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## Gender-Related Differences in Psychoactive Drug Use Among Older Adults

Cynthia Robbins  
Richard R. Clayton

*Age, sex and ethnic differences in past year medical and non-medical use of tranquilizers, sedatives, stimulants, and analgesics are explored in the 1982 National Household Survey on Drug Abuse (NHSDA). In general women are more likely to report past year medical use than are men; whites are more likely to report past year medical use than are blacks or Hispanics; and older adults are more likely to report past year medical use than are younger adults. These differences are not large, however, and several notable exceptions occur. Hispanic women are especially likely to report past year use of prescription analgesics. Women age 45 to 64 report greater prescription psychoactive use than do those age 65 or older. In the 65 and older age group, men are more likely than women to report past year medical use of sedatives, tranquilizers, and stimulants.*

*Additional analyses of non-medical pill use and use of alcohol and illicit drugs suggest that young adult men and women, rather than older women, are most at risk for adverse drug interactions, and young adults in the 1985 NHSDA are far more likely than older adults to report psychosocial problems resulting from alcohol or drug use.*

### Adults

**I**n the 1970s feminist scholars sounded an alarm about possible overmedication of women with psychoactive drugs. These early critiques

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Cynthia Robbins is Assistant Professor, Department of Sociology, University of Kentucky, Lexington, Kentucky. Richard Clayton is Professor, Department of Sociology, University of Kentucky, Lexington, Kentucky. This work was supported by contract 271-84-7301 from the National Institute on Drug Abuse. The data were made available by the Institute.

derived from content analyses of advertisements in medical publications (Mosher, 1976; Prather and Fidell, 1975; Seidenberg, 1974). Such advertisements were accused of portraying the stresses of everyday life as disease states treatable by psychotropic drugs. Ads suggested giving tranquilizers to harried mothers, dissatisfied housewives, lonely women, and even "the woman who can't get along with her new daughter in law." Normative life transitions such as adjusting to college life, menopause, "the empty nest" and widowhood were depicted as cause for medication, and psychoactive drugs were even promoted as a way to manage hypochondriacal or difficult patients. For example, one tranquilizer ad depicted the same woman in numerous poses in a doctor's waiting room with the caption "When you see the same patient over and over with functional complaints" (Mosher, 1976:74).

Most of the ads depicted woman patients, and survey research on representative populations confirmed that women were receiving more prescriptions for psychoactive drugs than were men (Abelson et al., 1973; Cooperstock and Parnell, 1982; Parry et al., 1973; Verbrugge, 1982).

Critics of these patterns were concerned that drugs were being used beyond traditional medical psychiatric concepts of disease. It was feared that the expanding concept of disease was diffusing or channeling female innovation and protest (Cloward and Piven, 1979). Further, since women also use more over-the-counter medications (Verbrugge, 1982) and alcohol problems of women are often undetected by physicians (Dunham, 1986; Smith, 1986), prescription drug use may make women especially vulnerable to adverse drug interactions. Alcohol in combination with other substances is the most frequent cause of emergency episodes in the Drug Abuse Warning Network (DAWN) system (NIDA, 1986).

Older women might be especially at risk. As previously noted, the drug ads often depicted aging-related events — menopause, empty nest, and bereavement. Prescription drug use is positively related to age (Brown, 1982; Zawadski et al., 1978) as is over-the-counter drug use (Lamy, 1982). It is estimated that up to 10% of the elderly have an alcohol problem (Schuckit, 1977). Moreover, as with women, alcohol problems in the elderly are often unrecognized by physicians who may prescribe psychoactive drugs (Dunham, 1986). Finally, Braude (1986) notes that age-related changes in drug absorption, distribution, metabolism, or elimination could make the elderly vulnerable to adverse reactions.

Most research on prescription drug use has only included whites, but it is important to consider minorities since they may rely heavily on over-the-counter drug use (Juergens et al., 1986), and treatment statistics suggest greater minority involvement in alcohol abuse and illicit drug use (Hanson, 1985). In addition to the potential for drug interactions, blacks and Hispanics may be disadvantaged in health care delivery (Dutton, 1986). Cultural differences may lead physicians to rely on prescription drugs when they have difficulty communicating with a patient. Poor communication could

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result in an incomplete history of other medications and misunderstandings concerning proper use of prescribed drugs and potential drug interactions. Further, if blacks and Hispanics are more often treated in clinics and emergency rooms rather than by family physicians, discontinuity in health care could contribute to inappropriate and/or overlapping prescriptions.

The purpose of this study is to present descriptive data from a nationally representative sample on medical and nonmedical use of four kinds of psychoactive drugs: sedatives, tranquilizers, stimulants, and analgesics. The analyses allow comparisons of men and women, of blacks, whites and Hispanics, and of different age groups. The data on medical and nonmedical use of the substances are from the 1982 National Household Survey sponsored by the National Institute on Drug Abuse. (Such questions were not asked in the more recent 1985 survey.) We also present additional analyses of the 1985 National Household Survey to explore group differences in the potential for overlap of prescription drug use with alcohol and illicit drug use and group differences in perceived drug problems.

### Methods

#### *The Sample*

The data for this study come from the 1982 and 1985 National Household Surveys on Drug Abuse (NHSDA) sponsored by the National Institute on Drug Abuse and the National Institute on Alcohol Abuse and Alcoholism. In 1982 and 1985, in-person interviews were conducted in respondents' homes using self-administered answer sheets for sensitive questions. The samples for the two surveys were designed to represent the household population of the United States (excluding Alaska and Hawaii) aged 12 and above. The household population excludes persons residing in group quarters and institutional settings such as prisons, hospitals, dormitories, rest homes, hotels, rooming houses, and military installations, as well as the homeless. Consequently, the surveys likely underrepresent the drug-using population of the entire country. Because of the particular analytic concerns, the 1982 survey oversampled adults age 18 to 34 and the 1985 survey oversampled blacks, Hispanics, and those under 35 years of age. Therefore, the data are weighted to reflect the actual population using estimates from the Census Bureau's Current Population Surveys. For more information on the samples and weighting procedures see Clayton et al. (1987) and Miller et al. (1982).

In 1985, a total of 8,038 interviews were completed, representing an overall response rate of 83.5%. Completion rates were slightly higher for blacks and Hispanics than for whites. In 1982, 5,624 interviews were completed. Response rates in 1982 ranged from 77% in the 35 and older age stratum to 84% in the 12 to 17 stratum. Miller et al. do not report response rates by ethnicity for the 1982 survey.

*Measures**Demographic variables*

Three demographic classifications are used in these analyses: sex, ethnicity and age group. The weighted sample for 1982 adults is 46% male and 54% female. The 1985 sample is 48% male and 52% female.

Ethnicity has three categories: white, black, and Hispanic. The white category includes a small number of respondents of other ethnicities (86 in 1982, 148 in 1985). The weighted percentages for 1982 are 10% black, 5% Hispanic and 85% white. For 1985, the weighted percentages are 11% black, 7% Hispanic and 83% white.

The 1982 age group classification is divided into five categories: age 18 to 25 (21% of weighted adult sample), age 26 to 34 (20%), age 35 to 44 (15%), age 45 to 64 (26%) and age 65 or older (19%). In the 1985 sample, the age group classification is divided into four categories: youth age 12 to 17 (11%), young adults age 18 to 25 (17%), mid adults age 26 to 34 (19%), and older adults (53%).

*Drug use*

Medical use of psychoactive drugs was assessed by showing respondents a card for each of four classes of drugs: sedatives, tranquilizers, stimulants, and analgesics. The cards depicted the most commonly prescribed pills and capsules in the respective drug category. Respondents were asked if they ever had a drug of that type prescribed for them by a physician. Those who had ever used a type of drug medically were asked when they most recently used the drug. In analyses reported here, responses are dichotomized to reflect past year medical use of the four drug classes. Nonmedical use was measured by showing respondents the same cards and asking them to put a checkmark next to each pill they "ever took for kicks or to get high — or for any other nonmedical reason." The measure of most recent nonmedical experience was dichotomized to reflect past year use.

To explore the potential for overlap between medical use of psychoactive drugs with alcohol or illicit drug use, we created an index of past year recreational drug use by adding across three measures: the frequency during the past year that respondents say they got "very high or drunk on alcohol," the frequency during the past year respondents used marijuana, and the frequency during the past year they used cocaine. Each of the component items ranged from 0 for never during the past year to 8 for daily or near daily use.

*Perceived drug problems*

The past year alcohol and drug problem index ( $\alpha = .91$ ) is the sum of responses to seventeen items concerning social, psychological and health problems the respondent experienced in the past twelve months from their use of alcohol or drugs. Frequencies of the component items ranged from 1% of respondents who had to get emergency medical help to 8% of respondents who found it difficult to think clearly. Respondents who had experienced a problem were asked which substance or substances caused the problem. Over half the

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problems were attributed to alcohol use. Marijuana, cocaine and tobacco were the most frequently mentioned substances following alcohol. Fewer than 10% of the problems were attributed to use of pills (sedatives, tranquilizers, stimulants or analgesics).

### *Analysis*

Group differences in past year medical and nonmedical use of sedatives, tranquilizers, stimulants, and analgesics are explored in simple cross-tabulations. Group differences in recreational substance use and perceived drug problems are assessed by means of Analysis of Variance (ANOVA). Given the large sample sizes, even small differences are statistically significant, so interpretations will rely on magnitude and consistency of patterns rather than statistical tests.

### **Results**

Sex, age and ethnic differences in past year medical use of psychotherapeutic drugs are shown in Table 1. Of the four types of drugs, analgesics are the most commonly used while stimulants are least commonly used. As expected, women report greater past year use of the prescribed drugs than do men. In the oldest age group (65+), however, men are more likely than women to report past year medical use of sedatives, tranquilizers and stimulants. The sex reversal occurs in the oldest age category because, while medical drug use by women peaks in the 45 to 64 age group and then declines in the oldest age group, medical use by men is greater in the oldest age group than in the 45 to 64 group.

Age differences in medical use are not uniform in the expected direction. Although previous researchers report increasing use with age, women age 65 and older are less likely to report past year use of each drug type than are women age 45 to 64. Stimulant use is greatest in the 26 to 34 age group.

Ethnic differences in medical use are not very pronounced, and, if anything, suggest greater use by whites than by blacks or Hispanics. One exception is the apparent high level of prescription analgesic use by Hispanic women. Hispanic women are half again as likely as white or black women to report past year use of prescribed analgesics. Hispanic men, on the other hand, are far less likely than white or black men to report past year medical use of analgesics.

Past year nonmedical use of the four classes of drugs is reported in Table 2. With the exception of stimulants, nonmedical use is much less common than medical use. Among whites, males are more likely than females to report nonmedical use. These differences are not large, however, and there is no clear sex difference among minority men and women. Although older persons might be presumed to have greater access to these substances through borrowed or misused prescriptions, nonmedical pill use follows the pattern of other illicit drug use and is concentrated in the two younger (18 to 25, 26 to 34) age groups. Among women, ethnic differences in nonmedical pill use are not pronounced.

Table 1:  
Percent of Respondents in Age, Race and Sex Groups Reporting Past Year Medical Use of  
Psychoactive Drugs (1982 National Household Survey)

	Sedatives					Total	Weighted N
	age 18-25	age 26-34	age 35-44	age 45-64	age 65+		
Men:	2	2	2	6	11	5	2275
Black	2	4	0	4	3	3	214
White	2	2	2	7	12	5	1951
Hispanic	3	3	0	0	9	3	110
Women:	4	6	5	7	7	6	2638
Black	2	5	7	13	4	6	285
White	5	6	5	7	8	6	2202
Hispanic	3	0	5	0	—	2	151

  

	Tranquilizers					Total	Weighted N
	age 18-25	age 26-34	age 35-44	age 45-64	age 65+		
Men:	3	6	10	9	12	8	2275
Black	0	2	0	0	22	4	214
White	4	6	12	10	10	8	1951
Hispanic	3	1	0	0	22	4	110
Women:	6	12	17	19	10	13	2638
Black	1	15	20	20	7	13	285
White	7	13	18	19	10	13	2202
Hispanic	5	1	10	13	—	8	151

  

	Stimulants					Total	Weighted N
	age 18-25	age 26-34	age 35-44	age 45-64	age 65+		
Men:	*	*	0	*	2	1	2275
Black	0	0	0	0	3	*	214
White	*	*	0	*	2	1	1951
Hispanic	0	1	0	0	0	*	110
Women:	1	4	4	3	1	3	2638
Black	0	6	7	0	0	3	285
White	2	4	4	3	1	3	2202
Hispanic	0	8	0	2	—	2	151

  

	Analgesics					Total	Weighted N
	age 18-25	age 26-34	age 35-44	age 45-64	age 65+		
Men:	15	16	13	12	7	13	2275
Black	10	19	10	15	10	13	214
White	16	17	14	12	7	13	1951
Hispanic	14	0	0	0	0	3	110
Women:	24	23	13	19	15	19	2638
Black	22	23	11	25	20	20	285
White	25	23	13	17	15	19	2202
Hispanic	20	30	19	39	—	28	151

Note: \* means less than one-half of one percent  
— means no cases in this cell

# GENDER-RELATED DIFFERENCES IN PSYCHOACTIVE DRUG USE

**Table 2:**  
**Percent of Respondents in Age, Race and Sex Groups Reporting Past Year Nonmedical Use of Psychoactive Drugs (1982 National Household Survey)**

	Sedatives					Total	Weighted N
	age 18-25	age 26-34	age 35-44	age 45-64	age 65+		
Men:	11	5	5	0	0	4	2275
Black	3	1	11	0	0	3	214
White	13	6	5	0	0	5	1951
Hispanic	0	0	0	0	0	110	
Women:	6	2	*	0	0	2	2638
Black	8	6	1	0	0	3	285
White	6	2	0	0	0	2	2201
Hispanic	*	0	0	0	—	*	151

  

	Tranquilizers					Total	Weighted N
	age 18-25	age 26-34	age 35-44	age 45-64	age 65+		
Men:	6	4	3	0	0	3	2275
Black	0	2	0	0	0	*	214
White	7	4	3	0	0	3	1951
Hispanic	0	0	0	0	0	0	110
Women:	6	2	*	0	0	2	2638
Black	6	4	0	0	0	2	285
White	6	2	*	0	0	2	2202
Hispanic	*	0	0	0	—	*	151

  

	Stimulants					Total	Weighted N
	age 18-25	age 26-34	age 35-44	age 45-64	age 65+		
Men:	13	7	3	1	0	5	2275
Black	1	0	0	0	0	*	214
White	15	8	3	1	0	6	1951
Hispanic	6	2	0	0	0	2	110
Women:	9	4	0	0	0	3	2638
Black	8	7	0	0	0	3	285
White	9	4	0	0	0	3	2202
Hispanic	*	0	0	0	—	*	151

  

	Analgesics					Total	Weighted N
	age 18-25	age 26-34	age 35-44	age 45-64	age 65+		
Men:	6	4	2	0	0	2	2275
Black	0	0	0	0	0	0	214
White	6	5	3	0	0	3	1951
Hispanic	7	0	0	0	0	1	110
Women:	3	2	*	0	0	1	2638
Black	1	2	0	0	0	1	285
White	3	2	*	0	0	1	2201
Hispanic	3	0	0	0	—	*	151

Note: \* means less than one-half of one percent  
 — means no cases in this cell



Among men, whites are more likely than blacks or Hispanics to say they used these substances for kicks or to get high.

The most commonly abused recreational drugs are not psychoactive medications. Rather they are alcohol, marijuana and cocaine. There is a potential for adverse drug reactions when prescribed psychoactive drugs are taken simultaneously with recreational drugs. This potential is explored in Table 3 on group differences in recreational drug use. The dependent variable in Table 3 is an index of past year alcohol, marijuana, and cocaine use. Recreational use is greatest in the 18 to 25 age group and drops sharply thereafter. Use is quite low in the 35 and older age group, so the potential for adverse interactions with medical drug use is minimal among older adults. Males are much more involved in recreational drug use than are females. Ethnic differences in recreational use appear to reverse with age. Among youth and young adults, whites report greater alcohol and illicit drug use than do blacks or Hispanics. White and Hispanic use declines more rapidly with age, however, so that in the older age groups blacks report greater use than do whites or Hispanics. This is particularly true of older black men who may be

Table 3  
Mean Scores by Demographic Characteristics on Additive Index of Past Year Recreational Substance Use (1985 National Household Survey)

	Youth Age 12-17	Young Adults Age 18-25	Mid Adults Age 26-34	Older Adults Age 35 +	Total
Males (3391)	1.65	4.06	3.37	1.08	2.49
Black (732)	1.24	4.11	3.82	2.25	2.70
White (1814)	1.81	4.60	3.53	.84	2.57
Hispanic (845)	1.71	3.08	2.60	.78	2.12
Females (4419)	1.09	2.21	1.44	.31	1.25
Black (1134)	.83	2.06	1.92	.49	1.32
White (2201)	1.43	2.83	1.65	.27	1.43
Hispanic (1084)	.83	1.41	.56	.17	.80
Total (7810)	1.37	3.02	2.20	.62	1.78

Note: Figures in parentheses are weighted n's.

particularly vulnerable to synergistic effects of prescription drugs with alcohol or illicit drugs.

Indeed, among adults age 35 and older, black men report the greatest number of problems resulting from past year alcohol or drug use, though they do not report significantly more problems than do white men in that age group. These group differences in perceived drug problems are reported in Table 4. In general, differences in perceived problems are about what we would expect based on group differences in alcohol and recreational drug use. Men report

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more problems than do women; adults age 18 to 25 report more problems than do younger or older persons; and whites report more problems than do blacks or Hispanics. Among women age 35 and older, Hispanics report nearly as many drug problems as do whites, even though Hispanic women report low

Table 4  
Mean Scores on Drug Problem Index by Demographic Characteristics (1985 National Household Survey)

	Youth Age 12-17	Young Adults Age 18-25	Mid Adults Age 26-34	Older Adults Age 35 +	Total
Males (3526)	.61	1.36	1.08	.60	.89
Black (773)	.38	.77	.89	.65	.64
White (1869)	.72	1.92	1.20	.60	1.06
Hispanic (884)	.61	.93	.96	.54	.76
Females (4512)	.57	.87	.63	.15	.55
Black (1172)	.31	.47	.49	.10	.35
White (2228)	.84	1.23	.80	.17	.71
Hispanic (1112)	.40	.70	.43	.14	.45
Total (8038)	.59	1.09	.81	.33	.70

Note: Figures in parentheses are weighted n's.

levels of alcohol or illicit drug use. This may be a consequence of the high levels of prescribed analgesic use by older Hispanic women.

### Discussion

Many previous studies of psychotropic drug use have only included whites. Therefore, it is important to note that in the National Household Surveys minorities are slightly less likely than whites to have used prescribed psychotropic drugs. This contrasts sharply with the overrepresentation of minorities in substance abuse treatment populations. One exception to lower levels of use by minorities in the NHSDA data is the apparent high level of analgesic use by Hispanic women. That Hispanic women are more likely to use this type, but not other types of psychoactive drugs, should sensitize researchers to explore ethnic differences in the presentation of symptoms or in the interpretation of symptoms by health care professionals. Hispanic men, on the other hand, report very low levels of medical analgesic use. Does this reflect cultural values of machismo on the part of Hispanic male patients (i.e., denial of pain or refusal of pain medication), or does stereotyping by health care providers make them less likely to prescribe analgesics to Hispanic men?

Compared to men, women report fairly high levels of medically prescribed drug use. This is particularly true for tranquilizers, which over one in ten

women acknowledged using during the previous year, and for prescription analgesics, which about one woman in five used. These drugs have great potential for dependence and addiction, so such high levels of use are cause for concern. On the other hand, high levels of medical drug use by older American women are counterbalanced by their low rates of nonmedical use of pills, alcohol, or illicit drugs. For this reason, it appears that men and younger women are more at risk for dangerous drug interactions between prescribed drugs, illegal drugs, and alcohol. The levels of prescribed medication used for these groups are not dramatically lower than those for older women, while their rates of alcohol and illicit drug use are considerably higher.

Analyses of the 1985 measure of perceived drug problems corroborate the impression of few drug problems among older women relative to younger women and to men. White men and women age 18 to 25 report the greatest number of problems in health and in social and psychological functioning due to substance use. The problems in this age group probably accrue more from alcohol and illicit drug use than from prescribed use.

The low rate of drug problems among older women may be a result of the critiques raised during the seventies that physicians were overprescribing psychoactive drugs. Goode (1984) notes dramatic reductions in psychoactive drugs. Goode (1984) notes dramatic reductions in psychoactive drug prescriptions since the early 1970s. This decrease and the tendency for noncompliers to take less rather than more pills than prescribed (Caplan et al., 1984) mitigate problems related to medical use of psychoactive drugs.

Lest we paint too benign a picture of prescription drug use, several limitations of these analyses should be noted. First, drug use and drug problems are underrepresented in these surveys because the respondents are limited to the household population, not the institutionalized or transient populations. Second, respondents are likely to underreport both their nonmedical and medical drug use. Many Americans hold attitudes that have been referred to as "pharmacological Calvinism." To the extent that they regard psychotropic drug use as a sign of weakness, respondents may deny use in an interview situations.

In addition to problems of undersampling and underreporting of drug use, our measures are limited in several respects. The most recent measures of medical drug use are from the 1982 National Household Survey. Neither the 1982 nor the 1985 survey includes measures of over-the-counter (OTC) drug use. OTC drug use may present a greater danger for adverse drug interactions than do alcohol or illicit drug use in the older adult population. Finally, the Household Surveys do not measure abuse of prescription drugs in situations where respondents use the drugs other than as prescribed, but in a manner that they define as medical use. Further research will require fine-tuned measures of the psychosocial circumstances surrounding prescription drug use and of the manner in which prescribed psychoactive drugs are combined with OTC drugs, illicit drugs, and alcohol.

## GENDER-RELATED DIFFERENCES IN PSYCHOACTIVE DRUG USE

These descriptive survey analyses have identified age, sex, and ethnic differences in prescribed psychoactive drug use. While these data are a valuable resource, they are limited in measures of the causes, circumstances and consequences of group differences in prescription drug use. The social forces producing these group differences must be addressed in further research which examines perceptions of health, help-seeking behavior, and patient-physician communication.

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