
Sexual Risk Behavior of Incarcerated, Drug-Using Women, 1992

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Synopsis

In this study, sexual risk behavior of 104 incarcerated female drug users is examined. Findings demonstrate that incarcerated women who use drugs are at high risk for human immunodeficiency virus (HIV) infection because of their behavior prior to arrest. During the month prior to arrest, the majority of respondents were sexually active. Half reported past sexual contacts with injecting drug users, and more than one-third had traded sex for money or drugs.

Consistent with other studies, condom use was more frequent with casual or commercial partners. Those who traded sex for money were less likely to be white Anglo or regular heroin users, and more likely to be regular crack users and alcoholic, have fathers who were drug or alcohol users, and perceive themselves as at-risk for contracting HIV and other sexually transmitted diseases.

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WOMEN IN CORRECTIONAL FACILITIES, a population that has tripled nationwide in the last decade, are at high risk for becoming infected with the human immunodeficiency virus (HIV) infection (1-4). HIV seroprevalence rates of incarcerated women vary widely, from 3.2 percent to 35 percent, but they are highest in regions with high rates of HIV prevalence associated with injection drug use and related heterosexual transmission (2,5-7). Available seroprevalence data from prisons and jails in the United States indicate that female inmates usually test HIV positive at higher rates than their male counterparts (2).

Among Massachusetts inmates tested for HIV during 1988 and 1989, women tested positive (35 percent) at nearly three times the rate of men (13 percent) (5). In the Rikers Island facility in New York City, the corresponding prevalence rates are 25.8 percent for women and 16.1 percent among men (7,8). This wide sex discrepancy in HIV seroprevalence rates may be partially explained by women's

proportionately higher risk of contracting HIV through heterosexual transmission (9).

The risk profile of women incarcerated in urban jail facilities is characterized by drug use and by sexual activity with paid and noncommercial partners who use injected drugs. Of female prisoners, 70-80 percent have alcohol and drug dependence problems (2). The seroprevalence and drug use patterns of female inmates have been investigated, but sexual risk behavior among this population has received relatively less attention from policy makers, researchers, and correctional health officials (2,10). Extant findings on sexual behavior of female arrestees and drug users indicate that HIV risks include the exchange of sex for drugs or money, sex with injection drug users, and infrequent condom use.

Many incarcerated women have traded sex for drugs or money, although adjudication trends regarding prostitution vary across localities (5,11,12). Several studies have linked prostitution with HIV and sexually transmitted diseases (13,14). Nevertheless, it

is important to recognize that female injection drug users (IDUs) are more likely to contract than transmit HIV. Most female IDUs are introduced to injection drugs through male associates.

Women who engage in prostitution tend to use condoms more frequently with customers than with steady male partners (15–18). Whereas a large majority of male injection drug users have sexual relationships with noninjecting females (12,19), less than half the female IDUs report noninjecting male partners (19). Moreover, male-to-female transmission appears to be more efficient than the obverse, at least in developed countries.

Among women participating in acquired immunodeficiency syndrome (AIDS) demonstration research programs that target injecting and noninjecting drug users, funded by the National Institute on Drug Abuse (NIDA), 85 percent did not consistently use condoms for vaginal sex (20) and only 11 percent consistently used latex barriers for all sexual activity (21). One of the few studies of female inmates' pre-incarceration sexual behavior, conducted in Maricopa County, AZ, found that vaginal sex with a condom was infrequent (11).

Attitudes about safer sex are salient determinants of sexual risk behavior (22). Female drug users and sexual partners of IDUs have cited male partners' dislike of condoms, and their own dislike of condoms, as reasons for not using them (23–25). Many women struggle to implement safe sex because of discomfort in talking with partners about safe sex and a power imbalance in heterosexual relationships (26–29). For women drug users, these adversities may be amplified by the difficulty of practicing safe sex while under the influence of drugs and alcohol (30).

This cross-sectional study examines sexual risk behavior of a group of incarcerated women with a recent history of substance use. Demographic and psychosocial characteristics, criminal history, and drug use were included in the assessment battery. The study depicts attitudes towards condom use and frequency of condom use 1 month before arrest. The relationships between demographic and criminal history variables, and exchanging sex for money or drugs, are analyzed using multiple logistic regression.

Methods

Sample and recruitment. All subjects were sentenced women recruited through notices posted on the dormitory walls and invitations made by correctional counselors and research staff. Participation was voluntary and did not affect respondents' status or

assignment to jail activities. To be eligible for the study, subjects had to meet five criteria: (a) females, ages 18–55, incarcerated in the central correctional facility of New York City, (b) convicted, serving a 3- to 12-month sentence, (c) scheduled for release within 10 weeks to one of four boroughs (excluding Staten Island) in New York City, (d) self-reported drug use, three or more times a week during the 3 months before arrest, (e) correctional or medical intake case records indicating abuse of drugs other than alcohol or marijuana.

Of 105 incarcerated women who met the eligibility criteria, 104 agreed to participate.

Measurement. Structured oral interviews were conducted by experienced female interviewers, most of African American background. Bilingual Spanish-speaking interviewers administered questionnaire batteries to Latinas. The questionnaire was first administered to five subjects during an intensive interview to assess their cognitive understanding of each item. The battery, which lasted approximately 1/2 hour, was then revised and administered to 10 additional subjects to assess the feasibility and face validity of the instrument. The final measurement contained the following items:

Demographic variables. The variables included age, race-ethnicity, marital-partner status, number of children, level of education, employment status and history, source of income, residence prior to arrest, history of homelessness, and family members' drug and alcohol use.

Criminal history. Variables included juvenile arrests and incarceration, total arrests and convictions, time previously incarcerated, and length of current incarceration. Dichotomous variables specific to this incarceration included parole violator status, official drug-related offense, unofficial drug-related offense, offense committed to obtain money or drugs, and regular drug use at time of offense.

Drug use. Participants were asked about past and recent use of different drugs. For example, cocaine use was assessed as follows: "Have you ever used cocaine?" (yes or no); "Did you ever use cocaine regularly? (three or more times a week; yes or no); "During the month before this incarceration, how often did you use cocaine?" (seven Likert-type responses, from "never used," to "several times a day.") Similar questions were asked for drug-use risk behaviors, including injection drug use, sharing needles, and frequenting shooting galleries and crack

houses. Subjects were also asked how many times they had overdosed on drugs.

Alcohol use was assessed using the Michigan Alcoholism Screening Test (MAST) (31,32)—one of the most widely used screening instruments for alcohol dependence. Previous studies suggest that problem drinking severity can be measured with adequate degrees of reliability and validity using this instrument, and MAST scores have been correlated with clinical ratings of alcohol problems. The MAST consists of 24 self-report items rated yes or no; five points or more place the subject in an “alcoholic” category, four points suggest alcoholism, and three points or less indicate the subject is not alcoholic.

Drug-alcohol treatment. Variables included whether or not respondents had received alcohol-drug treatment ever and in the year prior to arrest, what type of drug-alcohol treatment they received, and whether they are planning to enter drug-alcohol treatment upon release.

Sexual risk behavior. Subjects were asked about the following sexual activities during the 30 days prior to arrest: the number of times she had vaginal, anal, and oral sex with regular, casual, and commercial male partners; whether or not she had oral or manual sex with women; the number of times she traded sex for drugs or money; and the number of commercial and noncommercial partners. The following lifetime sexual risk behaviors were also assessed: sex with an injecting partner, number of injecting partners, sex with a male or female partner who was HIV positive or had AIDS, sharing a vibrator with a woman, and trading sex for drugs or money.

Use of condoms and other birth control methods. Participants were asked about the frequency of condom use with regular, casual, and commercial sexual partners during vaginal, oral, and anal sex 1 month prior to arrest (condom use responses ranged from “always” to “never” on a five-point Likert scale); if they used condoms or any other method of birth control the last time they had vaginal sex; and if they had ever used condoms or any other method of birth control including the pill, diaphragm, sponge, spermicide, withdrawal, rhythm, intrauterine devices, cervical cap, or sterilization.

Sexually transmitted disease history and HIV status. Items asked if respondents ever, or during the year prior to arrest, had contracted genital herpes, gonorrhea, syphilis, chlamydia, vaginal warts, or other sexually transmitted diseases (STDs). Respond-

Table 1. Demographic characteristics of incarcerated, drug-using women, 1992

Variable	Number	Percent
Race-ethnicity:		
African American	66	63.5
Latina.....	23	21.1
White Anglo.....	9	8.7
Other	6	5.8
Marital status:		
Never.....	49	47.0
Separated, divorced, widowed.....	23	22.0
Married (legal, common-law)	29	27.9
Other	3	2.9
Number of children younger than 18 years:		
0.....	30	28.8
1.....	29	27.9
2.....	21	20.2
3.....	6	5.8
4.....	9	8.7
5 or more.....	9	8.7
Living arrangement at time of arrest:		
Own apartment.....	30	28.8
With family member	33	31.7
With someone else.....	23	22.1
Street.....	11	10.6
Shelter-rooming house	3	2.9
Other.....	4	3.8

ents were asked whether they ever received the HIV test and the results of their last HIV test. On a six-point Likert scale, respondents were asked about their perceived likelihood of contracting the HIV virus.

Attitudes towards using condoms. Using a four-point Likert scale, respondents were asked to rate the following questions from “strongly agree” to “strongly disagree”; “Condoms spoil the mood”; “Condoms are uncomfortable to put on and take off”; “I would avoid condoms whenever possible”; “If my partner refused to use a condom, I would still have sex”; “If I trusted my partner enough, I would use condoms”; “I would feel relief if my partner suggested using a condom.”

Data Analyses

Univariate frequency distributions were conducted to describe demographic characteristics, criminal history, self-reported HIV status, perceived vulnerability for HIV, patterns of drug-alcohol use, and sexual risk behavior. In earlier research with female crack cocaine users, we found that sex trading was associated with other risk behavior and with HIV status (33,34). In this study, we examined correlates of exchanging sex for money or drugs in the past.

Respondents were asked whether or not they had ever traded sex, and this dichotomous item was

Table 2. Criminal history of incarcerated, drug-using women, 1992

Variable	Number	Percent
Number of previous incarcerations:		
0	23	22.3
1	9	8.7
2-4	28	27.2
5-7	17	16.5
8 or more	26	25.2
Most recent conviction:		
Drug possession, sale	28	26.9
Shoplifting	22	21.2
Burglary, petty larceny	13	12.5
Parole violation	16	15.4
Other, missing	25	24.0

entered as the dependent variable in a multiple logistic regression with the following independent variables selected from demographic, criminal history, and drug use domains, including age, marital status, ethnicity, education level, ever homeless, ever arrested in prison, injected 1 month prior to arrest, ever used heroin regularly, ever used cocaine regularly, ever used crack regularly, level of alcohol dependence as measured by the MAST score, father currently using drugs-alcohol, mother currently using drugs-alcohol, and perceived chance of getting HIV infection. These independent variables were selected on the basis of their significant association with sex trading in the univariate analyses or because of their heuristic value.

Results

As shown in table 1, almost two-thirds of the women in the sample described themselves as African American, and the balance were Latina, white Anglo, or of other backgrounds. The mean age was 31.6 (standard deviation [SD] = 6.18) years and mean years of education was 11 (SD = 1.83); 17, or 16.3 percent, had completed some college, and one woman was a college graduate. Nearly half of the respondents had never been married. The bulk of the respondents had at least one child. Over half had at least one financial dependent prior to incarceration. At the time of arrest, only 30 women lived in their own apartment. Fifty women (48.0 percent of the sample) had been homeless at least once; 18, or 17.3 percent, two to five times, and 7, or 6.7 percent, more than six times.

Only 7.7 percent, eight respondents, were employed full or part-time at the time of arrest. Two-thirds, 63 women, reported that their major source of income prior to their incarceration was from illegal sources, but 60 percent stated that they had once held

a legal job, covering an average period of 7.41 years (range, 29 days to 27 years).

Incarceration history. The 103 respondents (data missing for 1) had been previously incarcerated for an average of 6.72 times for an average total of 2.41 years (table 2). Current incarceration ranged from 7 to 396 days with a mean of 100 days. One in seven respondents (15.4 percent) were arrested for parole violations, and 56 indicated their offenses were drug-related (53.8 percent). The most common convictions for the most recent incarceration were drug possession, sales, and theft.

Past and current drug-alcohol use. As shown in table 3, many subjects reported regularly (3 or more days per week) smoking crack, snorting cocaine, and smoking marijuana in the 30 days prior to arrest and in the past. Smaller, but nevertheless substantial proportions, reported injecting cocaine, heroin, or speedballs. Heroin use, both injected and sniffed, was also common. Nearly three-quarters (72.5 percent) of crack users reported using crack several times daily in the month before arrest. Seventy-five women, (72.9 percent) used more than one drug. However, crack users used more substances, other than crack, than noncrack users ($t = -2.06$, degrees of freedom (df)=97, $P < .04$). Problem alcohol use was also prevalent, as 38.4 percent, 40 respondents, were classified as "alcoholic" according to the MAST.

Drug use risk behavior. Of these women, 40.6 percent, or 42, had injected drugs in the past. Fifty-one (49 percent) had visited a shooting gallery; 63 (60.6 percent) had visited a crack house; 32 (31.1 percent) reported sharing used needles or injection paraphernalia; and 21 (20.2 percent) had overdosed on drugs.

Family drug use history. Of respondents, 61, or 59.8 percent, indicated that one or more family members were currently using drugs or alcohol. Of the total sample, 35.2 percent had siblings; 15.4 percent had fathers and 14.4 percent had mothers currently using drugs or alcohol. Twenty-eight women, 26.9 percent, indicated that one or both parents were currently using drugs or alcohol.

Chemical dependence treatment. Only seven women had received either outpatient or inpatient alcohol detoxification, but 39, or 37.5 percent, had received either inpatient or outpatient drug detoxification. Proportions of those ever involved in self-help included 27.9 percent in Alcoholics Anonymous, 5.8

Table 3. Past and current drug use of 104 incarcerated women, 1992

Drug	Used 30 days before arrest		Used 3 or more days per week in the past		Average lifetime regular use in years	Standard deviation
	Number	Percent	Number	Percent		
Crack	64	61.5	86	82.7	3.7	7.5
Cocaine (snorting)	53	51.0	48	46.1	6.4	4.7
Cocaine (injecting)	13	12.2	20	19.2	8.9	5.1
Heroin (sniffing).....	47	45.2	45	43.2	6.6	5.0
Herion (injecting).....	20	19.2	30	28.8	8.7	5.6
Marijuana.....	64	61.5	59	56.7	6.2	5.8
Speedball	15	14.2	32	30.7	6.1	4.3

percent in Narcotics Anonymous, and 8.7 percent in Cocaine Anonymous. Fifty-three participants, or 51 percent, reported interest in seeking drug-alcohol treatment after release.

Sexual risk behavior. When asked about vaginal sex during the month prior to arrest, 49 percent, or 51, had had intercourse with regular partners, 21.2 percent, or 22, with casual partners, 22.1 percent, or 23, had sex with clients 1 month prior to arrest, and 8 subjects reported no sexual activity during this period. In addition, 63 respondents (62 percent) engaged in vaginal sex 1 month prior to arrest and 70.2 percent, or 73, said that they were involved in an ongoing relationship during the month before arrest. Over half, or 51 respondents (6 missing), reported having sex with injection drug users in the past; and 25.8 percent, or 23 (15 missing), stated that they had had sex with more than one injection drug user.

Many (45.2 percent) of the women reported having had sex with a woman during the last 10 years. Of this group, 24.4 percent (11 women, 2 missing) said that they had had sex with women who injected drugs. Nine respondents reported having ever shared a vibrator with another woman. One woman had had sex with a woman known to have AIDS.

Use of condoms and other birth control methods.

Of the 61 (2 missing) who had sex during the month prior to arrest, 16.4 percent reported always using condoms, 8 percent used condoms less than half the time, 18 percent used about half the time, 9.7 percent used condoms more than half of the time, and 47.5 percent never used condoms. Frequency of condom use varied by type of sexual partner. Among the 51 respondents with one regular partner, only 8 stated that they always used condoms during the month prior to arrest. In contrast, of 22 women who had sex with casual partners, half reported that they always used condoms.

Among the 23 women who had sex with clients in

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the last month, 69.6 percent indicated that they always used condoms, and 26 percent reported they sometimes used condoms. However, of the 14 women who had had vaginal sex with regular partners as well as with clients, none reported always using condoms with their regular partner, and 6 said they sometimes used condoms.

Only 27.2 percent of the total sample reported that they used condoms or any other method of birth control during the last time they had sex. Nearly one-fifth of the women reported that they were pregnant in the last year. Overall, 46 had ever used condoms; 46 had used the pill; 32 had used withdrawal; 19 had used an IUD; 18 had used a diaphragm; 15 had used a spermicide foam or jelly without condoms; 12 had been sterilized; 8 had used the rhythm method; and 12 had used a contraceptive sponge.

Attitudes towards condom use. Nearly half of the respondents (48.5 percent) agreed that condoms spoil the mood; 31 percent agreed that condoms are uncomfortable to put on and take off; 33.7 percent reported that they would avoid condoms whenever possible; 59.2 percent said if their sexual partners refused to use a condom, they would still have sex; 55.6 percent reported they would not use a condom if they trusted their partner enough. Yet, 81.6 percent reported they would feel relief if their sexual partners suggested using a condom. As shown in table 4, frequency of condom use is related to attitudes toward the aesthetic properties of condoms and

Table 4. Correlates of the condom use of 61 incarcerated, drug-using women, 1992

Variable	Frequency of condom use 1 month prior to arrest
Condoms "spoil the mood"	¹ -0.229
Condoms are uncomfortable to put on and take off.....	² -0.387
I would avoid using condoms if possible	² -0.510
If my sexual partner(s) said that we won't use a condom, I would still have sex with him.....	² -0.352
I would probably not use a condom if I knew my partner well enough to trust his word that he does not have the HIV virus	² -0.397
If my partner suggested using a condom, I would feel relieved.....	² 0.395

¹P < .05 ²P < .01

attitudes toward negotiating condom use with a partner.

Perceived vulnerability. Of 88 respondents who reported seronegative or unknown HIV status, only 18.1 percent perceived themselves to be at "very high risk" of contracting the HIV infection; 25 percent thought there was "some chance"; 31.8 percent thought there was a "very small chance"; and 25 percent were "almost certain" there was no chance of contracting HIV.

Other HIV-related variables. Of the total sample of 104, 82.5 percent, or 85, 1 missing, had been tested an average of 2.1 times; of these, 78.8 percent had received their test results. Of this group, 23.9 percent reported seropositive status. Almost half, 47 women, reported losing an average of 3.74 (range = 1-20) close friends to AIDS, and 11 had family members with AIDS.

Sexually transmitted diseases. More than a third of the sample, 38 women, reported having contracted a STD in the last year; 20 indicated they had had syphilis and 6 had contracted gonorrhea.

Trading sex. In this sample, 43.5 percent (45 women, 5 missing) had received money for sex and 21.9 percent (21, 8 missing) had received drugs for sex; 13.1 percent (13, 5 missing) had paid money for sex (\bar{X} = 4.54 times, range = 1-20 times); and 11.5 percent (11, 8 missing) had given drugs for sex (\bar{X} = 15.1 times). As shown in table 5, those who had traded sex for money were less likely to be regular heroin users, were more likely to be regular crack users or alcoholic, to have a father who was a current drug or alcohol user, and to perceive themselves as being at risk of contracting HIV.

Respondents who traded sex were also significantly less likely to be white Anglo. However, the odds ratio was low, and the small number of white Anglos

may have skewed the relationship between sex-trading and race-ethnicity.

Summary and Conclusion

This study is characterized by two methodological limitations common to most surveys of HIV risk behavior. The nonrandom sample may bias the results and limit the generalization of the study. Self-reported data may reflect a bias toward social desirability—with this sample, likely more of a problem in the reports on sexual behavior than on drug use (35-37). Findings are nonetheless consistent with other research on sexual risk-taking among female drug users and demonstrate that incarcerated women—even those who do not inject—are at high risk for HIV infection.

The typical respondent was an African American single mother with little education and no substantial work history. The lives of the women in this study are characterized by multiple incarcerations, precarious living arrangements, and unstable sexual relationships. The chronicity and severity of substance use among the study sample is striking. The majority used crack daily, most had used two or more drugs in the last 30 days, and the average length of time they had used different drugs ranged from 3 to 8 years. Two-thirds had visited crack houses. More than a third had injected drugs, and similar proportions had visited shooting galleries and shared injection paraphernalia. Crack users were more likely than noncrack users to use multiple substances. The high rates of poly drug use make it difficult to isolate the relationship between individual substances and sexual risk behavior.

Most women were sexually active in the month prior to arrest. Half had had sex with injecting drug users and more than a third had traded sex for money or drugs. As in many other studies, consistent condom use during vaginal sex was infrequent with regular partners and practiced more often with casual

partners and clients. More than two-thirds of the women reported not using condoms or any other birth control method the last time that they had had sex. As found in previous studies (38–40), injecting drug users were more likely to have had sex with an injection drug user and were less likely to use condoms. Confirming previous findings (41–44), crack use among these women was associated with trading sex and a higher number of sexual partners.

Frequency of condom use during the month prior to arrest and during the last time having vaginal sex was negatively associated with aesthetic attitudes (“I just don’t like the idea of using condoms”) as well as with attitudes towards negotiating safe sex (“If my sexual partner(s) said that we won’t use a condom, I would still have sex with him”). Regular condom use may require women to weigh the long-term benefits of safe sex against their need to support their drug addiction and their desire to maintain primary relationships (45). The findings on low rates of condom or any other form of birth control use underscore the need to expand the repertoire of methods of disease protection, including methods under women’s control that may also permit reproduction (46–48).

The shift to crack use has created a new market for sexual trading, characterized by high rates of brief encounters in exchange for small amounts of cocaine or money. Two factors may explain why crack use is associated with high rates of sex trading, in contrast to heroin use, which in this study was negatively associated with trading sex.

First, there is evidence, albeit mixed (49–51), of increased sexual arousal among at least a portion of male crack smokers. In contrast, heroin tends to depress sexual drive. Second, crack addicts typically ingest 10 to 20 “hits” a day, requiring the means to buy or trade quickly and repeatedly for cocaine. Heavy alcohol use was also associated with crack use, a finding supported by other studies of sex workers (52).

The association between sexual trading and having a father who currently uses drugs-alcohol merits further inquiry. A related issue that should be addressed in future studies of incarcerated and drug-using women is the linkage between parental alcohol and drug use, sexual and physical abuse of children and adolescents, and subsequent risk-taking behavior among women exposed to such trauma (53–56).

Efforts to reduce the spread of HIV among this population are hindered by a paucity of prevention programs targeting incarcerated women. The chaotic lifestyle of drug-using inmates, who cycle in and out of jail, shelters, psychiatric settings, and through a

Table 5. Logistic regression: demographic and drug-related determinants of ever receiving money for sex among incarcerated women, 1992

Category	Beta	Significance	Odds-ratio	95 percent CI	
Age.....	0.060	0.361	1.062	0.93, 1.21	
Ethnicity.....	...	0.193	
African American..	-2.039	0.238	0.130	0.00, 3.86	
White	-4.183	0.049	0.015	0.00, 0.98	
Hispanic.....	-1.912	0.302	0.148	0.00, 5.58	
Marital status.....	...	0.748	
Single.....	-0.565	0.342	0.568	0.18, 1.82	
Married	-0.538	0.434	0.584	0.15, 2.24	
Separated or divorced.....	-0.357	0.632	0.700	0.16, 3.02	
Years of schooling..	-0.283	0.258	0.754	0.46, 1.23	
Ever homeless	0.812	0.217	2.251	0.62, 8.17	
Ever arrested before age 17	-1.089	0.243	0.337	0.05, 2.10	
Total years in prison (lifetime)...	0.072	0.385	1.075	0.91, 1.26	
Shot up 1 month before arrest	0.898	0.286	2.454	0.47, 12.76	
Ever used heroin regularly.....	-1.279	0.060	0.278	0.07, 1.06	
Ever used cocaine regularly.....	0.812	0.211	2.252	0.63, 8.02	
Ever used crack regularly.....	3.015	0.002	20.387	3.12, 133.17	
MAST total score...	0.250	0.049	1.284	1.00, 1.65	
Father currently using drug, alcohol.....	1.805	0.023	6.080	1.29, 28.75	
Mother currently using drug, alcohol.....	0.427	0.628	1.532	0.27, 8.59	
Perceived chance of getting HIV	0.481	0.034	1.618	1.04, 2.52	
Constant	-1.461	0.733

NOTE: Goodness of fit: Chi-square = 93.355, *df* = 79, *P* < .1289. Model chi-square = 53.910, *df* = 19, *P* < .0000.

succession of living arrangements, presents a formidable obstacle for even the most innovative and aggressive AIDS prevention programs.

Although some jails and prisons provide good quality, comprehensive care (57), correctional settings remain underused as settings to engage chemically dependent women, providing them substantive HIV prevention services and preliminary drug treatment. The chronicity and severity of substance use among this population indicate a need for sustained post-release intervention strategies, plausibly mandated by parole-probation requirements. Notwithstanding the efforts that take place in homeless shelters, soup kitchens, sex worker programs, and other community venues (58–60), jails and prisons have contact with women who might otherwise remain invisible to social service and health care providers (61,62).

Although reasonable people might disagree as to the desirability of incarcerating so many drug users in

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recent years, we find few indications that the correctional system as presently constituted has served to "rehabilitate" drug users or reduce drug use and concomitant social and health problems (63,64). Nevertheless, considerable evidence points toward the promise of correctional intervention (63-65). Perhaps, correctional systems could once again become settings for pro-social interventions, including efforts to reduce HIV risk behavior among offenders returning to society.

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