An economy of risk: resource acquisition strategies of inner city women who use drugs

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Abstract

Researchers suggest that women’s HIV risk is influenced by environmental factors. In order to better understand the processes through which environmental factors are mediated into HIV risk, 28 women who used drugs from two low income neighbourhoods in New York City (NYC) participated in life history interviews. Women 18 years or older who used heroin, crack or cocaine were recruited from out-of-treatment settings between March and November 2000. Central to this analysis was an assessment of the strategies adopted for acquiring resources (resource acquisition strategies) as well as the costs and obligations associated with such strategies. The majority of women’s resources came from illegal sources or from men with whom they had sexual relationships. Three quarters of the women worked in the drug trade, 68% reported stealing and 68% engaged in street based sex work. Most (89%) women had been arrested. The large majority (79%) had current, male sex partners from whom they received financial and other benefits, including a diminished risk of incarceration. The implicit or explicit trade of sex for a reliable supply of resources severely limited women’s ability to implement sex risk reduction. In the context of economic deprivation, most resource acquisition strategies employed by the women increased HIV risk.

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Introduction

Women in the United States (US) contract HIV and other sexually transmitted and blood borne pathogens at an unacceptably high rate, despite more than 15 years of prevention efforts. As of 2000 in the US, 69,725 women were estimated to be living with AIDS (21% of all adult cases) and an additional 10,000 women were diagnosed as incident AIDS cases (26% of all adult cases) (http://www.cdc.gov/hiv/stats/hasr1301.htm). Increasingly, researchers and policy analysts suggest that women’s HIV risk is influenced by environmental or structural factors. It has been suggested that women’s HIV risk is linked to gender inequality and institutionalised sexism in both developed and developing countries (Heise & Elias, 1995; Aggleton, O’Reilly, Slutkin & Davies, 1994; Amaro, 1995; Farmer, Connors & Simmons, 1996); to government policy that further reduces the rights and abilities of marginalized individuals to protect themselves (Rhodes, Stimson, Crofts, Ball, Dehne & Khodakevich, 1999; Aggleton et al., 1994; Parker, Easton & Klein, 2000); and to the effects of institutionalised racism and poverty (Krieger, 1999; Farmer, 1999; Zierler et al., 2000). However, the processes through which environmental factors are mediated into HIV risk are poorly understood. If interventions that target environmental factors are to be based on scientific knowledge rather than on plausible intuition, it is necessary to understand how environmental factors translate into HIV risk. Without such an understanding, it will not be possible to assess the conditions under which environmental interventions are likely to prove effective or when they may be neither feasible nor effective.
Since health policy and program implementation are often developed with the support of empirical data generated through large epidemiologic studies rather than in response to theory alone, it is necessary to translate the theoretical or intuitive understanding of environmental risk factors into ‘researchable’ units known to have an impact at the individual level. Research in North America using aggregate level data has documented strong associations between low socioeconomic status (SES) and AIDS incidence and mortality (Hogg, Strathdee, Craib, O’Shaughnessy, Montaner & Schechter, 1994; Zierler et al., 2000; Wallace, Fullilove & Fisher, 1996; Wallace, 1990; Cohen, Spear, Scribner, & Schechter, 1994 & Flisher, 1996; Wallace, 1990; Cohen, Spear, Scribner, & Schechter, 1994; Maher, 1997; Sommers, Baskin & Fagan, 1996; Welle & Falkin, 2000). A major benefit includes the ability to avoid participation in sex work (Inciardi et al., 1993; Maher, 1997; Sommers et al., 1996); however, researchers have also found that drug market involvement, mostly through lower level drug sales, may facilitate future drug use, negatively affect future involvement in legal work, and may be linked to women’s involvement in serious felony crimes (Brettiville-Jensen, 1999; Sommers et al., 1996; Welle & Falkin, 2000). Moreover, women’s involvement in the primary drug market economy (i.e. in the ownership and management of drug distribution organisations) is the exception rather than the rule. Research that has examined the economics of women who use drugs finds that they are grossly over-represented in street based sex work, which carries a considerable risk of acquiring infectious pathogens, as well as of punitive legal sanctions (Brettiville-Jensen, 1999; Maher, 1997).

While researchers suspect that resource disadvantage places greater risk on women in terms of disease transmission (Aggleton et al., 1994; Heise & Elias, 1995; Miller & Neaigus, 2001) the mechanisms of this relationship are currently unknown. We hypothesise that increased HIV risk may be related to the non-institutional resources accessed through the informal economy by women who use drugs. The objective of the current analysis is to explore the role that resource acquisition strategies play in women drug users’ sexual risk of HIV infection in an environment in which there is high HIV prevalence, economic deprivation and widespread punitive law enforcement efforts targeted at drug users.

Methods

In-depth, life history interviews were conducted with 28 women who used drugs from two low income neighborhoods in New York City (NYC): the Lower East Side/East Village in Manhattan, a predominantly white and Latino neighbourhood, and in Bedford Stuyvesant in Brooklyn, the largest African American neighbourhood in NYC. The women were recruited from out-of-treatment settings through a variety of methods including street recruitment, snowball sampling, and referrals from community based organisations (Kaplan, Korf & Sterk, 1987; Booth, Walters & Chitwood, 1993; Watters & Biernacki, 1989; Heckathorn, 1997). Women at least 18 years of age who used heroin, cocaine or crack (a smokable form of cocaine) in the past year through either injected or non-injected
methods, and who were able to provide their own informed consent were eligible to participate. The study was approved by the Institutional Review Boards of the National Development and Research Institutes, Inc. and Columbia University. All women were interviewed between March and November 2000. Interviews lasted between 60 and 90 min, and all participants were provided with US$30 cash reimbursements for their time. Referrals to health care services, as well as to drug treatment services, were provided upon request.

Life history interviews followed a structured interview guide and, although data collection was not standardised, efforts at consistency across interviews were maximised by the fact that one interviewer (MM) conducted all of the interviews. Interviews were tape recorded and transcribed verbatim. Personal names are replaced with pseudonyms for all women.

Grounded theory, an inductive and field based approach, provided an initial framework within which the qualitative data were examined in order to develop theoretical categories or typologies (Strauss, 1990, 1998). Central to this analysis was an assessment of the range of strategies adopted for acquiring resources, as well as the costs and obligations associated with such strategies. The data were coded for factors associated with resource needs, acquisition strategies and incarceration risk, as well as for sociodemographics, drug use and sex practices, risk and social networks, and personal history. Analyses were conducted using a computerised text based analytic tool, DTSEARCH (http://www.dtSearch.com) for qualitative analysis and SAS 8.0 for data that were quantified using codes developed for this purpose (e.g. ever tested for HIV).

Results

Demographics

Of the 28 women interviewed, nine (32%) were white, eight (29%) were Latina, eight (29%) were black (African American or Caribbean), and three (10%) were of mixed race/ethnicity. The women had a mean age of 31 (S.D. 7; range 19–43). Educational attainment was low: 13 (46%) women had either completed high school or acquired a general equivalency degree. Just over half (57%) of the women reported having children; only three of 16 (19%) women had primary childcare responsibilities. Three women were pregnant at the time of interview.

Drug use and self reported infection status

All of the women in the study had used heroin (79%), crack (43%) or cocaine (21%); 23 (82%) had used these drugs within 2 weeks of the interview. Two thirds (64%) of the women had injected drugs.

Ten (36%) women reported knowing that they were HIV infected, while eight (29%) reported being infected with hepatitis C virus (HCV) and three (11%) reported having been infected with hepatitis B virus (HBV). Among women who reported that they were seronegative, 72% (13/18) had been HIV tested, 36% (9/25) had been tested for HCV and 24% (5/24) had been tested for HBV, in the year prior to interview.

Access to legal economic resources

Although just over one third (36%) of women had a history of formal sector economy employment, only one woman was currently working as a means to receive her welfare payments. Approximately half (57%) of the women received current public assistance. Only four of the ten HIV infected women, all of whom were eligible for assistance, reported receiving it. These interviews were conducted prior to the expiration of lifetime public assistance benefits time limits, which went into effect December 2001.

The final set of legal resources available to women consisted of ‘one shot deals.’ For example, one woman’s mother won the lottery, and several women reported receiving financial settlements as a result of often serious accidents for which the manufacturers were held liable. These funds were frequently distributed among family members and quickly depleted; only one woman continued to receive funds from a financial settlement.

A larger share of women’s resources was reported as the result of active participation in the drug market economy, which includes direct drug trade involvement, theft and sex work. When asked about the sources of income to support drug use, Alex, a 24 year old, white heroin injector who currently lives in a homeless shelter for women with mental illness summarised income options this way: ‘The majority is boosting [stealing from retail establishments], copping [buying drugs] for other people, and prostitution’.

Criminal justice sanctions

Almost all (89%) of the women had been arrested and 18 (64%) had been incarcerated. Most of the 25 women had been arrested on charges related to drug use: 14 (56%) for drug dealing, 12 (48%) for drug possession, seven (28%) for theft, and two (8%) for sex work. Involvement in the drug trade was reported by 21 (75%) women, among whom 17 (81%) had been arrested on drug charges, as compared with the 37% (7/19) who reported stealing and being arrested on theft related charges, and 11% (2/19) who reported being arrested for prostitution while engaging in street based sex work. These figures provide some evidence of the low level,
high visibility income generating strategies that are routinely available to women who use drugs, and also of the active law enforcement efforts targeting drug crimes (e.g. drug dealing) and drug use (i.e. drug possession).

Even though women do not often report being arrested for sex work, it is sometimes in the context of sex work that they are arrested for their drug related crimes. Renee, a 25 year old, white heroin injector told of her most recent arrest experience for buying drugs from an undercover police officer:

“I went to jail in like, when was it? I don’t know if it was before Christmas or after Christmas? Some time around, anywhere from like January or December. I got arrested. And—[Interviewer: For what?]—for coppering uh coke. Wait, actually it was for a date. And I was with him. And I got busted for his thing. But I don’t mind getting busted for myself, but for somebody else, I mean, you know, and I didn’t get any money out of it anyway because obviously he got, I got busted.”

Women reported numerous strategies to avoid arrest, while at the same time still acquiring the significant resources required for both their drug use and their daily living expenses.

Sex partners as resources

In addition to the 19 (68%) women who admitted having engaged in sex work, the large majority (22 or 79%) also reported having current, regular male sex partners who were not sex clients. None of the five women who preferred female sex partners had current female partners. Six (22%) women reported having more than one current sex partner and 16 (57%) reported having only one sex partner. Moreover, women explicitly noted that their regular sex partners provided them with financial or other important benefits. For example, of the 22 women with current sex partners, 14 (64%) women reported that their sex partners acquired drugs for the couple; six of these women reported that their current partners were drug dealers. Not only could these men provide drugs for the women, but several women specifically selected partners based on this ability. Mira, a 33 year old, Latina crack smoker, describes previous relationships with men involved in the drug trade:

“I had a couple [of] drug dealer boyfriends, cause that’s what basically I was trying to go after. So this way I didn’t have to work the streets. I had everything there, and I had my boyfriend, I had my sex, and I would be having sex with the person I wanted. So he had money to buy whatever clothes I wanted, whatever munchies and whatever drugs I wanted, so I had a package deal right there. Wow.”

Women with sex partners also tried to select men who received a regular income. Seven (32%) women noted that their sex partners were employed, while 11 (50%) women reported that their partners received government benefits or pensions. Many of these men were older and able to provide material and emotional support in exchange for sex and/or companionship. While some women explicitly labeled these men as ‘sugar daddies,’ others classified them more vaguely with terms such as ‘my man’ as opposed to ‘my main man.’ Women actively conducted ‘cost-benefit’ analyses of maintaining this type of partnership based on issues such as his monthly income, his knowledge of her drug use, and the likelihood that the relationship could be sustained. Fay, a 41 year old, black heroin sniffer, described a process she used to determine how much money she could ask from a ‘sugar daddy’ and still maintain the relationship:

“He was an ugly old man, and he was crazy about my big ass ... Yeah, I had him around for a while. But after I’d fuck up that $100 in a minute, and I’d be ashamed to go back and ask him for something because I really didn’t want him in my business. He’s not a fool. He’s an old, wise man. Damn, I gave her $100 Friday and Monday she needs some more. What the fuck is going on? I didn’t want him in my business so I never stressed him like that, I needed it for my phone bill. I’d bring him a phone bill and show him what my card is. ‘This is what I need it for.’ I never played him. That’s why I was able to ... keep him around for a while, till he died.”

Women also reported relying on ‘sugar daddies’ for a place to stay. Three women reported that they currently exchanged sex in return for shelter, while two additional women reported living with men for whom they provided services other than sex, such as cleaning and cooking or secretarial/girl Friday services. The women reported meeting these men locally, often in the context of sex work, and used this strategy to stabilise their lives.

In addition, women made explicit remarks concerning sex partners’ willingness and ability to acquire drugs or to engage in behaviors that would provide needed resources for the couple. Lorraine, a 31 year old, white heroin injector, discusses her sex partners’ willingness to protect her:

“Sam was good like that, too. He would steal before he would ever ask me to do something like that... And if I brought it [sex work] up he’d be very upset. And the same thing with Richard. I, I wouldn’t even, you know, I’d bring it up and he is
like, Lorraine, you are too good for that, you know.”

The first sex partner that Lorraine mentions was actually incarcerated for a crime she committed. He knew that she did not want to be arrested and was willing to take the punishment for her. Despite the fact that men were willing to take risks, particularly with respect to criminal sanctions, women were well aware of the price of acquiring resources from men. Princess, a 34 year old, black crack smoker had this to say about the implicit exchange required when men provided resources: ‘You know, because when you ask somebody for a favor, you gotta do a favor by using your body’. However, the majority of women, including Princess, were willing to make that exchange in order to both acquire needed resources and to limit the risk of punitive sanctions associated with their drug use and their resource acquisition strategies.

Interactions between HIV transmission risk and the avoidance punitive sanctions

Resource acquisition strategies varied in the extent to which they involved the threat of punitive sanctions as a result of law enforcement activities. Fig. 1 details the possible relationships between HIV transmission risk and punitive sanction risk associated with the resource acquisition strategies utilized by the women.

High HIV transmission risk and high punitive sanction risk

The large majority of women had participated in sex work as an income generating strategy. While women expressed a range of emotions at their involvement in sex work, they consistently expressed concern about being arrested and incarcerated for prostitution. This fear stemmed from a belief that a record for prostitution would be difficult to explain in future when they became ‘straight’. Therefore, strategies were devised to minimize the risk of arrest, such as the one used by Renee:

“I used to work on the street like every day and then the cops were getting too bad so I gave people my number. Everybody I just gave my number to. And if they weren’t worth it, if it wasn’t like $50 or better, then I’m not gonna really go out with them. You know, I don’t want to, don’t waste my time to come all the way down here because I live up [town]. You know, it is ridiculous to come down here for $30, $40. So I’m not, I’m not trying to come down here for that. But, um, the good dates, you know, I take and, and it’s just much easier.”

The strategies employed by women often led to the cultivation of ‘regular’ sex work clients. Overall, these men were deemed to be trustworthy and reliable. ‘Regulars’ were also known to provide significant resources on a longer term basis, such as a source of ‘emergency’ cash. Anna, a 22 year old, white heroin injector, tells of a man she met on the stroll and with whom she became friendly: ‘He doesn’t like to give me money for drugs, but if I call and I say look, I am really, really sick and I missed my methadone program already, then he will reluctantly [give me money for drugs], but he will give it to me usually, if he has it’.

Women tended to report sporadic condom use with their ‘regular’ clients, who often paid less but were a relatively stable income source associated with a limited risk of arrest. Therefore, women who engage in street based sex work experience two sets of HIV risk dynamics: sexual transmission risk occurs with their ‘regular’ clients since women are less likely to use condoms with these men, while high exposure risk occurs with other customers since the probability of being exposed to an infected individual is greater given the higher sex partner change rate. A worst case scenario, (i.e. increased transmission and exposure risk), would be women not using condoms with at least some of their sex clients, which, in fact, was reported by 15 (79%) of the women who participated in sex work. Moreover, lack of condom use was not limited to oral sex for these women, as Mira admits when asked about condom use during vaginal intercourse: ‘Most of the time I wasn’t [using condoms] because a lot of clients out there do not like using them’.

High HIV transmission risk and low punitive sanction risk

Most of the women in this study reported having current, non-casual male sex partners. Even two of the five women who reported that they preferred female sex partners had current male sex partners. All 22 women with sex partners reported that these men provided at least one, but usually multiple, resources. The vast majority (88%) of these relationships were of limited duration, and were measured in terms of weeks or months. Moreover, sex partner turnover was common.
and frequently due to incarceration or death. Princess, pregnant with her fifth child, describes the nature of her relationship with her previous sex partner and the father of her current child.

Princess: The father of this child is dead. He was in a car accident. You know, from drunk driving. Yeah.

Interviewer: Was that your husband? Or a boyfriend?

Princess: Just a boyfriend... You know like, when, I mean, have a boyfriend, [I mean] when he was in drugs, you know?

Interviewer: So, he was your partner for the drug thing?

Princess: Yeah... We argued a lot so, you know.

Um, if I were to had, if he were to found out I was pregnant—I didn’t want him in my life anyway.

The search for new sex partners who could acquire resources often involved sex with many potential partners. Lorraine had just settled on her most recent sex partner and they had been together for about 6 weeks. When asked if she loved him, Lorraine stated ‘right now, honestly, I care about him.’ Later she admits ‘I know that if I take his bottle of methadone and I get off [heroin]...I will get rid of him.’ He will no longer be her sex partner if she manages to stop using drugs.

The only reported condom use with current, non-casual sex partners was by the two women who knew that they were HIV infected and that their partners were not.

Low HIV transmission risk and high punitive sanction risk

Participation in the drug market economy through involvement in the drug trade or through theft is the only income generating strategy that does not, in itself, involve sex with men. However, the risk of punitive sanctions is almost certain. Virtually all (89%) of the women had been arrested for drug related offenses. In fact, few women reported relying solely on these strategies. Work in the drug trade tended to be sporadic and often was reported in times of desperation. For example, several women reported selling drugs in order to get money to ‘get straight’ from heroin withdrawal. Mar, a 28 year old, Latina heroin sniffer, described her most recent ‘job’ selling drugs:

“I started like selling and now I’m every day on that corner...the guy that used to give me the material, they were watching me...He’s drinking meth, you know. He don’t need the heroin. I need the heroin, so I need to make money... so I can support myself... One day I sell drugs to an undercover...this lady just come up to me. She said, ‘this is my last $20... and I am sick. I started thinking, damn I know I’ve been in a situation that I go to a different neighbourhood. They don’t know me. They don’t want to sell me [drugs]...’”

While involvement in the drug trade is entirely free of HIV sexual transmission risk, it may raise the risk of HIV infection if involvement in the drug trade increases the probability of unsafe drug using practices; for example, if payment comes in the form of ready-filled syringes.

Minor theft, including shoplifting and stealing from other drug users and family, was also commonly reported. While this method of resource acquisition is potentially subject to a lower risk of arrest and carries no direct HIV risk, low profitability is the major limitation of this strategy. Only three women reported stealing goods worth more than $2500 at one time, a unique event for two of the three women.

Low HIV transmission risk and low punitive sanction risk

‘Sugar daddies’ were an important source of resources for a number of women. They tended to be employed or retired older men from the neighbourhood, men who women met while ‘on the stroll’ or ‘father’ figures who had sometimes abused or abandoned the women in their youth. While sex figured prominently in most of these relationships, women also reported being obliged to maintain households as well. The risk of punitive sanctions, especially arrest and incarceration, involved in this resource acquisition strategy was negligible, despite the fact that the ‘sugar daddy’ was often aware of the woman’s drug use. In terms of HIV risk, the women tried to cultivate relationships with men who did not use drugs and monitored the men’s lives closely (e.g. employment status, income level and purchasing practices, and sexual relationships). Danette, a 34 year old crack user of mixed race/ethnicity tells of one of her two sugar daddies:

“He’s a friend of mine who took me off the streets when I was hustling on the streets. You know, he’s a book writer. He’s a older man, but he loves me. And here it is, he’s helping out with the rent, my brother’s car insurance, everything. Groceries.”

Several other women also reported an important role for ‘sugar daddies’ in the financial upkeep of their extended families. As was the case with Danette’s ‘sugar daddy’, most were significantly older than the women. These men present an unknown HIV risk, since women knew very little about the past experiences of their ‘sugar daddies’, such as whether they had injected drugs or been exposed to HIV or other sexually transmitted pathogens. Moreover, this theoretically ‘lowest’ risk option may carry considerable HIV transmission risk, since condom use was rare with these men. However, the
immediate benefits reaped by the women (e.g. shelter, money, safety from arrest) far outweighed any HIV risk posed by men who were viewed as ‘kind’, ‘older’ and generous.

Some of the women talked about the fact that their older ‘sugar daddies’ did not require sex because they had difficulty maintaining erections. Fay’s older ‘sugar daddy’ asked her to ‘play’ and dance around naked:

“He’d have to take off all my clothes and let him look at my titties and play with my pussy. He be so happy... You know what I’m saying? Because his dick was this little. He couldn’t get hard. It would be like a fucking finger in your mouth... For $100, and you ain’t got to do nothing.”

This situation was ideal for Fay and she remembered it fondly, partly because Fay preferred female sex partners and she had a live-in girlfriend at the time. However, this type of relationship was relatively rare. Moreover, as with many of the women in this study, Fay did not recognize oral sex as a sexual practice that carries a risk of sexually transmitted infections.

In reality, the men who functioned, as ‘sugar daddies’ may not have been at high risk of being HIV infected. Since ‘sugar daddies’ were significantly older and stabilized, they may represent generational survivors (i.e. men who were in the same age cohort as many of the IDUs who became infected over the past two decades in NYC, but who may not have been involved in the IDU scene). If anything, these men were possibly at greater risk of acquiring sexually transmitted infections than the women. Nevertheless, this could be an inaccurate reflection and is likely influenced by the background HIV prevalence and incidence in the environment.

Discussion

These data suggest that, in the context of economic deprivation, most resource acquisition strategies employed by women who use drugs increase the risk of HIV transmission. An important element influencing the ability to implement HIV risk reduction is the threat of punitive sanctions associated with women’s active drug use, as well as with their means of acquiring drugs and resources needed for daily living. The active avoidance of punitive sanctions, with which most women had experience, was found to underlie increases in HIV sex risk. HIV sex risk was particularly high for the majority of women who reported trading sex or who relied on regular, male sex partners to acquire resources for the couple. While the former may have been at increased risk of exposure to infected partners, the latter may have had increased risk of transmission if their sex partners were infected with HIV. The implicit or explicit trade of sex for a reliable supply of resources severely limited women’s ability to implement sex risk reduction.

Multiple and overlapping resource acquisition strategies were reported by the women, including acquiring resources from sex partners, sex work, participation in the drug labor market, cultivating ‘sugar daddies’, and legal income sources. Accessing legal resources was reported by the fewest women. The resource acquisition strategies that provided the greatest quantity and variety of resources came through establishing sex partnerships with men. Importantly, most men from whom women received resources did shield women from incarceration risk. While acquiring resources from men minimises women’s risk of punitive sanctions, it establishes a situation of dependence in which the ability to reduce sex or drug use risk may be compromised. However, women were well aware of their increased sex risk; almost three quarters of HIV negative women reported having been HIV tested in the year prior to interview. Moreover, sex partners with resource potential were not randomly selected by the women, and a majority of women selected male partners who could and did provide drugs for the couple. Sexual mixing patterns in high HIV prevalence areas are likely to favor potentially high risk partners due to limited resource opportunities for all residents in low income neighbourhoods, as well as to the limited availability of sex partners able and willing to provide needed resources to women who use drugs (Miller & Neaigus, 2002, 2001). It should be noted that the strategy of subsidising incomes by establishing sex partnerships with men who have resource potential is not unique to this population, and has been documented internationally (Mulia, 2000; Mill & Anarfi, 2002; Farmer et al., 1996; Gilbert & Walker, 2002; Gupta, 2002).

A striking finding in these data is that there is very little difference in reported sex risk behaviors by sex partner type. Women were just as likely to report unprotected penetrative sex with sex clients, particularly ‘regulars’, as with their primary or main partners. Since sex risk behaviors appear to be constant, the risk of HIV sexual transmission in this population is linked to the differential probabilities that different types of sex partners are HIV infected, rather than to differential risk behaviors at the individual level. It is more likely that a primary sex partner who is an IDU poses a greater HIV threat than a retired ‘sugar daddy’ who has been a continuing member of mainstream society for many years as evidenced by his having a pension. Of note, these data may differ from other research focused on the differential sex risk behaviors by sex partner type of women prostitutes in that the women in this study do not consider themselves to be sex workers. These women participate in sex work as one of few available strategies to acquire needed resources. Moreover, by not identify-
ing themselves as sex workers, inner city women who use drugs may be at a disadvantage in terms of self-protective behaviors, such as working in pairs, as well as in their ability to create or join sex worker agencies that provide both the information and the means to implement drug use and sex related harm reduction (Roche et al., under review).

Policy implications

The interaction between HIV risk and the avoidance of punitive sanctions by drug users is not a new phenomenon. An analogous example of this interaction may be found among IDUs who sought to avoid the punitive sanctions associated with the possession of needles and syringes. In the absence of pharmacy sales or syringe exchange programs, these sanctions contributed to the creation of shooting galleries where IDUs could rent used syringes rather than carry their own. Shooting galleries served to increase the risk of HIV transmission by facilitating random mixing patterns between infected and uninfected IDUs. Changes in law and policy addressing this interaction, (in combination with widespread acceptance and rigorous enforcement of these changes), have successfully helped to control the HIV epidemic among IDUs in many areas of the world (e.g. Des Jarlais et al., 2000, 1995).

The findings from this research are more subtle and involve issues of the public financial support of a marginalised group with few means of community mobilisation or access to political power, but at high risk of acquiring, and potentially transmitting, HIV. The public health implications of these research findings are a need to decrease the dependence by low income women who use drugs on men, who pose a significant HIV transmission risk to the women. Data from a longitudinal evaluation of the syringe exchange program in Oslo, Norway underscore the potential impact of socioeconomic resources on women’s individual level participation in HIV risk behaviors. Over a 6 year period, a significant decrease in current participation in sex work by women was observed, and was accompanied by a large increase in the number of women reporting government benefits as their primary source of income over the same time period (Miller, Eskild, Mella, Moi & Magnus, 2001). The ‘resource advantage’ provided by government benefits may signify that the women in the study were functionally more integrated into the social system than they had been in the past, and may also have contributed to the large decrease in the percent of those currently engaging in sex work. Unfortunately, the conflict between public health demands and social welfare is particularly strong in the US context.

Given the dramatic changes that have occurred in public assistance programs in the US over the past few years, it is likely that the dynamics surrounding access to resources continue to change and that informal resource support plays an increasingly important role. Women who use drugs have been particularly vulnerable to the harmful consequences of the reduction in welfare benefits and to the increasingly moral distinctions made between the ‘deserving’ and ‘undeserving’ poor (Allard, 2002). Although individual and social network level based interventions will continue to be helpful in low income communities, where drug use and poverty are widespread and HIV/AIDS prevalence is highest, they will be of limited impact, since much of the problem is at the environmental level and requires policy changes (Kadushin, Reber, Saxe & Livert, 1998). The policy changes required to impact public health include alternatives to incarceration for drug offenses; the provision of a full range of services to address women’s dependence on drugs, (e.g. access to drug treatment, primary health care, mental health care, child care and housing); as well as training and economic opportunities to decrease women’s dependence on high risk men (Miller & Neaigus, 2001; Wasserheit & Aral, 1996).

In order to specify the types of policy initiatives most likely to be feasible and effective, and to have tools with which to evaluate the impact of policy changes, it is necessary to identify and measure environmental risk factors useful in multi-level analyses that examine the independent and interactive effects of contextual and individual level variables. Increasingly, researchers from fields as disparate as sociology, epidemiology and policy analysis have called for this type of approach in order to better understand and hopefully disrupt HIV transmission (Parker et al., 2000; O’Leary & Martins, 2000; Sweat & Denison, 1995; Miller & Neaigus, 2001; Rhodes et al., 1999). The data from this study suggest that environmental level variables collected at the individual level, in particular variables related to the process of acquiring resources in the context of economic deprivation, are able to be measured and analysed as to their impact on individual behavior and risk.

The results of this study should be interpreted with caution, due in part to the small sample size of women from only two inner city neighbourhoods in NYC. Despite the fact that the two neighborhoods were characterised by different types of drug use and racial/ethnic composition, the resource acquisition strategies used by the women were strikingly similar, adding credence to the idea that women who use drugs are limited in the ways they access resources. Another limitation comes from the egocentric self reports concerning the men upon whom the women rely for resources, since men were not included in this research. Future research should make efforts to interview the sex partners of women to ascertain the actual infection (and other) risk posed by the men, as well as to explore how sex partners may be included in HIV prevention efforts.
In addition, men who live in areas of economic deprivation are also subject to similar environmental pressures. In fact, although male partners are seen by women in the study as providing access to needed resources, they are often only marginally better off than the women. The overall lack of resources is reflected in stories told by women about their male sex partners, which suggest that men in these neighbourhoods may also knowingly partner with high risk sex partners to acquire resources, as was the case with Sandra, a 35 year old HIV infected, crack user with hoodings may also knowingly partner with high risk sex partners, which suggest that men in these neighbourhoods may also knowingly partner with high risk sex partners to acquire resources, as was the case with Sandra, a 35 year old HIV infected, crack user with schizophrenia, and her HIV negative boyfriend who she supports, and of Kitty’s boyfriend who, in order to avoid homelessness upon his release from prison, moved in with a man known to be both gay and HIV infected.

Conclusions

Limited access to resources from legal sources compels many low income women who use drugs to pursue resources through illegal means or through men. Women relied on a combination of strategies to acquire resources and faced varying degrees of risk, none negligible, of HIV infection and of punitive sanctions. Avoidance of incarceration, primarily for drug related offences, as well as access to substantial and varied resources required both for drug use and for daily survival, favored acquiring resources through establishing sex partnerships with men who could supply at least some level of resources. Negotiation of HIV sex risk reduction in this context was constrained. Sex risk was deemed preferable to incarceration risk, and since most women had incarceration experience, the fear of punitive sanctions was more tangible than that of a future, theoretical HIV infection. Therefore, the implementation of environmental level interventions, which include conferring some sort of ‘resource advantage’ to women and changing policies that marginalise or compulsively target drug users, could change women’s priorities at the individual level, which, in turn, could disrupt the sexual transmission of HIV.

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