too rare to be a matter of any serious concern. This view would seem to be supported by Arndt, Gunter, and Acion (2005) in their examination of substance abuse treatment admissions in the year 2001 of persons aged 55 and older. Their report indicated that all such admissions were alcohol-related, consistent with the general consensus view that this was the sole substance abuse problem among older adults.

Abuse of legal medications by the elderly population has generally come to be seen as a real but smaller problem (Atkinson & Kofoed, 1982; Schonfeld & Dupree, 1995). CSAT (1998) identified abuse of alcohol and prescription drugs among adults 60 and older as one of the fastest growing health problems facing the nation—one that “remains underestimated, underidentified, underdiagnosed, and undertreated.”

White & Duncan (2008) have suggested that the assessment of substance abuse by elders as being limited to alcohol and prescription drugs may no longer be valid. These authors argued that increasing attention needs to be paid to the possible abuse of illicit drugs by older Americans as baby boomers reach retirement age. Given the historically high levels of drug use among this generation (Johnson & Gerstein, 1998) and the possibility that many of them may be continuing their drug use, the impact on the prevalence of drug problems among the elderly population could be substantial. It remains to be seen, of course, how many baby boomers will continue their earlier patterns of drug use in later life. Furthermore, the same amount of drug taken at the age of 25 may have markedly different effects when consumed at the age of 75—meaning that harmless drug use may become harmful drug use with age, without any change in the drug-taking behavior itself (Dowling, Weiss, & Condon, 2008; Duncan, 1994). It also remains unclear how many baby boomers will develop a problem as a result of continuing to use drugs. Along with this, there would likely occur a concomitant increase in illicit drug abuse among a proportion of these elderly illicit drug consumers. This will have important implications for drug policy and drug abuse treatment services. Our current analysis will address the question of whether the generational shift represented by baby

boomers reaching their senior citizen years is resulting in an increased prevalence of illicit drug use among the elderly population.

Methods

We conducted a secondary analysis of archived data from the National Household Survey on Drug Abuse (NHSDA) and its successor survey the National Survey on Drug Use and Health (NSDUH). Sponsored by the Substance Abuse and Mental Health Services Administration (2008), both surveys were designed to provide yearly national data on the use of alcohol, tobacco, and illicit and prescription drugs in the United States. The NHSDA was conducted annually from 1971 until 1998 as a paper-and-pencil survey. In 1999, it was expanded, converted to a computer-based survey and formally renamed the NSDUH (Gfroerer, Eyerman, & Chromy, 2002). This study was conducted using the public access data files of the NHSDA and NSDUH made available through the Inter-University Consortium for Political and Social Research (2009).

For purposes of our study, we compared lifetime and current prevalence rates for older Americans in the 1985 NHSDA ($n = 1,103$) and the 2006 NSDUH ($n = 5,830$), the earliest and latest surveys in this series available for public data use. A 77% response rate was reported for the computer-assisted personal interview portion of the NSDUH (U.S. Department of Health and Human Services, 2006). All subsequent analysis is based on data weighted using estimates provided by the Substance Abuse and Mental Health Services Administration to render the data generalizable to the adult noninstitutional population of the United States. For this study, we defined “older American” as age 50 and older. This was to ensure that an age group similar to that defined as “baby boomer” would be included in the sample for the study. The demographic profile of this sample is presented in Table 1. Differences in prevalence between the two samples were assessed using a Mann-Whitney U test to compare reported drug use across the generations.

Table 1: Sample Characteristics

Characteristics	1985	2006
Male	42.15	45.86
Female	57.85	54.14
White	85.67	77.54
Black	8.31	9.69
Hispanic	4.61	7.95
Other	1.41	4.81
< High school	39.57	18.48
High school	33.19	31.73
Some college	14.44	21.74
College graduate	12.8	28.05

As could be expected, our results (see Table 2) show a significant decline ($U = 2,837,581,209,170,520$; $p < .001$) in the prevalence of current (i.e., past month) cigarette smoking and a decrease in the proportion who ever smoked cigarettes among older Americans.

Table 2: Percentage of Older Americans Reporting Cigarette and Alcohol Use in 1985 and 2006

Drug Last Used	Cigarettes		Alcohol	
	1985	2006	1985	2006
Past month	24.7	17.5	46.7	46.5
< 1 year	2.2	2.2	13.9	12.7
> 1 year	50.3	51.5	23.1	24.9
Never used	22.8	28.9	16.3	15.8

Alcohol use, on the other hand, showed little change from 1985 to 2006, with nearly identical prevalences among older Americans in both years, although this difference, too, was significant ($U = 2,587,609,488,152,670$; $p < .001$). The change in prevalences for prescription drugs was smaller, but in all four categories studied, there was an increase in the percent that had ever used (see Table 3). Adults reported significantly higher use of sedatives ($U = 2,561,798,265,166,490$; $p < .001$), tranquilizers ($U = 2,525,203,645,535,830$; $p < .001$), stimulants ($U = 2,466,597,277,810,900$; $p < .001$), and analgesics ($U = 2,574,438,622,606,390$; $p < .001$).

Table 3: Percentage of Older Americans Reporting Prescription Drug Use in 1985 and 2006

Drug Last Used	Sedatives		Tranquilizers		Stimulants		Analgesics	
	1985	2006	1985	2006	1985	2006	1985	2006
Past month	0.20	0.10	0.30	0.10	0.10	0.10	0.27	0.59
< 1 year	0.10	0.00	0.40	0.30	0.10	0.10		0.60
> 1 year	1.20	3.60	2.20	4.50	1.60	5.70	0.82	4.20
Never used	98.60	96.30	97.10	95.10	98.30	94.00	98.91	94.60

We found clear support for the idea that the population of older Americans in 2006 would contain significantly greater proportions of persons who had ever used and who currently use illicit drugs than had the older population in 1985 (see Table 4). The proportion that had ever used these substances increased for all six categories of illicit drugs studied. Current (i.e., past month) use was greater for marijuana (1.6 % vs. 0.3%; $U = 2,041,068,525,773,020$; $p < .001$), cocaine (0.3% vs. 0.1%; $U = 2,407,759,835,615,580$; $p < .001$), and inhalants (0.1% vs. 0%; $U = 2,511,445,810,210,830$; $p < .001$). While these percentages may look small, it should be remembered that this amounts to an estimated increase of 1,268,262 in the number of older Americans who are currently using marijuana, 140,422 using cocaine, and 56,547 using inhalant. Lesser but significant increases were seen in the use of hallucinogens ($U = 2,371,346,063,158,550$; $p < .001$), heroin ($U = 2,550,151,037,444,280$; $p < .001$), and PCP ($U = 2,522,045,543,659,650$; $p < .001$).

Table 4: Percentage of Older Americans Reporting Illicit Drug Use in 1985 and 2006

Drug Last Used	Marijuana		Cocaine		Hallucinogens	
	1985	2006	1985	2006	1985	2006
Past month	0.3	1.6	0.1	0.3		
< 1 year	0.4	1.0		0.2		0.1
> 1 year	4.8	23.5	1.6	7.8	0.5	8.4
Never used	94.6	73.8	98.3	91.8	99.5	91.5

Drug Last Used	Heroin		Inhalants		PCP	
	1985	2006	1985	2006	1985	2006
Past month		0.1		0.1		
< 1 year		0.0	0.0	0.1		
> 1 year	0.4	1.2	1.1	3.4	0.3	2.3
Never used	99.6	98.7	98.9	96.4	99.7	97.7

Discussion

The NHSDA and the NSDUH are both designed to be representative of the U.S. population aged 12 and older but were not specifically designed to be representative of older Americans. We are also relying on self-report data with all the limitations inherent in the use of such data. While, normally, one might expect exaggeration of some behaviors, there is evidence that recreational use of drugs (both prescription and illicit) is typically underreported in these surveys. Additionally, the most recent data available for analysis includes only a part of the baby boom generation, and these individuals will likely have an even more significant impact on reported levels of drug use over the next decade.

We should also note these analyses were conducted on weighted data; thus, the significance levels reported are based on the United States population at the time of each survey (1985 and 2006). These large population estimates resulted in a substantial increase in power, such that findings of significant differences between the two time periods were virtually guaranteed. That said, even a tenth of a decimal point change means that thousands more among older Americans are using the drug in question.

It also should be noted that the increase found in marijuana use may not only be a result of trends that emerged in the 1960s and 1970s, but may also represent increased use of medical marijuana in more recent years. While it is unlikely that medical marijuana users will develop an abuse problem, the likelihood that their numbers are increasing is a situation that could present important issues for professionals working with these users, especially in skilled nursing facilities or other residential settings. For patients who are self-administering medicinal marijuana, simple discreteness and good communication between residents and staff may be all that is required to prevent complicating situations. Patients who are not able to manage their own medication, however, would present the long-term-care facility with more complex issues regarding the choice of whether and how to store, secure, and dispense an illegal substance as medicine.

Of course, not all of these older users of illicit drugs have an addiction or abuse problem. Generally speaking, only about 10% to 20% of the users of a drug (other than tobacco) ever develop an abuse problem (Anthony & Helzer, 1991; Nicholson, Duncan & White, 2002; Duncan, White & Nicholson, 2003). This still suggests, however, that there has been a substantial increase in the numbers of

older Americans who abuse illicit drugs. We can no longer assume that substance abuse among older Americans refers only to problems with alcohol, prescription drugs, and over-the-counter medications.

For those who do need treatment, this transition raises the issue of whether existing programs will best serve them or whether they should be treated in separate older-specific programs. Janik and Dunham (1983) cast doubt on this idea, pointing out that older patients in mixed-age treatment seem to do quite well. Finlayson (1995) claims that grouping patients according to what drug they abused is more important than their age. Others argue, however, that older substance abuse patients do even better when treated with others of similar age (Duncan, 1994; CSAT, 1998).

Why might the treatment of older drug abusers be better conducted on an older-specific basis? Five broad reasons have been identified in literature:

1. The specific problems and concerns of older substance abusers, including etiologic factors and risk factors for relapse, may be substantially different from those of younger substance abusers (Rice, Longabaugh, Beattie, & Noel, 1993; Schonfeld & Dupree, 1995).
2. Value differences and differences in life experiences between older and younger substance abusers may constitute barriers to the open and honest communication required in treatment groups (Dupree, Broskowski, & Schonfeld, 1984; Rice et al., 1993).
3. Cognitive, social, and value traits of the older patients may require the use of different approaches, such as slower pacing, repetition, and an emotionally supportive rather than confrontational counseling style (Dupree et al., 1984; Kofoed et al., 1984; Schonfeld & Dupree, 1995; Tarter, 1995).
4. Social bonding with like-age peers may facilitate identification with the treatment group and promote shared reminiscence, thus enhancing program compliance and outcomes (Kofoed et al., 1984 & 1987).
5. Older patients may face transportation problems and access issues more often than do younger patients (Fredriksen, 1992; Fortney et al., 1995).

Three prototypic older-specific treatment models have been developed for older alcoholics:

1. Supportive social programs (Zimberg, 1978) that often emphasize group and family therapy, either in a "freestanding" program (Dunlop, Skorney, & Hamilton, 1982; Williams, 1983) or in an alcoholism outpatient clinic (Atkinson, Tolson, & Turner, 1993; Kofoed et al., 1984).
2. Cognitive-behavioral therapy offered in a group format as part of a day treatment program in an aging services setting (Dupree et al., 1984; Schonfeld & Dupree, 1995).
3. Older-specific residential treatment programs that usually follow the 12-step model of Alcoholics Anonymous (Kashner et al., 1992; Thomas-Knight, 1978).

Our analysis suggests that there will be a continuing trend to more illicit drug use by seniors for quite some time to come. This societal change has important implications for social and health services for the elderly population, including treatment services for those who develop a substance abuse disorder. This also indicates a need for studies of treatment of elderly abusers of illicit drugs and examination of such questions as whether they need older-specific treatment modalities.

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