AIDS Prevention Strategies for Ethnic-Racial Minority Substance Users

Robert F. Schilling [a], Nabila El-Bassel [a], Yolanda Serrano [b], Barbara C. Wallace [c]

[a] School of Social Work, Columbia University
[b] Association for Drug Abuse Prevention and Treatment, New York City
[c] Teachers College, Columbia University

This research was supported by Grant DA-05356 awarded by the National Institute on Drug Abuse.

Correspondence concerning this article should be addressed to Robert F Schilling, School of Social Work, Columbia University, 622 West 113th Street, New York, New York 10025.

Abstract

African Americans and Latinos, respectively, account for 29% and 16% of persons with the acquired immunodeficiency syndrome, yet collectively represent less than 20% of the US population (Centers for Disease Control 1990) Although rates of human immunodeficiency virus (HIV) transmission have slowed among gay Anglo men there is less evidence to indicate that patterns of transmission have been altered among Black and Hispanic intravenous drug users. In this article, risk factors for HIV transmission among drug users are described, and sociocultural aspects of these risk behaviors are discussed Next, the advantages and disadvantages of various approaches to reducing the spread of HIV among drug users and their associates are considered, particularly as they apply to ethnic–racial minorities Finally, brief examples are provided of how existing theories of behavior change can be applied in Hispanic and African-American communities and suggestions are offered for further research

Introduction

Culturally specific interventions are developed with an appreciation of various risk behaviors, the prevalence of such risk taking in various communities, and the coexistence of multiple risk elements Thus, human immunodeficiency virus (HIV) risks must be viewed with an understanding of how intravenous (IV) drug use and sexual contact are mediated by African- and Latino-American culture

Hispanic Americans and African Americans include many groups reflecting differing sociocultural and economic characteristics, and any assertions about either group as a whole must include this caveat (Selik, Castro, Pappaioanou, & Beuhler, 1989). Available data collected by the Centers for Disease Control and other agencies may mask important differences of specific Black and Latino groups However, for the purposes of this article on drug users and their associates, the largest group of Hispanic substance users and their associates in regions with high rates of acquired immunodeficiency syndrome (AIDS) and IV drug use are of Puerto Rican descent (Serrano, 1990, Sufian, Friedman, Neaigus Stepherson, & Des Jarlais, 1989) Persons of

Mexican, Cuban, Colombian, Dominican, and other Caribbean and Central and South American backgrounds are also represented among substance users, but in unknown proportions (Marin, 1990) African-American substance users are primarily U.S born Caribbean Americans typically self-identify as Latino but may have characteristics reflecting sociocultural aspects of both Blacks and Hispanics.

Intravenous Drug Use

It is difficult to overstate, in either absolute numbers or as a proportion of identified cases, the extent to which IV drug use is related to AIDS among African Americans and Hispanic Americans (Hahn Onorato, Jones, & Dougherty, 1989). As of March 1992, nearly 64,000 African Americans and more than 35,000 Latinos had been diagnosed with AIDS (Centers for Disease Control, 1992) IV drug use, including sexual transmission involving an HIV-infected drug user, accounted for more than 50% of identified AIDS cases among African and Hispanic Americans (Centers for Disease Control, 1992).

Sexual and Other Risk Correlates Related to Drug Use

A small proportion of cases are attributable to combined risks of IV drug use and sexual contact (Centers for Disease Control, 1990) Cocaine use and psychiatric disorder are also surfacing as potential correlates of HIV transmission.

The extent to which AIDS is spreading among heterosexuals has been the subject of considerable speculation and heated discussion. Base rates were initially less than 1% of cases, but heterosexually acquired AIDS may account for almost 6% of all reported cases by the end of 1991. Rates of heterosexually acquired AIDS among African-American and Latino women are 11 times the rates among White women (Holmes, Karon, & Kreiss, 1990). Correspondingly, Black and Hispanic children account for 83% of all children who acquired AIDS through permatal transmission (Centers for Disease Control 1992, J. Mitchell, 1989).

In the large majority of cases of heterosexual transmission, women contracted HIV from an IV drug user Risk factors associated with transmission include low rates of condom use, high rates of sexually transmitted diseases along with genital scarring, prostitution early intercourse, and unwanted pregnancy (Eckholm, 1990, Quinn et al, 1988, Tierney, 1990, , Miller, & Moses, 1989). Black Americans and, to a lesser extent, Latinos are disproportionately affected by these sexually related problems (Chaisson et al., 1990, Eversley et al., 1990; Moran, Aral, Jenkins, Peterman, & Alexander, 1989).

Crack cocamc, now emerging as a factor related to sexual risk taking, has had a devastating effect on ethnic-racial minority communities (Chaisson et al 1989, Rolfs, Goldberg, & Sharrar, 1990, Schilling, El-Bassel, Gilbert, & Schinke, 1991). One aspect is the exchange of sex for drugs, under circumstances far different than the exchange of services for money described by advocates of legalized prostitution (Jenness, 1990).

Homosexual IV drug users have not received much attention from researchers, and few interventions have been targeted at such persons (Jones, 1990). Homosexuality is condemned in

Black and Hispanic communities, and is in some ways less normative than drug abuse Moreover, some African-American and Latino men who have sex with other men do not consider themselves homosexual or even bisexual Hence, it has been difficult to ascertain the degree to which persons with HIV may claim to be IV drug users rather than admit to homosexual activity (Des Jarlais & Friedman, 1989, Morales, 1990).

Individuals with co-occurring mental and substance abuse disorders are increasingly a focus of attention. Profound social problems that have disproportionately affected ethnic-racial minorities may account for an increase in the covariance of chemical dependency and psychiatric disorder. These include deinstitutionalization, homelessness, violence, growing economic disparities, and a continuing social and economic decay, problems that have afflicted inner-city communities in recent years (Bowser, Fullilove, & Fullilove, 1990 Brickner, Scharer, Conanan, Savarese, & Scanlan, 1990).

Together, these observations indicate that substance abuse is a complex causal element in the spread of HIV among Americans of African, Caribbean, and Latino descent.

Current Risk-Reduction Approaches

AIDS prevention approaches may be categorized, albeit somewhat artificially, according to their intensity.

Low-Intensity Approaches

Low-intensity approaches tend to be low in cost, universal or aimed at large population segments, and of low potency.

Information

The early years of the AIDS crisis saw an almost exclusive emphasis on disseminating information. Posters were printed, and the surgeon general eventually sent a booklet to every home in the nation. The strengths and limitations of information-based approaches are readily apparent. Information is a necessary starting point for most interventions. Costs per contact are low, and it is possible to reach almost all persons with some kind of information. Repeat campaigns can be launched with little difficulty. Yet, by itself, information is an insufficient element in the chain of events culminating in behavior change (Schilling & McAlister, 1990, Turner et al, 1989). In minority drug cultures, prevention messages may be received with mistrust. In communities with as yet few observed AIDS cases, IV drug users may reject admonitions about drug use and unprotected sex as having no basis in reality, and may even label these messages as attempts to control their right to reproduce in the face of a man-made virus (DeParle, 1990, Navarro, 1990, Schilling et al., 1989).

HIV counseling and testing

Accumulating evidence indicates that individuals, including IV drug users, reduce their risk behavior after participating in the HIV testing and counseling process (Turner et al, 1989) HIV

testing and counseling is potentially one of the most cost-effective strategies for slowing the spread of HIV. given the limited resources expended per participant and the possibility of effecting substantial reductions in risk behavior HIV testing and counseling–particularly in the case of a positive test result–is a unique form of patient education that does not fit neatly into existing theories of health behavior. In no other circumstance of disease is an individual told that he or she has contracted a fatal illness that is readily transmittable to others. Although the psychological processes of denial under these conditions remain poorly understood, extant theory suggests that health-related information messages are mediated by cultural factors (Schinke. Botvin, & Orlandi, 1991). For example, for a low-income Black or Hispanic woman, the possibility of transmitting HIV to an unborn child may be appraised as an acceptable risk, another unknown in a life governed by external events Plausibly, testing and counseling may be more effective if the message sender and receiver are of the same race-ethnicity and gender and the benefits of testing are emphasized.

Patient contact

Contact with IV drug users with HIV in clinics, hospitals, and chemical dependency settings might also be described as a low-intensity prevention strategy. The objective, usually secondary to therapeutic objectives involving the patient, is to persuade the individual to not infect other. Such efforts are natural extensions of the helping agent's role, use modest agency resources, and afford an opportunity to influence minority drug users who would otherwise be beyond the reach of risk-reduction programs. To date these efforts remain unstandardized and have yet to be evaluated even from a process perspective. Moreover, even addicts in substance abuse treatment tend to seek health care late in the disease course. Thus, it is not unusual for two or more diseases—HIV, tuberculosis, gonorrhea or other conditions—to be diagnosed together when patients seek treatment after prolonged periods of illness. Too often, prevention messages can be aimed only at preventing the spread from the patient to others.

Other low-intensity strategies

Other strategies include street outreach, drop-in centers, and condom and bleach distribution efforts. As with information-based approaches, these tactics can reach large numbers of people at relatively low cost. If such programs are staffed by persons who have credibility with the target group (e.g. recovering addicts), the likelihood of behavior change is enhanced. Personal contact implicit in such endeavors could lead to a helping relationship, culminating in HIV testing and counseling or referral to chemical dependency treatment. Perhaps most important, these interventions are staged in the communities and settings frequented by the target population, and are therefore accessible to drug users.

Community outreach efforts are not without problems. Many of these activities are perceived by a substantial proportion of Black and Hispanic citizens as encouraging drug use, or at least giving in to drug users who adversely affect their communities (Quimby & Friedman, 1989). Often not operationally defined, programs may be characterized by vague objectives and poorly defined target groups or catchment areas (Battjes, Leukefeld, & Amsel, 1990). Outcomes are typically not measured. As with information-dissemination endeavors, there is a danger that these risk-reduction activities will be mistaken for behavior change outcomes. For example,

millions of condoms and bottles of bleach have been distributed, and there are indications that some IV drug users are using these tools. As yet, however, there is little evidence to show that bleach and condoms are being used regularly by sufficient numbers of IV drug users to slow the spread of AIDS.

High-Intensity Approaches

High-intensity strategies focus on specific groups who practice high-risk behavior. Costing more per contact than low-intensity approaches, intensive efforts potentially have more powerful effects Cost-benefit considerations should inform the selection and design of high-intensity risk-reduction efforts. Thus, risk-reduction strategies that expend greater amounts of resources may be justifiable because low-intensity approaches may be inadequate to either initiate or sustain behavior change.

Chemical Dependency Treatment

Substance abuse treatment has been shown to be one of the most effective AIDS prevention strategies (Leukefeld, Battles, & Amsel, 1990). Considerable attention has been focused on the efficacy of methadone maintenance programs in reducing risk behavior, other drug treatment settings also hold promise in the effort to slow the spread of HIV among drug users.

Methadone maintenance programs

These programs reduce drug and needle use (Gerstein & Harwood 1990): however, they offer extremely modest services other than medication (Ball & Corty, 1988, Hubbard et al, 1989). AIDS prevention activities are usually limited to information dissemination and informal education, risk assessment, and persuasion which sometimes occur in counseling sessions. Increasingly, HIV counseling and testing is becoming routine in methadone programs. A few methadone programs have developed into comprehensive health care clinics that include ongoing care for HIV-positive patients. Ideally, such programs could provide a complete array of addiction treatment, medical care, mental health supports, and health promotion services under one umbrella. If professionally and efficiently operated, they could develop enhanced levels of trust, monitoring, and care necessary to reinforce lasting behavior change in recovering drug users. Unfortunately, the costs of such programs will at least appear to be high, because methadone patients presently obtain much of their medical care through emergency rooms.

Therapeutic communities (TCs)

TCs have tended to serve an increasingly broad group of drug users, including many cocaine users who have used needles infrequently, if at all. Although TCs can potentially create the most enduring changes in recovering persons, attention rates are extremely high (Charuvastra, 1981; De Leon & Schwartz, 1984, Hubbard et al, 1989). Moreover, many TCs have not been willing to acknowledge or accept ongoing drug use among members. Thus, residents engaging in high-risk behavior may be either ignored or expelled. In the past, African Americans were underrepresented in TCs, and issues of race-ethnicity are generally avoided in the TC ideology. The increasing emphasis on male survival and responsibility and family unity in Black self-help organizations could suggest new approaches for involving African Americans in collaborative

drug abuse treatment and AIDS prevention programs (Carnegie Corporation of New York, 1988, M. Mitchell & Daniels, 1989). Perhaps such ideas could be applied in TCs in the form of risk-reduction programs and residential and aftercare milieu norms that reinforce responsible behavior.

Transitions and aftercare

At present, many inpatient programs provide an ill-constructed scaffold for patients contemplating treatment or returning to the community. Very few programs have attended to the needs of motivated substance users waiting for treatment slots, resulting in high rates of attrition before program entry. Also needed are strategies that facilitate the transition from intensive, supervised treatment to less intensive and relatively unstructured community-based treatment services. Community mental health centers family counseling agencies, and psychiatric clinics have waiting lists and may have intake procedures that serve to screen out or dissuade recovering clients from obtaining supportive services after inpatient treatment. Moreover many service providers offer only standard treatments not necessarily designed for substance users and typically limited to weekly group or individual sessions. In most communities, Alcoholics Anonymous (AA) and Narcotics Anonymous have many meetings operating on any given day, making it possible for recovering individuals to participate in as many fellowship experiences as they need. However, the very nature of the informal and self-directed help seeking inherent in the AA model does not afford the necessary structure, monitoring, and guidance needed to overcome the craving associated with heroin and cocaine use Transition structures, both before and after inpatient treatment, could enhance the effectiveness of chemical dependency programs while affording opportunities to initiate and reinforce risk-reduction strategies (Institute of Medicine, 1990). For example, drop-in centers might provide wait-listed treatment applicants with encouragement as well as AIDS information, bleach, and condoms. Aftercare programs could provide urine screening, tracking of missing participants, and opportunities to receive HIV testing and learn risk-reduction skills (Wallace, 1989).

Detoxification units

These units, with few exceptions, have always had stepchild status in the realm of substance abuse treatment. The literature on detoxification programs is scant, and mention of the logical role of detoxification in treatment initiation is glaringly absent. Detoxification centers have a low profile in the AIDS prevention arena. Yet such units are potentially an important contact for low-income ethnic-racial minority substance users, who frequently use this resource. Staffed with able and committed professionals and linked to treatment and other support services, detoxification units could realize more meaningful results than are now achieved in most such settings. Detoxification patients should, at the very least, receive AIDS information and on-site HIV testing and counseling Ideally, low-income African-American and Latino patients would be exposed to positive role models, including recovering persons of minority backgrounds. Thorough assessments should include determinations about a patient's interest in entering a given form of treatment. Detoxified individuals should learn, in a positive, encouraging milieu, minimal survival skills for making the transition to treatment. Interpersonal skills would include positive self-presentation, assertive requests for consideration by treatment programs, and systematic steps in identifying and applying to treatment programs. Cognitive skills would cover

planning and problem solving, positive self-statements, constructive appraisals of rejections, and other intrapersonal resources for gaining entry into treatment.

Community-Based Prevention Programs

Nontraditional organizations are most adept at bringing preventive services to disenfranchised high-risk groups. Community outreach programs were described earlier as low-intensity interventions because of their low cost, limited potency and potentially wide application. But some community programs could also launch high-intensity AIDS prevention interventions. Ongoing intervention programs could be developed in public housing, public welfare offices, maternal and child health settings, and family planning clinics (Donovan, 1987). Soup kitchens, homeless shelters, community mental health centers, Job Corps sites and even bus, train, and subway stations could provide space and resources for preventive intervention programs (Raba et al, 1990, Schinke, Gordon, & Weston, 1990, Torres, Mam, Altholz, & Brickner, in press)

Criminal Justice Settings

The criminal justice system affords many opportunities for preventing AIDS among ethnicracial minorities. The majority of correctional residents are African American or Latino, and most incarcerated persons were either using drugs at the time of arrest or convicted of drug-related crimes (Wish, O'Neil, & Baldau, 1990). Because of high rates of IV drug use and homosexual activity within penal institutions, prisoners and parolees are among groups at the highest risk for AIDS (Barry, Gleavy, Herd, Schwingl, & Werner, 1990, Dubler & Sidel, 1989, Horsburgh, Jarvis, McArthur, Ignacio, & Stock, 1990). Moreover the bulk of the prison population will return to conditions associated with HIV transmission—prostitution and the use of crack and IV drugs—with scant monitoring and rarely with any treatment. Beyond the minimal educational efforts conducted in many correctional settings, a range of more intensive prevention strategies is needed.

Probably the most efficacious approach is to first reduce the likelihood that the offender will immediately return to substance use, and concomitantly to a cycle of criminal activity and rearrest TCs, now operational in several prison settings (Wexler, Falkin, & Lipton, 1990), provide the controlled conditions to conduct a variety of risk-reduction efforts that focus on a drug-free life-style and, plausibly, avoidance of sexual risks Traditionally. TCs have accomplished their objectives through a series of graded steps, in which recovering members gain increased privileges as they demonstrate increasing responsibility for themselves and the therapeutic milieu. Although confrontation and self-awareness have been primary axioms of treatment in TCs and other residential programs, there has been increasing recognition of the importance of intrapsychic and interpersonal skills in the process of recovery and maintenance (Annis, 1990, McAuliffe, 1990, Wallace, 1989).

Sex Workers

The extremely steep HIV incidence curve among Bangkok sex workers and the remarkably low rates of HIV among regulated prostitutes in Nevada evidence the potential for AIDS transmission as well as the possibilities for preventive interventions (Miller Turner, & Moses.

1990). Most street prostitutes are chemically dependent, and many are the source of support for addicted men (Rosenberg & Weiner, 1988). As difficult as they are to attract into conventional service programs, female prostitutes are more accessible than invisible male drug users. In New York City, a mobile van—complete with space for HIV testing and counseling—has been operated by the Foundation for Research on Sexually Transmitted Diseases (FROST'D) for 2 years, and has tested more than a thousand women (J. Wallace, personal communication, December 4, 1990). The Association for Drug Abuse Prevention and Treatment (ADAPT) claims some modest success in operating a storefront for prostitutes, but has also begun using a mobile unit (Y. Serrano, personal communication. May 11, 1992). As with the FROST'D unit, services will include free condoms, bleach for cleaning needles, AIDS information, encouragement for seeking treatment, and referrals to chemical dependency and health services.

Homeless Populations

In many places where the destitute gather, social service, transportation, and public safety officials are attempting to serve homeless persons. Social service agencies are increasingly being asked to tend to the needs of clients with both drug addiction and severe and persistent mental disorders. In many instances, these clients are the same individuals who are likely to contract and transmit HIV (Joseph & Roman-Nay, 1990). It may seem futile to attempt risk-reduction interventions with individuals whose most basic need is to find a home, but it is also unlikely that any immediate or satisfactory solution to the homeless problem will emerge in the next few years. In the meantime, many thousands of homeless persons most of them minority and many with substance abuse disorders and other coexistent forms of severe and persistent mental illness, are engaging in high-risk sex and drug use. Potentially useful risk-reduction interventions could be conducted on-site, even as efforts are made to find housing and other services for the homeless. Although still an untested notion, it seems plausible that individuals who have a sense of hope about finding housing would be more likely than persons without hope to be receptive to risk-reduction interventions.

Our own research with drug users in a large homeless shelter suggests the degree of powerlessness felt by the homeless. In small-group discussions, African-American and Latino men reported that they were afraid of being forced to submit to unwanted sex with other shelter residents. Others reported having their entire social security check stolen soon after cashing. Still others spoke of good intentions not to spend their next allotment on drugs—usually within a few days after receipt—that went awry because of the temptations of the neighborhood or pressure from other residents eager to sell or use crack, heroin, and other substances.

Selected Theories, Application with Black and Hispanic Substance Users

Although AIDS prevention activities have been guided by extant theories of health behavior and social learning, the application of such theories to ethnic–racial minority populations has been less than explicit.

Skills training includes a variety of procedures and techniques designed to increase an individual's skill repertoire and behavioral competence either in cognitive or interpersonal domains. Given the association between drug use and interpersonal incompetence, social skills

training holds promise as a means of improving drug treatment outcomes (Schilling, El-Bassel, Schinke. Gordon, & Nichols, 1991). Among the more salient elements of any such skills training package are modeling, guided practice, and social reinforcement. To be most effective, models should be of the same gender and racial-ethnic background as the client group (DeLaCancela, 1989). Guided practice exercises can readily incorporate examples drawn from participating clients and build on successful coping strategies suggested and modeled by group members (Wallace, 1989). Social reinforcement is universally helpful but may be particularly salient with disenfranchised, disadvantaged drug users who have deficits in a host of intrapsychic and interpersonal domains.

Relapse prevention (RP) involves a series of self-management procedures that enhance maintenance after a change in habits. Drug users who learn skills and attitudes within the RP framework are apt to be better prepared for the eventuality of relapse than are similar users without such knowledge RP may also be useful in reducing high-risk sexual behavior in that individuals are likely to temporarily relapse from intended sexual abstinence or precaution Recovering drug users who learn cognitive and behavioral skills to prepare for the eventuality of a slip are more apt to avoid sustained relapse episodes than are those without such preparation Low-income Latino and African-American drug users are most apt to learn and use RP strategies that emphasize action over cognition and that link preventive actions to immediate outcomes that have meaning to them. For example, we have found that homeless men with co-occurring drug use and mental disorders are not able to link preventive strategies with long-term goals such as obtaining a job or permanent housing. However, they can readily articulate that drugs cause them to spend all of their money very quickly, and they consider having money to spend on meals and other needs a positive outcome associated with a reduction a drug use Graphic metaphors are useful in incorporating RP content into group discussions and may provide an effective bridge between what is learned in the group and what is practiced in high-risk situations (Wallace, 1989).

Self-regulation, sometimes called self-control or self-management, is the process by which individuals identify and solve problems in the absence of external intervention. Models of self-management share the assumption that people may be controlled by internal, interpersonal, and external forces or that they may control these influences themselves to reach long-term goals. These theories recognize that individuals determine their personal goals according to highly individualized perceptions and situations. For African-American and Latino substance users, who may have had negative experiences being regulated by others (e.g. police and parole officers), self-regulation may be dystonic. Moreover, drug users frequently come from family backgrounds in which they have not had opportunities to observe and learn self-regulation. At the same time, self-regulation is consistent with a desire, frequently expressed by drug users, to be in control of their lives. Thus, interventions need to increase self-regulatory capacities in substance-using clients.

Community control and social influence are recognized as important, even critical, aspects of efforts to change high-risk behavior in ethnic-racial minority communities (DeLaCancela, 1989, Fisher, 1988, Friedman et al., 1990). It is now clear that the major change in risk behavior in the gay community came about not through any single intervention or educational campaign, but rather through a normative shift that occurred in a relatively short period of a few years.

Notwithstanding the considerable differences between middle-class, Anglo homosexuals and minority substance user, there may be important lessons to be learned from the gay experience Certainly, it is much more difficult to change the norms among impoverished, disorganized, addicted persons than among affluent gay men during a unique point in the history of sexual minorities. Nevertheless, the comparatively lesser changes thus far among ethnic-racial minority communities and the recognition of the limitations of extant prevention approaches suggest that more efforts be devoted to understanding and attempting changes at the community and social group level.

Directions for Intervention Research

In our view, investigators should increasingly tic descriptive and exploratory research to intervention studies. Although some basic questions cannot be answered in the course of conducting an intervention study, pretests posttests, and intervention development are rich and often underused sources of data Investigators intent on understanding the phenomena of risk behavior among ethnic-racial minority substance users could profitably collaborate with intervention researchers in community, drug treatment, and health and social service settings. In like manner, investigators should expend more effort on developing sophisticated, rigorous intervention protocols in concert with community-based outreach programs, chemical dependency staff, and health and social service providers (Schilling, Schinke, Kirkham, Meltzer, & Norelius, 1988). In so doing, investigators achieve a better understanding of the settings that ultimately must carry out on a large scale those strategies found to be efficacious. Community-based and other agencies serving low-income ethnic-racial minorities stand to gain research skills and a perspective for critically examining both the process and outcomes of service delivery. Threats to external validity are minimized under such circumstances, and the lag between research and development and dissemination is effectively shortened.

While attending to design rigor and execution integrity, applied researchers should increasingly consider the context of a given intervention Community interventions must incorporate multiple and repeated components, draw on other community resources, and be carried out with awareness of major social problems such as poverty, racism, homelessness, and violence (Battjes et al, 1990). In recognition of the limited effectiveness and coverage of existing substance abuse treatments, AIDS prevention efforts must include both harm reduction and drug abuse treatment. Needed are theory-driven studies that test the feasibility, efficacy, and replicability of adaptations of the still limited range of drug abuse treatment approaches. Researchers should examine strategies for attracting Black and Hispanic substance users into treatment and creative ways of expanding the range of treatment options, particularly in settings other than inpatient.

Conclusion

In this article, we have briefly reviewed risk factors for HIV transmission among Black and Hispanic drug users, discussed the sociocultural aspects of these risk behaviors, and suggested approaches to altering risk behavior in ethnic-racial minority settings. Now is the time for investigators, community activists, and drug treatment agencies to collaborate on rigorous, creative, community-based studies. Only through such cooperative efforts will feasible and efficacious AIDS prevention strategies be developed.

References

Annis, H. M. (1990). Relapse to substance abuse Empirical findings within a cognitive-social learning approach. Journal of Psychoactive Drugs, 22, 117–124.

Ball, J. C., & Corty, E. (1988). Basic issues pertaining to the effectiveness of methadone maintenance treatment. In C. G. Leukefeld & F. M. Tims (Eds.), Compulsory treatment of drug abuse Research and clinical practice (Research Monograph No 86, pp. 178–191). Rockville, MD National Institute on Drug Abuse.

Barry, M. A., Gleavy, D., Herd, K., Schwingl, P. J., & Werner, B. G. (1990). Prevalence of markers for hepatitis B and hepatitis D in a municipal house of correction. American Journal of Public Health, 80, 471–473.

Battjes, R. J., Leukefeld, C. G., & Amsel, Z. (1990). Community prevention efforts to reduce the spread of AIDS associated with intravenous drug abuse. In C. G. Leukefeld, R. J. Battjes, & Z. Amsel (Eds.), AIDS and intravenous drug use Future directions for community-based prevention research (Research Monograph No 93, pp 288–299) Rockville, MD National Institute on Drug Abuse.

Bowser, B. P., Fullilove, M. T., & Fullilove, R. E. (1990). African-American youth and AIDS high-risk behavior. The social context and barriers to prevention. Youth and Society, 22, 54–66.

Brickner, P. W., Scharer, L. K., Conanan, B. A., Savarese, M., & Scanlan, B. C. (Eds.). (1990). Under the safety net The health and social welfare of the homeless in the United States. New York Norton.

Carnegie Corporation of New York. (1988). Black churches Can they strengthen the Black family. Carnegie Quarterly, 33, 1–7.

Centers for Disease Control. (1992April). HIV/AIDS Surveillance Report. pp. 1–18.

Chaisson, R. E., Bacchett, P., Osmond, D., Brodie, B., Sande, M. A., & Moss, A. R. (1989). Cocaine use and HIV infection in intravenous drug users in San Francisco. Journal of the American Medical Association, 261, 561–565.

Chaisson, M. A., Stoneburner, R. L., Lifson, A. R., Hildenbrandt, D. S., Ewing, W. E., Schultz, S., & Jaffe, H. W. (1990). Risk factors for human immunodeficiency virus type 1 (HIV-1) infection in patients at a sexually transmitted disease clinic in New York City. American Journal of Epidemiology, 131, 208–220.

Charuvastra, V. C. (1981). Drug free therapeutic community–A five-year follow up. Journal of Drug Education, 11, 275–280.

DeLaCancela, V. (1989). Minority AIDS-prevention Moving beyond cultural perspectives towards sociopolitical empowerment. AIDS Education and Prevention, 1, 141–153.

De Leon, G., & Schwartz, S. (1984). Therapeutic communities What are the attrition rates? American Journal of Drug and Alcohol Abuse, 10, 267–284.

DeParle, J. (1990 October 29). Talk of government being out to get Blacks falls on more attentive ears. New York Times, p. B7.

Des Jarldis, D. C., & Friedman, S. R. (1989). Ethnic differences in HIV seroprevalence rates among intravenous drug users. In AIDS and intravenous drug abuse among minorities (pp 24–33) Rockville, MD. National Institute on Drug Abuse.

Donovan, P. (1987). AIDS and family planning clinics Confronting the crisis. Family-Planning Perspectives, 19, 111–114.

Dubler, N. N., & Sidel, V. W. (1989). On research on HIV infection and AIDS in correctional institutions. Milbank Quarterly, 67, 171–207.

Eckholm, E. (1990 November 1). Old disease emerges as a factor in AIDS spread. New York Times, p. B12.

Eversley, R., Beirnes, D., Newstetter, A., Wingood, G., Hembry, K., Gotch, L., & Avins, A. (1990). Ethnic predictors of sexual HIV risk among young adult women attending family planning clinics. Multicultural Inquiry and Research on AIDS, 4, 4–5.

Fisher, J. D. (1988). Possible effects of reference group-based social influence on AIDS risk behavior and AIDS prevention. American Psychologist, 43, 914–920.

Friedman, S. R., Des Jarlais, D. C., Sterk, C. E., Southern, J. L., Tross, S., Woods, J., Sufian, M., & Abdul-Quater, A. (1990). AIDS and the social relations of intravenous drug users. Milbank Quarterh, 68 (Suppl. 1), 85–110.

Gerstein, D. R., & Harwood, H. J. (Eds.). (1990). Treating drug problems. Washington DC National Academy Press.

Hahn, R. A., Onorato, I. M., Jones, S., & Dougherty, I. (1989). Prevalence of HIV infection among intravenous drug users in the United States. Journal of the American Medical Association, 261, 2677–2684.

Holmes, K. K., Karon, J. M., & Kreiss, J. (1990). The increasing frequency of heterosexually acquired AIDS in the United States, 1983–1988. American Journal of Public Health, 80, 858–863.

Horsburgh, C. R., Jarvis, J. Q., McArthur, T., Ignacio, T., & Stock, P. (1990). Seroconversion to human immunodeficiency virus in prison inmates. American Journal of Public Health, 80, 209–210.

Hubbard, R. L., Marsden, M. E., Rachal, J. V., Harwood, H. J., Cavanaugh, E. R., & Ginzburg, H. M. (1989). Drug abuse treatment. A national studs of effectiveness. Chapel Hill University of North Carolina Press.

Institute of Medicine Committee for the Study of Treatment and Rehabilitation Services for Alcoholism and Alcohol Abuse. (1990). Broadening the base of treatment for alcohol problems. Washington, DC National Academy Press.

Jenness, V. (1990). From sex as sin to sex as work COYOTE and the reorganization of prostitution as a social problem. Social Problems, 37, 403–420.

Jones, A. B. (1990). Sexual minority needle users. In C. G. Leukefeld, R. J. Battjes & Z. Amsel (Eds). AIDS and intravenous drug use Future directions for commumn-based prevention research (Research Monograph No. 93, pp. 108–119) Rockville, MD. National Institute on Drug Abuse.

Joseph, H., & Roman-Nay, H. (1990). The homeless intravenous drug abuser and the AIDS epidemic. In C. G. Leukefeld, R. J. Battjes. & Z. Amsel (Eds). AIDS and intravenous drug use Future directions for community-based prevention research (Research Monograph No. 93. pp. 210–253) Rockville. MD. National Institute on Drug Abuse.

Leukefeld, C. G., Battles, R. J., & Amsel, Z. (1990). Community prevention efforts to reduce the spread of AIDS associated with intravenous drug abuse. AIDS Education and Prevention, 2, 235–243.

Marin, B. V. (1990). AIDS prevention for non-Puerto Rican Hispanics. In C. G. Leukefeld R. J. Battjes & Z. Amsel (Eds), AIDS and intravenous drug use Future directions for commumn-based prevention research (Research Monograph No. 93, pp 35–52) Rockville, MD National Institute on Drug Abuse.

McAuliffe, W. E. (1990). A randomized controlled trial of recovery training and self-help for opioid addicts in New England and Hong Kong. Journal of Psychoactive Drugs, 22, 197–200.

Miller, H. G., Turner, C. F., & Moses, L. E. (1990). AIDS The second decade. Washington DC National Academy Press.

Mitchell, J. L. (1989). Drug abuse and AIDS in women and their affected offspring. Journal of the National Medical Association, 81, 841–842.

Mitchell, M. A., & Daniels, S. (1989). Black-on-Black homicide Kansas City's response. Public Health Reports, 104, 605–608.

Morales, E. S. (1990). HIV infection and Hispanic gay and bisexual men. Hispanic Journal of Behavioral Sciences, 11, 212–222.

Moran, J. S., Aral, S. O., Jenkins, W. C., Peterman, T. A., & Alexander, E. R. (1989). The impact of sexually transmitted diseases on minority populations. Public Health Reports, 104, 560–565.

Navarro, M. (1990 October 31). Study finds many Hispanic-Americans are ignorant about AIDS. New York Times, p. B2.

Quimby, E., & Friedman, S. R. (1989). Dynamics of Black mobilization against AIDS in New York City. Social Problems, 36, 403–415.

Quinn, T. C., Glasser, D., Cannon, R. O., Matuszak, D. L., Dunning, R. W., Kline, R. L., Campbell, C. H., Israel, E., Faugi, A. S., & Hook, E. W. (1988). Human immunodeficiency virus infection among patients attending clinics for sexually transmitted diseases. New England Journal of Medicine, 318, 197–202.

Raba, J. M., Joseph, H., Avery, R., Torres, R. A., Kivasy, S., Prentice, R., Staats, J., & Brickner, P. W. (1990). Homelessness and AIDS. In P. W. Brickner, L. K. Scharer, B. A. Conanan, M. Savarese, & B. C. Scanlan (Eds), Under the safety net, The health and social welfare of the homeless in the United States. (pp. 215–233) New York Norton.

Rolfs, R. T., Goldberg, M., & Sharrar, R. G. (1990). Risk factors for syphilis Cocaine use and prostitution. American Journal of Public Health, 80, 853–857.

Rosenberg, M. J., & Werner, J. M. (1988). Prostitutes and AIDS. A health department priority? American Journal of Public Health, 78, 418–423.

Schilling, R. F., El-Bassel, N., Gilbert, L., & Schinke, S. P. (1991). Correlates of drug use, sexual behavior and attitudes toward safer sex among African-American and Hispanic women in methadone maintenance. Journal of Drug Issues, 21, 685–698.

Schilling, R. F., El-Bassel, N., Schinke, S. P., Gordon, K., & Nichols, S. (1991). Reducing sexual transmission of AIDS Skills-building with recovering female drug users. Public Health Reports, 106, 297–304.

Schilling, R. F., & McAlister, A. (1990). Media interventions to prevent drug use in adolescents. Journal of Consulting and Clinical Psychology, 58, 416–424.

Schilling, R. F., Schinke, S. P., Kirkham, M. A., Meltzer, N. J., & Norelius, K. L. (1988). Social work research in service agencies Issues and guidelines. Journal of Social Service Research, 11, 75–87.

Schilling, R. F., Schinke, S. P., Nichols, S. E., Zavas, L. H., Miller, S. O., Orlandi, M. A., & Botvin, G. J. (1989). Developing strategies for AIDS prevention research with Black and Hispanic drug users. Public Health Reports, 104, 2–11.

Schinke, S. P., Botvin, G. J., & Orlandi, M. A. (1991). Substance abuse in children and adolescents Evaluation and intervention. Newbury Park, CA Sage.

Schinke, S. P., Gordon, A., & Weston, R. (1990). Self-instruction to prevent HIV infection among African-American and Hispanic adolescents. Journal of Consulting and Clinical Psychology, 58, 432–436.

Selik, R. M., Castro, K. G., Pappaioanou, M., & Beuhler, J. W. (1989). Birthplace and the risk of AIDS among Hispanics in the United States. American Journal of Public Health, 79, 836–839.

Serrano, Y. (1990). The Puerto Rican intravenous drug user. In C. G. Leukefeld R. J. Battjes, & Z. Amsel (Eds), AIDS and intravenous drug use Future directions for community-based prevention research (Research Monograph No. 93, pp. 24–34) Rockville, MD National Institute on Drug Abuse.

Sufian, M., Friedman, S. R., Neaigus, A., Stepherson, B., & Des Jarlais, D. C. (1989). The impact of AIDS on Puerto Rican intravenous drug users. Hispanic Journal of Behavioral Sciences, 12, 122–134.

Tiernev, J. (1990 October 19). AIDS in Africa Experts study role of promiscuous sex in the epidemic. New York Times, p. A10.

Torres, R. A., Mam, S., Altholz, J., & Brickner, P. W. (in press). Human immunodeficiency virus intection among homeless men in a New York City shelter Association with invcobacterium tuberculosis infection. Archives of Internal Medicine.

Turner, C. F., Miller, H. G., & Moses, L. E. (1989). AIDS Sexual behavior and intravenous drug use. Washington, DC National Academy Press.

Wallace, B. C. (1989). Relapse prevention in psychoeducational groups for compulsive crack cocaine smokers. Journal of Substance Abuse Treatment, 6, 229–239.

Wesler, H. K., Falkin, G. P., & Lipton, D. S. (1990). Outcome evaluation of a prison therapeutic community for substance abuse treatment. Criminal Justice and Behavior, 17, 71–92.

Wish, E. D., O'Neil, J., & Baldau, V. (1990). Lost opportunity to combat AIDS Drug abusers in the criminal justice system. In C. G. Leukefeld, R. J. Battjes, & Z. Amsel (Eds), AIDS and intravenous drug use Future directions for community-based prevention research (Research Monograph No. 93. pp. 187–209) Rockville, MD National Institute on Drug Abuse.