

SISTER-TO-SISTER (ONE-ON-ONE SKILLS-BUILDING)

Best Evidence – Risk Reduction

INTERVENTION DESCRIPTION

Target Population

- Inner-city African American female clinic patients

Goals of Intervention

- Eliminate or reduce sex risk behaviors
- Prevent new STD infections

Brief Description

Sister-to-Sister includes two skills-building interventions – *Group* (Best-evidence) or *One-on-one* (Best-evidence). These skills-building interventions are culturally-sensitive, gender-appropriate, single-session interventions developed to increase self-efficacy and skills to use condoms correctly and to negotiate condom use with sex partners. The interventions encourage women to respect and protect themselves, not only for their own sake, but also for their family and community. The interventions are delivered by female African-American nurses and can be delivered to small groups of women (3-5 women) or individuals. Both group and one-on-one formats involve video viewing, condom demonstration, practice with an anatomical model, and role playing to increase self-efficacy and skills to negotiate condom use. The additional activities used in the group format include group discussions, brainstorming, and interactive exercises and games.

Theoretical Basis

- Social Cognitive Theory

Intervention Duration

- One session – 200 minutes for the group format, and 20 minutes for the one-on-one format

Intervention Setting

- Inner-city women’s health clinic

Deliverer

- African American female nurses with over 10 years of nursing experience and working with the target population

Delivery Methods

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| • Demonstration | • Group discussion | • Printed materials |
| • Exercises | • Lecture/teach | • Role play |
| • Games | • Practice | • Video |

INTERVENTION PACKAGE INFORMATION

An intervention package was developed with funding from CDC's Replicating Effective Programs (REP) Project. For information on training and intervention-related materials, please visit [CDC's HIV Effective Interventions website](#).

Intervention package and training are available through [ETR Associates](#) under the name [Sister to Sister](#).

EVALUATION STUDY AND RESULTS

The original evaluation study was conducted in Newark, New Jersey between 1993 and 1996.

Key Intervention Effects

- Increased condom use
- Reduced unprotected sex
- Reduced new STD infections

Study Sample

The baseline study sample of 564 inner-city clinic patients is characterized by the following:

- 100% black or African American
- 100% female
- 99% heterosexual, 1% homosexual/bisexual
- Mean age of 27 years

Recruitment Settings

Outpatient women's health clinic of a large hospital

Eligibility Criteria

Clinic patients were eligible if they were sexually experienced African American women, between 18 and 45 years old, and were not pregnant.

Assignment Method

Women (N = 564) were randomly assigned to 1 of 5 groups: Group skill-building intervention (*Group Skills*, n = 118), One-on-one skill-building intervention (*One-on-one Skills*, n = 123), Group HIV/STD information intervention (*Group Information*, n = 124), One-on-one HIV/STD information intervention (*One-on-one Information*, n = 118), or *Health Promotion* comparison (n = 81).

Comparison Group

- The *Health Promotion* comparison intervention, consisting of a single, 200-minute, group session (3-5 women per group) and delivered by female African American nurses, addressed behaviors (e.g., diet, physical exercise, alcohol, and tobacco use) associated with risk of heart disease, stroke and cancer.
- Both of the HIV/STD Information interventions consisted of a single session delivered by female African American nurses to increase knowledge about HIV/STD transmission and prevention and personal

vulnerability to HIV/STD. The interventions were delivered to groups of women (3-5 women per group) or individuals. The intervention lasted 200 minutes for the group format and 20 minutes for the one-on-one format. The intervention activities were similar to those in the Sister-to-Sister group and one-on-one skill-building interventions, except there was no behavioral skill demonstration or practice.

Relevant Outcomes Measured and Follow-up Time

- Sex behaviors during past 3 months (including proportion condom-protected sexual intercourse and frequency of unprotected sexual intercourse – defined as the number of days having sexual intercourse using a condom/not using a condom divided by the number of days having sexual intercourse; and condom use at most recent sexual intercourse) were measured at 3-, 6-, and 12- month follow-ups.
- New STD infections (including gonorrhea, chlamydia, and trichomonas) were measured using STD screening and lab-confirmed tests at 6- and 12-month follow-ups.

Participant Retention

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| <ul style="list-style-type: none"> • <i>Group skills</i> <ul style="list-style-type: none"> ○ 91% retained at 3 months ○ 90% retained at 6 months ○ 86% retained at 12 months • <i>Health Promotion</i> <ul style="list-style-type: none"> ○ 93% retained at 3 months ○ 89% retained at 6 months ○ 83% retained at 12 months • <i>One-on-One Information</i> <ul style="list-style-type: none"> ○ 90% retained at 3 months ○ 90% retained at 6 months ○ 86% retained at 12 months | <ul style="list-style-type: none"> • <i>One-on-One skills</i> <ul style="list-style-type: none"> ○ 91% retained at 3 months ○ 88% retained at 6 months ○ 85% retained at 12 months • <i>Group Information</i> <ul style="list-style-type: none"> ○ 94% retained at 3 months ○ 94% retained at 6 months ○ 94% retained at 12 months |
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Significant Findings

Combined *Group* and *One-on-one Skills* compared to *Health Promotion*:

- *Skills* Intervention women, compared to *Health Promotion* women, reported a significantly lower frequency of unprotected sexual intercourse at the 3-month follow-up ($p = .02$) and a significantly greater proportion of condom protected sexual intercourse at the 12-month follow-up ($p = .03$), and were significantly more likely to report using a condom at last sexual intercourse at the 3- and 12-month follow-ups ($p = .05$, $p = .03$, respectively).
- *Skills* Intervention women were significantly less likely to test positive for STD than comparison women at the 12-month follow-up ($p = .03$).

Group Skills compared to *Health Promotion*:

- At the 12-month follow-up, *Group Skills* women, compared to *Health Promotion* women, reported a significantly greater proportion condom-protected sexual intercourse ($p = .003$) and were significantly more likely to report using a condom at last sexual intercourse ($p = .05$).

One-on-one Skills compared to *Health Promotion*:

- *One-on-one Skills* women were significantly less likely to test positive for STD than comparison women at the 12-month follow-up ($p = .03$).

Combined *Group* and *One-on-one Skills* compared to *Combined Group and One-on-one Information*:

- *Skills* intervention women, compared to *Information* women, reported a significantly greater proportion of condom protected sexual intercourse at the 3- and 12-month follow-ups ($p = .02$, $p = .05$, respectively), a significantly lower frequency of unprotected sexual intercourse at the 3- and 12-month follow-ups ($p = .01$, $p = .02$, respectively), and were significantly more likely to report using a condom at last sexual intercourse at the 12-month follow-up ($p = .01$).

Considerations

- The *Group Skills* intervention had a marginally significant effect in reducing new STD infections at the 12-month follow-up ($p = .08$) compared to *Health Promotion*.
- The *One-on-one Skills* intervention also has a marginally significant effect in increasing condom use at most recent sexual intercourse at the 12-month follow-up ($p = .07$) compared to *Health Promotion*.
- Women receiving the *Group Skills* intervention reported a significantly greater proportion condom-protected sexual intercourse at the 12-month follow-up compared to women receiving the *One-on-one Skills* intervention ($p = .05$).
- There were no significant intervention effects on any sex behavior or STD outcomes at 6 months follow-up.
- The 5th study group (*Health Promotion* comparison group) was added in year 2 and, thus, resulted in a smaller number of participants being assigned to that group. The authors report that the findings from the entire study sample were similar to the findings when restricting to years 2 and 3 of the study.

REFERENCES AND CONTACT INFORMATION

Jemmott, L. S., Jemmott, J. B., III, & O'Leary, A. (2007). [Effects on sexual risk behavior and STD rate of brief HIV/STD prevention interventions for African American women in primary care settings](#). *American Journal of Public Health*, 97, 1034-1040.

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