

## URGING OTHERS TO BE HEALTHY: “INTRAVENTION” BY INJECTION DRUG USERS AS A COMMUNITY PREVENTION GOAL

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“Intravention,” prevention activities that are conducted by and sustained through ongoing actions of members of communities-at-risk, is an appropriate goal for HIV intervention activities. Data from 120 injection drug users in a Brooklyn, New York, neighborhood that has seen decreases in HIV prevalence among IDUs and little HIV diffusion to young adults indicate that most of them have recently (3 months) urged other people to engage in one or more self-protective actions. These data suggest that the common image of IDUs as simply being sources of social and medical problems is inaccurate. Research is needed into how to create and diffuse “communities of intravention;” and we suggest that behavioral interventions be evaluated for their success or failure at creating outward-focused health communication by participants as well as for their impact on individual risk behaviors.

Much of the literature on HIV prevention and on drug users tends to focus on the individual, whether as the target for behavioral change interventions or as persons with behavioral and/or psychological dysfunctions. This article presents evidence about processes that may be of major importance for HIV prevention that are primarily ignored by these perspectives.

Individual-behavioral models in HIV research and intervention have primarily had a cognitive-behavioral focus. They include the transtheoretical model (De Zoysa et al., 1995; Galavotti, Grimley, Riley, & Prochaska, 1993; Prochaska & DiClemente, 1986; Prochaska, DiClemente, & Norcross, 1992; Prochaska, Redding, Harlow, Ross, & Velicer, 1994; Robles et al., 1998), health belief model (Brown, DiClemente, & Reynolds, 1991; Catania, Kegeles, & Coates, 1990; Edem & Harvey, 1988; Rosenstock, Strecher, & Becker, 1994), social cognitive (learning)

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theory (Bandura, 1977, 1986, 1994; Kok, de Vries, Mudde, & Strecher, 1991; Wexler, Magura, Josepher, Bixler, & Beardsley, 1994), theory of reasoned action (Ajzen & Fishbein, 1990; Fishbein, Middlestadt, & Hitchcock, 1994; Kalichman & Hospers 1997), and AIDS risk reduction model (Catania et al., 1990; Moore, Harrison, & Doll, 1994; Prochaska et al., 1994). The goal of these models in HIV interventions is to promote individual behavior change, or perhaps to encourage movement toward “intention to change,” by changing individuals’ knowledge, attitudes, beliefs, and/or emotions. Evaluation of such interventions, then, consists of seeing whether individual change results as a consequence of exposure to the intervention.

Since the mid-1980s, however, our research group has put forward a different goal—to change “cultures of risk” into “cultures of support” for, and perhaps even insistence on, risk reduction and/or risk avoidance (Friedman, Des Jarlais et al., 1987; Friedman, Southeran et al., 1987; Friedman, Sterk, Sufian, Des Jarlais, & Stepherson, 1990; Friedman, Sufian, Curtis, Neaigus, & Des Jarlais, 1991; Friedman, Sufian, & Des Jarlais, 1990; Friedman, Wiebel, Jose, & Levin, 1993). The focus of this argument is (a) that such cultures can be self-sustaining rather than requiring constant (and person-power intensive) external interventions by trained personnel or professionals and (b) that such collective “intraventions” (i.e., prevention activities that are conducted and sustained through processes within communities themselves) have broader coverage than individual-focused interventions in that they reach more people and operate at all hours of day and night.

In this article, rather than evaluating a given intervention, we present data on such a culture of support for risk reduction and risk avoidance. These data are from drug injectors in one community, Bushwick, within New York City—a city in which an enormous HIV/AIDS epidemic killed tens of thousands of injection drug users (IDUs) in the 1980s and 1990s, but also a city in which HIV prevalence among IDUs has declined from about 50% to about 10% to 15% and HIV incidence among IDUs has declined from about 13% per person per year at risk to about 1% to 2% (Des Jarlais et al., 1998, Des Jarlais et al., 1999, Des Jarlais et al., 2000; Des Jarlais et al., 2003). Elsewhere (Friedman et al., 1997; Friedman et al., 2003) we have presented data that indicate that HIV prevalence among Bushwick IDUs has declined and that HIV has not diffused outward from local drug injectors to young adults in the community. Here we present data that begin to describe some of the intravention processes present in a community of IDUs that has undergone a decline in HIV prevalence, perhaps as a result of sociocultural adaptation to HIV. We do not claim that these processes are unique to Bushwick; nor do we claim, or even believe, that they are the result of any single intervention or combination of interventions. Indeed, in many ways, we believe that they have grown as much out of IDUs’ innovation and experience with the epidemic as out of behavioral or educational interventions (Friedman, Curtis, Neaigus, Jose, & Jarlais, 1999). (Syringe exchanges have also had an impact, but they are neither, *per se*, cognitive-behavioral interventions nor intraventions.)

Part of the theoretical basis for the perspective put forward in this article derives from our perspective on much of the literature on drug users and on IDUs in particular who are often portrayed as having dysfunctional behaviors and personal attributes (Brehm & Khantzian 1997; Chambliss 1999; King & Brooner, 1999; Office of National Drug Control Policy, 1992; Platt, 1995; Regier et al., 1990; van Wijngaart, 1991). Such research often investigates how psychological traits of drug users and chemical traits of drugs lead to addiction and related problems (Brook, Cohen, White-man, & Gordon, 1992; Hawkins, Catalano, & Miller, 1992; Khantzian, 1997). This

approach, by personalizing and medicalizing drug use and its associated problems, can lead to underestimating or even ignoring the ability of drug users to act collectively to respond to the dangers of the HIV epidemic as well as to other harms that threaten drug users.

Research on IDUs during the HIV/AIDS epidemic, however, has in many ways shown that drug injectors can and do react to HIV and other threats rationally and effectively. For example, drug users have publicly formed formal organizations in many countries, including the Netherlands, Denmark, Great Britain, Australia, and Canada (Friedman, de Jong, & Wodak, 1993; Wodak, Strathdee, Friedman, & Byrne, 1998) to represent and act on behalf of their interests and to conduct HIV and HCV risk reduction programs. In the United States, extreme stigmatization and repression has made such organizing more difficult, although it has nevertheless taken place (sometimes under the guise of other activities). Prior research of ours has indicated that IDUs in the New York City epidemic have been active participants in protecting themselves and each other against HIV/AIDS and other health threats. We have shown that they were actively reducing their HIV risk in the early stages of the HIV epidemic, well before any public health programs were set up in the city to help them do so (Friedman et al., 1986; Friedman, Curtis, et al., 1999; Friedman, Des Jarlais, et al., 1987), that drug sellers were disseminating HIV-related health-promotion messages by the early 1980s (Des Jarlais, Friedman, & Hopkins, 1985), that drug injectors seemed to be moving toward risk reduction in small groups rather than simply as individuals (Friedman, Des Jarlais, et al. 1987), that IDUs' health-oriented peer norms were related to greater likelihood of consistent condom use (Friedman et al., 1994) and less likelihood of syringe sharing (Friedman, Curtis, et al., 1999), that many drug injectors report having advised others to use condoms or to clean their works with bleach (Friedman et al., 1992; Friedman, Curtis, et al., 1999; Friedman, Neaigus et al., 1999) and that IDUs also actively try to assist others with tuberculosis or related symptoms of ill health (Curtis et al., 1994). Knowlton (2003) has shown that IDUs and other drug users are often among the friends and family members who provide social and economic support for IDUs with HIV.

In addition, perhaps because of the common focus on drug users as being dysfunctional and marginalized, little research has been reported on the extent to which IDUs (many of whom live, and in some cases were born and raised, in the communities where they use drugs) are active members of their community and take part in various community events like block parties, church activities, or health fairs.

Here we report on the extent to which IDUs in Bushwick report engaging in six specific forms of health promotion, as well as helping to care for other people who have HIV or AIDS, and on the predictors of engaging in such activities. We also present data on the extent to which IDUs take part in community events. Ethnographic data are used to validate reports of health communication and to contextualize the findings.

## METHODS

### SAMPLE

One hundred twenty IDUs were recruited as part of a sociometric network study of the sexual and injection partners of IDUs and of other adults in the Bushwick section of Brooklyn. Bushwick is a poor, primarily Latino and African American neighborhood in New York City with a population of approximately 100,000. It has been a major center for drug dealing and use for many years (Friedman, Curtis, et al., 1999;

Maher, 1997). Among Bushwick drug injectors in the early 1990s, HIV prevalence was approximately 40% and hepatitis B core antibody prevalence was approximately 70% (Friedman, Curtis, et al., 1999). Of the 120 IDUs reported on here, 3 had been subjects in an earlier population-representative sample of Bushwick youth; 18 were walk-ins who met study criteria (discussed below); 16 were street-recruited in known drug purchasing venues, at shooting galleries, or at needle exchanges; and 83 were IDUs who were injection or sexual partners of other subjects. (Two of these cases were sex links of subjects who are not themselves IDUs.)

To be eligible for this study, subjects had to be at least 18 years of age, to live in Bushwick, to report having injected drugs within the last 3 months, and either to have visible track marks or to otherwise convince our experienced field director after detailed verbal questioning that they had injected during the last 3 months. Of the 120 subjects, 119 had their urines tested for amphetamine, cocaine, marijuana, and heroin use; 109 (92%) tested positive for opiates or cocaine metabolites. On-site urinalysis for drug metabolites used OnTrak “TesTcup” (Roche Diagnostic Systems, Indianapolis, IN) to detect recent marijuana use (in the last 10 days), heroin use (in the last 2-3 days), cocaine use (in the last 2-3 days), and amphetamine use (in the last 2-4 days).

### QUESTIONNAIRE

Face-to-face structured interviews were conducted in confidential settings after informed consent was obtained. On average, the interviews lasted 74 minutes ( $sd = 24$ ; range = 39 - 130 minutes).

The questionnaire included sections on sociodemographics, sexual and drug behaviors, sexual and drug networks, social support, external and internal norms, health activism, and other personal characteristics. The items that asked about health activism were as follows:

1. In the last 3 months, have you urged anyone not to use drugs?
2. In the last 3 months, have you urged anyone to use condoms if they start a new relationship?
3. In the last 3 months, have you urged anyone to get into drug treatment?
4. In the last 3 months, have you urged any drug injector to use needle exchanges?
5. In the last 3 months, have you urged any drug injectors to use condoms when they have sex?
6. In the last 3 months, have you urged anyone to not participate in group sex?
7. In the last 3 months, have you helped care for anyone who has HIV or AIDS?

The project ethnographer conducted postinterview in-depth discussions with 9 subjects to learn more about the events that respondents were referring to when they answered these questions in the affirmative, and to assess whether they had actually taken place within the specified time frame. In addition, 22 wide-ranging in-depth interviews (with 15 IDUs and 7 non-IDUs) were analyzed to further study the extent to which subjects engage in actions aimed at protecting others.

### DEVELOPING A SCALE OF OTHER-ORIENTED PROTECTIVE ACTIONS

In the analyses that follow, we use a five-item additive scale as our dependent variable (Cronbach's  $\alpha = .75$ ). Although, as noted above, seven items asked about health-assisting actions, two of these items (items 6 and 7, above) apply to relatively

small groups of persons, reducing the likelihood that subjects will have had contact with any of their members (e.g., people who have group sex, people with HIV/AIDS) and an opportunity to engage in health-assisting communications with them. Drug injectors, however, are relatively easily located in Bushwick and are known by many residents. Actions aimed at this larger group, or at no specific group at all, were considered to be a better measure of the degree to which subjects are involved in health-assisting actions. Thus, in the analyses that follow, we use only items 1-5 shown above.

We conducted both factor and cluster analyses on these five items. A factor analysis yielded one factor in which all five variables were correlated at .49 or higher. The resulting factor (i.e., weighted) scale, however, was no more strongly correlated with other variables than the additive scale derived by adding the scores of the individual items. In addition, although cluster analyses identified two distinct groupings of individuals, analyses using a dichotomous measure based on these groupings produced associations no different from those found with the additive scale. Because the substantive results with these other measures of health assisting actions did not differ from those presented below, we chose the additive scale for its simplicity and clarity.

#### INDEPENDENT VARIABLES AND ANALYSES

Analyses of predictors of health activism were to some degree exploratory but were also based on several underlying hypotheses. One was that people who are involved in community activities are more likely to engage in health-oriented communication with their families, friends, associates or neighbors. A second was that normative pressure, as measured by previously validated questions (Flom, Friedman, Jose, Curtis, & Sandoval, 2001; Flom, Friedman, Jose, Neaigus, & Curtis, 2001; Flom, Friedman, Kottiri, et al., 2001) about close friends or associates, encouraging forms of drug or sexual behaviors, is associated with such behaviors. (Alternative post hoc interpretations of these variables appear in the Results section.)

A third was that an injector's stage in his or her injection career is related to the extent that he or she engages in other-directed health communication. The directionality of this relationship, however, is ambiguous: To the extent that drug user milieus socialize users into antisocial or asocial behavior and ways of thought (Stephens 1991), more years of injection might be associated with less health activism or, alternatively, with a greater likelihood of being socialized into efforts to help each other avoid the risks associated with drug use and with injection. Other variables explored included sociodemographic characteristics; social support and burden; a draft altruism scale (in which subjects rank-order activities they might engage in, including assisting others with everyday or medical needs); other values; sexual and drug-related risk behaviors, venues, and roles; history of potentially traumatic events; personality characteristics; HIV serostatus; and tendency toward giving socially desirable responses.

Statistical analysis used SAS software (SAS Institute, 1999) to examine frequency distributions on key variables and to conduct exploratory *t*-tests on how community involvement and external norms are related to engaging in health activism. Because some independent variables had categories with small *n*s, *t*-tests were supplemented with bootstrap methods. We used bias corrected and adjusted confidence intervals to estimate the confidence intervals around estimated bivariate regression coefficients to test whether results that were significant by *t*-test remained so under this technique (see, e.g., Davison & Hinkley, 1997; Efron & Tibshirani, 1993; Simon, 2000). S-Plus software (MathSoft, 1999) was used to conduct the bootstrap analyses.

**TABLE 1. Proportions of 120 Injection Drug Users Who Engaged in Other-Directed Health Activities**

	% Yes
In the last 3 months, have you urged anyone not to use drugs?	55
In the last 3 months, have you urged anyone to use condoms if they start a new relationship?	49
In the last 3 months, have you urged anyone to get into drug treatment?	55
In the last 3 months, have you urged any drug injector to use needle exchanges?	38
In the last 3 months, have you urged any drug injectors to use condoms when they have sex?	41
In the last 3 months, have you urged anyone to not participate in group sex?	10
In the last 3 months, have you helped care for anyone who has HIV or AIDS?	37

**RESULTS**

The sample was mainly (68%) male; 78% were Latino/a, 8% African American, 9% White, and 6% of other race/ethnicity. Mean age was 36.0 (*SD* = 8.5; range = 18 - 57). Mean number of years injecting was 11.6 (*SD* = 11; range = 0 - 43); 16% for 1 year or less, 22% for 2 to 4 years, 17% for 5 to10 years, 46% for 11 or more years.

Data on the proportions engaging in each type of health-supportive action in the prior 3 months are presented in Table 1. Correlations among these seven variables ranged from .08 to .57; 76% are less than .40—suggesting that these questions are not evoking “rote” responses and that they are measuring distinct behaviors. Most actions were quite common: Of the 120 drug injectors, 83% engaged in at least one of the seven items, and 78% engaged in at least one of the five urging activities that comprise the five-item scale.

Ethnographic interviews conducted after the formal interviews revealed that the subjects had specific events in mind and were reporting on actual events. Furthermore, these events were recent, indicating that the specified time frame (the last 3 months) is at least approximately accurate.

Which drug injectors were more likely to engage in which actions? This was analyzed using the additive scale of the number of other-directed health-protective actions the subject had engaged in (among the first five listed in the Methods section—that is, the items on urging others not to use drugs, to use condoms if they start a new relationship, or to get into drug treatment, and those on urging drug injectors to use needle exchanges or to use condoms when they have sex).

Table 2 presents the distributions of a number of potential explanatory variables. Volunteerism and attendance at community events by IDUs in Bushwick appear to be comparatively rare events. Between a third and half of the IDUs report that they have at least one close friend or associate who encourages them to use noninjected drugs. Forty percent have a close friend or associate who encourages them to use condoms, and only 12% have a close friend or associate who encourages them to have sex with an IDU.

Table 3 presents exploratory analyses of variables that are significantly associated with the five-item health activism scale. IDUs reported, on average, engaging in one to two more forms of health activism if they had worked as a volunteer or an organizer in a community based activity during the prior 3 months (although in bootstrap analysis this relationship was not significant), attended community events (block party, health fair, church, etc.), or had friends who encourage noninjecting drug use, condoms, or sex with IDUs (although in bootstrap analysis this last relationship was

TABLE 2. Distribution of Selected Other Variables Among 120 Injection Drug Users

	%
Involved in community	
Volunteer or organizer in community-based activity in last 3 months	9
Attended any community event	14
Attended a community health event	3
Attended a block party	6
Attended a church event	7
Attended other kind of event	6
External norms	
Any close friends or associates encourage marijuana use	34
Any close friends or associates encourage noninjection cocaine use	37
Any close friends or associates encourage noninjection heroin use	47
Any close friends or associates encourage condom use	40
Any close friends or associates have encouraged me to have sex with an injection drug user	12
Injecting drugs for 10 years or less	54

only significant at  $p < .10$ ). The relationships between health activism and having friends who encourage noninjecting drug use, condoms, or (perhaps) sex with IDUs may imply that health communications are more likely among friends or associates whose communication patterns include encouragement of other activities as well, and/or it may simply reflect that some IDUs are socially isolated. The finding that those who have friends who encourage marijuana, noninjection cocaine and noninjection heroin engage in about one more type of health activism (on average) than those who do not might imply that, among IDUs, encouraging such noninjecting drug use may be a way to help others to avoid high-risk injecting (and thus is a form of health activism in this context). The health activism scale was also significantly correlated with a three-item altruism scale ( $r = .20$ ;  $p = .0309$ ) and with the number of years the IDU had been injecting drugs ( $r = .18$ ;  $p = .0473$ ). Variables that were *not* significantly related to the health activism scale included sex, age, education, personal and household incomes, and HIV serostatus. The ethnographic research provides a context in which to consider these findings. Despite facing some hostility, IDUs are nonetheless active members of the Bushwick community with a stake in the welfare of those in their immediate surroundings. In their roles as family members, friends and neighbors, they engage in actions aimed at protecting others from harm that could derive from risky behaviors such as unprotected sex and drug use. For example, in the following excerpt, A, a 36-year-old IDU, described how he suggested condom use to a friend:

A friend of mine, he was telling me he got a new girlfriend. He really likes this girl. I said, "how long you know her?" He said, "I think a month." He said he was falling in love with her. I said, "Did you have sex with her?" He said, "yeah. I had sex with her about three or four times with no condoms." I said, "what?" This kid is about nineteen. You know I said, "what with no condoms?" He said, "yeah. What's your problem?" I said, "don't you ever do that. Go check yourself. Do the things right. You know you'll both be protected and protect yourself. Be safe. You're young." He's my nephew's friend. You know he's young. He can't risk, you cannot risk yourself. All it takes is one time. One time and

TABLE 3. Mean Score on Health Activism Scale for Selected Variables Among 120 Injection Drug Users

	<i>n</i>	Mean	<i>SD</i>	<i>p</i> Value
<b>Involved in Community</b>				
Volunteer or organizer in community based activity in last 3 months*				
No	109	2.3	1.7	.0494
Yes	11	3.4	1.8	
Attended any community event				
No	103	2.1	1.7	.0001
Yes	17	3.9	.8	
Attended a community health event				
No	116	2.3	1.7	.0006
Yes	4	4.3	.5	
Attended a block party				
No	113	2.3	1.8	.0001
Yes	7	3.7	.5	
Attended a church event				
No	112	2.3	1.8	.0211
Yes	8	3.8	1.0	
Attended other kind of event				
No	113	2.3	1.7	.0206
Yes	7	3.9	1.1	
<b>External norms</b>				
Any close friends or associates encourage marijuana use				
No	79	2.1	1.8	.0148
Yes	41	2.9	1.6	
Any close friends or associates encourage non-injection cocaine use				
No	75	2.1	1.7	.0319
Yes	45	2.8	1.8	
Any close friends or associates encourage non-injection heroin use				
No	63	2.0	1.8	.0093
Yes	57	2.8	1.6	
Any close friends or associates encourage condom use				
No	72	1.9	1.5	.0004
Yes	48	3.0	1.5	
Any close friends or associates have encouraged me to have sex with an IDU**				
No	106	2.3	1.7	.0468
Yes	14	3.3	1.7	

\*Not significant in bootstrap test. \*\*Significant at  $p < .10$  in bootstrap test.

that’s it. He just looked at me. I gave him about 10 condoms that I had in the house. I said, “use them.”

Drawing from their own injection careers, IDUs and former IDUs sometimes advise both nonusers and users against drug use. Examples of this include parents advising their children about the perils of addiction, IDUs advising friends about the misleading apparent sense of control at the initial stages of their use or advising relatives not to use drugs based on their struggles with addiction. In the following excerpt H, an 18-year-old nonuser, described how he received such advice:

My whole family they did all types of drugs; you name it, they did it. They always tell me where you coming from I have been there and back and past that. Learn from our mistakes. I try to acknowledge that in my head and make sure I keep that.

In addition, IDUs at times actively help others to stop their drug use. In the following excerpt T, an 25 year-old IDU, describes helping her boyfriend to stop using:

I had been clean by that time for about a year when he [boyfriend] started using again. So I started bringing him to [NA] meetings all the time because I had been going steadily to the meetings. He just got better. He stopped using. He stopped for about 4 or 5 months.

## DISCUSSION

These data suggest that the common image of IDUs as being little more than sources of social and medical problems is inaccurate. It is of course true that many IDUs do (at least in social contexts where drug use is illegal and highly stigmatized) commit crimes against persons or property (Friedman, Curtis, et al., 1999) and that many become infected with HIV, hepatitis B or C, syphilis, herpes simplex type 2, and bacterial infections (Friedman et al., 2003; Novick, Haverkos, Teller, & Douglas, 1997). There is another side to this story, however. Some (18%) act as volunteers or organizers of community-based events and/or take part in community events like health fairs or church events. A majority of IDUs in this sample also actively urge other persons to take actions that can protect themselves and others against blood-borne or sexually transmissible infections. A majority also urge others to avoid or to stop using drugs. It is noteworthy that the IDUs who act to protect others are not merely new users who have not had time to become socialized into “dysfunctional adaptations of the drug injecting subculture.” Rather, there is a positive (rather than a negative) association between engaging in other-protective communication and years of injecting.

More research is clearly needed to understand the implications of the positive associations between engaging in other-protective action and engaging in community activities such as health fairs, church, or block parties or volunteering in or organizing community-based activities. It is likely that there are bidirectional causal pathways (i.e., those IDUs who engage in community activities may be more likely to get involved in other-protective communication, and, also, those who engage in other-protective communication may be more likely to get involved in community activities). Mediating processes such as being or becoming less socially marginalized, personality factors that encourage health activism, and peer or community-agency pressure to engage in such activities may all be part of this process.

## IMPLICATIONS

These findings have a number of implications for public health practice. First, they support our previous findings that many IDUs are active participants in trying to reduce HIV transmission and other problems that afflict themselves and others (Friedman, Chapman, et al., 1999; Friedman, Neaigus, et al., 1999; Wodak et al., 1998). Second, they suggest that even in the United States with its strong stigmatization of drug users, there is at least a subset of IDUs who are involved in community agencies and activities in various ways. Although only a small proportion, they may nonetheless be important allies for public health and harm reduction agencies—particularly in sociopolitical environments where stigmatization and prevention do not deter them from publicly identifying themselves as IDUs or even as drug users. Policies that discriminate against drug users, such as those that forbid publicly funded agencies from employing users, may make it harder to forge alliances of this kind.

Third, these findings show that public health agencies, and even harm reduction, drug treatment, and drug prevention projects and agencies, through clearly important and necessary, are not the whole story. IDUs themselves are already actively playing roles in HIV prevention and care, in urging community members not to use drugs and in urging other drug users to seek treatment. IDUs are especially well placed to be health activists among other IDUs because they have insider knowledge and are often physically present when advice or assistance can usefully be provided. Examples include being there to help if another IDU needs a sterile syringe or if her or his health is rapidly deteriorating. It might be useful to see this ongoing health activity as a form of “intravention,” whereby the community acts to protect itself and others.

Presumably, the health-promoting efforts that IDUs engage in have both histories and sociocultural roots in their communities. Public health theory and research might well be strengthened, and our ability to intervene against HIV and other epidemics improved, to the extent that we can incorporate the historically changing actions (and errors) of IDUs and other community members into our thinking and programs. We recommend that such research and theory construction be conducted.

Present theory, and our ability to intervene in HIV and other epidemics, would benefit from research on the extent to which such health activism on the part of those affected is the product of (a) 25 years of community and/or individual experience with HIV and its sequelae (including many thousands of deaths among IDUs in New York City), (b) the cumulative impact of a wealth of interventions of various kinds by a plethora of official, unofficial, and illegal projects, and (c) preexisting traditions and ways of thought and discussion among local IDU cultures and their social environments.

Furthermore, this view of IDUs as active participants in their own health promotion suggests the potential utility of involving IDUs in planning interventions aimed at them. Users' groups capable of being active participants in such planning exist in many nations (Wodak et al., 1998). Because there is considerable local variation in cultures and histories, local IDUs need to be involved in planning local interventions. We suggest that such involvement should be on a level considerably beyond having a focus group or two or token “community advisory committees” of ex-IDUs, of participants in drug treatment or Narcotics Anonymous, or even of current IDUs. Instead, we suggest that local IDUs should become an ongoing part of community-planning activities. One form this has taken in some countries (e.g., Australia) is to fund and otherwise support organizations of drug user activists (Wodak et al., 1998). These organizations then advise and criticize government and community organizations and agencies about what projects are needed and about how projects can most usefully be structured and act. (Users' organizations also conduct their own interventions—often with public and private funding.) Other forms of incorporating IDUs, such as hiring them as project members and/or consultants, may also prove useful. IDU staff participation may be not only strategically important but absolutely essential in localities where there are few other resources for public health interventions, such as in some nondeveloping countries or in some marginalized areas within developed or developing countries.

Finally, these data present one view of a community in which HIV among IDUs has declined. It seems to have a self-reinforcing and sustained culture of risk reduction—the opposite of a “culture of risk” (Friedman, Weibel, et al., 1993). Historically, this culture probably emerged through 25 years of a massive local HIV epidemic as the joint product of (a) the activities of individuals and small groups of IDUs who, in re-

sponse to an emergent health crisis among their friends and associates, observed, experienced, and innovated, and then engaged in persuading other IDUs about what risk consists of and how to reduce risk; (b) the initiatives by community-based organizations to start prevention activities including outreach activities and then syringe exchanges, regardless of their legal status; and (c) public health programs by governmental health authorities (which, perhaps due to being restrained by political or other objections, generally lagged behind both the autonomous activities of IDUs and those of community based and other nongovernmental organizations) (Friedman, Curtis, et al., 1999, pp. 1-7).

This “culture of intravention” is neither sufficient nor a finished product. Even though the HIV epidemic among IDUs in New York City has been greatly ameliorated, new infections occur at a rate of about 1% - 2% per year (Des Jarlais et al., 1998, Des Jarlais et al., Des Jarlais, 2000; Des Jarlais et al., 2003), probably as the result of both sexual risk and injection risk. Furthermore, like all cultures, the culture among IDUs changes over time. This can be the result of many forces, including new drug use patterns emerging, gentrification that disrupts existing social networks, or the fading of the memory of the AIDS-related horrors of past decades. It can also be in response to, or in collaboration with, interventions carried out by governmental and nongovernmental organizations.

This culture of intravention is both a source of self-sustaining action against HIV and also an arena (which might usefully be called an “action field”) for further initiatives by injection drug users as individuals and as groups, by community organizations, by other nongovernmental organizations, and by public authorities. This action field undoubtedly provides both resources for and obstacles to further change.

In this context, then, successful intervention by outsiders such as public health agencies or other health organizations (or intravention by insiders such as drug users and their communities) requires both on-the-ground knowledge of the local action field and a theoretical understanding of cultures of intravention and how they arise, sustain themselves, and change. Cognitive-behavioral theories that focus on the individual may not provide sufficient understanding for such efforts because they lack the concepts and methodologies needed to identify, understand, or intervene in structures and processes that are at the cultural system, community, and sociometric network levels. Furthermore, standard evaluation measures, which look only at changes in those behaviors that put individuals at risk (or, in some instances, at direct transmission behaviors such as passing used syringes on to other people), seem insufficient to measure the kinds of cultural collective reinforcement of risk reduction that is documented in this paper.

What are needed, then, are theories and methods that focus on community and cultural processes and structures, and on broad social change; evaluations that measure sociocultural processes that can create and maintain cultures of intravention; and intervention approaches that help communities to develop (if necessary) and then to maintain such forms of collective prevention.

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