

Substance Use, Dependence, and Service Utilization Among the US Uninsured Nonelderly Population

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An increasing number of Americans do not have health insurance,¹⁻³ but little is known about the extent and magnitude of their substance abuse service needs. Between 1989 and 1996, the number of uninsured persons in the United States increased by 8.3 million so that by 1996 41.7 million Americans lacked any health insurance coverage.³ Adolescents living in low-income or single-parent households and members of non-White racial/ethnic groups were more likely to have no health insurance coverage.⁴⁻⁷ Prior surveys have shown that an increased proportion of young adults aged 19 to 24 years, persons who never married, and Blacks and Hispanics (especially Hispanic males) lack health insurance coverage.⁸⁻¹⁰

Lack of health insurance coverage represents a major barrier to health care utilization and is associated with having poorer physical and mental health.¹¹⁻¹³ Compared with insured persons, the uninsured have significantly fewer annual ambulatory visits and are more likely to report needing but not receiving medical care.¹⁴ Adults without any insurance are much less likely than insured persons to receive mental health services from general medical or mental health specialty sectors.¹⁵ Low-income persons are less likely than higher-income persons to have mental health insurance coverage, and those whose insurance does not provide mental health coverage are far less likely to utilize the specialty sector for mental health problems.¹⁵

Uninsured workers have poorer self-perceived general and mental health than workers receiving employer-sponsored health insurance.¹¹ Norquist and Wells found that uninsured persons had a higher prevalence of serious psychiatric disorders than privately insured persons, independent of the influence of gender, age, ethnicity, education, and physical health.¹⁶ A national survey of Americans from 60 communities found that severely mentally ill adults were disproportionately

Objectives. We examined the prevalence and correlates of substance use, dependence, and service utilization among uninsured persons aged 12 to 64 years.

Methods. We drew study data from the 1998 National Household Survey on Drug Abuse.

Results. An estimated 80% of uninsured nonelderly persons reported being uninsured for more than 6 months in the prior year. Only 9% of these uninsured persons who were dependent on alcohol or drugs had received any substance abuse service in the past year. Non-Hispanic Whites were an estimated 3 times more likely than Blacks to receive substance abuse services.

Conclusions. Compared with the privately insured, uninsured persons had increased odds of having alcohol/drug dependence and appeared to face substantial barriers to health services for substance use problems. (*Am J Public Health.* 2003;93:2079-2085)

Black, less educated, and from lower-income families, and that 1 in 5 adults with severe mental illness were uninsured.¹⁷

To better understand the scope of substance use and associated service needs, we examined the prevalence and correlates of substance use, dependence, and substance abuse service utilization among nonelderly persons interviewed in the 1998 National Household Survey on Drug Abuse (NHSDA), a survey of the US general population. The survey addressed 3 questions: (1) What proportions of uninsured nonelderly persons used substances, developed dependence, or utilized services for problems related to alcohol or drug use in the past year? (2) Among uninsured substance users, what subgroups were more likely than others to have substance dependence symptoms but to not receive substance abuse services? (3) Were there differences between uninsured and insured nonelderly substance users in their likelihood of substance dependence or use of substance abuse services?

METHODS

Study Sample

Study data were drawn from the 1998 NHSDA.¹⁸ The NHSDA was designed primarily to provide annual estimates on the use of illicit drugs, alcohol, and tobacco among the US civilian, noninstitutionalized population

aged 12 years and older. Targeted populations were selected for participation based on multistage area probability sampling. These included household residents, residents of noninstitutional group quarters (such as college dormitories, group homes, homeless shelters, rooming houses), and civilians dwelling on military installations.

The household interview took approximately 1 hour to complete. A total of 25 500 individuals completed in-home interviews in the 1998 survey; the response rate was 77%.¹⁸ To maximize accurate reporting of illicit drug use and other sensitive behaviors, self-administered answer sheets were used for questions related to the use of licit and illicit drugs, problems associated with substance use, and substance abuse treatment.¹⁹ With this procedure, the answers to sensitive questions (e.g., regarding drug use behaviors) were recorded by the respondent and were not seen by the interviewer. Other details of the survey design and data collection procedures have been reported elsewhere.^{18,19}

Study Variables

The 1998 NHSDA assessed current health insurance coverage obtained through both public programs and private sources. "Private health insurance" included health insurance obtained through an employer or union, or by direct payment of premiums to a private health insurance company or health mainte-

nance organization (HMO). “Public health insurance” included Medicare, Medicaid, CHAMPUS, TRICARE, CHAMPVA, and care provided by the Department of Veterans Affairs and the military.

“The uninsured” were defined as persons not covered by any private or public programs or above-mentioned sources.²⁰ To be conservative about the specification of the uninsured and rule out transient lack of coverage, we based our estimates mainly on a subsample of uninsured persons aged 12 to 64 years who reported not having any kind of health insurance coverage for more than 6 months in the year preceding the survey (n=4464).

We examined NHSDA data on use in the past year of alcohol or any drug, including cocaine/crack, marijuana/hashish, inhalants, hallucinogens, or heroin, as well as any non-medical use of sedatives, tranquilizers, pain relievers, or stimulants. The 1998 NHSDA assessed substance dependence over the past year, as defined by the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)*.²¹ The survey assessed 6 of the 7 DSM-IV substance dependence criteria: (1) building up a tolerance for the substance; (2) using the substance in larger amounts than the person intended; (3) being unable to reduce or terminate substance use; (4) spending a great deal of time getting the substance; (5) reducing important social, occupational, or recreational activities because of substance use; and (6) manifesting health or psychological problems because of substance use. These dependence questions were asked separately for each class of substance used.

Consistent with the logic of the DSM-IV,²¹ a person was considered “dependent” on a substance when he/she met at least 3 of the dependence criteria in the past year. “Any drug dependence” applied to persons reporting at least 3 dependence symptoms resulting from the use of a particular drug.

The 1998 NHSDA assessed substance abuse service utilization specifically related to the use of alcohol or drugs, asking, for example, “During the past 12 months have you received treatment or counseling for your use of alcohol or any drug, not counting cigarettes?” “Substance abuse service utilization” was defined as the receipt in the past year of

any service to address the use of alcohol or drugs (including cocaine/crack, marijuana/hashish, inhalants, hallucinogens, and heroin; and the nonmedical use of sedatives, tranquilizers, pain relievers, and stimulants) at any hospital, drug or alcohol rehabilitation facility, mental health center or facility, private doctor’s office, prison or jail, or self-help group. Social and demographic characteristics assessed included age, gender, race/ethnicity, and educational level.

Data Analysis

We analyzed the data using SUDAAN software,²² which applies a Taylor series linearization method to account for complex design features of the NHSDA. We used logistic regression procedures to identify correlates of substance dependence among substance users and factors related to substance abuse service utilization among substance users reporting dependence symptoms. In the analysis that examined differences between uninsured and

insured substance users in their likelihood of substance dependence or use of substance abuse services, we expanded the sample to include past-year substance users aged 12 to 64 years who were covered through public or private sources of health insurance.

RESULTS

Prevalence and Characteristics of the Uninsured

Of all civilian, noninstitutionalized Americans aged 12 year or older surveyed (n=25 500), 76% obtained health insurance through private sources, 11% had coverage through public programs, and 12% were uninsured (Table 1). Among all persons aged 12 to 64 years (n=24 161), 14% lacked any health insurance coverage. Of these, an estimated 80% (that is, 11.5% of all persons aged 12 to 64 years) reported being uninsured for more than 6 months in the past year (n=4464).

TABLE 1—Health Insurance Status by Sociodemographic Characteristics

	Aged 12 y or Older (n = 25 500)			Aged 12 to 64 y (n = 24 161)		
	Private, %	Public, %	Uninsured, %	Private, %	Public, %	Uninsured, %
Age, y						
12-17	76.5	10.7	11.8	76.5	11.7	11.8
18-34	71.4	6.9	21.6	71.4	6.9	21.6
35-49	82.2	5.8	12.0	82.2	5.8	12.0
≥50	75.0	20.1	5.0	83.5	8.2	8.2
Gender						
Male	77.3	9.6	13.1	79.2	5.8	15.1
Female	75.1	13.0	11.8	77.2	9.0	13.9
Race/Ethnicity						
White, non-Hispanic	81.9	9.0	9.2	84.3	4.8	10.9
Black, non-Hispanic	60.6	23.2	16.2	64.1	18.1	17.9
Hispanic	52.2	16.3	31.4	53.6	13.0	33.4
Other ^a	75.8	10.1	14.1	78.9	6.6	14.5
Residence Region						
Northeast	78.3	11.7	9.9	80.7	7.5	11.8
North central	82.0	8.8	9.2	83.3	6.0	10.7
South	72.7	12.5	14.8	75.2	7.6	17.3
West	73.7	12.0	14.4	75.3	8.5	16.2
Overall	76.2	11.4	12.4	78.1	7.4	14.4

Note. Sample sizes are unweighted figures; percentages are weighted estimates. There was a significant bivariate association between current health insurance status and age group, gender, race/ethnicity, and geographic region of residence for the overall sample and the subsample restricted to persons under age 65 (χ^2 : $P < .001$).

^aAsians, Pacific Islanders, American Indians, and Alaska Natives.

TABLE 2—Past-Year Prevalence of Substance Use/Dependence Among Uninsured Persons^a Aged 12 to 64 Years

	All Uninsured Persons Aged 12 to 64 ^b		Past-Year Substance Users ^c	
	Any Use, % (SE)	Having 3 or More Dependence Symptoms, % (SE)	Any Dependence Symptom, % (SE)	Having 3 or More Dependence Symptoms, % (SE)
Alcohol use	62.7 (1.38)	8.3 (0.73)	32.8 (1.79)	13.3 (1.09)
Any drug use	18.8 (1.13)	4.2 (0.44)	50.3 (3.05)	21.7 (2.07)

Note. SE = standard error. Percentages are weighted estimates.

^aUninsured persons are those who did not have any health insurance coverage for more than 6 months in the past year.

^bn = 4464.

^cn = 2546 for past-year alcohol users; n = 884 for past-year any-drug users.

For all ages, uninsured persons were more likely to be younger adults aged 18 to 34 years, non-White minority members (particularly non-White Hispanics), and residents of the Western and Southern US regions. This pattern is similar to the 1999 estimates from the Medical Expenditure Panel Survey.⁹ Persons aged 12 to 64 years who reported being uninsured for more than 6 months in the past year were the primary focus of our analysis. Of these, 49% were aged 18 to 34 years, 28% were aged 35 to 49 years, 51% were male, 52% were White, 28% were Hispanic, 44% were from the South, and 26% were from the West.

Substance Use and Dependence Among Uninsured Nonelderly Persons

Of the uninsured nonelderly persons, 63% reported that they drank alcohol, and 19% used drugs for nonmedical reasons in the past year (Table 2). About 16% of the uninsured reported using marijuana/hashish, and less than 5% reported using other drugs (cocaine/crack, inhalants, hallucinogens, heroin, sedatives, tranquilizers, pain relievers, stimulants). Altogether, 64% of uninsured persons used alcohol or drugs in the past year. Overall, one-fifth had at least 1 alcohol dependence symptom, and one-tenth had at least 1 drug dependence symptom. Past-year prevalence of substance dependence among the uninsured was 8% for alcohol and 4% for any drug.

Among uninsured past-year substance users, one-third of alcohol users reported alcohol dependence symptoms, and one-half of drug users reported drug dependence symptoms. The prevalence of dependence among

users was 13% and 22%, respectively, for alcohol and any drug. Of those dependent on alcohol or drugs (n=459), 60% were dependent on alcohol only, and the remaining 40% were dependent on drugs only (20%) or on both alcohol and drugs (20%).

Substance Abuse Service Utilization

Overall, an estimated 1.6% of these uninsured nonelderly persons utilized substance abuse services for problems related to alcohol or drug use in the past year (data not shown). Among the uninsured who reported no alcohol or drug dependence symptoms, 0.6% utilized any substance abuse service. Proportions of service utilization increased to 5% among the uninsured reporting at least 1 alcohol or drug dependence symptom.

However, the prevalence was considered to be very low, even among persons dependent on alcohol (9%) or drugs (12%). Overall, only 9% of uninsured persons dependent on alcohol or drugs in the past year received any substance abuse service. The prevalence of service use was higher among persons dependent on both alcohol and drugs (15%) than among those dependent on alcohol only (7%) or drugs only (10%).

Determinants of Substance Dependence and Service Utilization

Estimated adjusted odds ratios and 95% confidence intervals from final logistic regression models are summarized in Table 3. Among uninsured past-year alcohol users, adults aged 18 to 34 years had greater odds of alcohol dependence, compared with those aged 50 to 64 years. The same was true for

men, compared with women. In comparison, age, gender, race/ethnicity, and educational level were not found to be associated with the relative odds of drug dependence among past-year drug users.

Because we defined substance abuse service utilization to include treatment or counseling received at any professional or nonprofessional setting, and persons without a past-year psychiatric diagnosis but some mental health problems have been found to utilize mental health services,²³ we reported relative odds of service utilization among persons reporting at least 1 dependence symptom and among persons with 3 or more dependence symptoms. Multiple logistic regression analyses showed that, among uninsured alcohol and drug users with at least 1 dependence symptom, Whites were about 3 times more likely than Blacks to have used such services recently. Age, gender, and educational level were not found to be associated with service utilization. Among uninsured alcohol and drug users reporting at least 3 dependence symptoms, Whites were about 4 times more likely than Blacks to have used services recently. This association was marginally significant ($P=0.056$).

Differences in Substance Dependence and Service Utilization by Health Insurance Status

We conducted logistic regression procedures to determine differences in the odds of substance dependence or using substance abuse services between uninsured and insured nonelderly alcohol and drug users (Table 4). Each separate logistic regression model was adjusted for age, gender, race/ethnicity, educational level, and residential region, all of which have been found to be related to substance use/dependence or utilization of substance abuse services.^{24–27}

Even with statistical adjustment for demographic variables, uninsured substance users were more likely than privately insured substance users to have been dependent on alcohol and drugs in the prior year. Substance users covered through public insurance programs also had greater odds of alcohol and drug dependence, compared with privately insured substance users. There was no significant difference in the relative odds of using substance abuse services between uninsured

TABLE 3—Adjusted Odds Ratios (ORs) of Substance Dependence and Service Utilization Among Past-Year Nonelderly Uninsured Substance Users

	≥ 3 Drug Dependence Symptoms				Receiving Substance Abuse Services			
	Alcohol Users (n = 2546)		Any Drug Users (n = 884)		Alcohol or Drug Users With at Least 1 Dependence Symptom (n = 969)		Alcohol or Drug Users With at Least 3 Dependence Symptoms (n = 459)	
	Adjusted OR (95% CI)	P	Adjusted OR (95% CI)	P	Adjusted OR (95% CI)	P	Adjusted OR (95% CI)	P
Age, y								
12–17	2.57 (0.72, 9.19)	.145	0.68 (0.27, 1.71)	.410	0.80 (0.07, 8.89)	.852	1.22 (0.10, 14.53)	.876
18–34	2.97 (1.10, 7.98)	.032	1.05 (0.56, 1.97)	.883	0.96 (0.15, 6.12)	.966	0.70 (0.10, 5.02)	.720
35–49	2.39 (0.86, 6.65)	.095	...	...	...	...	...	...
50–64	Ref		Ref ^a		Ref ^a		Ref ^a	
Gender								
Male	2.00 (1.25, 3.21)	.004	0.65 (0.38, 1.12)	.120	3.05 (0.73, 12.63)	.124	3.63 (0.86, 15.30)	.079
Female	Ref		Ref		Ref		Ref	
Race/Ethnicity								
White, non-Hispanic	0.92 (0.58, 1.46)	.731	0.97 (0.52, 1.81)	.916	3.45 (1.04, 11.49)	.044	3.83 (0.97, 15.14)	.056
Hispanic	0.60 (0.36, 1.00)	.052	0.72 (0.38, 1.39)	.332	1.00 (0.27, 3.72)	.999	0.94 (0.18, 4.88)	.942
Native American/Asian	1.18 (0.42, 3.36)	.749	3.28 (0.55, 19.39)	.188	0.59 (0.05, 6.64)	.664	0.77 (0.03, 19.30)	.873
Black, non-Hispanic	Ref		Ref		Ref		Ref	
Education								
Less than high school	1.22 (0.52, 2.87)	.651	0.97 (0.34, 2.75)	.952	1.49 (0.31, 7.13)	.614	0.83 (0.13, 5.22)	.842
High school graduate	0.87 (0.36, 2.09)	.747	0.66 (0.21, 2.05)	.471	0.69 (0.15, 3.10)	.627	0.90 (0.19, 4.34)	.898
Some college	0.85 (0.35, 2.08)	.720	0.75 (0.22, 2.55)	.643	...	....	...	...
College graduate	Ref		Ref		Ref ^b		Ref ^b	

Note. CI = confidence interval; Ref = reference group. Each separate logistic regression model includes age, gender, race/ethnicity, and education.

^aReference group includes those aged 35 to 64 y.

^bReference group includes those with some college and college graduates.

TABLE 4—Adjusted Odds Ratios (ORs) of Past-Year Substance Dependence and Service Utilization in Relation to Health Insurance Status Among Past-Year Substance Users Aged 12 to 64 Years

	≥ 3 Drug Dependence Symptoms				Receiving Substance Abuse Services			
	Alcohol Users (n = 13 398)		Any Drug Users (n = 3894)		Alcohol or Drug Users With at Least 1 Dependence Symptom (n = 4557)		Alcohol or Drug Users With at Least 3 Dependence Symptoms (n = 1869)	
	Adjusted OR (95% CI)	P	Adjusted OR (95% CI)	P	Adjusted OR (95% CI)	P	Adjusted OR (95% CI)	P
Uninsured 6 Months or Longer	1.45 (1.15, 1.82)	.002	1.44 (1.04, 2.00)	.028	1.60 (0.74, 3.45)	.230	1.80 (0.72, 4.50)	.206
Public	1.52 (1.13, 2.04)	.006	1.60 (1.09, 2.34)	.017	3.59 (1.80, 7.16)	<.001	4.91 (2.21, 10.91)	<.001
Private	Ref		Ref		Ref		Ref	

Note. CI = confidence interval; Ref = reference group. Each separate logistic regression model is adjusted for age, gender, race/ethnicity, education, and geographic region of residence.

and privately insured alcohol- and drug-dependent persons. However, persons who obtained health insurance coverage through public programs were much more likely than the privately insured to have utilized substance abuse services recently (Table 4). Additional comparisons of substance users reporting at least 3 dependence symptoms revealed that the uninsured were significantly less

likely than persons with public coverage to receive services for problems related to alcohol or drug use (adjusted odds ratio=0.4; 95% confidence interval=0.16, 0.85).

DISCUSSION

In this nationally representative sample of uninsured persons, 63% used alcohol in the

prior year, and 16% used marijuana. Among recent substance users, the dependence prevalence was 22% for drugs and 13% for alcohol. Among uninsured past-year alcohol users, those who were aged 18 to 34 years, male, or Black (as opposed to Hispanic) had increased odds of alcohol dependence.

Altogether, 91% of uninsured persons dependent on alcohol or drugs reported that

they did not receive any substance abuse services in the past year. Among uninsured past-year alcohol or drug users reporting any dependence symptoms, non-Hispanic Whites were an estimated 3 times more likely than non-Hispanic Blacks to utilize substance abuse services. Multiple logistic regression analysis supported a higher prevalence of alcohol and drug dependence among the uninsured and the publicly insured than among privately insured substance users. Uninsured substance-dependent persons were less likely than publicly insured dependent persons to receive substance abuse services, whereas there was no difference in the odds of using services between uninsured and privately insured persons dependent on alcohol or other drugs.

Limitations

Some limitations of the study design deserve attention. First, the NHSDA uses cross-sectional designs, and the data are based on self-reports. Active military personnel, homeless persons, and individuals living in institutional group quarters such as prisons, nursing homes, and treatment centers were not included in the NHSDA sample. Therefore, this study's estimates should be considered conservative. Second, assessments of substance dependence were constrained by the fact that the survey did not assess the seventh DSM-IV criterion, that of "withdrawal." This lack of withdrawal assessment might have caused us to underestimate the dependence prevalence for those drugs with which withdrawal is associated. Assessments of mental health problems also are not available.

Third, patterns of substance use/dependence and utilization of substance abuse services for adolescents may differ from those for adults. Studies of adults have found that the severity of a psychiatric problem (for example, its diagnosis or comorbidity) is an important determinant for service use.^{23,28} However, utilization of mental health services among adolescents also depends on parents' or other adults' perceptions of needs for services.²⁹ Parents, teachers, and other adults play a crucial role in identifying a child's mental health problem and making decisions about receiving services.^{30,31}

Because of our focus on uninsured persons, the small number of adolescents aged 12 to

17 years who were dependent on alcohol or drugs does not allow examination of service utilization separately by adolescents and adults. The NHSDA data are based entirely on participants' self-reports—parents' perceptions of their children's drug use behaviors and substance abuse service needs are not assessed. Nonetheless, other studies of adolescents also have found underutilization of mental health services by Black youth relative to Whites.³²

Implications

Perhaps the most striking finding of this study concerns the very low prevalence of any substance abuse service utilization among persons dependent on alcohol or drugs. The prevalence of substance dependence among drug users compared to alcohol users suggests that drugs were more addictive substances than alcohol. This finding is consistent with Kandel et al.'s study of past-year prevalence of substance dependence using aggregated samples of the 1991 to 1993 NHSDAs.³³ However, our estimates were somewhat higher, owing to our exclusion of elderly persons over the age of 64. In the study by Kandel et al.,³³ the proportions of past-year users aged 12 years or older who were dependent on a substance were 5% for alcohol, 8% for marijuana, and 12% for cocaine, whereas our estimates were 13% for alcohol and 22% for any illicit drugs.

Our estimates of substance abuse service utilization are generally consistent with those for mental health service utilization specifically for substance use problems,³⁴ but lower than the results of studies examining aggregated service use for substance abuse and other mental health problems.^{23,35,36} The National Longitudinal Alcohol Epidemiologic Survey found that only 10% of adult Americans who abused or were dependent on alcohol received alcohol abuse services at any service sector in the past year.³⁴ The current study estimated that 9% of persons dependent on alcohol received any alcohol abuse service at any service source in the past year. These findings suggest that the use of both licit and illicit substances might have a significantly negative influence on the quality of life of a substantial number of uninsured persons. Unfortunately, even among persons depen-

dent on both alcohol and drugs, 85% reported that they did not receive any services for alcohol or drug use.

Logistic regression analyses with statistical adjustment for demographic characteristics revealed that uninsured or publicly insured substance users were more likely than privately insured substance users to be dependent on alcohol or drugs. Among the uninsured substance users reporting dependence problems, non-Hispanic Blacks appear to have more unmet needs for substance abuse services than non-Hispanic Whites. Our findings suggest that greater attention should be focused on the nature and extent of possible barriers, such as education, language, fear of stigma or discrimination, or financial difficulties.

Unfortunately, lack of health insurance might not be a temporary condition. Our study found that an estimated 80% of all uninsured nonelderly persons in the 1998 NHSDA reported being without health insurance for more than 6 months in the year preceding the interview. Being uninsured for more than 6 months suggests an increased likelihood of delaying or not seeking needed care and having less access to health care. In particular, persons with a substance use disorder appear to face greater barriers to utilizing mental health services than those with a non-addictive mental disorder.^{37,38}

Consistent with studies of mental health services,^{16,17} uninsured persons were less likely to utilize services than persons whose health care was paid for through public assistance. Studies also have found that having insurance coverage for mental health is a significant predictor of receiving mental health care in both the mental health specialty and the general medical sectors.³⁹ Adults covered by public insurance programs are more than 6 times more likely than uninsured adults to have access to the mental health specialty sector.¹⁷

Our data also indicate that persons covered by Medicaid or receiving other forms of public assistance were more likely to receive substance abuse care than the privately insured.¹⁶ The higher prevalence of utilizing substance abuse services by persons receiving public assistance might be related to more severe substance abuse problems or to more coexisting psychiatric or other health problems among

them than among privately insured persons. Persons with Medicaid had a higher prevalence of serious psychiatric disorders than those with private insurance even after demographics were held constant.¹⁶

Although the Medicaid benefit package for mental health services is broad, Medicaid beneficiaries might have received lower-quality care or have limited access to more effective mental health services because of the tension between improving access and limited resources.⁴⁰ Managed care models have been increasingly used in publicly funded mental health and substance abuse services. Unfortunately, studies have questioned the quality of public-sector managed behavioral care, which can be characterized by insufficient access to needed care, limited choices in selecting plans or providers, and a potential threat to continuity of care for persons with severe mental illness.⁴¹ The adequacy, appropriateness, and quality of substance abuse services delivered under publicly funded programs need to be further determined. Nonetheless, our data and those of other studies emphasize the importance of public insurance to the socially and economically disadvantaged population.^{16,17}

Taken together, the very low prevalence of substance abuse service utilization by alcohol- and drug-dependent persons may indicate a significant public health problem. Increased attention from the research and policy sectors should focus on the needs of the uninsured population. They appear to face more barriers to services for substance abuse than persons covered through public programs. The uninsured population should be studied further to understand who they are, the negative impacts of being uninsured for different subgroups, and the social costs of living without health insurance.⁴²

Our findings support the need for further research to identify factors that may enhance or impede the likelihood of substance abuse service utilization, particularly to disentangle subgroup variations among this underserved, uninsured population. Because universal health care coverage is a widely held objective, more concerted combined efforts are needed to increase community support for programs and policies that expand health insurance coverage. ■

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Contributors

L.-T. Wu conceived of the study, performed all analyses, and wrote the initial draft of the article. A. C. Kouzis and W. E. Schlenger contributed to the interpretation of the findings and the writing of the article.

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Human Participant Protection

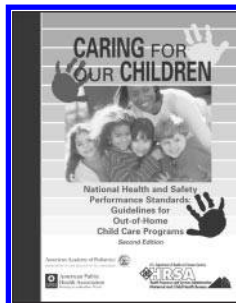
This study was declared exempt from the RTI International institutional review board, because it used an existing public-use data file. No information or identifiers on the data file can be used to link to any respondent of the survey.

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