

Research Team

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Main Findings

- Prison inmates are at increased risk for HIV. One-half of inmates reported a history of injecting drug use, and prison policies block access to condoms and clean syringes while incarcerated.
- Most men in our studies returned to a committed female partner and had unprotected sex with her immediately after release.
- Female partners of incarcerated men have a high level of general knowledge about HIV and AIDS, but they are not aware of prison-specific policies and activities that increase their partner's and their own risk for HIV.
- Peer education is a particularly useful model for providing HIV prevention services to inmates and their partners.
- HIV prevention interventions in prisons are effective. In one study, a single pre-release intervention session produced significantly more condom use at first intercourse after release.
- Multiple institutional barriers to conducting intervention research in and around prisons can be overcome with persistence and collaboration between correctional institutions, community-based agencies, and academic researchers.

Background

Prisons and jails present an important 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. There are now more than two million adults incarcerated in the United States and four million more on probation or parole. Due to the disproportionate incarceration of drug users, incarcerated men are five times more likely than men in the general population to be infected with HIV.¹ Because many prisoners are serving short sentences for parole violation and recidivism to prison is common, at-risk individuals move frequently between prisons and their home communities.²

There is an urgent need to develop effective, accessible HIV prevention programs and population-specific HIV education materials for prison inmates and their partners. Despite this, institutional and access barriers have impeded development and evaluation of such programs. Inmates in U.S. prisons have virtually no access to condoms, bleach, clean syringes, or comprehensive HIV prevention education.³ Rules protecting the security of the institution also limit access by community-based service providers and researchers.

Why these projects?

Our projects are unique in relying on peer education intervention models. Peer educators are particularly effective because they 1) have specific knowledge about risk behavior occurring both inside and outside the prison, 2) increase the perception of personal risk, 3) reinforce community norms for safer sexual and injection practices, and 4) have the additional advantage of being cost-effective and, consequently, sustainable.

These projects are also unique in their collaborative approach. Institutional barriers to HIV intervention research in prisons can be overcome through the development of collaborative research partnerships. 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.^{5,6}

Interventions and Findings

Five intervention and evaluation projects are described below. All of the collaborative projects described here were conducted at San Quentin State Prison in Marin County, CA. San Quentin is a medium-security prison housing approximately 6,000 men who stay at the prison for an average of less than two years. San Quentin is unusual in being located close to an urban center, which facilitates visiting and the involvement of community service organizations.

Men who received the intervention reported being nearly twice as likely to use a condom at their first intercourse after release from prison as compared to the no-treatment group.

• Inmate Peer Education Project

Centerforce staff select, train, and supervise inmate peer educators at San Quentin in cooperation with correctional officers. The training curriculum for inmate peer educators includes 40 hours of instruction over five days. 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.

In addition to their initial training, peer educators are supervised for a minimum of one hour per week and receive additional training and supervision as needed. About 40 inmates are trained as peer educators each year. Peer educators provide various services at the prison, including the HIV orientation, pre-release counseling, and other educational programs.

• HIV Orientation Program

Men arriving at the prison are taken to a classroom, where they meet with the peer educators for an hour-long program including basic information about HIV prevention, transmission, and specific risks in the prison setting. The majority of men coming to San Quentin receive this intervention. After the orientation, voluntary confidential HIV testing is offered. The orientation session has recently been expanded to include other health issues such as STDs, hepatitis, and tuberculosis. The HIV orientation program is ongoing with the full support of the prison, which provides the program space and assigns a correctional officer to supervise the activity.

Methods

We evaluated the HIV 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.

Findings

- 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.
- 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 that, at the time of this study, inmates known to be HIV seropositive were housed separately. There were no significant differences in testing rates by group.⁷

• Pre-Release HIV Prevention Program and Evaluation

With input from inmates and service providers, we developed a peer-led, single-session pre-release intervention addressing condom use, needle hygiene, and referrals to community agencies. The intervention consisted of a 30-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.

Methods

A total of 414 inmates were randomly assigned to standard care or to receive the pre-release 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. Follow-up assessment was conducted via telephone two to four weeks after release. We interviewed 43% of the baseline sample at follow-up. Findings must be interpreted cautiously due to this follow-up rate, however attrition analyses revealed no demographic or baseline risk behavior differences between those interviewed and those not interviewed at follow-up.

Findings

- Most men return to a steady partner and have unprotected intercourse within hours of their release from prison.
- Men who received the intervention reported being nearly twice as likely to use a condom at their first intercourse after release from prison as compared to the no-treatment group (38% versus 20%, $p=.05$).⁸

• The Health Promotion Program

We developed and evaluated the effectiveness of a 20-hour pre-release intervention for HIV+ inmates. The goal of the intervention was to improve HIV+ 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 community-based AIDS service organizations and included sessions on self-esteem, health maintenance, community resources, stress management, legal issues, and barriers to care after release. There was also a “resource fair” for which representatives of a wide variety of service agencies came to the prison to meet with participants.

Methods

The intervention was assessed by comparing the post-release outcomes of program participants to the outcomes of a comparison group who expressed interest in the intervention but were unable to attend because they were being released too early. All participants received both a pre-intervention and a post-intervention survey, and were followed for an additional survey in the community 30–60 days after release. A total of 123 men (94 intervention and 29 comparison participants) agreed to be assessed after release from prison; 66% were contacted and assessed after release.

Findings

- Over half of participants were in a committed relationship.
- 50% of their committed female partners were HIV-seropositive, and all of their committed male partners were HIV-seropositive.
- 40% always used condoms with committed female partners, and nearly 60% always used condoms with other female partners.
- After release, participants in the intervention group were more likely to have used a condom the first time they had sex (81% versus 68%), less likely to have injected drugs (46% versus 67%), and, among those who injected drugs, less likely to have shared injection equipment (6% versus 25%).⁹

• Love Your Man, Love Yourself: The Women Visitors' Project

In the pre-release HIV prevention program, we found that nearly half of inmates considered themselves to be in a committed relationship and had unprotected sex with their main partner almost immediately after leaving prison. We therefore developed an HIV prevention program for women visiting their incarcerated partners. An additional goal of this project was to describe the population and their HIV prevention needs.

Based on the findings of three preliminary focus groups, we developed a group single-session, peer-led informational intervention. The

intervention included basic HIV information and information about risks specific to having an incarcerated partner, encouraged interaction and social support, and encouraged participants to share this information with others.

Methods

Evaluation included a face-to-face pre-intervention survey, a brief post-intervention survey, and a follow-up survey one month after the intervention. The pre-intervention survey included questions about the participant's relationship with the incarcerated man, her perception of HIV risk, and any sexual or drug-related risk for HIV. The post-intervention survey assessed HIV knowledge only. The follow-up survey assessed sexual behavior and drug use since the intervention and diffusion of information learned in the intervention to her partner, other visitors, or to relatives or friends. Eighty-six women participated in the study and 75% were followed-up one month later.

Findings

- Participants had a high level of general knowledge about HIV and AIDS, but many did not consider themselves to be at risk of transmission because they were monogamous. Many women were unaware of HIV risks specific to incarceration.¹⁰
- 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 had never used condoms with their primary partner; of all the women who had overnight prison visits, not one had used a condom.
- Nearly 20% of our sample reported having a secondary sexual partner, and most used condoms with secondary partners.
- Very few women admitted currently injecting drugs, but all of the women who had a history of injecting drugs had shared a needle.
- Many women shared information with other visitors, family members, and their incarcerated partners.

Challenges

Conducting programs and research within a prison setting presents certain barriers and limitations. For example, inmate movement is limited, and programs must deal with resistance from prison staff, including correctional officers and health care providers. Institutional lockdowns (e.g., in cases of bad weather, escapes,

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riots, or executions) occasionally prevent 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. Successful HIV prevention programs in prisons call for flexible program, research, and funding approaches as well as the development of collaborative relationships with prison personnel.

Lessons Learned/ Recommendations

- HIV prevention interventions at prisons are feasible. We have conducted four programs serving inmates, former inmates, and their partners in the community. Findings to date support the effectiveness of these programs.
- Prisoners are also a part of the community outside the prison walls, and their relationships outside of prison must be addressed. Partners and families of prison inmates are also in need of HIV education and prevention services.
- Peer educators are an important resource in conducting interventions at prisons. Inmates and their partners prefer peer educators and respond with increased attendance and attention, thereby improving the possibility of behavior change.
- Inmates need to be introduced to community prevention services before they are released. After release, men face the stresses of community and family reentry and may have difficulty completing treatment.¹¹
- Transitional case management services for inmates are currently inadequate for treatment and virtually non-existent for prevention services.¹² In addition to teaching inmates about HIV risk reduction, in-prison interventions could facilitate referrals to community resources for drug/alcohol treatment, adequate housing, and employment, and to other services to prevent recidivism.
- Researchers approaching prisons to conduct intervention research would do well to identify and partner with community-based service agencies that are already providing services to incarcerated individuals.
- Effective interventions must be feasible within the organizational and institutional constraints of the prison system.

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Materials Available

Program description and intervention outlines are available on CAPS website: www.caps.ucsf.edu/projects/mapindex.html. Information about Centerforce and the Centerforce Health Programs Division is available at www.centerforce.org. Survey instruments from each of the intervention studies are available from Olga Grinstead at CAPS: ogrinstead@psg.ucsf.edu or write to 74 New Montgomery Street #600, San Francisco, CA 94105.

The video *Inside/Out: Real Stories of Men, Women, and Life after Incarceration* and the accompanying discussion guide can be ordered by calling Centerforce Health Programs Division at (415) 456-9980.

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