



Sustainability of intervention effects of an evidence-based HIV prevention intervention for African American women who smoke crack cocaine[☆]

Wendee M. Wechsberg^{a,*}, Scott P. Novak^a, William A. Zule^a, Felicia A. Browne^a, Alex H. Kral^b, Rachel Middlesteadt Ellerson^a, Tracy Kline^a

^a RTI International, Substance Abuse Treatment Evaluations and Interventions, 3040 Cornwallis Road, Research Triangle Park, NC 27709-2194 USA

^b RTI International, Urban Health Program, 114 Sansome Street, Suite 500, San Francisco, CA 94194-1355, USA

ARTICLE INFO

Article history:

Received 4 September 2009

Received in revised form 9 January 2010

Accepted 12 January 2010

Available online 12 March 2010

Keywords:

Intervention effects

Sustainability

HIV prevention

Crack cocaine

African American women

ABSTRACT

Background: HIV prevention intervention efficacy is often assessed in the short term. Thus, we conducted a long-term (mean 4.4 years) follow-up of a woman-focused HIV intervention for African American crack smokers, for which we had previously observed beneficial short-term gains.

Methods: 455 out-of-treatment African American women in central North Carolina participated in a randomized field experiment and were followed up to determine sustainability of intervention effects across three conditions: the woman-focused intervention, a modified NIDA intervention, and a delayed-treatment control condition. We compared these groups in terms of HIV risk behavior at short-term follow-up (STFU; 3–6 months) and long-term follow-up (LTFU; average 4 years).

Results: The analyses revealed two distinct groups at STFU: women who either eliminated or greatly reduced their risk behaviors (low-risk class) and women who retained high levels of risk across multiple risk domains (high-risk class). At STFU, women in the woman-focused intervention were more likely to be in the low HIV risk group than the women in control conditions, but this effect was not statistically significant at LTFU. However, low-risk participants at STFU were less likely to be retained at LTFU, and this retention rate was lowest among women in the woman-focused intervention.

Conclusions: Short-term intervention effects were not observed over 4 years later, possibly due to differential retention across conditions. The retention of the highest risk women presents an opportunity to extend intervention effects through booster sessions for these women.

© 2010 Elsevier Ireland Ltd. All rights reserved.

1. Introduction

Compared with other racial/ethnic groups, African Americans continue to bear a disproportionate burden of HIV infection in the United States (Hall et al., 2008). The primary mode of HIV transmission for African American women is heterosexual contact, with an estimated three fourths of them being infected via this transmission route (Centers for Disease Control and Prevention, 2009). One factor that contributes to HIV risk among African American women is crack cocaine use (Adimora et al., 2006).

HIV risk behaviors among African American women who use crack cocaine include exchanging sex for money and drugs, unprotected sex, increased number of sex partners, and having sex with high-risk partners, such as injecting drug users (IDUs) (Inciardi et al., 2005; Jones and Oliver, 2007; Wechsberg et al., 2003a). Crack

cocaine use is also associated with contextual factors, including lower education and higher rates of unemployment, homelessness, violence, and alcohol use (Tortu et al., 2000; Wechsberg et al., 2003a).

1.1. HIV prevention interventions and effectiveness

Over the past decade, several HIV prevention interventions have demonstrated effectiveness in reducing risk behaviors among African American women (Sterk et al., 2003; Wechsberg et al., 2004; Wingood et al., 2004) and they have been designated “best-evidence” HIV prevention interventions by the U.S. Centers for Disease Control and Prevention (CDC) (Lyles et al., 2007). Several interventions focus on reducing crack cocaine use and sexual risk (Cottler et al., 1998; Inciardi et al., 2005; Sterk et al., 2003; Wechsberg et al., 2004). Two recent meta-analyses of intervention studies—using experimental or quasi-experimental designs that included control groups—to reduce HIV risk among African Americans concluded that behavioral interventions were efficacious in reducing HIV at follow-up periods ranging from 3 to 12 months (Crepaz et al., 2009; Johnson et al., 2009).

[☆] Supplementary material related to this article is available with the full text online version at doi:10.1016/j.drugalcdep.2010.01.014.

* Corresponding author. Tel.: +1 919 541 6422; fax: +1 919 485 5555.

E-mail address: wmmw@rti.org (W.M. Wechsberg).

Many of these interventions were designed to reduce risk in one major area, such as substance abuse, sexual risk, employment, or housing (Albarracín et al., 2005). Research has shown, however, that because of the interconnectedness of the complex issues facing impoverished women who use illicit substances, it is important to address a host of social and health-related concerns simultaneously in order to be successful in any one health area (El-Bassel et al., 2009; Nobles et al., 2009). For example, existing interventions targeting sexual risk may be successful in the short term, but unless the broader concerns are addressed simultaneously, the positive effect is unlikely to be sustained.

1.2. Sustainability of intervention effects

There has been considerable progress in the development of HIV prevention and sexual risk reduction interventions for women that have been shown to be efficacious (Darbes et al., 2008; Logan et al., 2002). Many studies, however, have only followed participants from 3 to 9 months (Cottler et al., 1998; Dancy et al., 2000; Inciardi et al., 2005; Sterk et al., 2003; Wechsberg et al., 2004), although one study reported follow-up data for up to 2 years (Nyamathi and Stein, 1997). A review of the few studies that have included longer follow-up periods found that even the most successful interventions continue to have significant rates of relapse to high-risk sex behaviors (Wechsberg et al., 2003b).

Even fewer longer term follow-up studies of crack cocaine users have been conducted. Siegal et al. (2002) examined treatment outcomes in a cohort of 229 predominantly male (>99%) veterans who were crack cocaine users over an 18-month period. Among the 419 subjects who entered the study, 229 (54.6%) completed the intake, 6-, 12-, and 18-month interviews. Three trajectories of crack use emerged: (1) individuals who had reported ongoing, stable abstinence from cocaine; (2) individuals who had consistently used cocaine during the period; and (3) individuals who reported cycling between abstinence and use during the follow-up period. The results showed that subjects who were able to sustain abstinence from cocaine also demonstrated improvements in the domains of employment, family, legal, and psychiatric functioning compared with subjects who were not able to sustain abstinence.

A second study by Siegal and colleagues followed crack cocaine users over time to examine predictors of drug abuse treatment entry among an out-of-treatment community sample of 430 crack cocaine users (Falck et al., 2007). The sample comprised 262 males and 168 females—62% of whom are African American—who were tracked and assessed at 6-month intervals for 3 years following baseline. The overall follow-up rate for the 3-year study was 79%. During the observation period, 38% ($n = 162$) of the sample reported that they had entered a drug abuse treatment program. Predictors of entering a drug abuse treatment program included being younger, having more severe legal problems, perceiving a need for treatment, and having prior treatment experience.

Because African American women who use crack are at risk for a multitude of issues, including HIV, studies are needed to identify and understand their risk more clearly. To date, no studies have examined the complex, intersecting issues and long-term effects of woman-focused interventions in substance-using African American women.

1.3. The North Carolina Women's CoOp I and Women's CoOp II studies

The North Carolina (NC) Women's CoOp I (hereafter, Women's CoOp I) used a 3-group randomized design to compare the effects of a culturally sensitive gender-specific woman-focused intervention for African American women who use crack with the effects of an equal dose intervention based on the revised National Insti-

tute on Drug Abuse NIDA Standard intervention (Wechsberg et al., 2004) and a delayed-treatment control group. A total of 762 women were enrolled and randomized between 1999 and 2002. Intervention effects were evaluated at follow-up interviews conducted at 3 months and 6 months post-enrollment. The woman-focused intervention and the revised NIDA Standard intervention in the Women's CoOp I study both consisted of two 30–40 min individual sessions and two 60–90 min group sessions. The two individual sessions in both interventions conducted pre- and posttest HIV counseling. The woman-focused intervention individual sessions incorporated personalized feedback and included culturally enriched content that was grounded in empowerment theory specific to African American women crack users and action plans to address the multi-dimensional risks of drug use, sex-risk behaviors, and contextual goals to address barriers of education, employment, housing, and parenting (Wechsberg et al., 2004). The group sessions were interactive with a gender- and culture-specific focus. This intervention was found to be highly efficacious in the short term and was included in a list of “best-evidence” HIV behavioral interventions from 2000 to 2004 (Lyles et al., 2007). The revised NIDA Standard intervention was similar to the woman-focused intervention in educational content; however, it did not incorporate the gender- or culture-specific empowerment approach to develop one's life and change social contexts. Moreover, the two group sessions were didactic and presented general information.

The NC Women's CoOp II (hereafter, Women's CoOp II) was a NIDA competing continuation study of the Women's CoOp I originally not planned until the initial study's final year. The Women's CoOp II specific aims were to assess the long-term effects of the Women's CoOp I interventions and assess the impact of adding booster sessions. Baseline enrollment in the Women's CoOp II began in 2004, 2 years after the last follow-ups from Women's CoOp I (2002), and ended in 2007. Follow-up interviews for the Women's CoOp II project were completed at 6, 12, and 18 months post-enrollment. This paper is limited to an evaluation of the long-term effects of the Women's CoOp I interventions. See Appendix A¹ for a more detailed overview and timeline for these two studies.

2. Methods

2.1. Overview

We tested the long-term effects of the Women's CoOp I intervention and hypothesized that the women who completed the woman-focused intervention, which emphasized empowerment (i.e., reducing impaired behavior and taking positive action) but also addressed contextual (e.g., employment, housing) and environmental conditions (e.g., changing and leaving drug-infested neighborhoods and disassociating with drug-using friends), would exhibit more positive change compared with the NIDA Standard intervention and a control condition. We also hypothesized a larger loss to long-term follow-up among women assigned to the woman-focused intervention who responded well to the intervention.

For the purpose of these analyses, we used the last participant contact in the Women's CoOp I study to define short-term follow-up (STFU). These study participants were then re-contacted between 2 and 8 years later (mean 4.4, median 4.4). For simplicity, we will subsequently refer to the time between the last contact in the Women's CoOp I and re-contact for the Women's CoOp II as 4 years. The baseline data for the Women's CoOp II study serve as the long-term follow-up (LTFU) observation.

2.2. Relocation and enrollment procedures for the Women's CoOp II study

Between March 2004 and March 2007, 60% (455/762) of Women's CoOp I study participants were relocated and enrolled in the Women's CoOp II study; a mean of 4.4 years (range 2–8 years) since their last follow-up. Another 18 women had died prior to being relocated, 2 women were incarcerated over the entire recruitment period for the Women's CoOp II study, 9 had moved out of the area and could not be contacted, and 8 others who had moved out of the area were interviewed by

¹ Available as supplementary material with the full text online version of this paper at doi:10.1016/j.drugalcdep.2010.01.014.

Download English Version:

<https://daneshyari.com/en/article/1070781>

Download Persian Version:

<https://daneshyari.com/article/1070781>

[Daneshyari.com](https://daneshyari.com)