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CROSS-CULTURAL APPROACHES TO HARM REDUCTION RESEARCH: SOME CONSIDERATIONS ON THE BRAZIL EXPERIENCE

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ABSTRACT

Harm reduction initiatives for drug users comprise a range of approaches, including drug-user treatment, advocacy for changes in drug policy, needle exchange programs, bleach distribution, and broad-based interventions that focus on both safer drug use and less risky sexual behaviors. In many developing nations, harm reduction is a relatively new strategy, which focuses almost exclusively on the connections between drug use and the spread of HIV infection. In Brazil, harm reduction programs are few, and little has been documented about their scope, experience, and effectiveness. This paper reviews the status of Brazilian harm reduction initiatives in general, with a specific focus on lessons learned from the conduct of cross-national research in Rio de Janeiro. The study demonstrated the feasibility of implementing a community-based prevention program among an at-risk population of cocaine users in Brazil, and in other countries where there is little tradition of research with out-of-treatment drug users. Finally, the paper addresses aspects of

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the harm reduction movement that tend to hamper its progress in both developed and developing nations. [Translations are provided in the International Abstracts Section of this issue.]

Key Words: Harm reduction; HIV/AIDS prevention; Cocaine; Brazil.

Although "harm reduction" is a concept that has been difficult to define with any degree of precision, its essential feature is the attempt to ameliorate the adverse health, social, legal, and/or economic consequences associated with the use of mood-altering drugs. As such, harm reduction is neither a policy nor a program, but rather, a principle which suggests that managing drug misuse is more realistic than attempting to stop it altogether. Within this context, harm reduction, or "harm minimization" as it is also termed in a number of countries, can mean different things to different people, groups, cultures, and nations. Most broadly, it can refer to any variety of policies and policy goals, including

- Advocacy for Changes in Drug Policies—legalization, decriminalization, ending the drug prohibition, reduction of criminal sanctions for drug-related crimes, changes in drug paraphernalia laws
- HIV/AIDS-Related Interventions—needle/syringe exchange programs, HIV prevention/intervention programs, bleach and condom distribution programs, referrals for HIV and other sexually transmitted disease (STD) testing; referrals for HIV and other STD medical care and management, referrals for HIV/AIDS-related psychological care and case management
- Broader Drug-User Treatment Options—methadone maintenance by primary care physicians, changes in methadone regulations, heroin substitution programs, new experimental treatments, treatment on demand
- 'Drug Abuse' Management for Those Who Wish to Continue Using Drugs—counseling and clinical case management programs that promote safer and more responsible drug use
- Ancillary Interventions—housing and other entitlements, healing centers, support, and advocacy groups (1)

Harm reduction per se is not officially a part of American drug policy, and in fact, the very term *harm reduction* has become so value-laden among many U.S. drug strategists and politicians that it is rarely articulated within government circles. This has occurred, for the most part, because "harm reduction" is often used interchangeably with such expressions as *drug legalization* and *marijuana decriminalization*. But advocating harm reduction does not necessarily mean promoting the legalization of heroin, cocaine, and other currently illegal drugs. Rather, it can

focus on many different alternatives, including drug use education, prevention, and treatment. And curiously in this regard, one of the first and oldest harm reduction initiatives in the world—methadone maintenance—originated in the United States more than three decades ago.

In many parts of the world, the appearance of HIV has led to a widespread intensifying of commitments to harm reduction approaches to drug use. Within this context, the focus of this discussion is what constitutes harm reduction in Brazil, a review of some of the experiences with harm reduction in that nation, and an examination of some of the issues associated with implementing harm reduction initiatives in developing nations.

HARM REDUCTION IN BRAZIL

Brazil ranks second in the world in the number of reported cases of AIDS, with 163,355 identified as of May 1999 (2). Although men who have sex with men have represented the largest exposure category since the beginning of the epidemic in Brazil, the role of injection drug use has changed dramatically since the first cases were reported almost two decades ago. From 1982 to 1986, for example, injection drug users accounted for only 6.4% of all identified cases. By 1999, however, this proportion had risen to nearly 20% (2).

Because injection drug users in Brazil lack political power, live in social isolation, and are discriminated against—even by noninjecting drug users—they are seldom found in traditional substance abuse treatment settings and health services programs. Moreover, until only recently drug users were not targeted by HIV prevention initiatives by government-sponsored education and prevention programs. Although HIV/AIDS prevention campaigns initiated by several nongovernmental organizations have been effective in targeting street children, construction workers, sailors, prostitutes, and gay-identified men, others at significant risk for HIV infection—especially injection and noninjection drug users—have been largely overlooked by these efforts (3). Despite statistical evidence of alarming HIV sero-prevalence rates among drug injectors, by the end of the first decade of the AIDS epidemic there was still no official policy or programs directed to this particular group (4). Even by late 1996, respected Brazilian drug researchers were still lamenting the lack of political attention paid to the public health problems associated with drug use in Brazil (5).

Going further, harm reduction is a relatively new phenomenon in Brazil; it is far more narrowly focused than in other parts of the world; and it emerged specifically in response to the HIV/AIDS epidemic among injection drug users. Currently, the goals of harm reduction in the Brazilian context include needle/syringe exchange, bleach disinfection, substitution of noninjection drug use for injection use, traditional drug-user treatment, and general HIV/AIDS prevention education (6).

Syringe Exchange

Although a syringe exchange program operated in the Brazilian port city of Santos for a short period in 1989 before it was closed through pressure from the Federal Narcotics Council (7), it was not until 1992 that harm reduction approaches for injection drug users were first addressed by the Brazilian National Program on STD/AIDS. The focus was primarily on needle/syringe exchange, and the dialogue resulted in the first government commitment to systematically address the negative consequences of drug use among Brazilians.

Building on this initiative and the endorsement of the Ibero-American Health Ministers, in 1994 the Brazilian Federal Narcotics Council approved a six-site pilot needle/syringe exchange program (8). Citing the need to make drug use as safe as possible for both individuals and society, the council sanctioned the operation of syringe exchange programs in six Brazilian cities having a high incidence of HIV infection and relatively large communities of injection drug users: São Paulo, Belo Horizonte, Santos, Salvador, Rio de Janeiro, and Campo Grande.

Despite broad-based support for needle exchange efforts by both federal and state agencies, the implementation of these projects has been slow and difficult (9). The Brazilian Ministry of Health piloted needle/syringe exchange programs at the Salvador and Santos sites in 1995. In Salvador, the program continues to operate, and provides disposable injection equipment, condoms, HIV prevention information, and referrals for medical and social services. The Santos endeavor, however, was less fortunate. Shortly after its initiation, the Narcotics Police of Santos seized the program's resources and closed it down (10). The project later moved to the neighboring city of São Vicente where a more relaxed political climate made syringe distribution more feasible. More recently, the Ministry of Health and the Federal Narcotics Council of the Ministry of Justice gave joint approval for seven additional needle/syringe exchange programs to be funded by international institutions (11). A number of these were initiated during 1996 and 1997, but they continue to receive opposition from many sectors of the Brazilian community.

Community Outreach Programs

Going beyond needle/syringe exchange programs, other types of harm reduction initiatives for drug users in Brazil are even fewer in number. Drug-user treatment is generally limited to a few religious institutions that lack the resources to meet the demand, and to private clinics that are expensive and therefore not accessible to the majority of drug users (12). In fact, it was not until December 1996 that the first public, free-of-charge, drug-user treatment clinic

was opened in the state of São Paulo, the most economically progressive region of Brazil (13). In Rio de Janeiro, furthermore, the second largest city of Brazil, there is only one publically funded outpatient drug-user treatment program, and no publically funded inpatient programs (14). Furthermore, condom distribution programs directed to drug users are uncommon, especially when compared with those operating for male and female sex workers, the gay community, and sex partners of HIV-infected persons. Consequently, rates of condom use among drug users are extremely low, with one study reporting that 90.2% and 91.3% of drug-using men and women, respectively, do not use condoms at all or most of the time (15). And finally, much of the HIV work targeting drug users is epidemiologic in nature, with prevention and intervention components typically lacking.

One of the most substantial harm reduction projects for drug users in all of Brazil, and clearly the largest in Rio de Janeiro, was established by the authors in 1993. The initiative was funded by the U.S. National Institute on Drug Abuse as a research demonstration project to develop, implement, and evaluate a communitybased HIV/AIDS prevention/intervention outreach program for cocaine injectors and snorters (16). Study participants were recruited from low-income communities and "red light" districts of Rio de Janeiro where rates of drug use and drug selling were known to be high, and from several of Rio de Janeiro's favelas (shantytowns), including Mangueira, Telégrafo, and Parque Candelária. These are typical favelas located in close proximity to the project's assessment center. Because the favelas are generally closed communities that are hostile to outsiders, access to the favelas was obtained through informal agreements made between project staff and favela community leaders. The outreach workers hired for client recruitment were young men and women who resided in the favela or downtown neighborhoods where they worked. In addition, only those who had access to and credibility with local drug user networks were used.

Clients were recruited by indigenous outreach workers through "targeted sampling" (17) and "chain referral" (18) strategies in specific geographic locales where drug-use rates were high. Outreach was proactive in that indigenous recruiters engaged potential clients in a screening process and a preliminary discussion of AIDS prevention. The screening process consisted of a 5-min street contact during which the outreach worker briefly described the purposes of the project, the risk reduction techniques that comprised the intervention, and the location of the intervention site. They also distributed hygiene kits that contained condoms, bleach and needle-cleaning equipment, band-aids, AIDS prevention literature (including how to use a condom and how to clean injection equipment), and referral information for STD testing and drug-user treatment.

Eligible clients (those who were at least 18 years of age, were not in druguser treatment or jail during the month before the interview, and who reported cocaine use during the 30 days before the interview) were given an appointment for intake at a project assessment center. Intake included informed consent, drug testing, and administration of a standardized risk behavior assessment instrument. Interviews were conducted using the Cooperative Agreement Risk Behavior Assessment (RBA), a standardized data collection instrument developed by scientists and funded investigators. The interview schedule was translated into Brazilian Portuguese and back-translated to ensure accuracy. Questions about demographics, drug use, sexual behavior, and health status were asked during an interview lasting approximately 1 h. Pretest HIV prevention counseling was provided, covering such topics as HIV disease, transmission routes, risky behaviors, risks associated with cocaine use, rehearsal of male and female condom use, stopping unsafe sex practices, communication with partners, cleaning and disinfection of injection equipment, rehearsal of needle- and syringe-cleaning, disposal of hazardous waste material, stopping unsafe drug use, benefits of drug-user treatment, HIV testing, literature and referrals, and distribution of the hygiene kit. HIV testing was provided to all clients on a voluntary basis and posttest counseling and HIV test results were available 1-3 weeks after testing. An effort was made to reassess all participants at a follow-up session 3–5 months later, followed by HIV retesting and counseling.

As mentioned previously, the vast majority of the project clients were recruited from Rio de Janeiro's "red-light" prostitution districts and *favelas*. By the end of 1997, more than 1500 cocaine injectors and snorters had been recruited into the project. Table 1 provides a demographic description of the project sample. As illustrated in Table 1, the respondents were young, with a median age of 29 years, and mostly male (77.5%). The three predominate race/ethnic categories in Rio de Janeiro—white, black (Afro-Brazilian), and multiracial—were well represented in the total sample, and the overwhelming majority of participants had minimal education, usually fewer than 8 years. Perhaps not surprisingly, the sample was concentrated in the lowest wage categories, with a median income of between \$100 and \$300 per month. This is primarily a reflection of the fact that marginalized drug users were limited to participation in the informal sector of the economy, often earning money by performing odd jobs or as street vendors.

On the whole, the project was a success. This study demonstrated the feasibility of accessing impoverished communities using indigenous outreach workers and documented the residents' willingness to participate in an AIDS education/prevention program. Although it is impossible to estimate the number of HIV infections that may have been prevented by the program, for almost 90% of the clients not only was it their first opportunity for HIV testing, but also it was their first involvement in an HIV/AIDS intervention program that provided risk reduction information, condoms, bleach, and referral sources. In addition, follow-up data suggested that significant numbers reduced both drug use and risky sexual behaviors (19).

Table 1. Selected Demographic Characteristics of 1544 Cocaine Users in Rio de Janeiro, Brazil, 1999

	Total (N = 1544)
Age at interview	
18–24	29.1%
25–34	42.0%
35+	28.9%
Median	29.0
Gender	
Male	77.5%
Female	22.5%
Ethnicity	
Black	34.1%
White	29.0%
Multiracial	36.8%
Education	
Less than 12 years	90.9%
More than 12 years	9.1%
Monthly income	
Less than \$100	36.9%
\$101-\$300	45.9%
\$301+	17.1%

ESTABLISHING HARM REDUCTION PROGRAMS IN DEVELOPING NATIONS

Although the NIDA-funded prevention/intervention project in Rio de Janeiro had a positive impact, its implementation and day-to-day operation was not without numerous difficulties. A number of the problems were the result of the investigators' lack of experience with conducting community-based health services research in Brazil. The majority of the obstacles, however, were an outgrowth of the newness of harm reduction concepts and the limited tradition of street research—phenomena that appear to be common to many developing nations. Establishing harm reduction programs is difficult enough; implementing them within a research context is even more problematic. Two issues in particular were of major concern in the Brazil project, the majority of which likely apply to harm reduction research in other developing nations.

First, few developing nations have a history and tradition of drug use research. Where research is being done, it is accomplished with limited funds and staffing, and as a result, samples are typically quite small and not necessarily

representative. Moreover, few investigators have developed a cadre of key informants and street contacts that can provide insights into the community epidemiology of drug use. The result is that only minimal empirical information is available about the nature and extent of drug use, the patterns of use, the community distribution of drug-using populations, and their characteristics and service needs. As such, making decisions about sampling plans and requirements for research purposes or targeting specific groups and locales for intervention and resource allocation becomes difficult.

This type of problem had implications in Rio de Janeiro not only for the HIV/AIDS intervention program implemented by the authors, but also for local harm-reduction advocates who opened a needle exchange program in early 1997. Studies sponsored by the World Health Organization during the late 1980s, for example, suggested that there were likely more than 30,000 cocaine injectors in Rio de Janeiro (20,21). Moreover, a variety of small-scale studies also suggested that rates of HIV infection among injection drug users were significant (22,23). However, when the authors' project went to the field, it was learned that although cocaine use was indeed widespread in Rio de Janeiro, injection drug users-the targets of the research—were actually few in number. Many had been infected with HIV early in the epidemic, and had subsequently died from AIDS before the onset of the research. In addition, cocaine injectors had been blamed for much of the spread of AIDS in Rio de Janeiro by segments of the media, and as a result many went into hiding or stopped injecting (14). And finally, because a good bit of the cocaine sold on the streets of Rio de Janeiro is cut with marble powder, it is difficult to inject (14). As such, the preferred route of cocaine ingestion is intranasal.

Although the authors were in a position to shift their focus to noninjecting cocaine users—a large population at high risk for HIV acquisition and transmission through sexual contact—the situation had a major impact on the Brazilian government-sponsored needle/syringe exchange effort in Rio de Janeiro. Because of the general shortage of injection drug users, the program encountered a significant number of obstacles in penetrating the networks of this hard-to-reach population (24). In this regard, injection drug users remained well-hidden, even in neighborhoods where drug use rates were high, and as such, even experienced field workers had difficulties in locating and recruiting them. This problem was compounded by the fact that because of corruption and abuses of power, weaker segments of Brazilian society tend to distrust government-sponsored programs (25).

Second, because "substance abuse" is a relatively new area of research in many developing nations, outreach mechanisms for accessing hidden populations tend to be only in their formative stages. Although anthropological studies have a long history in most parts of the world, such ethnographic techniques as participant observation and the use of key informants, indigenous outreach workers, and client

recruiters are both uncultivated and infrequent in drug use studies. As a result, both research and service delivery tends to focus on populations that are more easily accessed, which may be both atypical and in lesser need of harm reduction services.

An alternative problem related to both the recruitment and the follow-up of drug-abusing populations is the very structure of cities in many developing nations. Common features of the urban landscape are the many communities and districts comprised of shanties, shacks, and makeshift huts inhabited by those who have no other shelter. Known as *barriadas* in Peru, *ranchos* in Venezuela, *villas misérias* in Argentina, or *favelas* in Brazil, these squatter settlements have been estimated to house as much as one third of the urban population. Because there are neither addresses nor telephone or mail services in these communities, traditional methods of both recruitment and follow-up tend to be problematic at best. The extremely high rates of violent crime in these areas tend to compound the difficulties faced by researchers and outreach workers.

POSTSCRIPT

Harm reduction strategies have demonstrated numerous achievements in increasing the quality of life for drug-involved populations around the world. Many harm reduction advocates, however, tend to have an "all or nothing" philosophy, denigrating both the efforts and the accomplishments of those who do not share their zeal. This difficulty was faced by the authors during the 1998 International Conference on Drug-Related Harm in São Paulo, Brazil (26). Because needle exchange had not been included as a component of the Rio de Janeiro-based HIV/AIDS intervention program described earlier in this paper, the authors were ridiculed by a number of harm-reduction advocates from the United States. The project was denounced as "tantamount to genocide" and a reflection of "the failed US AIDS policy." In response to such critiques, it must be emphasized that syringe exchange programs are important, and Brazil is moving in the right direction is this regard. But at the same time, focusing all of one's efforts and ideological stamina solely on syringe exchange tends to be somewhat anachronistic—particularly when a large portion of the drug-using population is comprised of noninjectors. In the Rio de Janeiro project, for example, more than 90% of the drug-using clients were noninjectors. Almost 9% tested positive for HIV infection—an extremely high rate for a noninjecting population. Moreover, even injection drug users are exposed to HIV infection through sexual contact—an important issue in Brazil given the fact that the heterosexual spread of HIV and AIDS is increasing. In the latest statistics compiled by the Brazilian government for 1998–1999, 38.9% of the reported AIDS cases were linked to heterosexual contact, more than any other single exposure category (2).

The project in Rio de Janeiro was an appropriate first step. When it was fielded in 1994, there were no needle exchange programs anywhere in Brazil, and there were no community-based intervention programs targeting indigent or even low-income drug users. Among the more than 1500 clients that were eventually recruited, almost 70% had never received any HIV/AIDS prevention information—pamphlets, condoms, bleach, referral sources, or anything else. Thus, when implementing a harm reduction initiative in a developing nation, it is important to consider the local environment, to better understand the needs of the populations at risk, and to raise awareness about AIDS and the mechanisms of HIV acquisition and transmission. Needle exchange programs become feasible only in conjunction with these "first generation" education and prevention efforts.

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