



Criminal Justice | Drug Abuse Treatment Studies
A project of the National Institute on Drug Abuse, National Institutes of Health
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Brief Report Series **Restructuring Risky Relationships - HIV (RRR-HIV)**

Lead Research Center

Center on Drug and Alcohol Research
University of Kentucky
(Carl Leukefeld, Michele Staton Tindall,
Carrie Oser, Jennifer Havens)

Collaborating Centers

Connecticut Research Center
Connecticut Department of Mental Health and
Addiction Services
(Linda Frisman)

Mid-Atlantic Research Center
University of Delaware
(James A. Inciardi, Steve Martin, and Hilary Surratt)

Rhode Island Research Center
Brown University/Lifespan Hospital
(Jennifer Clarke)

Rationale and Objectives

The rate of HIV infection is about 6 times higher among female prisoners than the general U.S. population (Brien, 1995; Maruschak, 1999). Specifically, 2.4% of Federal and State prison inmates were known to be infected with HIV; slightly lower rates (1.8%) were found among jail inmates and higher rates among females -- 4.2% of females versus 2.5% of males (Braithwaite, Hammett & Mayberry, 1996). These findings support the idea that out-of-treatment criminal justice-involved drug abusers are at higher risk of exposure to and acquiring HIV than their non-criminal justice counterparts, particularly by exchanging sex (Farabee & Leukefeld, 1999). Sex exchange has been identified as an increased risk factor for HIV among female offenders (Cotton-Oldenburg et al., 1997). Other consistently reported behaviors which increase a female offender's risk for HIV include sharing drug injection equipment, engaging in unprotected sex with drug-injecting partners, having sex with multiple partners, reporting a history of a diagnosed STI, inconsistently using condoms with multiple sex partners, and using alcohol and other non-injection drugs (Cotton-Oldenburg et al., 1999; Hankins et al., 1994). Since HIV infection among female inmates is a serious public health concern, a better understanding of factors associated with HIV risks and targeted HIV interventions are needed.

Relationships are important to women and shape the ways women think. Unhealthy relationships may increase a woman's risk for engaging in unsafe behaviors which include risky sex, drug use, and criminality (Covington, 1998; Surrey, 1991; Staton et al., 2004). The context of a relationship can influence HIV risk behaviors since the desire to achieve and maintain intimacy may override a woman's ability to accurately assess her partner's HIV risk (Morrill et al., 1996). Women adapt their sexual behavior – risky or not – to a relationship and their level of involvement with a partner (Morrill, et al., 1996). Faulty thinking about relationships can place women at greater risk for HIV since

condom and drug use may depend on the context of intimate partner relationships. In fact, the context of a monogamous, committed relationship may shape a women's thinking about HIV risk behaviors since she "feels safe" with her partner, and she feels that unprotected sex may be a sign of trust that enhances a relationship (Morrill, et al., 1996). However, relationship thinking myths to decrease HIV risks have not been examined.

This project will examine how women can recognize and change their relationship thinking myths to reduce their HIV risk behaviors within intimate relationships. This project will: 1) Examine issues identified by female drug abusing prisoners about HIV risk behaviors in the context of relationships, and 2) Develop, pilot, and test an HIV intervention which targets thinking myths about relationships among incarcerated women who are re-entering the community. The project is conceptually grounded in the cognitive restructuring literature and the relational model.

Procedures

Over three years, this project will develop, pilot, and test the RRR-HIV intervention. The project is organized in three phases. The first two phases are complete. During Phase 1, 6 focus groups of 56 female participants were completed between July and December 2005. The focus group participants consisted of women from the following four categories: 1) women in treatment who transitioned to the community from prison (Chrysalis House – KY), 2) women in community treatment who were involved in the criminal justice system but not in prison (Drug Court – KY), 3) women in a prison-based treatment program (KY), and 4) women in a transitional prison to community work release center (Delaware). Focus group data were transcribed and qualitative data analysis yielded seven core thinking myths that facilitated the RRR-HIV manual development. The seven thinking myths are:

1. "Having sex without protection will strengthen my relationship." (Fear of Rejection)
2. "I only think good things about myself when I am in a relationship, even if it's a risky relationship." (Self-Worth)
3. "I can use drugs and still make healthy decisions about sex with this partner." (Drug Use)
4. "I know my partner is safe by the way my partner looks, talks, and/or acts." (Safety)
5. "I've been with this partner for a long time so there's no need to practice safe sex." (Trust)
6. "I will not get HIV from this partner because I'm not really at risk." (Invincibility)
7. "I have to use sex as a way to get what I want in a risky relationship." (Strategy/Power)

These focus groups provided information to understand relationships, how women use thinking myths, and how women can make safer decisions to reduce HIV risk behavior. The six session intervention was designed to take place both in the institution and in the

community. Sessions 1 through 5 were completed in prison immediately before community re-entry and Session 6 was held in the community after release from prison.

For Phase 2, the RRR-HIV intervention was piloted in September 2006 to examine feasibility with 11 volunteers enrolled in prison-based substance abuse treatment in Kentucky. Based on feedback from the first group, the RRR-HIV intervention was piloted with a second group of 9 prisoners from the general population at the same prison during the month of November. Sessions were piloted by an interventionist and observed by one research team member. Notes were recorded on participant feedback and overall session content. Feedback on RRR session was favorable and changes were incorporated into the manual.

Phase 3 of the study is ongoing. After consenting to participate and completing the baseline interview, study participants (N=444) are randomized into one of two groups: 1) RRR-HIV Intervention Group, or 2) the treatment as usual Comparison Condition. Data collection occurs at baseline and at 30 days and 90 days post-release to compare outcomes on high risk behaviors, drug use, and relationships. All participants view an HIV awareness video and have the opportunity to be tested for both the Hepatitis C and HIV antibodies. In accordance with recommendations from the Centers for Disease Control (CDC), all participants who are tested for these two diseases receive pre-test and post-test counseling and receive their test results regardless of their status. The RRR-HIV intervention group also receives the five prison-based RRR-HIV intervention sessions and one community session between approximately 2 weeks and 30-days post release.

Target Population and Sample

The manual driven intervention was designed to improve HIV outcomes for female drug abusing prisoners at community re-entry. Therefore, women participants for Phase 3 of the study are being recruited from correctional institutions just before community re-entry.

Instrumentation

Quantitative data is currently being collected as part of the Phase 3 intervention trial. Instruments will examine the primary outcomes for HIV risk behavior which include drug use, injection drug use, risky sexual behavior, and sex exchange during community re-entry. In addition to these core instruments, scales specific to the thinking myths established in Phase 1 of the study are evaluating change in thinking about relationships and HIV risks.

Data Analysis

The Reducing Risky Relationships for HIV (RRR-HIV) protocol was implemented on March 9, 2007 at the Kentucky Correctional Institution for Women in Pewee Valley, Kentucky. As of March 31, 2008, 444 women were recruited into the Reducing Risky Relationships for HIV protocol from four sites, Kentucky, Delaware, Connecticut, and

Rhode Island. Preliminary demographic information is available for 363 women from Kentucky, Delaware, and Connecticut. The median participant age is 34.6 years old (interquartile range: 27.5-41.9), the majority are white (68%, n=246), 24.9% (n=90) are black, and 6% (n=22) identified with other race/ethnicity. The mean number of months incarcerated is 31 (standard deviation: 36.2 months) and the mean age of first arrest is 21.5 years (SD: 7.5 years). The majority of women had at least one drug-related arrest (79.6%).

The HIV prevalence is 1.8%. The proportion of women testing positive for the hepatitis C antibody is 24.5%. In the 30 days prior to incarceration, women reported using alcohol (65%), marijuana (45%), crack (50%), cocaine (31%), heroin (10%), prescription opiates (37%) and/or methamphetamine (11%). At 30 day follow-up, there were significant reductions in ALL substances used at the $p < 0.001$ level. The majority of women participated in high-risk behaviors in the 30 days prior to incarceration, such as unprotected sex (81.8%). At 30-day follow-up, there were significant reductions from baseline in the number of unprotected sexual encounters in both the RRR and control group ($p < 0.001$ for both groups). Condom self-efficacy was significantly greater for the RRR group compared to the control group ($p = 0.019$), indicating greater perceptions of condom use ability among those exposed to the intervention. Also at follow-up, RRR participants indicated that they had less unprotected sex in the prior 30 days with their long-time partner ($d = -0.45$, $p = 0.005$) and would be less likely to think a partner was safe just by their looks ($d = -0.30$, $p = 0.04$). Women in the RRR group were significantly more likely than those in the control group at the 30-day follow-up to indicate that women using drugs do not make healthy choices ($p = 0.039$), to know that male and female condoms should not be used concurrently ($p < 0.001$), and that one can acquire HIV by sharing injection paraphernalia ($p = 0.008$).

Study Implications

Women's thought processes and thinking myths may be associated with risky HIV/AIDS behaviors. This study is examining how women can recognize and change relationship thinking myths to reduce HIV risk behaviors within intimate relationships. It is important to understand how women perceive selected thinking myths about relationships which can increase vulnerability to risky sex and drug use. Consequently, the intervention focuses on empowering women to make better decisions in their relationships in order to reduce HIV risk behavior. This project will also add to the literature on reducing HIV risk behaviors among women prisoners during the community re-entry and examine changes in risky behaviors in the context of relationships.

References

- Braithwaite, R., Hammett, T., & Mayberry, R. (1996). *Prisons and AIDS*. San Francisco: Jossey-Bass.
- Brien, P.M. (1995). HIV in prisons and jails, 1993. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics; Report No.: NCJ-152765.

- Brown, B., & Beschner, G.M. (1993). *Handbook on Risk of AIDS: Injection Drug Users and Sexual Partners*. Westport, CT: Greenwood Press.
- Cotton-Oldenburg, N. U., Jordan, K., Martin, S. L., & Kupper, L. (1999). Women inmates' risky sex and drug behaviors: are they related? *American Journal of Drug and Alcohol Abuse* 25 (1), 129-149.
- Cotton- Oldenburg, N. U., Martin, S. L., Jordan, B. K., Sadowski, S. L., & Kupper, L. (1997). Preincarceration risky behaviors among women inmates: opportunities for prevention. *Prison Journal*, 77 (3), 281-294.
- Covington, S. S. (1998). Women in prison: approaches in the treatment of our most invisible population. *Breaking the Rules: Women in Prison and the Feminist Theory*, 21 (1), 141- 155.
- Farabee, D., & Leukefeld, C.G. (1999). Opportunities for AIDS prevention in a rural state in criminal justice and drug treatment settings. *Substance Use and Misuse*, 34 (1&2), 617-631.
- Hankins, C. A., Gendron, S., Handley, M. A., Richard, C., Lai Tung, M. T., & O'Shaughnessy, M. (1994). HIV infection among women in prison: an assessment of risk factors using a nonnominal methodology. *American Journal of Public Health*, 84 (10), 1637-1640.
- Leukefeld, C., Tims, F.M. & Platt, J.J. Future directions in substance abuse relapse and recovery. In Tims, F.M., Leukefeld, C. & Platt, J.J (Eds.). (2001). *Relapse and Recovery in Addictions*. New Haven: Yale University Press. Pps. 401-413.
- Maruschak, L. M. (1999). HIV in prisons and jails, 1996. In *1996-1997 Update: HIV/AIDS, STDs, and TB in correctional facilities*. National Institute of Justice, NCJ 157642. Washington, DC: U. S. Department of Justice.
- Morrill, A.C., Ickovics, J.R., Golubchikov, V.V., Beren, S.E., & Rodin, J. (1996). Safer sex: Social and psychological predictors of behavioral maintenance and change among heterosexual women. *Journal of Consulting and Clinical Psychology*, 64(4), 819-828.
- Staton Tindall, M., Royse, D., & Leukefeld, C. Substance use, criminality, and social support: An exploratory analysis with incarcerated women. Submitted for review, April 2005.
- Surrey, J. (1991). *Women and addiction: A relational perspective*. Wellesley, MA: Stone Center.