# 13

# **Drug Use**

# Peter Reuter

Welfare rolls and illicit drugs are connected in at least two ways. First, drug use can serve as a barrier to exit from welfare by reducing the ability to find and retain a job. Second, welfare recipiency of the mother can affect drug use among the children, through any of a number of mechanisms. Given the focus of this volume, the chapter deals with maternal drug use, which is also the much better studied of the two.

The chapter is primarily about illicit drugs; alcohol gets only passing mention. Although the latter causes users health and behavioral problems comparable to those of cocaine, heroin, etc., the illegality of the other drugs gives them a particular place in social policy. The need to obtain large sums of money for purchase, the risk of imprisonment and loss of privileges, as well as the effect on popular attitudes toward the welfare population increase the importance of understanding the extent of illegal drug use among welfare recipients.

I begin with a description of the available data sets concerning drug use generally and discuss trends in drug problems over the past two decades, since drug use in the welfare population is not isolated from the broader changes. This is followed by a review of recent evidence on the relationship of maternal drug use to welfare participation around the time of the passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) and of the evidence as to whether the problem has increased with the implementation of the Temporary Assistance for Needy Families program (TANF). The final section speculates about the likely path of drug use in the adult welfare population.

The broad indicators tell a consistent story of declines in the use of cocaine and heroin, not yet compensated for by increases in the 232

use of other dangerous, addictive, and expensive drugs such as methamphetamine. Drug use among welfare recipients has been above that among the general population, but dependence and abuse make a modest contribution to keeping mothers (the vast majority of adult recipients) on welfare. The indicators suggest that drugs may be a fairly marginal factor in outcomes for the welfare population in the foreseeable future; relatively few women will enter TANF or remain in TANF as a result of their drug use.

#### **Data Sets**

Four major data sets are familiar to those who study this topic. All of them can be accessed through the website of the Inter-University Consortium on Political and Social Research, which also contains the published reports and tables.<sup>1</sup>

Monitoring the Future (MTF), a survey of high school students' use of alcohol, tobacco, and other drugs, has been operating for twenty-five years. In addition to its cross-section, MTF also has about twenty-five active panels, since 2,500 respondents are recruited out of each year's high school senior class to participate in panels that now extend to age forty. Through this period, the same three principal investigators have been asking the same questions; as a result, they have produced a very stable high-quality data set. However, the survey principals have demonstrated little interest in exploring special topics.

There are no data on the welfare status of the household in MTF, either cross-sectional or longitudinal. The income questions in the annual cross-sections are not very useful because the data are self-reported by students, with limited knowledge of their parents' earnings. The best proxy for the economic status of the household is the education of parents, which is hardly adequate for analysis of welfare status.

The second broad survey is the National Household Survey on Drug Abuse (NHSDA), now carried out every year. The sample size has grown from about 10,000 in 1990 to approximately 70,000 in 1999. The sample is now large enough to produce state-level estimates of drug use for broad age groups; those might allow for analysis of differences among states, but no pre–PRWORA baseline exists at the state level. The NHSDA contains quite detailed information on household and personal income, including welfare and poverty status, and has been used extensively to study drug use and welfare

participation prior to 1996. Analysis is complicated by the fact that question wording has changed in important ways across years. Sheldon Danziger, professor at the University of Michigan School of Social Work, and colleagues have begun using the data for analyses of this relationship post-PRWORA.<sup>2</sup>

The third relevant data set is the Drug Abuse Warning Network (DAWN), which provides figures on emergency room admissions causally related to use of specific illegal drugs. Unfortunately, this data set is thin, providing only age, sex, and race of the person, and the data set makes it difficult to do neighborhood-level analyses because of the catchment areas of many emergency rooms. However, some ecological analyses should be possible, relating emergency room admissions to welfare participation by neighborhood.

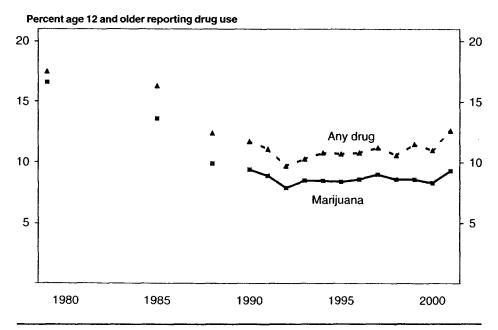
Of potential interest is a relatively new data set called Arrestee Drug Abuse Monitoring (ADAM), which contains data on biological assays (as well as self-report) for drug use in a sample of arrestees in about thirty-five counties. Eventually, the Department of Justice hopes to have seventy participating counties. ADAM includes a detailed survey instrument about criminal and noncriminal earnings and sociodemographic variables. Though females constitute less than one-quarter of arrestees, the ADAM sample is large enough to provide useful data on earnings, family responsibility, welfare participation, and drug use in the criminally active female population.

These data sets are underutilized. One director of the NHSDA thought that 50 percent of the items had never been looked at. The topic came up when he was queried as to whether it would be possible to add some items; he responded that it would certainly be possible to subtract some. All the data are becoming increasingly accessible for public use but there has been little funding for secondary analyses of some of them.

### **Changing Patterns**

Drug use in the general population rose rapidly in the late 1970s, maybe even into the early 1980s, after which a substantial decline took place. Figure 13.1 illustrates the trend; it reports past-year use of any illicit drug and of marijuana from 1979 to 2001 for the household population over age twelve. Drug-use rates in this population have remained stable since the end of the 1980s. In particular, the epidemic of cocaine use came to an end in the 1980s.

Figure 13.1 Past-Year Drug Use, 1979-2001



Source: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Agency, National Household Survey on Drug Abuse (Rockville, Md.: National Institute on Drug Abuse, various years).

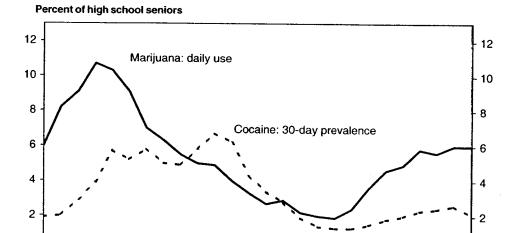
Age-specific patterns turn out to be distinct, however. In particular, the aggregate stability in marijuana use since about 1988 masks sharp increases in adolescent prevalence. As shown in figure 13.2, large increases in marijuana use in the late 1970s among high school seniors were followed by an extended decline over nearly fifteen years. Then in 1992 a dramatic upturn in use began among high school students, effectively doubling the rate by 1998, since when it has plateaued.

How does one account for this recent upturn in adolescent marijuana use? In 1992, candidate Bill Clinton said that he did not inhale, thus making it clear that he had at least tried the drug. But it is difficult to believe that his moral authority, even back then, was so great that it led to a profound change in adolescent behavior. But apart from some throwaway line like that, there are no stories except that attitudes changed, and that merely shifts the mystery: Why did attitudes change?

Could the changes in prevalence be accounted for by movements in poverty rates or other economic indicators? The very smooth long-

2000

Figure 13.2
Daily Marijuana Use and 30-Day Cocaine Prevalence of Use, 1975–2000



Source: Lloyd Johnson, Patrick M. O'Malley, and Jerald G. Bachman, Monitoring the Future: National Results on Adolescent Drug Abuse, Overview of Key Findings, 2001 (Bethesda, Md.: National Institute on Drug Abuse, 2000).

1990

1995

1985

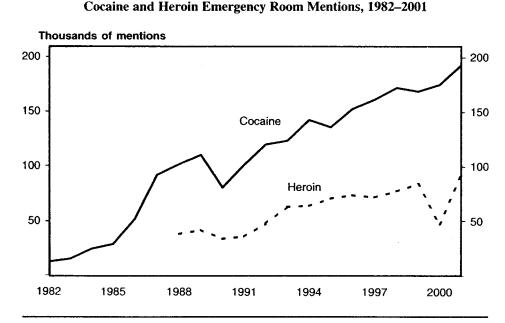
1975

1980

term population patterns through the recession of the early 1990s and the subsequent boom make this implausible. The fact that the recent rise in youthful marijuana use has occurred in almost all Western nations over the same period provides a further basis for skepticism that economic conditions are an important contributor to changes.<sup>3</sup>

If one looks beyond drug use in the general population, which captures mostly occasional use of less dangerous drugs, the indicators tell a different story. For example, according to the latest estimates of the Office of National Drug Control Policy (ONDCP), the number of frequent cocaine users has declined substantially, from about 4 million in 1988 to 2.7 million in 2000.4 On the other hand, data from the DAWN show dramatic increases in emergency room and medical examiner indicators during approximately the same period (see figure 13.3), apparently inconsistent with the prevalence data. The same is true for heroin: A decline in the number of dependent users and roughly stable prevalence in the household population but sharp and continuing increases in the number of Emergency Department and Medical Examiner mentions of the drug.<sup>5</sup>

Figure 13.3



Source: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Agency, National Household Survey on Drug Abuse (Rockville, Md.: National Institute on Drug Abuse, various years).

The apparent inconsistencies among population surveys, estimates of the number of dependent users, and emergency room data do not necessarily reflect conflict or inaccuracy. Rather, they point to a need to recognize cocaine and heroin use as a career rather than as an event. During the late 1970s and early 1980s, many individuals in their late teens and early twenties experimented with cocaine. Some became regular, but occasional, users; a smaller group went on to become regular and frequent users. By the mid-1980s, the percentage of first-time users had fallen substantially and remained low through the mid-1990s. But the total number of cocaine users did not begin to decline because a modest share (perhaps one-third) of the earlier initiates continued to use the drug. The story with heroin is probably very similar.

As the dangers (medical rather than legal) of cocaine use became more apparent and widely known, regular users who were not dependent and generally using only occasionally became increasingly likely to quit. But as cocaine became cheaper and more addictive in the form of crack, users who had not quit were more likely to become dependent. They were also more likely to be among the urban poor, whose drug use has serious consequences both for themselves and for society. As a result, the association between cocaine use and health problems on the one hand (as reflected in the DAWN's rise) and crime, on the other hand, is now stronger. Jonathan Caulkins, professor at Carnegie Mellon University's Heinz School of Public Policy and Management, and his colleagues are developing models that capture these internal dynamics of epidemics.<sup>6</sup>

More direct indicators illustrate the continued low levels of cocaine and heroin use in youth populations. Figure 13.4 is perhaps the most relevant to the discussion here. It shows drug use among juvenile arrestees (a very high-risk population for drug abuse) in the District of Columbia.<sup>7</sup> It is striking that in the late 1980s, criminally active adolescents still had moderately high rates of use of serious drugs, including PCP—a nasty hallucinogen—and cocaine. Twentyfive to 30 percent had used those drugs shortly before being arrested. However, use of these drugs has almost ceased. There is a spike for PCP in 1995, but, otherwise, today there is little use of illicit drugs other than marijuana.

Arrest is not a rare event for young urban minority males; perhaps as many as a third experience arrest before age eighteen. Ado-

Percent testing positive 70 70 60 60 50 50 Marijuana 40 40 Any drug 30 30 **PCP** 20 20 10 Cocaine 1988 1992 1996 2000

Figure 13.4
Drug Use among D.C. Juvenile Arrestees, 1987–2000

Source: District of Columbia Pretrial Services Agency, Drug Test Statistics for DC Arrestees (Washington, D.C.: DC Pretrial Services Agency, monthly).

lescent marijuana use may lead to later cocaine, heroin, or methamphetamine use, but little evidence so far points to an incipient epidemic of any of these drugs, notwithstanding media reports. Andrew Golub and Bruce Johnson, researchers at the National Development and Research Institutes, have shown that the probability of transitioning from marijuana use to cocaine, heroin, or methamphetamine use by age twenty-six has declined substantially in the past decade, from 39 percent (for the 1962–1963 birth cohort) to 24 percent (1970–1971 birth cohort).8

I have referred so far almost exclusively to cocaine, heroin, and marijuana. Synthetic drugs are often mentioned now. However, only methamphetamine shows signs of becoming a problem comparable to cocaine or heroin in terms of the numbers affected, the severity of the problems, and the duration of the addiction. Even methamphetamine may have peaked as a problem, at least according to the latest estimates from ONDCP.

# **Drugs and Welfare Receipt**

#### Pre-PRWORA

At the time of enactment of PRWORA, many welfare professionals believed that for a substantial fraction of clients, substance abuse and dependence were major contributing factors to their welfare status. Illicit drugs were seen as comparable to, if not more important than, alcohol. In the pre–PRWORA era, more emphasis was given the contribution of substance abuse to welfare entry. Post–PRWORA, the emphasis has been on its role as a barrier to exit through employment.

The National Center on Addiction and Substance Abuse (CASA), headed by Joseph Califano, former secretary of Health, Education, and Welfare, published a short report in 19949 apparently based on the 1991 NHSDA, asserting that "[m]others receiving AFDC are three times more likely to abuse or be addicted to alcohol and drugs than mothers not receiving AFDC (27 percent compared to 9 percent)." It concluded that "[a]t least 1.3 million adult welfare recipients currently abuse or are addicted to drugs and alcohol." With fewer than 5 million adult welfare recipients, this was an alarming number.

The CASA estimate seemed far too high as an estimate of the prevalence of a serious problem in this population, given that the vast majority of the drug users in the NHSDA consumed only marijuana. Moreover, the fraction of non-AFDC recipients said to be abusers was also higher than found in other surveys. Nonetheless, the estimate received wide circulation even five years later. For example, a 1999 National Governors Association report continued to cite the CASA study, among others. Califano continued to make similar claims in 2002.<sup>12</sup>

In 1996, an analysis of the 1992 National Longitudinal Alcohol Epidemiologic Survey (NLAES)<sup>13</sup> concluded that only 3.6 percent of AFDC recipients over eighteen were drug dependent or drug abusers and that 7.6 percent were alcohol dependent.<sup>14</sup> Moreover the authors concluded that rates for welfare recipients were "comparable to rates of heavy drinking (14.8 percent), drug use (5.1 percent), alcohol abuse and/or dependence (7.5 percent), and drug abuse and/or dependence (1.5 percent) among the subpopulation of the United States not receiving welfare benefits."<sup>15</sup>

Rukmalie Jayakody, an assistant professor in Pennsylvania State University's Department of Human Development and Family Studies, Sheldon Danziger, and Harold Pollack, a professor at the University of Michigan's School of Public Health, provide a careful analysis of the 1994 and 1995 NHSDAs. 16 They found that, for illegal substances other than marijuana, prevalence among single mothers receiving welfare was higher than among those not on welfare, but that the figures were low: 10 percent and 7 percent. Similar findings held for alcohol dependence: 9 percent in the welfare population and 5 percent for single mothers not on welfare. Having used crack increased the risk of being a welfare recipient substantially, but substance use (including alcohol) was a less important risk factor than either being a high school drop out or having a psychiatric disorder. Adjusting for a number of demographic and family characteristics, a woman on welfare was almost twice as likely as one not on welfare to be classified as a problem drug user, still leaving the proportion quite low.17

Dean Gerstein, senior vice president for the National Opinion Research Center's Substance Abuse, Mental Health, and Criminal Justice Department, and his colleagues analyzed the combined 1994–1996 NHSDA files. They again found that AFDC recipients had higher substance abuse rates than the overall working age population (eighteen to sixty-four) and that the differences were modest: 8 percent of AFDC recipients were classified as substance dependent, compared with 5 percent in the broader population.<sup>18</sup>

The principal explanation for the differences between the later studies and that from CASA appears to lie in the definitions. The CASA report never explicitly described how it classified an individual as a drug abuser or drug dependent, but it appears that using an illicit drug at least once per month was sufficient for that diagnosis. A monthly user of marijuana is certainly flouting the law on a regular basis, but there is little basis for asserting that this, if accompanied by no other drug use, is a serious behavioral problem, with important adverse consequences either for the mother or family. Marijuana dependence is a real phenomenon. Approximately 10 percent of users are at some stage dependent on the drug. But most past-month users are not daily users. In contrast, the other research groups used a diagnostic instrument that was imbedded in the NLAES and the NHSDA interview schedule and that focused on behavioral problems related to drug or alcohol use.

That is not to say that rates as low as those reported by the NLAES or the NHSDA should be accepted at face value. These nationwide household surveys are known to underestimate the prevalence of drug abuse and dependence. For example, in recent years the NHSDA has produced estimates of the total number of frequent cocaine users of about 700,000, yet other estimates, including the results of urinalysis of arrestees, generate estimates more than four times that figure. Heroin dependence, estimated to affect about 900,000 persons, cannot be estimated from the NHSDA at all, because of the instability of the lifestyles of heroin addicts. Can one rely solely on these general population surveys for estimates of the extent of drug use and abuse among AFDC recipients?

There were always some discrepant findings, particularly studies of welfare clients in specific programs. For example, Carol Sisco and Carol Pearson, in a study of Maryland AFDC recipients enrolled in a demonstration welfare to work transition program, gave some standardized tests for substance abuse. They found a prevalence rate of 16 to 21 percent for alcoholism and drug abuse and an additional 21 to 31 percent with social problems related to alcohol and drug abuse. A research group in Berkeley has been conducting research on a variety of public program settings in northern California. Constance Weisner, professor in the University of California at San Francisco, Department of Psychiatry, and Laura Schmidt, a scientist at the Alcohol Research Group, found that 21 percent of welfare clients were multiple drug users, on a past year basis. 1

### Post-PRWORA

Since the implementation of TANF, the focus has been on whether drug use has become an important barrier to exit, given the new emphasis on finding employment. Not only might illicit drug use lead to ineffective job search, but with drug testing of job applicants very common, many might be rejected simply for detected drug use. In particular, many expected that an increasing share of the diminishing welfare client population would be drug dependent.

There has been a continuing flow of estimates of the prevalence of substance abuse in the client welfare population in specific counties and states. Typical of the findings in the literature are those recently reported by Jeffrey Merrill, professor at the University of Medicine and Dentistry of New Jersey's Robert Wood Johnson Medical School, and his colleagues, who interviewed a sample of 740 Florida WAGES clients. Nineteen percent of the WAGES respondents admitted to drinking to intoxication at some point in their life (12 percent within the past thirty days). Five percent of the women admitted to using an illegal drug in the past month, while 21 percent said that they had used a drug at least once in their lifetime. Marijuana was the most common drug (3 percent in the past month and 17 percent during their lifetime), followed by cocaine (1 percent and 8 percent, respectively). Only six women (less than 1 percent) admitted to ever having used heroin. Those who had used illicit drugs during their lifetime averaged almost 4.5 years of use.22

The authors note that these figures are much lower than those generated by the earlier CASA study also led by Merrill and suggest that the explanation may lie in the deterrent effect of TANF, as compared with AFDC, for women with substance abuse problems. The conjecture is that fewer poor mothers with substance abuse problems are applying for welfare in the new system. Data on entrants are still rare so that conjecture cannot be readily assessed.<sup>23</sup>

Data from five other states<sup>24</sup> are roughly consistent with this. For example, New York state officials reported that use of a modified CAGE instrument led to between 2 and 10 percent positive screens for substance abuse. Sandra Danziger, an associate professor at the University of Michigan School of Social Work, and her colleagues found in a self-report survey of clients in a Michigan county that only 3.3 percent of a sample of 753 TANF recipients were drug

dependent and 2.7 percent were alcohol dependent. In New Jersey, a study found only 5 percent who had experienced an episode of binge drinking in the prior thirty days; the figure for frequent use of cocaine, heroin, or amphetamines was very much higher.<sup>25</sup> Sally Satel, the W. H. Brady, Jr., Fellow at the American Enterprise Institute, reports that in New York City a screener for substance abuse detects only 3 to 4 percent as potential problems. Numerous states have reported detecting very few clients with substance abuse problems, frequently less than 2 percent.<sup>26</sup>

A few analyses of the NHSDA post-TANF have appeared. Harold Pollack and his colleagues analyzed the 1998 NHSDA and found less than 5 percent satisfying criteria for drug dependence.<sup>27</sup> Preliminary analyses of the 2000 NHSDA data by Pollack indicate similar figures.<sup>28</sup>

As before PRWORA, there are a few discrepant findings, suggesting that the problem is a serious one. For example, Oregon, with one of the most sophisticated detection systems, has found 19 percent of clients with drug or alcohol problems. Studies of Alameda County, California, have found comparable rates there.<sup>29</sup>

#### The Future

Are figures as low as 5 percent for drug abuse plausible for a population with as many problems as welfare clients? There is one fragmentary indicator with much more credibility suggesting that drug use rates among welfare recipients is low. For a few months, until an American Civil Liberties Union (ACLU) suit ended it, one county in Michigan tested every welfare recipient for recent drug use. Of 258 recipients tested, only 21 tested positive for any drug; only three of these tested positive for a drug other than marijuana. This is one county, and not one with a major city, but it at least provides some sense of credibility.

Views in the field have changed slowly. The National Governors Association in 1999 reported views and impressions from four states (Kansas, New Jersey, North Carolina, and Oregon); none provided a figure lower than 20 percent. Also cited was a CASAWORKS program statement that "63 percent of state welfare administrators estimate that between 20 percent and 40 percent of TANF recipients need substance abuse treatment."<sup>30</sup>

I think that the weight of the very imperfect evidence is that abuse of illicit drugs affects only a modest share of welfare clients, even after the sharp declines post-PRWORA. That does not imply that it should receive no attention. Harold Pollack and Peter Reuter argue that welfare participation provides an important venue for identifying and helping poor mothers with drug problems.<sup>31</sup> Although, the population of drug-dependent poor women, graphically described in Leon Dash's *Rosa Lee* is aging, their children are at higher risk of also becoming drug dependent.<sup>32</sup>

What is true in 2002 need not be true five years from now. I believe that it depends primarily on changes in drug use in the general population. Although drug abuse is associated with poverty, the direction of causality is unclear and probably bidirectional. Many other factors, such as price, enforcement, prevention, and social attitudes, also influence drug use—as evidenced by the wide fluctuations in prevalence rates over short periods of time.

There has been an aging of the population of dependent drug users, certainly those dependent on expensive drugs. This aging has led to low drug-use initiation rates, particularly in communities that are rich in untreated addicts, who serve as a form of inoculation. Female use of drugs other than marijuana has always been substantially less than that of males, typically only 50 to 60 percent as high. Even the much discussed methamphetamine epidemic still remains primarily a western and mid-western phenomenon; it is much smaller in scale than those for cocaine and heroin. There might be a new drug that leads to large numbers of women becoming addicted and dysfunctional, but it is striking that, despite all the developments in neurochemistry, synthetic illegal drugs have made only modest advances.

I do not mean that a new epidemic of use of expensive, dependency-creating, illegal drugs will never occur, only that it is not likely over the next few years. The most likely near future is a client population in which drug abuse and dependence will be of declining importance.

#### Notes

- 1. See http://www.icpsr.umich.edu/SAMHDA/.
- 2. See Rukmalie Jayakody, Sheldon Danziger, and Harold Pollack, "Welfare Reform, Substance Use, and Mental Health," *Journal of Health Politics, Policy, and Law* 25 (2000): 623–651.
- 3. Robert MacCoun and Peter Reuter, "Evaluating Alternative Cannabis Policies," *British Journal of Psychiatry* 178 (2001): 123–128.
- 4. William Rhodes, Mary Layne, Anne-Marie Bruen, Patrick Johnston, and Lisa Becchetti, What America's Users Spend on Illicit Drugs, 1988–2000 (Washington, D.C.: Office of National Drug Control Policy, December 2001).

# 244 Family and Child Well-Being after Welfare Reform

- Official estimates of the number of past-week heroin users in a specific year have fluctuated dramatically. Estimates made in 2000 gave a figure for 1988 of 923,000. The 2000 series showed a fall of about 30 percent to 630,000 in 1992 and then a rise to the 1988 level by 1997. An updated series, published by the Office of National Drug Control Policy in 2002 gave a 1988 estimate of 1.15 million, again falling by about 30 percent to 1992, but then continuing to fall, at a slower pace, for the next seven years.
- See Doris Behrens, Jonathan Caulkins, Gernot Tragler, Josef Haunschmied, and Gustav Feichtinger, "A Dynamic Model of Drug Initiation: Implications for Treatment and Control," *Mathematical Biosciences* 159 (1999): 1–20.
- 7. The District of Columbia has been collecting such data for much longer than any other jurisdiction.
- 8. Andrew Golub and Bruce Johnson, "Variation in Youthful Risks of Progression From Alcohol and Tobacco to Marijuana and to Hard Drugs Across Generations," *American Journal of Public Health* 91 (2) (2001): 225–232.
- 9. Jeffrey Merrill, Kimberly S. Fox, Jennifer C. Friedman, and Gerald E. Pulver, Substance Abuse and Women on Welfare (New York: National Center on Addiction and Substance Abuse, 1994).
- Ibid., p. 3. AFDC, or Aid to Families with Dependent Children, was replaced by Temporary Assistance for Needy Families (TANF).
- 11. Ibid., p. 7.
- 12. Joseph Califano, "To Reform Welfare, Treat Drug Abuse," Washington Post, September 18, 2002.
- 13. The National Longitudinal Alcohol Epidemiologic Survey was very similar to the National Household Survey on Drug Abuse in scope and sample size at that time.
- Bridget F. Grant and Deborah A. Dawson, "Alcohol and Drug Use, Abuse and Dependence among Welfare Recipients," *American Journal of Public Health* 86 (1996): 1450–1454.
- 15. Grant and Dawson, 1996, p. 1453.
- 16. Jayakody et al., 2000.
- 17. Ibid.
- 18. Dean Gerstein, Janet Greenblatt, Tara N. Townsend, Julie D. Lane, Carolyn S. Dewa, Angela M. Brittingham, and Michael Pergamit, Substance Use and Mental Health Characteristics by Employment Status (Rockville, Md.: Substance Abuse and Mental Health Services Administration, June 1999).
- 19. Rhodes et al., 2001.
- Carol B. Sisco and Carol L. Pearson, "Prevalence of Alcoholism and Drug Abuse among Female AFDC Recipients," *Health and Social Work* 19 (1994): 75–77.
- Oddly enough, when the same researchers followed up these clients in 1995, they found that substance abuse was "not a significant determinant of long welfare stays, repeat welfare, or the total time a person remained on welfare during the six year period." Laura Schmidt, Constance Weisner, and James A. Wiley, "Substance Abuse and the Course of Welfare Dependency," American Journal of Public Health 88 (1998): 11. It seems unlikely that on the one hand substance abuse could be a major risk for welfare enrollment but not for length of stay.
- Jeffrey C. Merrill, Sara Ring-Kurtz, Delia Olufokunbi, Sherri Aversa, and Jennifer Sherker, Women on Welfare: A Study of the Florida WAGES Population (Philadelphia: University of Pennsylvania School of Medicine, Treatment Research Institute, 1999).
- 23. Merrill et al., 1994.
- 24. The five states are California (Alameda County), Michigan, New Jersey, New York, and Pennsylvania. For New York and Pennsylvania, there was no published study, just an oral report by a senior official.

- 25. Sandra K. Danziger, Mary Corcoran, Sheldon Danziger, Colleen Heflin, Ariel Kalil, Judith Levine, Daniel Rosen, Kristin Seefeldt, Kristine Siefert, and Richard Tolman, "Barriers to the Employment of Welfare Recipients," in *The Impact of Tight Labor Markets on Black Employment*, edited by R. Cherry and W. Rodgers (New York: Russell Sage Foundation, 2000), pp. 239–269.
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- Harold Pollack, Sheldon Danziger, Kristin Seefeldt, and Rukmalie Jayakody, "Substance Use Among Welfare Recipients: Trends and Policy Responses," Social Service Review 72 (2) (2002): 256.
- Harold Pollack and Peter Reuter, "Welfare Enrollment and Substance Abuse Treatment," unpublished manuscript, School of Public Health, University of Michigan, Ann Arbor, Mich., 2002.
- 29. Rex S. Green, Lynn Fujiwara, Jean Norris, Shanthi Kappagoda, Anne Driscoll, and Richard Speiglman, Alameda County CalWORKs Needs Assessment: Barriers to Working and Summaries of Baseline Status, Report no. 2 (Berkeley, Calif.: Public Health Institute, March 2000).
- 30. Merrill et al., 1994, p. 5.
- 31. Pollack and Reuter, 2002.
- 32. Leon Dash, Rosa Lee: A Mother and Her Family in Urban America (New York: Basic Books, 1996).

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