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BRIEF REPORT

Drug Use Among Welfare Recipients in the United States

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ABSTRACT

This study examined the prevalence of drug use in a nationally representative sample of 1989 recipients and 6840 nonrecipients of four welfare programs. Data from the 1995 National Household Survey on Drug Abuse (NHSDA) were analyzed using the conditional form of multiple logistic regression with matching of respondents on neighborhood of residence. Weighted proportions and variances accounting for the complex sample design of the NHSDA survey were estimated using the Taylor series linearization method. The results indicate that drug use is 50% more common in households with welfare recipients than in nonwelfare households. Programs making welfare eligibility contingent on the recipient working toward a drug-free lifestyle are worth examining, although a vigilant eye must be kept on the potential unintended consequences.

Key Words. Conditional logistic regression; Drugs; Epidemiology; Poststratification; Welfare

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INTRODUCTION

Little empirical evidence is available about the hypothesized relationship between receipt of welfare benefits and drug use (1–5). A recent study found significantly higher rates of monthly drug use among welfare recipients in northern California (38%) when compared to the area's general population (11%) (6). Based on data from the 1992 National Longitudinal Alcohol Epidemiologic Survey, researchers found similar levels of drug use among recipients of selected welfare programs (4–10%) versus nonrecipients (5%) (7). In the present report, we sought to determine if drug use is higher in households with welfare recipients than in households without welfare recipients. This study improves on prior studies by relying on data that are more recent, the 1995 National Household Survey on Drug Abuse (NHSDA), and by matching respondents on neighborhood of residence to hold constant the potential influences of commonly shared community-level characteristics.

Recent legislative trends toward drug testing of welfare recipients, levying sanctions against those who test positive, and enforcement of recipients' transitions to work underscore the need to investigate the extent of drug use among individuals who receive welfare benefits (8). Such information could help guide policy decisions regarding drug abuse screening and prevention programs for at-risk recipients, including such programs that might ensure a more successful transition to employment and greater self-sufficiency.

METHOD

Study Sample and Procedures

This study used the 1995 NHSDA data to compare the prevalence of drug use among recipients of four means-tested welfare programs and nonwelfare recipients. Described in detail elsewhere, this national survey employed a multistage area probability sampling design to select civilians aged 12 years and older living in the United States (9). In 1995, a total of 17,747 individuals were interviewed, representing a household response rate of 94% and an individual response rate of 85%. The present study sample includes all respondents 18 years of age or older ($N = 13,152$).

Measures

In this study, *drug use* is defined as any reported use of hallucinogens, marijuana, heroin, stimulants, cocaine, inhalants, sedatives, analgesics, or tranquiliz-



ers in the year prior to the interview. Respondents were classified as welfare recipients if they or another member of their household received benefits from one or more of the following programs: the now-defunct Aid to Families with Dependent Children (AFDC), food stamps, and Supplemental Security Income (SSI) in the year prior to the interview and Medicaid in the prior month. The reason for classifying respondents as welfare recipients if any member of their household received welfare assistance is due to the wording of these questions in the 1995 NHSDA survey. Specifically, the questions about food stamps and AFDC assistance ask if the respondent *or* another household member received these benefits. The question about SSI assistance was asked separately for respondents and for other household members. We coded respondents as receiving SSI benefits if they and/or other members received such benefits. The question about Medicaid benefits referred only to the respondent.

Data Analyses

Nonoverlapping area segments of at least 90 occupied dwelling units (neighborhoods) are identified in the NHSDA through an encrypted number. Respondents were grouped into strata or risk sets defined by the block groups and area segments where they were living when sampled, referred to as neighborhoods below. This poststratification or matching strategy holds constant the potentially confounding effects of unmeasured, but commonly shared, community-level characteristics (e.g., drug availability, police presence, social disadvantage shared across the neighborhood). Thus, in neighborhoods with at least one drug user, all of the non-drug users living in the same neighborhoods were included as controls.

The conditional form of multiple logistic regression was fit to the matched data to assess the association between receipt of welfare and past-year drug use (10). The model then was extended to include statistical adjustment for the hypothesized influences of sex, age, race, and education. In the conditional logistic regression model, the probability of the occurrence of an event, in this case drug use, was estimated for each matched set in the same way as in the standard logistic regression models. The conditional likelihood can be written as follows:

$$\prod_{i=0}^I \frac{\exp\left(\sum_{k=1}^K \beta_k X_{i0k}\right)}{\sum_{j=0}^{M_i} \left(\sum_{k=1}^K \beta_k X_{ijk}\right)}$$



where the i th of I matched sets contains M_i controls (non-drug user) in addition to the case (drug user). In each i th set, the zero value of index j corresponds to a case. The X_{i01} denotes the K vector of exposures for the case (x_{i01}, \dots, x_{i0k}), and the X_{ijk} represents the exposure vector for the j th control ($j = 1, \dots, M_i$) (11). In essence, the numerator represents the risk of an individual using drugs in a particular neighborhood divided by the risk of all the persons using drugs in the same neighborhood whether they receive welfare benefits or not. The Π symbol denotes the product of these risks across all matched sets, resulting in an overall estimate of risk of drug use by welfare recipients (an odds ratio [OR] in this case).

In addition to the above analyses, we used survey weighting procedures that take into account the composite of selection probabilities for individual participants to estimate weighted proportions and variances accounting for the complex sample design of the NHSDA survey, using the Taylor series linearization method implemented in the SUDAAN software package (12). Significance tests ($\alpha = .05$) were used as an aid to interpretation.

RESULTS

Past-year drug use was reported by a total of 1989 adult respondents residing in 1132 neighborhoods; 6840 respondents residing in these same neighborhoods

Table 1. Sociodemographic Characteristics of Welfare Recipients Who Used and Did Not Use Drugs in the Past Year ($N = 8829$)

Characteristic	Drug users ($n = 1989$)		Non-drug users ($n = 6840$)	
	n	Weighted %	n	Weighted %
Sex				
Male	1071	58.6	2615	46.7
Female	918	41.4	4225	53.3
Mean age (SD)	31.4	(0.69)	45.29	(0.51)
Race				
White	1111	77.6	3289	76.6
Black	492	12.9	1695	10.9
Hispanic	337	6.8	1671	8.8
Other	49	2.7	185	3.8
High school graduate				
Yes	1485	80.7	5308	81.7
No	504	19.3	1532	18.3

Source: From NHSDA 1995 (weighted estimates).

Table 2. Any Illicit Drug Use in the Past Year by Type of Welfare Assistance (NHSDA, 1990–1995), Results of Multiple Conditional Logistic Regression Analyses ($N = 8829$)

Characteristic	n	% Drug users (weighted)	% Drug users (unweighted)	Initial model, OR (95% CI)	Adjusted model, ^a OR (95% CI)
No assistance ^b	6779	14.5	21.6	1.00	1.00
Any assistance	2050	20.9	25.7	1.41 (1.23, 1.62)	1.49 (1.28, 1.73)
Multiple programs					
Any one program	788	17.0	22.8	1.27 (1.04, 1.55)	1.31 (1.05, 1.63)
Any two programs	543	26.9	28.0	1.64 (1.30, 2.07)	1.68 (1.31, 2.16)
Any three programs	714	22.8	27.0	1.47 (1.17, 1.83)	1.53 (1.20, 1.95)
At least food stamps	1558	23.6	26.8	1.52 (1.30, 1.78)	1.60 (1.35, 1.91)
Non-food stamp program	487	16.5	22.0	1.15 (0.90, 1.47)	1.22 (0.93, 1.58)

Note: Under large-sample theory, odds ratios with confidence intervals not including the null value of 1.0 are statistically significant ($p < .05$).

^a Adjusted for sex, age, race, and education.

^b Reference category for all comparisons.

reported no past-year drug use. This corresponds to a population prevalence estimate of 15.1% for past-year drug use once the survey weighting procedures are implemented. As shown in Table 1, the sex, age, race, and education characteristics were distributed differently among drug users and non-drug users, supporting the need to adjust for these characteristics in our analyses.

Drug use was higher in households with welfare recipients than in neighboring households without welfare recipients. As seen in Table 2, the adjusted odds of reporting past-year drug use were nearly 50% higher in households in which a member received welfare assistance than in neighboring households in which no members received such assistance (OR = 1.49; 95% confidence interval [CI] = 1.28, 1.73).

The next set of analyses examined the strength of the association between being a recipient of one, two, or three welfare programs and drug use. Past-year drug use was higher in households with recipients of any one, two, three, or more welfare programs when compared to neighboring households without welfare recipients (Table 2, $p < .05$).

Further examination of the data showed that more than two-thirds of households that received assistance from two or more welfare programs were receiving food stamps. Given the large percentage of households that received food stamp benefits, we compared drug use among those who received food stamps as one of the benefits; those who did not receive food stamps, but received other benefits; and non-welfare recipients. The adjusted odds of drug use in households with food stamp recipients was 60% higher than in households without food stamp recipients (OR = 1.60; 95% CI = 1.35, 1.91). The occurrence of drug use in households receiving welfare assistance other than food stamps was not statistically different from nonrecipients (OR = 1.22; 95% CI = 0.93, 1.58).

DISCUSSION

In this study, we sought to contribute to our understanding of the distribution of health problems among welfare recipients by focusing on drug use. The weight of evidence from this investigation is that the burdens associated with illicit drug use are found more often in households in which at least one person was receiving welfare benefits. This evidence contradicts findings from a prior national survey (3), perhaps because the current investigation involved matching respondents on neighborhood of residence; the prior investigation did not match or take neighborhood-level influences into account. The occurrence of drug use was highest



among recipients of multiple programs, particularly among those who reported receiving food stamps.

The above findings should be viewed in light of two important limitations. First, the cross-sectional nature of the study does not allow us to make causal inferences about the association between receiving welfare benefits and drug use. However, by matching respondents on neighborhood of residence, we were able to estimate the strength of the association between receiving welfare benefits and drug use, holding constant the potentially confounding effects of unmeasured, but commonly shared, community-level characteristics. Second, the finding that food stamp recipients are more likely to be drug users than non-food stamp recipients is difficult to interpret because most respondents reported receiving benefits from multiple programs. Eligibility for food stamps is based solely on income, whereas to be eligible for the other programs, additional criteria must be met (e.g., SSI eligibility requires a disability). If eligibility for food stamp benefits is considered an indicator of poverty, the higher occurrence of drug use observed in this population segment, even after adjusting for sex, age, race, and education and after matching respondents on community characteristics, might provide an indication of a strong association between poverty and drug use. However, the investigation of the temporal and causal relationship between poverty and drug use was beyond the scope of this study.

In summary, the findings of this study provide new and up-to-date empirical evidence of higher drug use among our society's most economically disadvantaged families. These findings suggest that recently implemented legal policies to enforce drug testing and to deny welfare benefits to people testing positive for drugs might have important consequences if we are to address drug use in this population. In response to the Congressional mandate to restructure the welfare system, some states have developed policies that allow screening of welfare recipients for drug use and have set up reinforcement contingencies that make welfare eligibility contingent on the recipient's willingness to seek drug treatment services. This strategy provides an opportunity to encourage recipients to work toward a drug-free lifestyle. Nonetheless, concerns about the constitutionality of these plans must be addressed. Also, if the net effect of these policy changes is to diminish the availability of drug treatment services and to deter help-seeking for serious drug problems, then these changes might augment, not diminish, the problems of welfare clients who are drug involved.

There is no easy solution to the problem of drug use in society in general and particularly among the poor, who face tremendous difficulties meeting such basic needs as securing employment, shelter, and food. Programs that make benefit eligibility contingent on individuals working toward a drug-free lifestyle deserve



scrutiny. A vigilant eye must be kept on the potential unintended consequences of these programs.

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