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Sex, Drugs, and Syringe Exchange in New York City: Women's Experiences

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The sex and drug human immunodeficiency virus (HIV) risk factors of drug-injecting women participating in New York City syringe exchange programs were studied and racial/ethnic differences examined. African-American women reported injecting least frequently and had lower rates of injecting with borrowed or used syringes. Women attending syringe exchange reported high levels of sexual risk behavior, and syringe exchange provides an opportunity for a sexual risk reduction intervention. Women were more likely to "always" use condoms with casual partners than with primary partners. About 60% of the women engaging in commercial sex work reported "always" using condoms. Three independent predictors for consistent condom use with primary partners were knowing one's HIV status, any risky injection during the past 30 days, and being African-American, compared with white or Latina. The profile of African-American women attending syringe exchange in New York City suggests a higher level of stabilization than is found in the other groups of women. White women appear to be more socially isolated and to engage in higher risk behaviors. Although women attending New York City syringe exchange programs have significantly reduced risky drug injection, consistent with other studies, sexual risk behavior has remained at a high level. Syringe exchange and drug treatment programs have a great opportunity to target drug-injecting women for sexual risk reduction interventions.

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New York City is the national epicenter of injection drug use, with an estimated 200,000 drug injectors.¹ Nationally, injection drug use was the route of transmission for 48% of acquired immune deficiency syndrome (AIDS) cases among women.² In New York City, 61% of AIDS cases among women are attributed to injection drug use,³ and AIDS is the leading cause of death for women age 25 to 44.⁴ Male injection drug users (IDUs) are the predominant vector for heterosexual transmission of HIV to women, and maternal and/or paternal injection drug use is the main source of perinatal transmission of HIV in the United States.^{5,6} Approximately 80% of HIV-positive women are IDUs or sex partners of IDUs.⁷ HIV infection rates are four times higher in Latina women and more than six times higher in African-American women than in white women.^{8,9} Thus it is difficult to overstate the importance that injection drug use has had and will continue to have on the HIV/AIDS epidemic in the United States and especially in New York City.

Although injection drug use tends to be well hidden from public view, particularly in women, AIDS prevention programs have provided a wealth of epidemiological data about this population.¹⁰ However, since women make up an increasing number of incident cases of AIDS and HIV infection, and since prospects of a cure or preventive vaccine are remote, a more detailed epidemiological understanding of the drug and sex risk factors of women IDUs is essential to the development of meaningful HIV prevention programs. It is particularly important to obtain better information about IDUs who are not in drug treatment programs since they are the great majority of IDUs,¹⁰ and the vast majority of new infections among IDUs are undoubtedly in this group.¹¹ Syringe exchange programs provide such an opportunity to collect this type of data.

In most developed countries, syringe exchange programs have become part of a standard HIV prevention strategy, but

have met with strong political opposition in the United States.¹²⁻¹⁴ Despite a seroprevalence rate among IDUs estimated at 50%,¹⁵ syringe exchange programs were not legally implemented on a large scale in New York City until July 1992, when the State Health Commissioner declared a public health emergency that allowed for the legal distribution of syringes by five community-based organizations.¹⁶ New York is also one of 44 states with drug paraphernalia laws and one of about 9 states that restricts the sale of syringes without a prescription. (For a more detailed discussion see references).^{15,17}

In acknowledging the close link of the HIV epidemic in women to both drug and sex risk behaviors, it is critically important to recognize that injection drug use women are not a homogeneous group. A National AIDS Demonstration Research (NADR) study of gender differences among IDUs found that women were less likely to rent or borrow needles, more likely to share cookers or cotton, and more likely to report condom use than were men.⁸ Although data on syringe exchange participants were analyzed by sex for this paper, no meaningful differences in sex and drug risk behavior were found. We therefore have chosen to focus on race and ethnicity among women IDUs in New York City syringe exchange programs. Three groups were included in this analysis: African-American, Latina, and white women. These groups were compared on social/demographic variables as well as sex and drug risk behaviors. We further examined the predictors of consistent condom use with primary and casual partners, controlling for race.

Background

Syringe exchange programs first began in Amsterdam in 1984 in response to the threat of hepatitis B among IDUs.¹⁸ Founded on a philosophy called "harm reduction," the program's aim is to minimize the harmful effects of injection drug use without requiring participants to abstain from injecting.^{19,20} As part of

the harm reduction education at syringe exchange programs, participants are urged to follow the same precautions used in clinical settings. Participants are reminded to clean their skin with alcohol pads before injecting, to inject only once with a syringe, or, if reusing, to disinfect syringes first with bleach.

In the United States, opponents of syringe exchange have argued that such programs would increase the number of IDUs and would also increase the frequency of injection among active IDUs (*New York Times*, December 7, 1988: B-10).²¹ To date, no scientific studies have substantiated these arguments. Instead they have shown that program participants have either decreased or maintained their frequency of injection.^{21,6} In addition, the typical participant has been injecting for an average of five to ten years, with less than 2% of the participants injecting for less than two years.^{16,17}

Despite the political controversies surrounding syringe exchange, there recently has been an increase in both official and public support of syringe exchange programs in the United States.^{16,17,22-24} Because of mounting scientific evidence of their efficacy. Currently, there are approximately 57 syringe exchange programs nationally (unpublished data, PD Hart Research Associates, February 1994).

Roughly 20% of IDUs participating in syringe exchanges are women,¹⁷ who make up an estimated 25% to 30% of all IDUs in the United States.²⁵ Legal syringe exchange programs in New York City currently serve approximately 20,431 men and 6,178 women; this 3:1 sex ratio is comparable to the gender ratios found in New York City treatment programs and other drug studies.²⁶ Although women are not underrepresented at New York City syringe exchanges, where they account for approximately 23% of all participants, efforts to increase the number of women in syringe exchange are intensifying. One exchange program added hours "for women only," and a recent New York City study found a dramatic increase—from 2% in 1990 to 32% in 1993—in the percentages of women IDUs reporting syringe exchanges as their most important source of sterile injection equipment.²⁷

Methods

This analysis was conducted as part of the ongoing evaluation of the New York City syringe exchange programs. Data for this study were collected from 3,065 participants (2,158 men and 907 women) from October 1992 to August 1994. Participants were eligible for a baseline interview if they had just made an exchange and had been to the exchange at least once before. Subjects were randomly selected from all five legal syringe exchange programs in New York City with legal waivers from the New York State Department of Health. Due to the large number of participants at some exchange sites, one person was hired to randomly select participants to be interviewed. The "steerer" selected the first eligible participant in line for each of the interviewers. Once an interviewer completed an interview, the "steerer" again

selected the first eligible participant. If this person refused to be interviewed, the next eligible person was selected. The refusal rate in New York City was less than 2%. Because of concern for confidentiality, participants provided verbal informed consent and created an anonymous code to link multiple interviews with the same subject. Subjects were paid a \$10 honorarium for each interview. Interviews were conducted by trained interviewers at both indoor and outdoor sites at all five syringe exchange programs. A standardized questionnaire focused on drug and sex risk behaviors 30 days prior to first use of syringe exchange and during the past 30 days while using the exchange.

Statistical Analysis. One-way analysis of variance (ANOVA) and chi-square tests were used to compare the different groups on demographics, drug use, and

Table 1: Demographic Characteristics of Female Syringe Exchange Participants of Different Ethnic Groups

Characteristics	All Women N (%)	Afr. Am. (N=296)	Latina (N=346)	White (N=265)
Completed High School ***	532 (59.0)	159 (54.1)	180 (52.2)	193 (73.4)
Marital Status				
Divorced	192 (21.2)	67 (23.0)	75 (21.0)	52 (19.6)
Married	230 (25.4)	78 (27.0)	94 (27.1)	38 (21.9)
Never married	424 (46.8)	121 (41.2)	162 (46.7)	141 (53.2)
Widowed	60 (6.6)	28 (9.5)	18 (5.2)	14 (5.3)
Children ***	682 (75.2)	255 (86.2)	307 (88.7)	120 (45.3)
Mean age ***	33.5 (SD=7.5)	36.6 (SD=7.1)	32.1 (SD=6.3)	31.9 (SD=8.1)
Mean age of first drug injection ²	20.4 (SD=6.0)	20.5 (SD=6.5)	20.4 (SD=5.7)	20.4 (SD=6.1)
Mean number of years injecting ***	13.2 (SD=8.4)	16.2 (SD=8.5)	11.8 (SD=11.8)	11.6 (SD=8.3)
Drug use in the last 30 days				
Inject heroin by self **	555 (63.0)	164 (55.8)	215 (61.8)	193 (73.1)
Inject cocaine by self	553 (57.8)	115 (39.1)	115 (34.0)	111 (42.1)
Inject speedball by self	454 (51.6)	158 (53.9)	178 (51.2)	139 (52.7)
Use crack at least once daily	53 (9.2)	20 (6.8)	41 (11.8)	22 (9.2)
Self-reported HIV positive **	156 (25.5)	39 (24.4)	70 (34.5)	56 (20.6)
Living arrangements—Past 6 mos ³				
Own house/apc ***	461 (53.0)	138 (63.5)	165 (47.4)	128 (48.7)
Someone else's house ***	317 (35.3)	78 (26.6)	144 (41.7)	95 (36.4)
Jail	28 (3.1)	9 (3.1)	12 (3.5)	7 (2.7)
Homeless *	138 (20.1)	48 (17.5)	68 (20.9)	64 (26.3)
Source of income—Past 6 mos ³				
Job ***	138 (15.1)	25 (16.7)	36 (26.1)	74 (53.6)
Self-employ/panhandle *	212 (23.9)	81 (28.0)	66 (19.1)	65 (25.6)
Welfare ***	45 (5.5)	212 (72.1)	212 (61.1)	52 (32.2)
Other benefits (SSI)	142 (16.0)	51 (17.7)	49 (14.2)	42 (16.4)
\$ Spouse/friends	158 (17.7)	53 (18.2)	69 (20.0)	36 (14.1)
Sex for pay/drugs ***	156 (15.3)	22 (7.6)	69 (19.9)	45 (17.7)
Illegal/possibly illegal	213 (23.9)	66 (22.8)	35 (24.0)	64 (25.2)
Ever prison/jail overnight **	497 (54.8)	160 (54.1)	170 (49.1)	167 (63.0)
Ever in treatment *	697 (77.9)	235 (80.5)	249 (72.5)	213 (81.6)
Currently in treatment	551 (46.9)	128 (50.8)	118 (42.9)	105 (47.5)

*Chi-square test used unless otherwise noted.

**ANOVA, if *F*-value significant, Scheffé test.

***More than one response may apply.

p*<.05 *p*<.01 ****p*<.001

Note: Values may not equal 100% due to missing data.

sexual behavior. Multiple pairwise comparison of means were conducted with Scheffé's multiple comparison test when a significant ($p < .05$) ANOVA F value was obtained. Chi-square tests were reported as significant at the $p < .05$ level or less.

A second stage of analysis was conducted to determine the predictors of consistent condom use (defined as condoms used 100% of the time). Two logistic regression models were used with backward elimination, one for primary partners and one for casual partners. Both logistic models included the following independent variables: age, race or ethnicity, frequency of injection, knowing HIV status, sexual frequency, education, taking money and/or drugs for sex, number of sexual partners in the last 30 days, any cocaine use, and any crack use. Adjusted odds ratios and corresponding 95% confidence intervals were computed.

Results

Subject Characteristics. Table 1 shows selected characteristics for the 907 women included in this analysis. The sample was racially diverse: 38% Latina, 33% African-American, and 29% white. The mean age was 33.5, with African-American women averaging four years older than Latinas and whites ($p < .01$). The mean age of first injection was 20.4, and the mean number of years injecting was 13.2: African-American women had been injecting four years longer on average.

White women had more formal education ($p < .001$) and were more likely than Latinas and African-American women to be employed ($p < .001$). White women reported having spent time in jail or prison more often than Latinas and African-American women ($p < .01$), were least likely to have children ($p < .001$), and most likely to report having been homeless during the past six months ($p < .05$). African-American women and Latinas were more likely to be current welfare recipients than white women ($p < .001$). African-American women were most likely to report they had been living in their own apartments during the past six months ($p < .001$).

Heroin was the drug of choice for most women; a majority reported speedball use, and more than a third reported using cocaine. Almost half the sample were in drug treatment; of those, 88% were in

methadone maintenance programs.

Almost three-quarters of the women in the sample had been tested for HIV, and 587 (86%) of those women knew their results. Twenty-nine percent reported testing positive for HIV antibodies, with Latinas most likely to report a positive HIV status ($p < .01$).

Drug Risk Behavior. Women of all groups were equally likely to have practiced most risk behaviors in the 30 days prior to first use of the syringe exchange. Significant decreases were observed for all groups of women in the last 30 days compared to the 30 days prior to using the exchange (see Table 2). Decreases were noted in such drug risk behaviors as renting or buying used syringes ($p < .001$) and borrowing or using used syringes ($p < .001$). Associated risk behaviors such as backloading (a sharing technique used to distribute drugs from one syringe to another)²³ and shooting gallery use^{26,27} decreased significantly ($p < .001$, $p < .01$, respectively). Women increased their use of alcohol pads to disinfect their skin before injecting by 151% ($p < .001$). Behavioral differences among female drug injectors are also associated with rates of HIV infection.^{28,35}

Three risk factor variables differed significantly by race or ethnicity. African-

frequently, both in the 30 days prior to using the syringe exchange and in the last 30 days, compared to white and Latina women ($p < .001$), and had lower rates of injecting with used or borrowed syringes in the last 30 days ($p = .001$). White women were more likely than African-American and Latina women to continue giving, lending, renting or selling used syringes to others ($p < .05$).

Sexual Risk Behavior. Of the 907 women interviewed, 590 (65%) reported having sex in the last 30 days while using the exchange. Of these, 45 (8%) reported having sex with primary partners of the same sex; 62% reported having sex with primary partners of the opposite sex. The average number of sex partners (primary or casual) during the past 30 days was 1.4, and the average frequency of intercourse (anal, oral or vaginal) was 16 times per month. Condoms were used during approximately 40% of the total number of sex acts practiced by the women during the last 30 days.

Bivariate analysis using chi-square was used to differentiate between those who consistently used condoms and those who did not. The data, analyzed separately for casual partners, primary partners, and commercial sex work, are presented in

Table 2: Risky Injection Behaviors of Female Participants 30 Days Prior to Using the Needle Exchange and in the Last 30 Days

Risk Behavior	30 days prior to using the exchange N (%)	In the last 30 days N (%)	% Change	McNemar Chi-Square Test p value
Rent/Buy used syringes	120 (14)	32 (4)	-73.3%	$p < .001$
Borrow/Use used syringes	192 (22)	94 (12)	-51.0%	$p < .001$
Use bleach if injecting with used equipment	40 (37)	49 (46)	+22.5%	$p < .05$
Backload	243 (27)	196 (22)	-19.3%	$p < .001$
Backload with used syringe	57 (41)	29 (21)	-49.1%	$p < .001$
Shooting gallery	92 (11)	65 (8)	-29.3%	$p < .01$
Give, lend, rent, or sell used works	141 (16)	85 (10)	-39.7%	$p < .001$
Use alcohol pads	517 (37)	765 (89)	+48.3%	$p < .001$
Mean no. injections per month:	95.6 (SD=76.1)	89.6 (SD=70.6)	-6.3%	NS
Mean no. injections per month:		74.7 (SD=57.8)		
African-American		89.7 (SD=72.7)		
Latina		98.1 (SD=78.5)		$p < .001$
White				
Borrow/Use used syringes:		16 (5.5)		
African-American		50 (14.3)		
Latina		29 (11.0)		$p < .001$
White				
Give/lend/rent/sell used syringes:		25 (8.5)		
African-American		27 (7.8)		
Latina		38 (14.5)		$p < .05$
White				

¹T-test

²Chi Square Test

Note: Values may not equal 100% due to missing data.

Table 3. Fifty-two percent of the women who had sex with casual sexual partners in the last 30 days reported "always" using condoms; there were no significant differences by race or ethnicity. There were, however, significant differences in consistent condom use with primary partners: Overall, 32% of the women who had sex with primary partners reported "always" using condoms; African-American were more likely to report consistent condom use compared to Latinas and white women ($p < .05$).

Almost 30% of the women reported engaging in commercial sex work, where sex is exchanged for money or drugs, with African-American women least likely to do so ($p < .001$). About 60% of the women engaging in commercial sex work reported "always" using condoms; white women were significantly more likely to consistently use condoms during commercial sex work ($p < .05$).

Multiple logistic regression with backward elimination³⁴ was used to identify independent variables associated with consistent condom use with primary or casual partners. All variables significant for primary and casual partners at the $p < .10$ level were entered in the regression model. (Due to the limited sample size [$n = 171$], we were unable to examine the predictors of consistent condom use for commercial sex workers.) Table 4 shows the results of the final equation after controlling for age. There were no significant predictors of consistent condom use with casual partners. Three independent predictors for consistent condom use with primary partners were: knowing one was HIV positive ($OR = 5.6$), any risky injection during the past 30 days ($OR = 0.36$), and being African-

American ($OR = 2.18$).

Discussion

Women attending syringe exchange programs in New York City have significantly reduced their risky injection and other associated drug risk factors since beginning syringe exchange. Other studies in New York have reported similar decreases in HIV risk behavior with increasing use of syringe exchange programs. These other studies used a serial cross-sectional design and found consistent reductions in risk behaviors over time. Subjects for these studies were recruited from those entering drug treatment and/or a storefront that provides outreach to IDUs; thus a social desirability factor was minimal.^{35,36}

Consistent with other studies of sexual risk behavior, women in this sample used condoms less than 50% of the time.^{44,47} Noting the important interaction between specific risk behaviors and the high seroprevalence in New York City, the low rate of consistent condom use indicates that, despite reductions in self-reported drug risk behaviors, women using syringe exchange in New York City remain at high risk for sexual transmission of HIV and other diseases.³⁷

In general, syringe exchange programs have not placed a heavy focus on sexual risk reduction but have a great opportunity to do so. In order to prevent the spread of HIV, it is essential that both programs and funders recognize the elevated risk women face when both drug and sex risks are considered.³⁸ In planning for the development and/or expansion of syringe exchange programs, the data suggest that intensified sexual risk reduction education be incorporated into

Table 4: The Effects of Various Risk Factors on "Always" Using Condoms

Risk Factor	Sex with Primary Partner	
	Odds Ratio	95% CI
Black/White & Latino	2.18	1.11, 4.27
Know HIV Positive	5.58	2.50, 12.45
Currently share syringes	0.36	0.14, 0.94

Risk variables entered into the regression:
(all significant at $p < .10$)

Age > 30
Inject > 1x daily
Race
Knowledge of HIV status
Sex > 3 times weekly
Education > high school
Commercial sex
At least one sex partner
Inject with used syringes in the last 30 days
Any cocaine injection
Any crack use
Homeless in last six months

the general harm reduction strategies. Moreover, the rate of consistent condom use for commercial sex work argues strongly for the development of targeted interventions for this group of women.

In addition, research has demonstrated the success of safer sex programs incorporated into drug treatment programs.³⁹ The drug programs currently treating almost half the women in our sample might easily target this population for additional sexual risk reduction education. While some may question why so many syringe exchange participants are enrolled in drug treatment, others have suggested that this subgroup may, in fact, be accustomed to using health services and therefore more likely to be registered at a syringe exchange. It is, however, critically important to emphasize that if drug treatment and syringe exchange programs are to intensify sexual risk reduction intervention, sufficient resources will be needed.

Until recently, the research on racial/ethnic differences among women has tended to portray women of color as more socially and economically marginalized than their white counterparts and, as a result, less likely to reduce risk behavior.⁴⁰ The dominant theme in the literature has viewed ethnicity as a barrier to behavior change rather than an enabler.⁴¹ Studies of HIV risk reduction have offered hypotheses varying from social correlates that influence behavior, differences in perception of risk, and stabilization of life-style as co-factors of change.⁴² It has also been posited that the crisis driven life-styles frequently associated with poverty may contribute to AIDS

Table 3: Risk Behaviors Reported for Female Syringe Exchange Participants of Different Racial/Ethnic Groups Who Were Sexually Active in the Last 30 days

Sexual Behaviors ¹	All Women		African American		Latinas		White	
	N	%	N	%	N	%	N	%
Same sex primary partner	45	(7.6)	14	(8.1)	19	(8.1)	11	(6.6)
Opposite sex primary partner	568	(62.4)	103	(59.2)	155	(65.7)	102	(61.1)
Always used condom with primary partner	104	(31.5)	38	(40.9)	39	(27.9)	23	(25.3)
Opposite sex casual partner	121	(20.5)	45	(25.9)	52	(22.0)	21	(12.6)
Always used condom with casual partner	64	(52.5)	24	(53.3)	30	(56.6)	9	(42.9)
Commercial sex	171	(29.0)	30	(17.2)	78	(33.1)	60	(35.9)
Always used condom with commercial sex partner	98	(59.8)	17	(58.6)	38	(50.0)	43	(72.9)

¹ Chi-square test

* $p < .05$ ** $p < .001$

Note: Values may not equal to 100% due to missing data.

risk behavior by displacing HIV infection among the list of concerns on people's minds.⁴³

One of the striking findings from this study is the data on the African-American and white women. Although African-American women in New York City constitute the highest number of incident cases of AIDS,⁴⁴ the African-American women attending syringe exchange were injecting least frequently, were least likely to engage in commercial sex work, and, in multivariate analysis, were twice as likely to "always" use condoms with primary partners compared with white or Latina women. Since African-American women were least likely to report having tested HIV positive, their consistent use of condoms with primary partners does not seem to be a function of their own HIV status, but may reflect concern about the serostatus of their partners and therefore a more self-protective stance.⁴⁵ Given the limitations of the data, we were unable to report on the number of partners or such characteristics as their race and injection behaviors. These limitations raise numerous questions and suggest the need for further research. Were these women more likely to have IDU partners? Does their perception of risk differ from that of their counterparts? Is condom use a more common method of pregnancy prevention for these women?

The profile of African-American women attending syringe exchange in New York City suggests some level of stabilization. On the other hand, the findings indicate that white women—who reported receiving more formal education and who were more likely to be employed—appear to be more socially isolated and engaged in higher risk behavior compared with their African-American and Latina counterparts. The white women were significantly less likely to have children, more than 50% have never been married, 63% have spent time in prison, and more than a quarter reported being homeless during the past six months.

The substance abuse literature has shown that the experiences of women in the drug culture are different from those of their male counterparts.⁴⁶ Some have described the heightened level of stigma associated with drug use for women, which, when internalized, often produces

stigmatization of the white women in this sample raises the question whether this societal bias is even greater for women who are perceived as deviating even further from the dominant culture and is particularly relevant to understanding the relationships between social factors and risk behavior.) Others have written about the social isolation that accompanies drug use.^{46,47} Some studies have described how the socialization process of women, which traditionally places a heavy focus on attachment and affiliation with others, is damaged by drug use.⁴⁷ Compared with men IDUs, women IDUs are less likely to have social support networks, which have been shown to have a protective effect.^{46,47}

A recent study found that disenfranchised women with higher self-esteem and a greater sense of coherence—the sense that life is controllable and meaningful—were practicing more protective behaviors than their low self-esteem and low coherence counterparts.^{48,49} Some investigators have addressed the issue of dual diagnosis (psychiatric disorder and substance abuse) and have reported that in general, drug-using African-Americans appear to be less psychologically disturbed compared with whites or Latinos, who are seen as deviating from the expected norm.⁴⁹ Whether the white women in this sample have more psychiatric illness or have experienced more sexual trauma (which has been shown to be associated with higher sexual risk behavior) is not known,^{50,51} but speaks to the need to understand both the social and psychological context in which risk behavior takes place in order to develop effective intervention strategies.

The strong correlation found between unsafe sex and any risky injection is in accordance with other findings that IDUs practicing one unsafe behavior are more likely to engage in others.^{33,52} This relationship would suggest a need for the development of highly intensified and targeted intervention strategies for those syringe exchange participants who are engaged in multiple risk behaviors.^{32,54} The limitations of the data do not permit us to determine whether the women who reported practicing unsafe sex with their primary partners were simultaneously practicing risky injection with these same partners and suggest further

Consistent with other studies, in multivariate analyses, knowing one was HIV positive was strongly predictive of always using condoms with primary partners. New York City syringe exchange programs are a major source of referrals for HIV counseling and testing. Some investigators have shown that voluntary HIV counseling and testing is sometimes, but not always, associated with risk reduction.⁵³

Although caution is needed in interpreting these findings, the study offers a context from which to view these women's lives. Whether greater risk for women attending syringe exchange in New York City is associated with underlying social patterns, instability in daily life, or how well social support buffers the effects of riskier behaviors will need to be explored further. It has been suggested that the integration of AIDS prevention into ongoing trusted services that are already part of women's lives is likely to enhance maintenance of change.^{43,54} HIV prevention is a complicated process, and the nonthreatening (nondiscriminatory) harm reduction approach appears to be a "safe space" for women to initiate behavior change. The demonstrated decrease in HIV risk behaviors among women participating in syringe exchange argues for expansion of these services to reach a larger pool of women. Moreover, the data demonstrate the continued critical need to improve sexual behavior change strategies. Further research, such as a national, multi-city evaluation of syringe exchange programs, is needed to develop and evaluate the integration of these strategies into syringe exchange programs in order to prevent the further spread of HIV. ■

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