

Collaborative Research to Prevent HIV Among Male Prison Inmates and Their Female Partners

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Despite the need for targeted HIV prevention interventions for prison inmates, institutional and access barriers have impeded development and evaluation of such programs. Over the past 6 years, the authors have developed a unique collaborative relationship to develop and evaluate HIV prevention interventions for prison inmates. The collaboration includes an academic research institution (the Center for AIDS Prevention Studies at the University of California, San Francisco), a community-based organization (Centerforce), and the staff and inmate peer educators inside a state prison. In this ongoing collaboration, the authors have developed and evaluated a series of HIV prevention interventions for prison inmates and for women who visit prison inmates. Results of these studies support the feasibility and effectiveness of HIV prevention programs for inmates and their partners both in prison and in the community. Access and institutional barriers to HIV intervention research in prisons can be overcome through the development of collaborative research partnerships.

INTRODUCTION

The number of Americans who are incarcerated has increased dramatically over the past 15 years. As of 1995, more than 1.5 million adults were incarcerated in the United States, two-thirds in state and federal prisons and the remainder in local jails. This is nearly three times the number of adults who were incarcerated in 1980.¹ Among the incarcerated, the numbers of individuals living with HIV or AIDS has also increased dramatically. As of 1994, 2.5% of the inmates in state prisons and 1.1% of inmates in federal prisons were known to be infected with HIV.² Women inmates, older inmates, inmates with a

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history of previous incarceration, and ethnic minority inmates have also been identified as more likely to be infected with HIV.^{3,5}

These statistics are of limited validity, however, as testing policies vary by jurisdiction; it is unlikely that all inmates or even a random sample of inmates were tested, and the actual rate of HIV infection is likely to be higher than reported. In one study comparing blind seroprevalence estimates to voluntary testing results, only 47% of inmates accepted voluntary testing, and only 34% of the HIV infected individuals were identified by voluntary testing.⁶ In 1994, a blind seroprevalence survey of inmates in California showed that 2.4% of male inmates and 3.2% of female inmates were infected with HIV.⁷

Many individuals incarcerated today are serving short sentences for parole violation, and recidivism to prison is common.⁸ Consequently, at-risk individuals move frequently between prisons and their home communities. When inmates return to their sexual and/or needle-sharing partners in the community, their partners face increased risk for HIV infection and may not be aware that they are at risk. Many female partners of incarcerated men, for example, believe incorrectly that HIV testing in prison is mandatory and that they would be informed if their partner were infected.⁹ Also, newly released inmates face a difficult adjustment period during which HIV testing and HIV risk reduction may be a low priority.

Prisons and jails present an opportunity for HIV education and prevention because of the concentration of at-risk individuals who are underserved with HIV education and prevention services in the community. Many jurisdictions are taking advantage of this opportunity to offer inmate HIV education and prevention programs.^{10,11} To be effective in changing risk behavior, however, HIV prevention programs within prisons must be feasible, appropriate, and accessible to inmates. HIV prevention intervention can be started inside the prison and continued by existing community-based agencies outside the prison. In addition to teaching inmates about HIV risk reduction, in-prison interventions could link inmates with community resources to help them avoid HIV infection by accessing drug/alcohol treatment, adequate housing, and employment and by avoiding reincarceration.

Effective education and prevention programs must also take into account institutional barriers. Inmates in U.S. prisons have virtually no access to condoms, bleach, clean syringes, or comprehensive HIV prevention education. Only two state prison systems and four county jails are known to provide access to condoms, and nowhere in the country do inmates have access to bleach or clean syringes.¹² The primary goal of correctional institutions is security, and this can be at odds with providing prevention services to inmates. Rules protecting the security of the institution also limit access by community-based service providers and researchers who could be developing, implementing, and evaluating prevention programs. In addition, funders have only recently recognized the public health importance of interventions to prevent HIV infection and transmission among prison inmates.

Collaborations between community-based service providers and academic researchers may be ideal to overcome the barriers to developing and evaluating HIV prevention programs for prison inmates. The importance of collaboration between community-based service providers and academic researchers is becoming more widely recognized as a means of reaching and providing programs for disenfranchised populations.^{13,14} While community service providers often lack the research and evaluation expertise to assess the efficacy of their innovative and feasible prevention programming, academic researchers are less likely to have experience with and access to the disenfranchised populations at greatest risk of HIV infection. Each member of the collaboration brings

different skills and resources. Community-based service providers bring their experience with and access to the populations most in need of HIV prevention services, while the academic researchers bring technical expertise in evaluation, the behavioral science base, and access to different funding sources.

Here we report on a series of HIV prevention programs for prison inmates and their partners that were developed, implemented, and evaluated by a collaborative group. Working collaboratively, we have secured research funding, developed innovative interventions, conducted scientifically sound evaluation studies, and immediately applied research findings to prevention practice. These projects were conducted within the context of an ongoing collaborative relationship that has been built over a number of years. The projects would not have been possible outside of the context of a true collaboration in which both parties act as scientists in generating the research questions, designing the program evaluations, and interpreting the data and in which the academic researchers are integrally involved in program development and implementation.

DEVELOPMENT AND STRUCTURE OF THE COLLABORATION

The development of the collaboration was first initiated by the community-based organization. In 1990, the education director from the Marin AIDS Project (MAP) first approached the director of the Center for AIDS Prevention Studies (CAPS), expressing their need to evaluate ongoing programs and offering the potential of developing new HIV prevention programs in collaboration. Since that time, we have conducted a series of program development, implementation, and evaluation projects (see Table 1). Project findings have led to the development of additional programs (see Figure 1). The collaborative partners also include the inmate peer educators who serve each project by advising specific project issues as well as overall research and program priorities. Prison staff and administrators have also provided feedback and guidance, particularly regarding feasibility issues. Research findings from CAPS and other academic sources have also been used to develop program and research ideas.

While we have developed a successful and productive collaboration, there have been challenges to developing and maintaining the collaborative relationship. Community service providers and academic researchers have different priorities that have been well described.^{15,16} While the highest priority of community-based organizations may be providing HIV prevention services, academic researchers have answering the research question as their highest priority. This collaboration is further complicated by the participation of the prison, in which security is always the highest priority. Consider the possibilities for conflict in choosing an evaluation design, for example, when the academic researcher wants the strongest scientific design, the service provider wants a design that does not interfere with service delivery, and the prison is motivated not to compromise security or risk negative publicity to the institution.

The collaboration has been facilitated by challenging these roles and not allowing the roles and activities of each collaborative partner to become polarized. In a successful collaboration, each party trusts and respects the other's priorities while asserting and protecting their own. In the collaboration, the academic researchers are more than evaluators; they also maintain an active role in developing and implementing the interventions. Service providers are challenged to participate in the development of research questions, instrument development, data cleaning, decisions regarding data analysis, and interpretation and preparation of results for dissemination through papers and presentations. While

Table 1. Collaborative Projects Summary

Project Name	Year(s)	Intervention/Study Design	Main Findings	Funder
HIV orientation program evaluation	1992-1993	Single-session peer HIV education; randomized design; cross-sectional surveys	Peer educators were as effective as a professional educator in changing behavioral intentions; inmates preferred peer HIV educators	CAPS Technology and Information Exchange Core and Northern California Grantmakers
Prerelease program evaluation	1993-1995	Individualized peer HIV education; randomized design; longitudinal surveys	Intervention group participants were more likely to use a condom at first intercourse after release	CAPS Technology and Information Exchange Core and Northern California Grantmakers
Health promotion (prerelease program for HIV+ inmates) evaluation	1995-1998	Multisession HIV education and skills building; comparison group; longitudinal surveys	Evaluation is ongoing; program has been found to be feasible and well accepted	University-wide AIDS Research Program (UARP)
Women visitors pilot study	1995-1996	Peer HIV education; longitudinal surveys	Women visitors have important misinformation about HIV and about prison policies related to HIV; peer education is feasible and well accepted	National Institute of Mental Health Technology Transfer Consortium
Women visitors project	1997-1999	Peer HIV education; support groups; community outreach; longitudinal surveys; cross-sectional surveys; in-depth interviews	Evaluation is ongoing	CAPS Technology and Information Exchange Core and Northern California Grantmakers
Young men in prison project	1997-2002	Formative phase: longitudinal qualitative and quantitative interviews of service providers and inmates; intervention phase: develop, pilot, and test an intervention based on formative results	Currently in formative research phase	Centers for Disease Control and Prevention

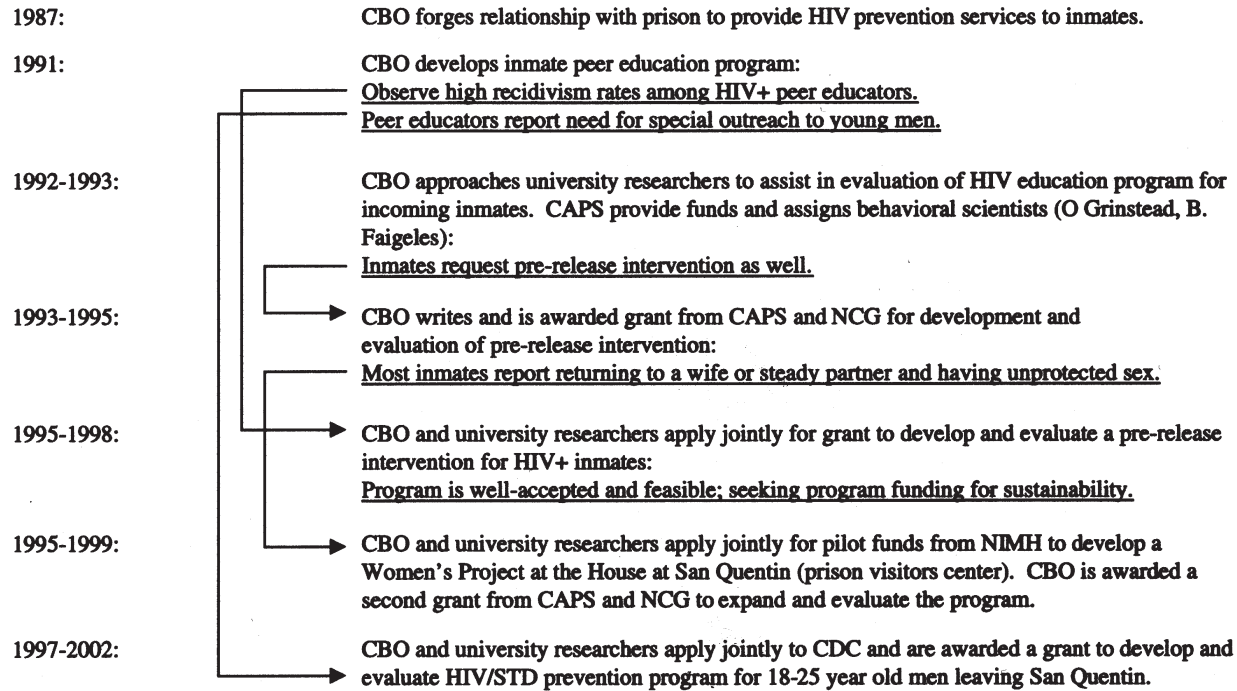


Figure 1. The process of developing the collaborative relationship and collaborative projects.

NOTE: Arrows indicate how research results have prompted subsequent projects. CBO = community-based organization; CAPS= Center for AIDS Prevention Studies; NCG = Northern California Grantmakers; NIMH = National Institute of Mental Health; CDC = Centers for Disease Control and Prevention; STD = sexually transmitted disease.

this collaborative process may be seen as compromising the objectivity of evaluation activities, it also improves the quality of the evaluation by ensuring that the evaluation design and process are feasible and relevant to the program and that those being evaluated are sincere participants in the process.

Over the years, the structure of the collaboration has changed depending on the projects being conducted. When possible, representatives from both organizations have served as coprincipal investigators on research grants, and the two agencies have shared responsibility for fiscal management. Decision making regarding research questions and design as well as implementation and evaluation are made by consensus. Staff from both organizations meet face-to-face at least twice per month and communicate daily by phone or electronic mail. We have found that face-to-face contact and alternating meetings between the two sites help to maintain involvement and demonstrate the commitment of each collaborative partner.

The collaboration has also been nurtured by collaborative research initiatives. Several funders have recently started collaborative research initiatives in which community and academic collaborations are encouraged or even required for funding (e.g., Northern California Grantmakers, University-wide AIDS Research Program of the University of California, and the National Institute of Mental Health).

Prior to November 1997, the community service provider staff was located at MAP in San Rafael, California. MAP's mission is to provide HIV prevention and education services to the residents of Marin County, which includes San Quentin State Prison. In November 1997, staff working on projects at the prison left MAP to join Centerforce and create the Health Programs Division of Centerforce. Centerforce is a statewide nonprofit organization dedicated to providing support and social and health programs to inmates and their families.

COLLABORATIVE PROJECTS

Setting for the Collaborative Projects

All of the collaborative projects described here were conducted at San Quentin State Prison in Marin County, California. San Quentin is a medium-security prison for men and also serves as the Northern California reception center for the California Department of Corrections. Approximately 5,500 men are housed at the prison, including more than 400 men who have been sentenced to death. Most men stay at San Quentin for less than 2 years. Recidivism to prison is high in California. More than 40% of parolees return within 1 year; by 2 years, 66% have been reincarcerated.⁸

Existing HIV prevention programs are conducted through the prison's education and health departments. Access to the prison and to the inmates is granted by the warden. He has supported the programs by providing space and permission for program staff to enter the prison. There is no mandate that community-based providers be allowed to enter the prison to provide these services; program implementation depends on the willingness of the warden and other correctional staff to provide support, space, and access. For example, recruiting participants to prerelease programs requires that we be able to identify and interview men preparing for release. The success of these programs depends on community-based staff having access to inmates preparing for release and permission from the institution to make program contacts with these inmates.

Inmate Peer Education Project

Since 1993 we have conducted five collaborative intervention research projects that are described below. Inmate peer educators conducted two of the in-prison interventions that have been evaluated. The inmate peer educator program preceded the CAPS-Centerforce collaboration but in itself demonstrates collaboration between the community-based organization and the prison. Peer educators conduct a variety of services within the prison, including teaching the HIV prevention orientation class for incoming inmates and providing individual counseling and support for newly diagnosed inmates.

When the target audience is culturally, geographically, or linguistically distinct, peer education may be an effective intervention approach. Inmate peer educators are more likely to have specific knowledge about risk behavior occurring both inside and outside the prison. Peer educators who are living with HIV may also be ideal to increase the perception of personal risk and to reinforce community norms for safer sexual and injection practices. Peer education has the additional advantage of being cost-effective and, consequently, sustainable. Inmate peer educators are always available to provide services as they live alongside the other inmates who are their educational target. Although peer education has some unique advantages, it has been underused as a means of inmate education. In 1994, a survey of adult jails and prisons showed only 35% of state and federal prison systems in the United States operating peer-led HIV prevention programs in at least one of their facilities.¹⁰

In 1991, staff from MAP began training inmates as peer educators at San Quentin State Prison. Selection, training, and supervision of inmate peer educators at San Quentin are currently conducted by Centerforce staff in cooperation with correctional officers supervising the peer education program. At this time, two of the five working peer educators are bilingual in English and Spanish, and recently, a 21-year-old inmate was hired specifically to conduct outreach to inmates younger than age 25. Historically, all inmate peer educators have been HIV seropositive. The program recently began training uninfected inmates as peer educators as well. The initial training curriculum for inmate peer educators includes 40 hours of instruction over 5 days. Training is both didactic and experiential. Trainees learn about HIV transmission and the interpersonal and structural issues related to HIV prevention, as well as the mechanics of HIV prevention (e.g., condom use and needle cleaning). They also learn public speaking skills; training includes making a videotape and receiving feedback from a professional speaking coach. In addition to their initial training, the working peer educators are supervised for a minimum of 1 hour per week and receive additional training and supervision as needed. About 40 inmates are trained as peer educators each year, and there are 5 paid peer educator positions.

HIV Orientation Program and Evaluation

The HIV Orientation Program is a peer-led HIV education intervention offered to inmates entering the prison. Men arriving at the prison by bus are taken directly to the classroom where they meet with the peer educators for an hour-long program, including basic information about HIV transmission, specific risks in the prison setting, and HIV prevention. After the orientation, voluntary HIV testing is offered. Recently, the orientation session has been expanded to include other health issues such as hepatitis and tuberculosis. The HIV Orientation Program is currently ongoing with the full support of the

prison that provides the program space and assigns a correctional officer to supervise the activity.

MAP first developed and implemented the peer-led HIV prevention orientation intervention in 1991. In 1993, MAP and CAPS collaborated to evaluate the HIV prevention orientation intervention in a randomized trial. Orientation groups were randomly assigned to receive the intervention either from an inmate peer educator or from a (non-inmate) professional HIV educator. Overall, 2,295 inmates participated in the evaluation. The cross-sectional self-administered survey assessed condom use history and intentions as well as needle-sharing/cleaning history and intentions among current injection drug users (men who had injected in the month prior to their incarceration). We also evaluated the overall effect of the intervention by comparing the responses of men who completed a survey prior to attending the intervention with responses of men who completed the survey after the intervention.

Results of the evaluation indicated that peer-led groups were as effective as groups led by a professional health educator in changing intentions to use condoms and to be tested for HIV and in increasing HIV/AIDS knowledge. Also, inmates reported a strong preference for the intervention led by an inmate peer educator. Overall, 44% of inmates volunteered for HIV testing after the intervention. This is a high percentage of volunteers, given that testing was not anonymous, and at the time of this study, inmates known to be HIV seropositive were housed separately. There were no significant differences in actual testing rates by group.¹⁷

This study also provided an overview of risk behavior among men entering a large state prison; we have used this information to better target the intervention. Of the men who participated in the evaluation, most were between the ages of 18 and 39; 19% were Hispanic/Latino, and 37% were African American. Thirty-two percent injected drugs in the month prior to their incarceration, and 45% reported never using a condom for sexual intercourse. These findings confirm our impression that the demographics of men entering prison reflect those populations disproportionately affected by the HIV epidemic, that is, young people of color and injection drug users.

Prerelease HIV Prevention Program and Evaluation

In 1995, we completed a study to describe the demographics and behaviors of inmates being released from prison and to develop and evaluate a prerelease HIV prevention intervention.¹⁸ With input from inmates, inmate peer educators, and service providers, we developed a peer-led, single-session prerelease intervention addressing condom use, needle hygiene, and referrals to community agencies. A total of 414 inmates were randomly assigned to standard care or to receive the prerelease intervention. Standard care included access to HIV educational materials and informal access to the peer educators. Participants completed a baseline face-to-face survey, including extensive information about their substance use and sexual behavior. Men randomized to receive the intervention participated in a 30- to 60-minute individual session with a peer educator. In that session, using a standardized format, the peer educator discussed the participant's plans after release, assessed his risk to contract or transmit HIV, and offered individualized education, risk reduction counseling, and referrals. Peer educators conducted the intervention under the supervision of a trained health educator. Follow-up assessment was conducted via telephone 2 to 4 weeks after release. This study focused primarily on white and African American inmates because a prerelease intervention for Latino and Spanish-speaking

inmates was also conducted in parallel as a collaboration between CAPS researchers, MAP, and San Quentin State Prison.¹⁹

Due to limitations in budget and personnel in this pilot study, extensive follow-up tracing was not conducted. However, even without intensive tracing and without information from parole and probation officials, we interviewed 43% of the baseline sample at follow-up. Attrition analyses revealed no demographic or baseline risk behavior differences between those interviewed and those not interviewed at follow-up. While the outcome results must still be interpreted cautiously due to the limited follow-up rate, findings support the effectiveness of a peer-led prerelease HIV prevention intervention and provide a useful demographic and risk behavior profile of men being released from state prison. For example, we learned that most men return to a steady partner and have unprotected intercourse within days of their release from prison. Regarding the efficacy of the intervention, men who received the intervention were nearly twice as likely to report using a condom at their first intercourse after release from prison compared to the standard care group (20% vs. 38%, $p = .05$). Additional funding is currently being sought to provide supervision for the inmate peer educators to continue to provide this program.

The Health Promotion Program and Evaluation

The next collaborative project was to develop and evaluate the effectiveness of a 16-hour prerelease intervention for HIV-seropositive inmates. The goal of the intervention was to improve HIV-seropositive inmates' health and well-being while reducing behaviors that may transmit HIV to their sexual and drug-using partners after release. The interactive intervention sessions were conducted inside the prison by representatives of other community-based AIDS service organizations. The intervention sessions included topics such as self-esteem, health maintenance, community resources, stress management, legal issues, and barriers to care after release, as well as a "resource fair" in which representatives of a wide variety of service agencies came to the prison to meet with participants.

Assessment of the intervention is currently being conducted by comparing the post-release outcomes of program participants to the outcomes of a comparison group of inmates who expressed interest in the intervention but were unable to attend because they were being released too early. All participants receive a preintervention survey and a postintervention survey, and they are followed for an additional survey in the community 30 to 60 days after release. The face-to-face preintervention survey includes extensive information on respondents' history of drug use, sexual risk taking, and previous service/treatment utilization. The face-to-face postintervention survey primarily assesses behavioral intentions and provides an opportunity to encourage follow-up. The postrelease survey is conducted 30 to 60 days after release from prison and assesses service utilization as well as drug use and sexual behavior since release. Utilization of community resources is also verified by contacting agencies that participants stated their intention to contact after release.²⁰ We are also collecting extensive process data on the development and implementation of the intervention and conducting in-depth qualitative interviews with a subsample of participants postrelease.

One of the products of this collaborative project will be an intervention manual to disseminate the intervention to other community-based organizations and prisons. We anticipate completing this intervention study at the end of 1998 with between 150 and 200 participants. The intervention has proved to be feasible and well accepted by inmates; we are seeking program funding to continue the program at the prison and to disseminate the program to other jails and prisons.

The Women Visitors Project

In the prerelease intervention study described above, we found that nearly half of inmates leaving the prison considered themselves to be in a committed relationship with a woman. Follow-up data from that study showed that most of these men had unprotected sex with their main partner almost immediately after leaving prison. These findings, as well as previous studies at CAPS on women's risk for HIV,^{21,22} led us to develop an HIV prevention program for women visiting their incarcerated partners. As very little is known about this potentially high-risk group, an additional goal of this project was to describe the population and their HIV prevention needs.

First, two focus groups were conducted. Based on the findings of the focus groups, a single-session peer-led informational intervention was developed. The intervention included basic HIV information and information about risks specific to having an incarcerated partner. Women participating in intervention groups were encouraged to interact and discuss the material with each other and to talk with their partners and other visitors about the intervention. Evaluation included a face-to-face preintervention survey, a brief postintervention survey, and a telephone survey 1 month following the intervention. The preintervention survey included questions about the participant's relationship with the incarcerated man she was visiting, her perception of HIV risk, and her history of sexual risk taking, injection drug use, and needle sharing. The postintervention survey is self-administered and assesses HIV knowledge only. The follow-up survey assesses sexual behavior and drug use since the intervention, as well as any efforts the participant has made to reduce her sexual or drug-injecting risk or to diffuse the information she learned in the intervention by talking with her partner, other visitors, or other relatives and friends.

Eighty-six women participated in the study, and 75% were followed up 1 month later. No tracing information was collected; women returned for follow-up without reminders. Most of the women participating in the study were African American, their average age was 33, and most had completed high school. Overall, the women had a high level of knowledge about HIV and AIDS, but many did not consider themselves to be at risk of transmission because they themselves were monogamous. Despite their stated denial of risk, however, the majority of the women had been tested for HIV multiple times and expressed a lot of worry about HIV. Most women never used condoms with their primary partner; of all the women who had family visits, no one had used a condom. While family visiting is an opportunity for family bonding and reunification, it is also interpersonally and financially stressful to women visiting their husbands in prison. Family visiting is the only time when condoms are allowed inside the prison. Nearly 20% of our sample reported having a secondary sexual partner, and most used condoms in these relationships. Very few women admitted currently injecting drugs, but all of the women who had a history of injecting drugs had shared a needle.⁹

The findings of this study confirmed that women visitors as a group are at high risk for HIV and that while they are aware of the risk from other partners, they underestimate their risk from their main partners being released from prison. This program is currently ongoing and supported by a second research grant, and we will seek program funding to continue providing services after the evaluation has been completed. We are also currently conducting formative research to learn more about HIV risk behavior that may occur during family visits and to develop supportive interventions for women having family visits at the prison.

Young Men in Prison Project

The CAPS-Centerforce research collaboration was recently funded to join a multisite project to develop and evaluate HIV and sexually transmitted disease (STD) prevention programs for young men leaving prison. The first 2 years of this project will be dedicated to formative research activities toward the development of a feasible and effective intervention. Formative research activities will include interviews with service providers both inside the prison (health service providers, correctional staff, teachers, etc.) and service providers outside the prison (STD treatment providers, parole officers, substance abuse treatment providers, etc.) as well as interviews with the young inmates being released from prison. In the next 3 years of the project, the interventions will be piloted, implemented, and tested for effectiveness in preventing postrelease HIV and STD risk behavior.

CONCLUSIONS AND IMPLICATIONS

To date, very little research has been conducted with prison inmates despite their high risk to contract and transmit HIV. In addition to evaluating the outcome of our individual programs, taken together, these evaluation studies provide a clearer picture of the HIV risk and risk reduction behavior of inmates and their partners. These data have been used by our group and by others to develop relevant HIV prevention programs in the prison community.

Overcoming Obstacles to Research and Service Delivery

We have learned valuable lessons in conducting collaborative research on HIV prevention for prison inmates. First, it is clear that peer educators are an important resource in conducting interventions in prison. Because inmates prefer peer educators, they may respond with increased attendance and attention, thereby improving the possibility of behavior change. We have also learned the importance of addressing service utilization in the community. Transitional case management services for inmates are inadequate for treatment and virtually nonexistent for prevention services.²³ The opportunity to introduce prison inmates to community prevention services is during the prerelease period rather than after release, when they are facing the stresses of community and family re-entry and may have difficulty completing treatment.²⁴

We have also learned the importance of developing effective interventions that are feasible within the organizational and institutional constraints of the prison system. Collaboration between the community-based organization and the academic researchers has helped to overcome access barriers, but this is a long-term process. Staff members at the community-based organization have been working to develop their relationship with the prison for more than 10 years. Other barriers have included limitations to inmate movement, staff resistance, and institutional lockdowns (due to executions, bad weather, etc.) that prevented program staff from entering the prison. While most of these barriers did not require intervention or evaluation design modifications, some programs required additional time to complete data collection, and in some cases, evaluation goals had to be modified to take institutional barriers into account. In a recent example, we originally designed the health promotion program to consist of twice-weekly sessions over 5 weeks. However, many did not complete the program because they were transferred or paroled before the program ended. In response, we changed the program format to eight sessions

over 2 weeks, and the program completion rate has been improved.

Because we have been developing and evaluating interventions as a research-service provider collaboration and in close collaboration with the prison staff and inmates, we have not experienced the difficulties of feasibility and sustainability that often plague HIV prevention programs for inmates and impede the evaluation of these potentially life-saving interventions.²⁵ In this regard, the cooperation and flexibility of program funders as well as both collaborative partners has been necessary. Funders seeking to support innovative HIV prevention research in prisons must be aware of and willing to be flexible regarding program modifications due to institutional needs, keeping in mind that research and, in many cases, programs are not the priority of the prison staff and administration.

Technology Transfer

The collaborative projects have accomplished technology transfer on several different levels. As previously shown in Figure 1, research findings have been used to develop subsequent programs and evaluations. This is internal technology transfer: We use our own findings to direct future research. In the course of these projects, we have also collaborated with other community-based organizations, transferring evaluation and collaboration skills to them as the projects are implemented. For example, the women visitors programs are conducted at the prison visitors center, and the health promotion program for HIV-positive inmates involves service providers from multiple community-based agencies. Each of these collaborating agencies has learned useful skills in evaluation and has been exposed to the culture of collaborative evaluation research.

All of the collaborative partners have been changed by their participation in these projects. Research findings and practical experiences from each project have informed the next intervention and evaluation priorities. For example, the need for HIV prevention programs for women visitors was realized, and the programs were developed in direct response to findings from the prerelease program evaluation. In this way, the community service providers have come to rely on the research findings to inform their program development and implementation and to allow immediate modification in ongoing programs. The academic researchers have also been changed by the collaborative experience. Formative and qualitative research has been conducted, and innovative research designs have been developed in response to the institutional barriers of the correctional setting. The projects have advanced our understanding of sexual risk behavior among men who have sex with women, and we have demonstrated the feasibility of conducting research with prison inmates. While the ultimate goal remains to demonstrate the effect of interventions on postrelease behavior, formative and qualitative research is also critical to our understanding of the process of behavior change and to applying that knowledge to the development of effective interventions. Funders have also changed; there has been increasing interest in collaborative research initiatives, and the presence of collaborative funding initiatives has increased the motivation to form research partnerships.

Research funding is not program funding. Research projects are funded for a limited period of time, after which the evaluated program will not continue unless program funds are secured. The goal of the collaborative research group is to provide sustainable programs, not solely to conduct research. Consequently, each collaborative project has included an additional phase: securing program funding and dissemination to other researchers and service providers. We have learned that research findings can be leveraged to secure program funding. While demonstrating the effectiveness of the intervention may be the evaluation research goal, preliminary data supporting the feasibility and

acceptability of an HIV prevention program may be sufficient to support an application for program funds to continue providing services.

Collaboration

It would not have been possible to conduct these projects outside of the collaborative partnership. Only the collaborative participation of service providers can ensure that intervention and evaluation will be feasible, valid, and appropriate. Without the collaborative participation of the prison, we would not have been granted access to our inmate participants. While academic researchers have specific technical expertise in evaluation design, instrument development, and outcome analysis, these skills cannot be applied effectively in the community context without the input and support of community-based organizations serving the target populations.

Collaboration is more than a means for researchers to get input, advice, and access to hard-to-reach populations from community-based service providers. If this were the only goal, community advisory boards would be sufficient. Collaboration is also more than a means for community-based service providers to benefit from the evaluation expertise of academic researchers. If that were the only goal, paid consultants would be sufficient. The goal of collaboration is to influence the questions that are asked and how the answers to those questions are used. By having each party involved from the conceptualization of the project through the seeking of funds, research and program design, and data collection and interpretation, true innovation can be achieved. We believe that this type of true collaboration changes not only the way that questions are asked but the nature of the questions themselves, allowing innovation in the basic science of HIV prevention. This type of collaboration also changes the nature of programs that are developed and has a profound impact on prevention practice as well. There is also the potential to affect policy as funders are challenged to change their traditional methods of funding research to accommodate collaborative teams.

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