

HIV Prevention Effectiveness Report 2002 Update



**Colorado Department
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and Environment**

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Overview

The following are HIV intervention effectiveness studies compiled by incorporating published HIV effectiveness studies and the result of an exhaustive review of the major journal databases (MEDLINE, GATEWAY). This document's purpose is to serve as an update to previous Intervention Effectiveness Reports, in order to give planners a background of research and previous effective studies with which they can frame and shape their own interventions for various populations. Also included are references to the 1999 *Compendium of HIV Prevention Interventions With Evidence of Effectiveness* by Centers for Disease Control, the 1997 *HIV Prevention Effectiveness Report* by Avery Wilson. This update will provide the Colorado planning group, Coloradans Working Together (CWT), HIV prevention planners, service providers, and program evaluators with information and insight when planning for HIV/AIDS intervention for the state of Colorado. The time-span for the literature search used to obtain these articles was from April 1999 to the February 2003. This report has been provided by the Colorado Department of Public Health and Environment, HIV/STD Section, Research and Evaluation Unit.

Organization

The following report is organized into four sections. Section One is a table listing all of the reviewed interventions. Section Two is a chapter containing summaries of the articles and an evaluation of each article for scientific rigor. They are ordered by type of intervention and then alphabetized. Section Three is a list of articles highlighting features that they have in common which may contribute towards the intervention effectiveness. Section Four is a list of articles cross-referenced according to risk group.

Section One: Table of Prevention Interventions

The table of Prevention Interventions highlights characteristics of the populations and interventions for all reviewed studies. This table is for quick reference to assist the reader in selecting articles targeting specific populations, characteristics or types of intervention. The table lists targeted populations, gender, race and ethnicity, age, the setting of the intervention, the type of intervention, the first author and year of the article, and brief additional comments.

Section Two: Summaries of Prevention Interventions

This section provides a brief summary of each reviewed article, in order to emphasize content and methods. There were 22 articles. Summaries are organized by intervention type, and then alphabetically by author. The article summaries contain comments on their scientific rigor and results according to measures of knowledge, attitudes, beliefs, and behaviors. Among these studies were a couple of articles that did not meet the requirements of scientific rigor. They are still included in this report due to their uniqueness and the relevance of their findings, and the possibility of future studies of these interventions which may at a later time provide the necessary rigor. They are relevant pilot studies. Each article was

reviewed by at least two members of the Research and Evaluation unit according to an algorithm. The algorithm for scientific rigor and relevance contained the following criteria. The studies were expected to have random assignment to an experimental/intervention group and a comparison group, or to a few different intervention groups. In addition, they had to present pre- and post-test data. And finally, the studies were expected to provide positive results and relevant outcomes. If a study did not meet these criteria, it was not included in the report, with the exception of the two pilot studies. These studies are included because they provide promising ideas for communities in need. The studies give a brief description of the ways in which they meet the criteria, a description of the intervention(s), and the results which were broken down into type: knowledge, attitudes, beliefs, or behaviors.

Section Three: Best Practices

This section highlights the most common and/or effective features of the interventions listed in the report, in addition to references on where these features can be found, and references to other reports on best practices.

Section Four: Cross-References by Risk Group

This section is a list of articles that address study populations in ethnic groups or with certain risks.

Section One: Table of Prevention Interventions

The table below summarizes information describing 23 articles on HIV prevention interventions

Included in this report. Articles are listed alphabetically by first author's last name and year of report.

Each article is then described by target population (i.e. drug user, heterosexual adult, men who have sex with men, persons living with HIV, youth), gender, race/ethnicity, age range of population, setting of intervention, and type of intervention. Two of the articles: Fullilove 2000, and Richie 2001, did not meet methodological criteria.

Section One: Table of Prevention Interventions: The table lists targeted populations, gender, race and ethnicity, age, the setting of the intervention, the type of intervention, the first author and year of the article, and brief additional comments.

Intervention Table Key

DU—Drug User

HA—Heterosexual Adult

MSM—Men Who Have Sex With Men

PP—Persons Living With HIV

Y—Youth

CLI—Community Level Intervention

CTR—Counseling, Testing and Referral

GLI—Group Level Intervention

ILI—Individual Level Intervention

NEP—Needle Exchange Program

PN—Partner Notification

PCM—Prevention Case Management

OR—Outreach

PI—Public Information

AA—African American

API—Asian and Pacific Islander

L—Latino

AI—American Indian

W—White

O—Other

NY—New York

B--Baltimore

Citation	Target					Gender		Race/Ethnicity %						Age (Yrs)		Setting	Intervention										Comments
	DU	HA	M S M	P P	Y	M	F	AA	API	L	AI	W	O	Avg.	Range		C L I	C T R	G L I	I L I	N E P	P N	P C M	O R	PI		
1. Boyer '01		X				X										Deployed ship			X								
2. Brown '00				X	X	X	X					74		18.5	13-24	Community			X							hemophiliacs	
3. Carey '00		X					X	88				6	6	29.4	17-46	CBO			X								
4. Collins '01		X					X	31		11		51	6	43.8		Group residences			X							Serious mental illness	
5. Dancy '00		X					X	100						31	20-44	Community			X								
6. Dushay '01	X					X	X	50		50				38.6 AA/ 33.9 L		Community			X						X		
7. Fisher '02					X	X	X	61		28		11	11	14.8	13-19	Inner-city high schools	X		X						X	X	School-based
8. Fogarty '01		X		X			X	91 PL WH/ 89 HA	0 PL WH/ <1 HA	1 PL WH/ 3 HA	1 PL WH /<1 HA	6 PL WH/ 8 HA	2 PLW H/ 0 HA	32 PL WH/ 30 HA	18-44 PLWH/ 15-44 HA	Community			X	X						Both at-risk and positives	
9. Fullilove '00		X				X	X									Homes, community	X		X					X		Pilot, family program	
10. Hobfoll '02		X					X	55				42	3	21.4 2	16-29	Hospital-based clinic free-standing clinic			X								
11. Jaworski '01		X					X					76		20		University			X								
12. Jenkins '00		X				X								23	18-43	Clinic			X	X						military	
13. Kalichman '01				X		X	X	74				22	4	40.1					X								
15. Krauss '00		X					X	38.4		45.2		16.4		36.7	21-52	Storefront								X		Female partner s of IDUs	
16. Markham '00					X	X	X	35.3	2	42.9		17.3	2.4	16.3		Schools	X			X					X	HIV positive speakers	
17. NIMH '01		X				X	X	68		20						Clinics			X								

Citation	Target					Gender		Race/Ethnicity %						Age (Yrs)		Setting	Intervention										Comments
	DU	HA	M S M	P P	Y	M	F	AA	API	L	AI	W	O	Avg.	Range		C L I	C T R	G L I	I L I	N E P	P N	P C M	O R	PI		
18. Richie ‘01		X					X	69		26		6		34		Correctional facilities, communities	X			X			X			Pilot	
19. Rotheram-Borus ‘01				X	X	X	X	27		37		19	17	20.7	13-24				X							2 modules	
20. Sears ‘01	X					X	X					80		20.9		Parks					X						
21. Siegel ‘01					X	X	X	50		16		20	14	13 MS/ 17.1 HS		Schools				X							
22. St. Lawrence ‘02	X				X	X	X	22		1	2	75		16	15-19	Drug treatment facilities			X								
23. Van Devanter ‘02		X					X	47.1 NY/ 94.6 B/ 31.7 S		49.7 NY/ 2.2 S		.7 NY/ 4.7 B/ 46 S	2.6 NY/ .7 B/ 20.1 S	18.6 NY/ 34.8 B/ 32.7 S		Community			X							3 cities: NY, Balt, Seattle	

Section Two: Summaries of Prevention Interventions

This section contains narrative summaries of the articles and comments regarding their scientific rigor and the relevant outcomes according to knowledge, attitudes, beliefs, and behaviors. All but three of the articles listed have met methodological criteria: They either have utilized random assignment of participants to intervention and control/comparison groups with post-intervention data, **OR** they have used non-random assignment of Participants, **BUT** with adjustment for assignment bias with the collection of pre-and post-intervention data. The articles listed have demonstrated either mostly positive, or at least mixed findings indicating some effectiveness of their interventions.

The findings are listed according to four dimensions: Knowledge, Attitudes, Beliefs, and Behaviors. The rationale for listing the results in this way is to conform with the demands of future evaluations which will require change in one of these areas in order to document valid outcomes.

Group-Level Interventions

1. Title: *Prevention of Sexually Transmitted Diseases and HIV in Young Military Men: Evaluation of a Cognitive-Behavioral Skills-Building Intervention.*

Authors: Boyer CB, Shafer MB, Shaffer RA, Brodine SK, Ito SI, Yniguez DL, Benas DM, Schachter J.

Published: *Sexually Transmitted Diseases*, 28(6), 349-55, 2001.

Type of Intervention: Group Level Intervention.

Target Population: Young Navy men on active duty.

Intervention Goals: To increase HIV-related knowledge, reduce of STD/HIV-related risk factors and build effective decision-making and communication skills.

Intervention Site: Five ships deployed to the western Pacific.

Description of Intervention: This study was conducted from January to June 1994. It was based on the information, motivation, and behavioral skills model. The intervention consisted of four two-hour sessions with 20-25 men per group, facilitated by Navy corpsmen, followed by a two-hour booster session. Participants were assessed during the first week, using a self-report questionnaire, and urine and blood screening for STDs. Post-test questionnaires and screening were conducted six months later before arrival at home port, at the end of deployment. The members of the largest ship were assigned to the experimental condition, and the members of three support ships were assigned to the control. No other information on nature of the intervention was provided.

Comparison Condition: The comparison condition consisted of a single eight-hour CPR session. There was a mid-deployment booster of unknown length.

Population Characteristics: Not provided.

Findings were as follows:

Positive findings:

Knowledge--There was an increase of knowledge of STD/HIV transmission,

Behavior--There was a decrease in use of alcohol, and in number of partners. There was an increase in use of condoms. There was adherence to STD treatment, if an STD was discovered at the preliminary exam, but it was difficult to tell whether this was attributable to the intervention.

No difference or negative findings:

Attitude--There was an increase in negative attitudes about using condoms following the intervention.

Beliefs--There was a decrease in perceptions of self-efficacy for using condoms.

2. Title: *Sexual behavior change among human-immunodeficiency virus-infected adolescents with hemophilia.*

Authors: Brown LK, Schultz JR, Parsons JT, Butler RB, Forsberg AD, Kocik SM, King G, Manco-Johnson M, Aledort L.

Published: *Pediatrics*, 2000, 106(2) E22.

Type of Intervention: Group and Individual level.

Target Population: HIV-infected youth with a dual diagnosis of hemophilia, between the ages of 12-24.

Intervention Goals: To increase safer sexual behaviors, condom use, non-penetrative sexual behaviors, or abstinence.

Intervention Site: Site was not listed.

Description of Intervention: The study evaluated an intervention based on the Theory of Reasoned Action and the Trans-theoretical model. Four interventions were delivered over a one-year period that emphasized communication skills, assertiveness, decision-making, and problem-solving around barriers to safer sex. Activities in each intervention were tailored to the participants' stage of change. The first intervention was an individual session, developing individual goals for safer sex. The second intervention occurred in a group setting with a social activity to establish a peer support network, including exercises to enhance self-efficacy. The third intervention was a weekend retreat incorporating activities to promote self-efficacy, communication, decision-making, skills building, and problem solving. The last intervention was another individual session to develop a plan for future behavior change, in order to prevent relapse. No other information on the interventions was given.

Comparison Condition: There was no comparison condition. The study used retrospective data analysis to distinguish factors between the successful outcome group, and unsuccessful outcome group. Successful was defined as maintaining safer behaviors, or progressing towards maintenance or action to adopt safer behaviors during the course of the study. There were 88 participants considered in the successful group by the conclusion of the study. Unsuccessful was considered either failure to progress to the action stage or relapsing from maintenance. There were 23 participants in the unsuccessful group.

Population Characteristics: N=111. Mean age was 18.5 years. The sample was 74% white, 51% suburban, 98% unmarried. 59% reported previous intercourse, 45% sexually active within past 6 months, 63% had used condoms at last intercourse, 64% had experienced non-penetrative sexual behaviors, and 30% reported having AIDS.

General Findings: The successful group was more likely than the unsuccessful group to report increased self-efficacy, more peer support, and less emotional distress over the course of the study. The successful group was more likely than the unsuccessful group to have attended the peer discussion session/social activity. The successful group was more likely than the unsuccessful group to perceive most friends as supportive of non-penetrative sexual activities or abstinence.

Findings were as follows:

Positive findings:

Beliefs--Increased self-efficacy for condom use and outercourse, and increased perceived peer norms for outercourse and abstinence.

3. Title: *Using Information, Motivational Enhancement, and Skills Training to Reduce the Risk of HIV Infection for Low-Income Urban Women: A Second Randomized Clinical Trial.*

Authors: Carey MP, Braaten LS, Maisto SA, Gleason JR, Forsyth AD, Durant LE, Jaworski BC.

Published: *Health Psychology*, 19(1) 3-11, 2000.

Type of Intervention: Group level intervention.

Target Population: Low-income urban women, 16-45 years of age, no births in past six months and not pregnant, with at least one of the following risk factors: lifetime history of injection drug use, STD, sex trading, multiple partners in the past year, and perception that a partner has not been monogamous or has used injection drugs.

Intervention Goal: To increase knowledge and risk awareness, and strengthen intentions to adopt safer sexual practices.

Intervention Site: A community-based organization serving communities of color in Syracuse, NY.

Description of Study: The study assessed an intervention based on the health belief, and information-motivation behavioral skills models. The intervention group attended four 90-minute sessions. During the first two sessions, participants were given personalized feedback concerning their HIV knowledge, risk perceptions, and sexual behavior. They viewed a motivational videotape of an HIV infected woman from the community, and participated in decisional balance exercises concerning the pros and cons of risky and safe sex. They discussed the risk of HIV compared to other health, social, and relationship concerns. The last sessions focused on the development of personalized action plans, education, and skills training. This design was taken from an earlier study. Participants were given an incentive of refreshments and \$10 for each session. Pre-test assessment, post-test, and follow-up assessments were conducted at three and 12 weeks after baseline. Participants were paid \$15 for each assessment.

Comparison Condition: The comparison condition was a Health Promotion group. The comparison group was also a four-session intervention of 90 minutes each, however, the focus was on stress, anger, nutrition, and breast health. The first session addressed the stressors facing the participants and identified their responses to stress and provided information on the relationship between stress and health based on the transactional model of stress. The second session focused on the components and function of anger, and discussed anger management strategies and obstacles to expressing anger. The third session focused on nutrition and the strategies for healthy eating on a limited budget, as well as the relationship between nutrition and health. The fourth session focused on breast cancer, prevalence rates, risk factors, and screening methods. Participants were

instructed in appropriate procedures for doing a breast self-exam, and the benefits and disadvantages to doing them regularly. The facilitators reviewed the sessions and affirmed progress towards these health goals.

Population Characteristics: N=102. Average age was 29.4 years, 88% were African American, 6% European American, 6% Other. 93% reported a family income less than \$12,000 per year, 77% had children. The average education level was 11.6 years, 53% had a high school degree. 82% had a non-monogamous partner, 62% had more than one partner, 32% had engaged in sex trading, 24% had contracted an STD, 23% had been with a bisexual partner, 5% had a partner who injected drugs, 1% had engaged in needle-sharing. All participants were heterosexual, 70% had been tested for HIV, 64% knew someone infected with HIV.

Findings were as follows:

Positive findings:

Knowledge--Knowledge of HIV risk and transmission increased in the intervention condition compared to the control.

Attitudes--The intentions of both groups to reduce sexual risk behaviors increased (e.g. the likelihood of using condoms or reducing the number of sexual partners), however, this remained higher only in the intervention condition at follow-up.

No difference or negative findings:

Beliefs--Perceived risk was not significantly increased in either the intervention or the comparison group.

4. Title: *Ourselves, Our Bodies, Our Realities: An HIV Prevention Intervention for Women With Severe Mental Illness.*

Authors: Collins PY, Geller PA, Miller S, Toro P, Susser ES.

Published: *Journal of Urban Health* 78(1), 162-175, 2001.

Type of Intervention: Group Level Intervention.

Target Population: Women with severe mental illness.

Intervention Goal: To assist women with severe mental illness in negotiating safer sex with partners and educating women about female-initiated methods, focusing mostly on female condoms.

Intervention Site: A psychiatric hospital located north of New York City.

Description of Intervention: The intervention tested was based on social cognitive theory and focused on self-efficacy and skills training. Utilizing a ten-session curriculum, the intervention was implemented over the course of five days, and included two 50-minute sessions each day separated by a snack period. Session 1 used self-tests, visualization, and role-playing to assess personal and partner risk for HIV and to develop ease in sexual discussion. Session 2 reviewed female sexual anatomy using a female pelvic model and illustrations, and linked female anatomy to roles in sexual intercourse. Session 3 participants learned the consequences of infections and how these are linked to different sexual acts, using note cards that rank behavior from highest to lowest risk. Session 4 reviewed messages concerning male condom use and the pros and cons of these messages, and reviewed different methods of contraception and their level of protection against STDs and HIV, along with instructions on how to make dental dams, using role-playing activities. Issues with condom discomfort were also discussed. Session 5 discussed female-initiated methods, and participants established criteria for what these methods should accomplish and look like. They were also introduced to nonoxdyol-9. The participants were encouraged to start familiarizing themselves with condoms and microbicides. Session 6 discussed the female condom. Session 7 used pelvic models to practice insertion of the female condom. Session 8 reviewed use of the male condom and encouraged practice using male penile models after demonstration of proper techniques by a facilitator. Session 9 discussed advantages of female-initiated methods and problems that may arise. Session 10 reinforced protection messages and concluded with a graduation ceremony. It was conducted using a talk show format in which the facilitators play the roles of a talk show host “Daphne Darling” and the panel expert “Professor Private Parts”. The participants could assume the roles of their favorite celebrities in panel discussions about safe sex, or participating audience members. In each session the women rehearsed and role-played teaching their friends or daughters using male or female models. Assessments were conducted at baseline, post-intervention, and six months post-intervention. Data collected included demographics by self-report,

determinants of sexual risk behavior using the Subjective Norms of Woman-Controlled Methods scale, and sexual behavior in the past three months using the Sexual Risk Behavior Assessment Schedule.

Comparison Condition: The comparison condition consisted of a day of two one-hour sessions. The material was an educational presentation on HIV risk-reduction. Prevention of STDs, and HIV were discussed, along with contraceptive options, and female-initiated HIV prevention methods.

Population Characteristics: N=13 experimental, N=12 control. Average age was 43.8, 51% were European American, 31% were African American, 11% were Hispanic, and 6% were Other. Forty percent were married. Sixty-three percent had at least one child. Fifty-seven percent had a high school diploma or higher. Eighty-three percent were unemployed, 40% had been homeless at some time, 31.4% had been jailed at least once, 83% had been admitted for psychiatric care at least once prior to this occasion, and 20% had a history of drug treatment.

Findings were as follows:

Positive findings:

Attitudes--There was an increase in positive attitudes toward the female condom in the experimental group compared to the control group. At the six-week follow-up the treatment group increased in positive attitudes, norms, self-efficacy, and behavioral intentions towards the use of the female condom and the male condom.

5. Title: *The Long-Term Effectiveness of an HIV Prevention Intervention for Low-Income African American Women.*

Authors: Dancy BL, Marcantonio R, Norr K.

Published: *AIDS Education and Prevention*, 12(2) 113-125, 2000.

Type of Intervention: Group level intervention.

Target Population: Low-income inner-city African American women, 20-44, living in one of two study communities, annual income less than \$20,000.

Intervention Goal: To increase risk reduction skills and self-efficacy concerning condom use.

Intervention Site: Illinois, exact locations were not given.

Description of Intervention: The intervention was conducted in groups of 15-20 women each. Assessment was done prior to the intervention and at three, six, and nine months. Participants received a ten dollar incentive for each session which they attended. After each assessment, a booster session was given, and incentives of \$15, \$25, and \$35 were given for each. Six sessions were given weekly that were based on behavioral change models (social cognitive theory, theory of reasoned action, and health belief model). Each session and booster lasted 90 minutes. In session 1, social norms governing relationships and sexuality were discussed. In session 2, STDs and HIV prevention and transmission were discussed. In session 3, women practiced the use of male and female condoms and discussed their attitudes towards condoms. In session 4, women were taken through the steps of decision-making by watching videotapes of women similar to themselves. In session 5, women role-played situations involving decision-making about condoms. Participants received feedback and discussed social and interpersonal factors influencing their decisions. In session 6, the women developed plans to support the maintenance of risk reduction skills and self-efficacy. The booster sessions strengthened these skills and knowledge, using discussion and role-playing.

Comparison Condition: The comparison condition, called the Health Maintenance Group involved six sessions that focused on nutrition, breast cancer, hypertension, and diabetes. The first two sessions gave information on nutrition. The participants practiced reading food labels, and developing healthy menus. In the third and fourth sessions, women watched videotapes on breast self-examination and mammography, and practiced breast self-exams on a breast model and through their clothes. In the fourth and fifth sessions, the women discussed hypertension and diabetes. The sixth session was not mentioned. The booster sessions reinforced the curriculum of the previous six sessions, using paper and pencil exercises and group discussion.

Population Characteristics: N=280, 147 in the intervention condition, 133 in the health maintenance condition. Average age in the treatment community was 31 years, in the control community average age was 33 years. Seventy-eight percent of women in the treatment community had never been married and 80% in the control community. Ninety-four percent of the women in the treatment community were parents and 89% in the control community. In both communities, women had an average of three children. In both communities 60% of women had not completed high school. Seventy-one percent of women in the treatment community, and 69% in the control community were unemployed. Seventy-four percent in the treatment and 54% in the control communities were receiving public HIV aid. Eighty-six percent of women in both communities had a monthly income less than \$700.

Findings were as follows:

Positive findings:

Knowledge--Knowledge concerning the proper use of condoms increased and was sustained by the final assessment, compared to the control.

Beliefs--Self-efficacy increased and was sustained at the level of the three month assessment compared to controls.

Behaviors--The use of protective sexual behaviors, such as condom use, increased compared to controls. Community involvement in HIV prevention increased compared to controls.

No difference or negative findings:

Beliefs--Perceived HIV vulnerability remained low in both groups.

Behaviors--Level of sexual activity remained unaffected in both groups.

6. Title: *Information-Motivation-Behavioral Skills Model-Based HIV Risk Behavior Change Intervention for Inner-City High School Youth.*

Authors: Fisher JD, Fisher WA, Bryan AD, Misovich SJ.

Published: *Health Psychology*, 2002 March, 21 (2) 177-86.

Type of Intervention: Group-level intervention.

Target Population: Inner-City High School Youth.

Intervention Goal: To increase risk prevention activities, and decrease risk activities among inner city youth.

Intervention Sites: Four inner-city high schools in Connecticut.

Description of Intervention: The intervention was based on the information-motivation-behavioral model. Intervention conditions were varied by location in four different schools. One school utilized a classroom only intervention. The second school utilized the peer educator or opinion leader only intervention. The third school utilized a combination of classroom and peer educator intervention, and the fourth school acted as a control utilizing only standard-of-care AIDS education in a week of health classes during 'AIDS week.' The classroom intervention consisted of five classes delivered by the regular high school teachers over the course of a week. The first class covered factual information about HIV, including the use a video and flashcards to reinforce the information on the video. The second class aimed to increase student's motivations and attitudes towards HIV risk. Another video was shown highlighting a group of attractive HIV-infected young people. The students on the video encouraged the watchers to change their attitudes towards HIV risk. After the video, students discussed attitudes and social norms. The third class featured another video with the same HIV-infected young people, but highlighted acted-out scenarios in which the young people encountered and overcame HIV prevention obstacles in social situations. The video was followed by discussion and group activities concerning barriers to prevention and how to overcome them. The fourth class was designed to develop behavioral skills for HIV risk prevention. Students viewed a video of ethnically-diverse young people successfully enacting preventive behaviors including abstinence; purchasing, maintaining and using condoms. After the video, the condom demonstration was repeated by the teacher, with students practicing on their fingers. Abstinence was also discussed. There was a role-playing exercise designed to practice decision-making skills and condom use. In the last class, students reviewed effective safer sex communication and participated in group role-plays. Responses were critiqued and modified. The peer education intervention was also based on the Information-Motivation-Behavioral model. Peer opinion leaders engaged in HIV prevention contacts with five same-sex friends over a three-week period. The peer opinion leaders taught HIV prevention information, addressed normative support for

abstinence and condom use, and taught behavioral skills. The opinion leaders wore t-shirts with stoplight logos to depict behaviors that differed in terms of their likelihood of HIV transmission. They used the t-shirts to help explain to peers the different levels of risk behaviors. Each student contact was given a dog-tag necklace or key-chain with the stoplight. After the initial contact, the students were approached by opinion leaders for booster sessions. The combined intervention featured both classroom curricula and peer opinion leader driven curricula.

Comparison Condition: The control condition consisted of the standard-of-care HIV/AIDS curriculum during 'AIDS Week', during which health classes for the week focused on HIV and prevention information.

Population Characteristics: N=1577, 37% male and 63% female. The age range was 13 to 19 years, with a mean of 14.8 years. Ninety-two percent of participants were in the ninth grade. Of participants: 61% were African American, 28% were Hispanic American, 11% were Caucasian, mixed, or other. Fifty-four percent of participants were living with mother only, 32% with both parents, and 14% with a combination of parents and step-parents. Forty-nine percent of participants had sexual intercourse at least once during the course of the study. Of the 464 sexually experienced participants, 42% reported always using condoms, 35% sometimes used them, and 23% never. In addition, 17% of participants among the experienced girls reported having been pregnant. Eight percent of boys reported having impregnated a girl. Four percent reported having had a sexually transmitted disease.

Findings were as follows:

Positive findings:

Knowledge--Knowledge about HIV transmission and prevention increased among participants in the classroom, combined and peer interventions.

Attitudes--HIV prevention attitudes (e.g. condom use norms) improved and HIV prevention intentions marginally improved with the classroom intervention for sexually inexperienced participants. HIV prevention attitudes marginally improved in the peer-based intervention compared to the control. There were improvements in attitudes, norms and HIV prevention intentions in the combined intervention for inexperienced participants.

Behaviors--For sexually inexperienced participants, negotiation and decision making skills improved marginally in the classroom intervention, and improved dramatically in the combined intervention. The combined intervention showed improvements in behavioral skills for experienced participants in addition to inexperienced participants. There were increases in condom use at three months in the combined intervention and in the peer intervention compared to the control. *At the one year follow-up there were increases in condom use in the classroom intervention that were not sustained in the peer or combined interventions.*

7. Title: *Long-term effectiveness of a peer-based intervention to promote condom and contraceptive use among HIV-positive and at-risk women.*

Authors: Fogarty LA, Heilig CM, Armstrong K, Cabral R, Galavotti C, Gielen AC, Green BM.

Published: *Public Health Reports*, 116 Suppl 1, 103-19, 2001.

Type of Intervention: Group and Individual level interventions.

Target Population: Population 1: HIV infected women between years 18-44, not currently pregnant, and deemed by medical providers to be healthy enough to participate. Population 2: High risk women, who met the following criteria: not pregnant, between the ages of 15-44, currently accessing services at participating drug treatment facilities, homeless shelters, or public housing developments.

Intervention Goal: To increase consistent condom use, contraceptive use, self-efficacy, and the perceived advantages to these behaviors, as well as to reduce relapse into risk behaviors. To reduce disadvantages in maintaining low risk behaviors.

Intervention Sites: 1: The intervention focusing on women infected with HIV was based in Baltimore Maryland, and recruited women at a hospital-based outpatient HIV clinic, a hospital-based pediatric HIV clinic, and a community-based primary HIV care facility. 2: High risk women were recruited from three homeless shelters, two housing developments, and five drug treatment programs in Philadelphia, Pennsylvania.

Description of Intervention: The interventions were based on the transtheoretical model. Target population 1: For the intervention with HIV infected women, 158 women were randomly assigned to a standard Title X health maintenance group, and 164 were randomly assigned to the enhanced group. One hundred and ninety-nine (60% standard, 63% enhanced) women returned for a 6-month follow-up, 195 (58% standard, 63% enhanced) returned for a 12-month follow-up, and 242 (79% standard, 72% enhanced) returned for an 18-month follow-up. Enhanced services provided both comprehensive reproductive health services and peer advocate services. Peer advocates worked with women in groups and individually, including “warm-up” encounters, rapport-building sessions, stage of change (SOC) encounters in which women were counseled on target behaviors, or non-SOC encounters in which other urgent needs for the participants were addressed. Stage of change encounters involved determining appropriate target behaviors and client stage of change, appropriate intervention activities and implementation of activities. In addition, weekly drop-in support groups were held. Groups provided information and support, addressed barriers to condom use and strategies for overcoming barriers, skills-building using role-play and negotiation of condom use. Assessments were done at baseline, six months, 12 months, and 18 months. Data gathered included: demographic and risk data, behavioral outcomes (stages of change, self-efficacy,

perceived advantages, and perceived disadvantages). Participants were paid \$20 or given coupons for manicures for each interview. Target population 2: In the intervention among women at increased risk, 566 women were offered standard group services; 723 women were offered enhanced services. There were a total of 949 out of 1,222 (70% in the standard intervention, 76% in the enhanced intervention) women who completed a six-month assessment, 73% of 1,222 (70% standard, 76% enhanced) who completed the 12-month assessment, and 76% of 1,222 (73% standard, 77% enhanced) who completed the 18-month assessment. There were no limits on the number of sessions a participant could engage in.

Comparison Condition: Title X comprehensive reproductive health services. This included visits to a health care professional for routine check-ups, treatment of acute problems, screening and treatment of STDs, supplies, and reproductive health education including counseling for contraception and other methods of protection. The messages were presented didactically.

Population Characteristics: HIV infected group: N=242. At-Risk group: N=980. More women in HIV infected group were African-American, had a history of injecting drug use, had only one sexual partner, or had partner who was HIV infected.

Findings were as follows:

Positive findings:

Attitudes--Among HIV infected women, the participants in the enhanced group were more likely to perceive advantages of condom use with a main partner compared to the control group. Among HIV infected women, participants from the enhanced group showed more positive change in the perceived advantages of contraceptive use.

Beliefs--Among HIV infected women, participants from the enhanced group had greater increases in self-efficacy than in the standard group.

Behaviors--Among HIV infected participants, those in the enhanced group were 2.8 times more likely to increase condom use and other harm reduction behaviors and less than half as likely to relapse in their use of condoms with a main partner. Most were already in the maintenance stage of change. For HIV infected women, participants were more likely to show progress along the stages of change and less likely to relapse in their contraceptive use than women in the standard health maintenance group.

No difference or negative findings:

Attitudes--Among at risk women, no differences were found between the enhanced and standard groups in terms of progress through the stages of change or relapse back to an earlier stage.

Beliefs--The enhanced group was less likely to perceive advantages to contraceptive use and displayed less self-efficacy than the health maintenance group.

Behaviors--No differences were found between the two groups in condom use with non-main partners.

8. Title: *Effects and Generalizability of Communally-Oriented HIV-AIDS Prevention Versus General Health Promotion Groups for Single, Inner-City Women in Urban Clinics.*

Authors: Hobfoll SE, Jackson AP, Lavin J, Johnson RJ, Schroder KE.

Published: *Journal of Consultation and Clinical Psychology*, 2002 August, 70 (4), 950-960.

Type of Intervention: Group Level Intervention.

Intervention Site: One hospital-based clinic, one free-standing clinic.

Target Population: Inner-city women.

Intervention Goal: To increase negotiation skills among single, inner city women. To decrease risky sexual behavior and the rate of sexually transmitted disease among single inner-city women.

Description of Intervention: The program being assessed was based on the Social Learning Theory with particular emphasis on the womens' sense of communal effectance (efficacy stemming from membership in family and community). The skills-building portion of the intervention focused on negotiation rather than assertiveness skills alone, so that the women could affect a compromise between their own and their partners' needs. The measures used to assess effectiveness included self-reported sexual behavior, audio-taped ratings of role-plays, 'condom credit-cards' cashed at pharmacies, and results of STD tests by clinic physicians. The role plays featured negotiation skills. Ratings of the audio-taped role plays were conducted at a six-month post-intervention follow-up. Women were interviewed two weeks before the beginning of the intervention, two weeks post-intervention, and six months post-intervention. Participants were given monetary incentives after completing pre-test, post-test, and six-month follow-up activities. There were six small group sessions of three to six women. The main theme of the intervention groups was the formation of a workable health action plan. Role-play, cognitive rehearsal, guided fantasy, discussion and videotapes were used. The videotapes were used for cognitive rehearsal and role-play. The final two sessions were open-ended and gave women an opportunity to voice their concerns in their own format or words. The groups also focused on honing the womens' negotiation and problem solving skills. The aspects of negotiation that were highlighted included deciding on a personal behavioral goal, explaining the reason for the goal to their partners, anticipating the partners' responses and how they themselves would react, being firm but not aggressive in sticking to their goals, making attempts to understand their partners' needs, expressing concern for those needs, and looking for a compromise that accommodated both their own needs and their partner's. The HIV prevention group focused on HIV and safer sex. There were two guided fantasies about expected future life. One scenario concerned the outcome if safer

sex practices were followed and the other concerned outcomes if they were not followed and infection occurred. The general health group received information regarding safer sex, general health and problems associated with smoking, alcohol, and drug use. These sessions paralleled the six HIV-oriented sessions in the other group with less emphasis on HIV. Both featured the acquisition of listening and negotiation skills, and skills to resist social pressure. The standard care control group received didactic information on HIV and safer sex that was provided by the hospital.

Comparison Condition: The control condition received the standard HIV prevention offered by the hospital. This consisted of didactic information on HIV and STDs and brochures containing HIV-related information. Similar to the intervention conditions, participants were given a pre-test, and post-tests at two weeks, and six months after the intervention conclusion, and examined for STDs. They were also given condom credit cards and incentives for participating. After the conclusion of the study they were offered a brief behavioral interactive intervention similar to the experimental intervention.

Population Characteristics: N=935. HIV Prevention group: n=361, General Health Promotion group: n=368, Standard Control group: n=206. Mean age was 21.42 years. Approximately 42% of the participants were employed, 77% had incomes below \$10,000. Two-thirds had high school diplomas. Fifty-five percent were African American, and forty-two percent were European Americans. The remaining three percent of participants were Hispanic, Asian or Other. Follow-up data was available for 714 women.

Findings were as follows:

Positive findings:

Knowledge--Participants in the HIV prevention group demonstrated greater HIV risk knowledge than the health promotion or control groups. Participants in the HIV prevention and health promotion groups increased in communication and negotiation skills compared to the standard care group.

Behaviors--Participants in the general health promotion group reported more safer sex behaviors than that standard of care controls. Participants in the HIV prevention and health promotion groups reported greater condom usage than the standard care group. Participants in the HIV prevention group obtained a greater number of condoms using the condom credit card compared to either the health promotion or the standard care groups. Participants in the HIV prevention group had a marginally lower frequency of STDs than the other two groups. However, these frequencies should be interpreted with caution since there was a low point prevalence of STDs among all groups.

No difference or negative findings:

Knowledge--There were no differences in level of prevention knowledge between the HIV prevention group and the health promotion group. There were no differences in communication and negotiation skills between the HIV and health promotion groups.

Behaviors--There was no difference in self-reported safer sex behaviors between the health promotion group and the HIV prevention group. There was no difference between the HIV prevention and health promotion groups in reported condom usage.

9. Title: *Effects of a Brief Theory-based STD-Prevention Program for Female College Students.*

Authors: Jaworski BC, Carey MP.

Published: *Journal of Adolescent Health*, 2001 Dec, 29(6), 417-25.

Type of Intervention: Group level intervention.

Intervention Site: College setting in an unspecified geographic location.

Target Population: Sexually active female college students ages 18 and older, unmarried, who were not pregnant, and have not used condoms consistently in the past two months.

Intervention Goal: To increase safe sex practices among female college students.

Description of Intervention: The intervention was based on the Information-Motivation-Behavior approach. The first intervention session covered a ten minute introduction. The next 30 minutes were dedicated to eliciting self-motivational statements from participants and names and manifestations of STDs. Facilitators corrected misconceptions and provided accurate information, including statistics of STDs among college women and those among the group who reported having an STD or history of one, or acquaintance with someone who had an STD. Participants were given a personalized feedback form based on their pre-intervention interview, including condom use, number of sexual partners, and STD history. The third segment of 20 minutes elicited risk-reduction strategies from participants, three strategies each, and evaluate the pros and cons of each. The facilitators elicited barriers to safer sex from the participants and helped them to identify strategies to overcome the barriers. The fourth segment of 45 minutes consisted of exercises to improve communication skills. The facilitators modeled angry and assertive approaches to making sexual requests and compared the effectiveness of each approach. The facilitators engaged in a scenario in which one facilitator refused unsafe sex, and the other requested safer sex, and the third pressured one of the role-players for unsafe sex. The points of the scenario were reviewed with participants. Participants were given their own scenarios to enact, and demonstrated them to the group. Participants were then asked to identify assertive strategies used and think of other risk-reduction alternatives. The final phase of 15 minutes consisted of the formation of action plans by participants. Assessments were conducted at baseline, immediately post-intervention, and two months post-intervention. Incentives for participation included either partial fulfillment of course requirements or extra credit in undergraduate psychology classes.

Comparison Condition: One comparison condition consisted of an information-only (INFO) group. The INFO group involved a 150 minute session that provided information on STDs, consequences, prevention and treatment, in an interactive format. Personalized

threat of STDs was avoided. A third group was used as a control and involved women who were on a waiting list.

Population Characteristics: N=78. Mean age was 20 years. Approximately 76% of participants were European American. Forty-eight percent reported three or more lifetime partners. Sixty-five persons reported unprotected vaginal sex in the previous two months.

Findings were as follows:

Positive findings:

Knowledge--Both the Information-Motivation-Behavioral (IMB) group and the information only group improved their STD knowledge compared to the waitlist control, but did not differ from each other.

Behaviors--Participants in the IMB group decreased their number of sexual partners compared to both the information-only group and the wait-list control.

No difference or negative findings:

Attitudes--There were no differences between groups or improvement in attitudes toward condoms and intentions to use condoms.

Behaviors--There were no differences between groups or improvement in condom use.

10. Title: *Effectiveness of an Intervention to Reduce HIV Transmission Risks in HIV-Positive People.*

Authors: Kalichman SC, Rompa D, Cage M, DiFonzo K, Simpson D, Austin J, Luke W, Kyomugisha F, Benotsch E, Pinkerton S, Graham J.

Published: *American Journal of Preventive Medicine*, 21(2) 85-93, 2001.

Type of Study: Group Level Intervention, Prevention for Positives.

Target Population: HIV-positive men and women.

Intervention Goal: To develop coping skills for HIV-related stressors and sexual-risk-producing situations. To enhance effective decision-making skills for disclosure to partners. To facilitate the development and maintenance of safer sexual practices.

Intervention Site: AIDS services and infectious disease clinics in Atlanta, Georgia.

Description of Intervention: This intervention was based on Social Cognitive Theory. It emphasized the importance of behavioral skill building, self-efficacy for risk-reduction, intention to change risk behavior, and strategies for changing behavior. The intervention also focused on managing stress related to HIV infection and issues of disclosure and barriers to safer behavior. Authors hypothesized that behavioral risk-reduction intervention would reduce risky behavior more than the social support group. The intervention was conducted within separate same-gender groups, in five 120-minute sessions over a period of two and a half weeks. The participants were reimbursed \$10 for each session and \$35 for each assessment. Assessments were conducted at baseline, immediate post-intervention, three months post-intervention, and six months post-intervention. The first three sessions focused on self-efficacy for disclosure and dealing with barriers and adverse outcomes. Scenes edited from popular films were used as a means of identifying barriers, assessing partner reaction, and practicing active coping responses. The following two sessions emphasized sexual transmission risks in a relationship, using scenes edited from popular films to discuss strategies for maintaining satisfying safer-sex relationships, practicing risk-reduction and communication. The movie scenes were used to help participants problem-solve around triggers and barriers affecting safer sex practices. Participants had the opportunity to practice condom use on anatomical models. Participants were given a personalized feedback report from the facilitator based on information given in the baseline assessment. Finally, the participants developed personalized sexual health and relationship plans.

Comparison Condition: The control condition was a matched social support group for people living with HIV. Control sessions included information on HIV disease, management of health problems, medication adherence, healthcare and healthcare concerns, and nutrition. At the end, each participant developed a personalized health

maintenance plan. The intervention did not include a cognitive or behavioral skills component designed to change high-risk behaviors.

Population Characteristics: 230 HIV positive men and 98 HIV positive women. Average age of 40 years. Approximately 52% of the sample identified as gay, 9% as bisexual. Ethnic breakdown: 74% African-American, 22% White, 4% Other. Forty-eight percent of the sample had completed 12 or fewer years of education; and 56% had annual incomes less than \$10,000. Inclusion criteria consisted of living with HIV/AIDS and willingness to participate.

Findings were as follows:

Positive findings:

Attitudes--Risk-reduction participants reported stronger intentions to consider the pros and cons of disclosing HIV status to partners and practicing safer sex with partners who are unaware of their HIV status.

Beliefs--Risk-reduction participants reported greater self-efficacy for suggesting condom use to partners.

Behaviors--Risk-reduction participants more often refused unsafe sexual practices than the health maintenance group. There were lower rates of unprotected intercourse and total number of intercourse episodes among the risk-reduction group than among the control group. Risk-reduction participants were less likely than the comparison group to report non-HIV positive sexual partners.

11. Title: *Social-Cognitive Theory Mediators of Behavior Change in the National Institute of Mental Health Multisite HIV Prevention Trial.*

Authors: National Institute of Mental Health Multisite HIV Prevention Trial Group.

Published: *Health Psychology*, 20 (5), 369-376, 2001.

Type of Intervention: Group-level intervention.

Target Population: Low-income, high-risk men and women.

Intervention Goal: To reduce HIV risk behavior by influencing social-cognitive factors in a population of disadvantaged and at-risk men and women.

Intervention site: Waiting rooms in STD clinics and health service organizations serving low-income populations in inner-city neighborhoods in seven study sites. Study sites were located at 1) the Bronx and Harlem; 2) lower Manhattan, Brooklyn, and northern New Jersey; 3) Baltimore Maryland; 4) Atlanta Georgia; 5) Milwaukee Wisconsin; 6) Los Angeles California; and 7) Orange and San Bernardino Counties California. The study period was from January 1994-February 1996.

Description of Intervention: This intervention was based on social-cognitive theory and concepts of self-efficacy. The intervention focused on the development, practice, and personal application of risk-reduction strategies. The study hypothesis tested that seven factors would mediate intervention effectiveness, including: self-efficacy, hedonism, partner reaction, self-evaluative outcome expectancies, safer sex, condom use knowledge, and condom use skills. The intervention was conducted over 26 months in 37 clinics from seven intervention sites in cities across the US that serve lower-income populations. A preliminary interview was conducted to elicit information on demographic characteristics, sexual behavior, alcohol and other drug use, STD symptoms, and HIV testing. Participants were paid for interviews. Small group interventions were conducted consisting of four participants each. Participants were randomly-assigned to either the control condition, in which participants received a one-hour HIV education session by videotape followed by a question and answer period. The intervention was called Project LIGHT (Living in Good Health Together), and involved participants attending seven 90-120 minute small group sessions twice weekly. Information was provided on expected outcomes concerning condom use and nonuse with modeling, individualized practice, and goal setting with feedback. Skill-building activities were conducted for condom use, condom negotiation, and sexual self-control. Interviews were conducted at three, six, and 12 months following the interview.

Comparison Condition: Participants received a one-hour session including viewing an HIV education video-tape, and a question and answer period following the tape.

Population Characteristics: A total of 1,564 men and 862 women were recruited from STD clinics, and 1,280 women were recruited from health service organizations. Of these recruits, 3,706 participants completed the baseline interview and received at least one intervention session. Ethnic and racial breakdown: African American 68%, Hispanic 20%. Eligibility requirements: presence at recruitment settings, at least 20 years of age at STD clinics, 18 years of age at HSOs, report of having had unprotected sex within the previous 90 days; and one of the following: sex with one or more new partners, having more than one sex partner, having had an STD, having sex with someone who has had multiple partners, or having sex with someone known to inject drugs or to be HIV infected.

Findings were as follows:

Positive findings:

Beliefs--All seven social and cognitive factors: (i.e self-efficacy, hedonistic outcome expectancy, partner reaction outcome expectancy, self-approval outcome expectancy, condom mechanics, other sexual activities, (such as mutual masturbation), and condom use skills) were higher among participants in the intervention group than among those in the control group.

Behaviors--Participants of Project Light increased consistent condom use and abstinence compared to controls.

12. Title: *Efficacy of a preventive intervention for youths living with HIV.*

Authors: Rotheram-Borus MJ, Lee MB, Murphy DA, Futterman D, Duan N, Birnbaum JM, Lightfoot M; Teens Linked to Care Consortium.

Published: *American Journal of Public Health.* 2001 Mar; 91 (3): 400-5.

Type of Intervention: Group-level intervention, Prevention for Positives.

Target Population: HIV-infected youth.

Intervention Goal: For module 1, to develop coping skills in learning one's serostatus, disclosure, developing daily health routines and participating in health care decisions. For module 2, to reduce substance use and risk behaviors by identifying risk behavior triggers, and developing condom use and negotiation skills.

Intervention site: Adolescent clinical care sites: Los Angeles, New York, San Francisco, Miami.

Description of Intervention: This was a two-module intervention, based on the Social Action Model, focusing on improving affective states influencing self-regulation or coping, negotiation skills and self-efficacy. Module One, *Stay Healthy*, consisted of 12 sessions delivered over a period of three months in mixed-sex cohorts of 15 youths in each cohort. These were designed to increase positive health behaviors among HIV positive youth. There were 16 cohorts in the intervention condition and nine in the control. Participants completed a baseline interview before assignment to intervention groups. The youths were re-assessed for attitudes, and risk behaviors at Month Nine. The module was delivered by two facilitators, a male and a female. Participants received \$10 for attending the first session and \$2 for subsequent sessions. Sessions used a small-group format to develop coping skills for learning one's serostatus and disclosure. They were also used for developing personal health plans and participating in health care decisions. Health care indices used were an index of medical care contacts, number of medical appointments missed, and number of positive lifestyle changes. Health status behavior was assessed by three measures: T-cell count, physical health symptoms, and physical health distress or intensity of symptoms. Coping style was assessed based on positive actions, social support, spiritual hope, passive problem solving, self-destructive escape, depression, and problem avoidance. Module Two, *Act Safe*, consisted of 11 sessions delivered over a period of three months in mixed-sex cohorts. There were 14 intervention cohorts and five in the control. Youths were assessed at Month 15. The same incentives were used in Module Two as had been used in Module One. *Act Safe* focused on reducing substance use and risk behaviors by identifying risk behavior triggers and developing condom use and negotiation skills. Sexual risk, degree of substance use, and emotional distress were assessed. Assessments were computer-assisted. Participants were given \$20-25 at each of the two baseline assessments.

Comparison Condition: Standard care at clinic sites for the duration of the study, then the intervention at the conclusion of the study.

Population Characteristics: Module One: There were 257 youths at final follow up, 181 in the intervention condition, and 76 in the control. Module Two: There were 229 youths total, 180 in the intervention condition, 49 in the control condition. Among participants, 72% were male, of which 88% of the males were gay or bisexual. Participants ranged in age between 13 and 24 years. Approximately 64% of participants were ethnic minorities; 55% had graduated high school; 31% were currently enrolled in high school; and 84% employed.

Findings were as follows:

Positive findings:

Attitudes--The positive action coping was higher for females in the intervention group than in the control group. The social coping was higher among both sexes in the intervention group than in the control group.

Behaviors--Module One, Stay Healthy, there were more positive lifestyle changes among females in the intervention group than among the control or among intervention non-attendees. Module Two, Act Safe, there were fewer sexual partners, fewer HIV-negative sexual partners, and fewer unprotected sex acts reported among intervention attendees than among control attendees or intervention non-attendees. There was a greater reduction in substance use among the intervention group.

No difference or negative findings:

Attitudes--There was no difference between groups for emotional distress.

Behaviors--There was no difference between groups in disclosure of sero-status to partners. There was no difference between groups for number of drugs used.

13. Title: *Long-Term Effects of a Middle-School and High School-Based Human Immunodeficiency Virus Sexual Risk Prevention Intervention.*

Authors: Siegel DM, Aten MJ, Enaharo M.

Published: *Archives of Pediatric and Adolescent Medicine*, 2001 Oct, 155(10) 1117-26.

Type of Intervention: Individual level intervention.

Target Population: High school or middle-school students enrolled in health education classes, fluent in either English or Spanish.

Intervention Goal: To increase knowledge of STDs, HIV/AIDS, and safe sex.

Intervention Site: Ten urban schools in a mid-sized northeastern city. No other details listed.

Description of Intervention: The intervention was based on the Theory of Reasoned Action. The first part of the intervention was facilitated by an adult health educator; the second part was facilitated by a peer educator. The intervention consisted of 10-12 consecutive health class sessions, ten for high schools, and 12 for middle schools. There were two to three sessions per week for two to seven weeks. The classes were integrated into the regular class schedule. It included both abstinence messages and safer sex messages. The early sessions highlighted self-esteem and decision-making strategies, and later classes included in-depth discussions and skill-building activities on sexuality, sexually transmitted diseases, pregnancy and HIV/AIDS. There were games, role-plays, and take-home activities. Assessments were conducted at baseline, immediately at post-intervention, and at long-term follow-up averaging 42 weeks post-intervention.

Comparison Condition: The control group consisted of the regular health education curriculum.

Population Characteristics: N=450. Demographics were as follows: 50% were African American, 16% were Hispanic, 20% were White, 14% were Other, and 70% of the families of the children had incomes below poverty level.

Findings were as follows:

Positive findings:

Knowledge--There was a greater increase in knowledge of HIV risk among participants in the peer-led and faculty led intervention than among the control or the intervention led by adult facilitators.

Attitudes--There was a greater increase in intention to use condoms or reduce risk activities among participants of the peer-led or faculty-led interventions than among the control or facilitator-led intervention.

Beliefs--There was a greater increase in self-efficacy among participants of the peer-led or faculty-led interventions than among the control or facilitator-led intervention.

Behaviors--There was a reduction in risky sexual behavior, such as sex while using substances, among participants of the peer-led or faculty-led interventions than among the control or facilitator-led intervention. Effects were sustained over time.

14. Title: *Reducing STD and HIV Risk Behavior of Substance-Dependent Adolescents: A Randomized Controlled Trial.*

Authors: St. Lawrence JS, Crosby RA, Brasfield TL, O'Bannon III RE.

Published: *Journal of Consulting and Clinical Psychology*, 2002 Aug., 70 (4), 1010-21.

Type of Intervention: Group-level intervention.

Target Population: Substance-dependent adolescents.

Intervention Goal: To increase knowledge about HIV and risk prevention skills. To decrease high risk activities for HIV. To sustain the decreased risk behavior after a year post-intervention.

Intervention Site: Two residential drug treatment programs in Mississippi.

Description of Intervention: This intervention was based on the Information-Motivation-Behavioral (IMB) model. All of the intervention groups were in mixed cohorts of six to ten adolescents each. They met three times a week over a four week period, for a total of twelve 90-minute sessions for each group. The groups each had one male and one female facilitator. The participants were given t-shirts with the project logo. At the completion of the six month post-intervention assessment, they were given \$25, and at the completion of the 12 month-post-intervention assessment, they were given \$35. The first component consisted of Information Only (I Only). This involved the use of a standard health education curriculum, except that it was presented in a student-centered rather than didactic manner. Instruction included educational games and group discussions. The focus of attention was changed every 10-15 minutes to maintain the participants' engagement in the exercises. Two sessions focused on HIV and STD information using epidemiologic data for STDs and HIV, specific to the area. The second component was Information and Behavior (IB). This group was given the same information in the first two sessions as the Information Only group, but the remaining sessions involved another previous program called Becoming a Responsible Teen. It included specific training regarding condom use, partner negotiation, refusal of unwanted sexual advances, and information sharing with friends and community. Two sessions taught problem-solving skills and anger management. The last component used Information, Motivation, and Behavior (IMB). This group was similar to the Information and Behavior component, but added strategies designed to address personal perceptions of risk. One strategy was emotion-based. It was implemented by taking a photo of each participant at baseline. The photo was digitally altered to show the participant how they might look during end-stage AIDS at Session Ten. The facilitators stressed that the participants were learning everything they needed to avoid the outcome indicated in the altered photo. The participants discussed their emotional response to the photo and how it affected their willingness to engage in risky behaviors.

Comparison Condition: There was no true control condition. The conditions were divided into Information Only, Information and Behavior Only, and Information-Motivation-Behavior.

Population Characteristics: N=159, mean age was 16 years, and average school grade was 9.6. Demographics: 68% of the sample was male, 75% was Caucasian, 22% was African American, 1% was Hispanic, and 2% was Native American. Risk demographics were as follows: 97% reported sexual experience, the mean age of first consensual sex was 12.3 years, the mean age of lifetime sex partners was 20.1, 14% had been diagnosed with syphilis or gonorrhea during preadmission physical, 9% had shared needles or self-injected drugs before drug treatment, 88.3% reported alcohol use in the three months before admission, 86.6% marijuana, 31.6% crack cocaine, 42.1% PCP, 39.3% barbiturates, 43.7% amphetamines, 18.6% heroin, 27.9% sniffed inhalants, 14.3% reported sex with an IDU partner, 65.2% with multiple partners, 43.4% with partner they never saw again, 83% had sex while using substances, 23% reported coerced sex, 11.5% traded sex for money or money for sex, and 15.6% traded sex for drugs.

Findings were as follows:

Positive findings:

Knowledge--All three conditions increased the participants' HIV knowledge post-intervention. There was an increase in social competency skills for both the IMB and for the IB conditions compared to the I Only, but no difference between the two conditions. There was also an increase in anger management skills in both the IB and IMB conditions compared to the I Only, but no difference between the two.

Attitudes--The Information-Behavior and the IMB participants demonstrated more positive attitudes towards HIV prevention compared to the I Only participants. But the IB condition sustained the positive attitude to a greater degree compared to the IMB condition.

Beliefs--Participants in all three conditions increased in perceived risk, but the greatest increase was in the IMB condition.

Behaviors--There was a reduction in drug use for all drugs in all conditions, and these changes were sustained through the following year after drug treatment. In addition, participants had less contact with the youth court system, and spent fewer days in jail. There was a decrease in risky sexual behavior for IB and for IMB conditions compared to the I Only, a lower number of sexual partners, and a lower frequency of unprotected vaginal sex. However, the decrease was only sustained in the IMB condition after 12 months. There was an increase in condom-protected sex only in the IMB condition and this was sustained and increased after a 12-month follow up. All conditions demonstrated a substantial increase in return to abstinence, with the IB and the IMB conditions demonstrating the greatest increase. This increase was sustained to the highest degree in the IMB condition. Increased abstinence was not sustained among I Only participants.

15. Title: *Effect of an STD/HIV Behavioral Intervention on Women's Use of the Female Condom.*

Authors: Van Devanter N, Gonzales V, Merzel C, Parikh NS, Celantano D, Greenberg J.

Published: *American Journal of Public Health*, 2002 Jan, 92(1), 109-15.

Type of Intervention: Group level intervention.

Target Population: HIV-negative women, ages 17 years or older who had vaginal sex with a male partner in the past three months and one of the following risk factors: a history STD, three or more sex partners, IV drug use, or sex with a partner who had other sex partners, used injected drugs, or had sex with a prostitute.

Intervention Goal: To increase the use of the female condom among high-risk women.

Intervention Site: Site not listed, but recruitment occurred through community-based programs, family-planning picnics, STD clinics, advertising and waiting lists for other research studies in Baltimore, Seattle, and New York City.

Description of Study: The intervention took place in six weekly sessions. The first three sessions provided information on STDs and HIV and skills training on communication, goal setting and male condom use. Session 4 provided information on the female condom, a video demonstration on its use, and a discussion on its advantages. Participants were given female condoms following a demonstration on a pelvic model by the facilitator, and then practiced inserting a condom using the model. Participants were encouraged to practice using the female condom before using it with their partners. Interested women were provided with three condoms to take home to try for the week. In the remaining sessions, women could receive more condoms upon request. Assessments were conducted at baseline and three months post-intervention. Women were provided with \$10-20 to attend each intervention and control session. At the end of the follow-up interview, women gave a skills demonstration and were rated on various aspects of female condom use. At the baseline assessment, women in the control group were given printed instructions on male and female condom use.

Comparison Condition: A one hour session on healthy food choices demonstrated by a video, and printed instruction on male and female condom use.

Population Characteristics: N=442. Demographics varied slightly from site to site. Overall, the mean age was 28.5 years. Ethnic/racial background: African Americans 58.2%, Latina 18%, and White 16.4%. The Baltimore site was almost entirely African American. Almost three percent of the participants were currently married, 73.3% had never been married, less than half had dependent children, 77.8% were currently unemployed, except in Seattle, where the percentage was 60.7%. Thirty-seven percent of

the participants in New York had completed high school. Of the total sample, 56.1% of participants were in Baltimore, and 80.5% were in Seattle.

Findings were as follows:

Positive findings:

Knowledge--There was an increase in the ability and skill of women for using the female condom in the intervention group compared to the control group.

Attitudes--There was an increase in positive attitudes towards female condom use in the intervention group compared to the control.

Beliefs--More women in the intervention group stated that the female condom would be acceptable to their male partners than in the control group.

Behaviors--More women in the intervention group used the female condom with their sexual partners than in the control group.

Community-Level Interventions

1. Title: *Lowering HIV Risk Among Ethnic Minority Drug Users: Comparing Culturally Targeted Intervention to a Standard Intervention.*

Authors: Dushay RA, Singer M, Weeks MR, Rohena L, Gruber R.

Published: *American Journal of Drug and Alcohol Abuse*, 27(3) 501-524, 2001.

Type of Intervention: Community Level Intervention.

Target Population: Ethnic minority, out-of-treatment IDU and crack-cocaine users.

Intervention Goal: To reduce risk behaviors of active drug-users through a culturally informed intervention by making messages more accessible and by providing a broader sense of social support.

Intervention Site: Hartford, Connecticut.

Description of Intervention: Project COPE II (Community Outreach Prevention Effort II) was designed for minority out-of-treatment injection drug users and crack-cocaine users and based on a risk reduction model with gender and culture-appropriate components. There were two interventions and one standard of care control group included in the study. The first intervention was a standard NIDA intervention conducted at 23 sites. It consisted of two educational sessions. The first session lasted one hour and educated participants on routes of HIV transmission, benefits of HIV testing, protection techniques: (e.g. proper condom use, needle bleaching techniques), and encouraged participants to reduce drug use. This session was followed after two weeks by a 15-minute booster session. The second intervention was an enhancement to the standard of care for assigned participants. Participants were randomly assigned to either a program implemented by and for African Americans, or by and for Puerto Ricans. The participants were recruited through outreach in high drug use areas in targeted neighborhoods. The enhanced interventions used ethnic cultural elements in order to enhance self-efficacy and constructive group interactions within the interventions. The African-American intervention focused on bolstering self-esteem, analyzing participant experiences of poverty and drug use, and providing positive images of African-American culture. The Puerto Rican intervention focused on family consideration of HIV, and addressed traditional gender roles within the Puerto Rican community. The interventions consisted of three two-hour sessions over a period of a week. Both the standard intervention and the enhanced interventions presented core HIV education, prevention messages, and hygiene materials. All participants underwent a baseline interview, and a six-month follow-up interview. The baseline interview utilized the Risk Behavior Assessment instrument, and the follow-up utilized the Risk Behavior Follow-Up Assessment instrument to measure risk behaviors. The assessment instruments collected information such as demographics, drug use history, sexual behavior and condom use, and sources of income. Four-hundred

fifty-three participants received the enhanced intervention, 86 received only the standard intervention.

Comparison Condition: The control group received only the standard NIDA intervention, without the additional cultural component.

Population Characteristics: Ethnicity/Race: 333 Puerto Rican participants, 336 African American participants. White participants were excluded since there was no comparison group. Twenty-eight percent of the African-American sample were female, and 26.5% of the Puerto Rican sample were female. Average age for African-Americans was 38 years, 34 years for Puerto Ricans. Twenty percent of African-Americans and 6.5% of Puerto Ricans had some college; 29.4% of African-Americans and 32.4% of Puerto Ricans were homeless. Males among both African-Americans and Puerto Ricans were more likely to be IDUs than females. Inclusion criteria: 18 years of age or older, active IDU or crack-cocaine user based on self-report, verified by urine toxicology and/or track marks, and lack of drug treatment for at least 30 days.

Findings were as follows:

Positive findings:

Behaviors--Injection risk behaviors decreased in Puerto Rican and African American groups and more in African American females than in African American males. Sexual risk behaviors decreased in Puerto Rican and African American groups, and more in females than in males.

The results must be interpreted with caution due to small numbers, high variance within the groups, and lack of statistical significance.

2. Title: *The Family to Family program: a structural intervention with implications for the prevention of HIV/AIDS and other community epidemics.*

Authors: Fullilove RE, Green L, Fullilove MT.

Published: *AIDS* 14(Supp 1), S63-S67, 2000.

Type of Study: Community Level Intervention.

Target Population: Disadvantaged families in Harlem, New York.

Intervention Goal: To increase social capital available to families and children in communities of Harlem, to expand the social networks of families and children in this community, to function and sustain itself through volunteers.

Intervention Site: A community in Harlem, New York.

Description of Intervention: Family to Family is based on theories of social capital in which personal, interpersonal, and community resources can be used to enhance individual social development. The program began in 1996 and involved eight young families, four families from the Mormon Church, and four Harlem families. The families met as a group once a month, and agreed to conduct Family Home Evening. These evenings were conducted in their own homes, and involved an evening every week devoted to family, in which family members discuss family business, play games together and focus on children. If they are members of the Mormon Church, they pray. In addition to the monthly meetings, one Mormon and one Harlem family met to exchange information, the Mormon family about Family Home Evening, and the Harlem family about insights into inner-city life and culture in Harlem. The current program has families conducting Family Home Evening and attending monthly gatherings called Family Reunion Dinners. Forty-five to 50 people attend the dinners. In 1999, the program became purely volunteer-based without extramural support. Participants cook meals, plan monthly agendas, and run community meetings. The program is geared towards lowering HIV rates in the community, but not by discussing HIV. Instead, it is focused on reducing the risk factors associated with HIV by bolstering community and family resources. No other information was provided on the program.

Comparison Condition: None.

Population Characteristics: Not measured. Over 200 families through mid-1999.

Preliminary results were as follows:

Attitudes--Participants reported looking forward to spending time together.

Behaviors--Participating families reported more frequent and freer communication between family members. There were fewer expressions of hostility and anger among

family members than there had been before joining the program. Participants reported setting aside more family time with each other.

Comments: This study did not meet methodological criteria. It was a pilot project based on the idea of social capital. It was included in the report because the intervention targeted a vulnerable population using a method that may show evidence of success in the future. The goal of the program was to provide primary prevention by immersing young people and their families in an environment conducive to communication. Better communication and an atmosphere of support may provide an alternative to risky behavior. Data was gathered by conversation with various participating members.

3. Title: *Impact of HIV-positive speakers in a multi-component, school-based HIV/STD prevention program for inner-city adolescents.*

Authors: Markham C, Baumler E, Richesson R, Parcel G, Basen-Engquist K, Kok G, Wilkerson D.

Published: *AIDS Education and Prevention*, 12(5) 442-54, 2000.

Type of Study: Community Level Intervention, Youth (need to acquire original study by Coyle).

Target Population: Inner-city youth.

Intervention Goal: To reduce the number of students engaging in unprotected intercourse.

Intervention Site: Five high schools in southwest Texas and northern California from 1993-1995.

Description of Intervention: The intervention consisted of five components: 1) school organization, 2) staff and curriculum development, 3) peer resources and school environment, 4) parent education, and 5) school-community linkages. There was a 20-session curriculum for ninth and tenth grades, conducted in 1996. It dealt with attitudes, beliefs, social skills, knowledge, and peer norms. In some components of the program, HIV-positive speakers were included in curriculum teacher training, discussion panels, small group discussions, and classroom presentations. The speakers were recruited from local AIDS organizations. Eighteen speakers, ten males and eight females participated over the two-year program. The age of speakers ranged from 20 to over 50 years. One-hundred seventy-five tenth grade classes and 180 ninth grade classes heard an HIV-positive speaker as part of their curriculum from ten schools in Texas. In addition, 15 eleventh grade and 14 twelfth grade classes heard a speaker but without the rest of the intervention. A baseline survey of ninth graders was done in 1993. There was a 19-month follow up. Data were collected using self-report, student homework assignments, essays, focus groups and teacher curriculum debriefings. Six months after the program 274 ninth grade students in ten classes described in an essay the ways in which the program affected them. Focus groups were conducted with tenth, eleventh, and twelfth grade students in spring 1995, in order to assess student knowledge and impressions of program. Focus groups included 58 tenth grade students, and 103 eleventh and twelfth grade students. There were 22 teachers present at the curriculum debriefing in the spring of 1994. HIV risk perception was measured by factors concerning perceived risk of getting HIV in the next year and willingness to get tested for HIV if at risk. Items related to empathy for people with HIV concerned fear of hugging a classmate with HIV or AIDS or willingness to help a person with HIV or AIDS. Exposure to an HIV-positive

speaker was measured by an item asking if they had heard a presentation by an HIV-positive speaker that year.

Comparison Condition: The comparison condition did not hear an HIV-positive speaker as part of the intervention.

Population Characteristics: N=1,491. Average age was 16.3 years. Fifty-one percent of participants were in tenth grade, 37.7% in eleventh grade. Forty-seven percent of participants were male. Ethnicity/Race: Hispanic 42.9%, African-American 35.3%, Caucasian 17.3%, Asian 2%, Other 2.4%. Risk demographics: 43.4% reported having had sexual intercourse, 26.5% reported having had it within the last three months, 59.4% reported using a condom during last intercourse. Parental education was measured and the results were as follows: 45.5% of mothers had high school or less, 39.3% of fathers had high school or less.

Findings were as follows:

Positive findings:

Knowledge--There were 29% of students who reported learning new information about HIV including modes of transmission.

Attitudes--In the tenth grade essays, 46% of the students in the Safer Choices reported more empathy towards people with HIV. One third of students reported that they intended to take steps to prevent becoming infected by either abstaining until marriage, or by using condoms. Students in Safer Choices reported greater willingness to get tested during the next year than those in the comparison condition.

Beliefs--Students in Safer Choices reported greater perceived risk than those in the comparison condition.

No difference or negative findings:

Attitudes--In empathy measured by fear of hugging or helping a person with HIV, there were no significant differences between conditions.

4. Title: *Reintegrating Women Leaving Jail Into Urban Communities: A Description of a Model Community.*

Authors: Richie BE, Freudenberg N, Page J.

Published: *Journal of Urban Health* 78(2) 290-303, 2001.

Type of Intervention: Community Level Intervention.

Target Population: Low-income, incarcerated women from Harlem and South Bronx.

Intervention Goal: To deliver coordinated and integrated services to reduce drug use and recidivism rates of women likely to return to Harlem or the South Bronx from jail. To increase the capacity of community-based organizations and service providers in these neighborhoods. To strengthen a network of service providers that coordinates services for women returning from jail. To change correctional policy and secure ongoing resources to improve quality of life for women and their families in these communities.

Intervention Site: Rose M. Singer Detention Center for Women at Riker's Island Correctional Facility in New York City, and community offices in the South Bronx and Harlem.

Description of Intervention: This program is ongoing and has not been fully evaluated. All results were based on a preliminary evaluation of the program from 1994 to 1996. This program made use of empowerment theories for strengthening individual capacity to analyze and change social conditions, social capital theories for mobilizing assets and networks within communities, and ecological models which suggest that there needs to be change on multiple levels to effect social problems. This program had four components, one of which involved client services. The first component included a six-week curriculum of individual counseling, discharge planning and case management. The services were provided by staff who have personal or professional experience with both incarceration and familiarity with the two communities. Caseworkers assist the women in engaging in post-release substance abuse services, finding housing, acquiring financial support, locating healthcare services, including mental and reproductive health, and acquiring opportunities for education or employment. This component also included several individual counseling sessions and referral to community resources. Once a woman is released, caseworkers continued to offer services for up to one year. The second component involved training and technical assistance, and financial support to community organizations to build capacity for responding to the needs of women at risk for involvement in illegal activity. The third component involved another capacity-building function engaging existing community organizations in local issues and the coordination and linkage of their activities. To this end, the Community Coordinating Council was formed in 1994 to: establish a network of agencies serving ex-offenders, women, drug-users, and homeless people; share community resources to reduce crime in the neighborhoods the women return to; for improving the overall well-being of

residents; and develop an effective working relationship with the NYC Department of Corrections and other agencies working with the women. The final component involved urging local departments of corrections, law enforcement and other city agencies to provide gender-specific discharge planning, expand community aftercare services, and link existing services.

Comparison Condition: In the preliminary study, the whole sample received Health Link services. The comparison condition consisted of women receiving Health Link while incarcerated and then did not receive any further services after release. The other condition included women who utilized Health Link services during incarceration and then continued to use the services following release.

Population Characteristics: There were 700 women enrolled in the program. Data is not complete. Based on the beginning of the process in 1997 and 1998, the average age was 34 years. Eighty-five percent had children, and 31% were married or living with a partner. Of the women, 45% had completed high school, 87% had received public assistance, and 83% had worked for pay at some time. Thirty-seven percent had been homeless in the year prior to arrest, 57% had been beaten badly enough to require medical care, and 54% had experienced sexual assault or coercion. One-third had a current partner who used drugs, 39% reported heroin use themselves, 64% used crack, and 36% used cocaine. Twenty-six percent had ever injected drugs and 30% reported 5 or more servings of alcohol per day in the previous six months. Two-thirds had been previously treated for drugs and 34% had been treated three or more times. Forty-eight percent had been arrested on drug-related charges. Sixty-nine percent of the women were African-American, 26% Hispanic, and 6% were White.

Results of a preliminary evaluation were as follows:

Behaviors--Women who participated in the Health Link program had a re-arrest rate 21% lower than women using only jail services.

Comments: This study did not meet methodological criteria. It was a pilot project (Health Link) designed to assist in the stabilization of communities as the women living in these communities have been released from prison. It was included in the effectiveness report despite the lack of scientific rigor because it represented a program targeting a vulnerable population that may show evidence of success in the future. The program was designed to prevent recidivism: (i.e. re-entry into the penal system or further commission of illegal activities). Many of these illegal activities present high degrees of risk to the individual in terms of behaviors that can lead to infection with HIV or other diseases, and the re-entry into the penal system presents the potential for future risk by limiting women's earning power and social capital, leading to financial and social conditions in which HIV risk behaviors may be more difficult to avoid.

5. Title: *Investigation of a Secondary Syringe Exchange Program for Homeless Young Adult Injection Drug Users in San Francisco, California, USA.*

Authors: Sears C, Guydish JR, Weltzien EK, Lum PJ.

Published: *Journal of Acquired Immune Deficiency Syndromes*, 27(2) 193-201, 2001.

Type of Intervention: Syringe-exchange program and community level intervention.

Target Population: Youth, homeless IDUs.

Intervention Goal: To increase the number of exchanges with the syringe exchange program (SEP) and decrease risk activities.

Intervention Site: Alvord Lake homeless encampments in Golden Gate Park, California.

Description of Intervention: The study period ran from July-September 1997. The three components included: 1) population-subculture-specific media, 2) community development activities, and 3) secondary syringe exchange program. These components were based on a previous intervention in the Haight-Ashbury district of San Francisco. The media component included provision of art supplies to youth, creation of materials for an issue of the youth “zine” or local community-produced magazine, the distribution of patches, zines, and stickers, and weekly barbecues. The SEP component was designed and operated by young IDU members of the Golden Gate Parks crowd who had gained credibility and respect from other IDUs. Four core peer leaders were assisted by other IDUs who were also members of the community. In addition to providing syringes, the SEP provided other drug paraphernalia such as cookers, cotton, water bottles, alcohol wipes, containers for sharps, and the peer-developed media. The SEP operated close to 24 hours a day, seven days a week. Participants were paid \$20 for the initial structured interview.

Comparison Condition: A non-sanctioned SEP in the Market Street area, and another clandestine SEP also in the Market Street area.

Population Characteristics: N=122, 71 from the Golden Gate Park encampments and 51 from the control group near Market Street downtown. Eligibility requirements consisted of the following: age between 15-25; injection within the past 30 days; and homelessness defined as primarily having stayed in a park, squat, street, hotel, shelter, or friend’s apartment within the past 30 days. Average age of participants was 20.9 years, average years of school completed was 10.4. Other demographics included the following: two-thirds were male, 80% were white, and 71% self-reported being heterosexual, 75% reported being homeless for over 2 years, and 82% relied on marginal or illegal activities for income; 34% reported a lifetime history of abscess, 25% had a history of sexually

transmitted disease; and 53% of the women had been pregnant. The injection demographics were as follows: participants reported an average of 85.2 injections in past month, 78% injected multiple drugs. Participants had been injecting for 4.6 years average, 60% had been in a drug treatment program, 57% reported previous overdose, 89% reported recent SEP use, 71% reported regular use, 39% exchanged syringes with friends not associated with an SEP, 28% exchanged syringes regularly, 53% reported sharing syringes in past 30 days, 47% reported syringe reuse, 92% reported backloading, 82% reported inconsistent skin cleaning, and 37% reported using someone else's cotton. The sexual demographics were as follows: 69% were sexually active, 59% were active with an IDU, 29% were active with multiple partners, Of those sexually active, 84% reported inconsistent condom use with a main partner, and 52% with a casual partner.

Findings were as follows:

Positive findings:

Behaviors--Intervention site youth experienced lower rates of syringe-sharing, syringe re-use, sharing cotton, and inconsistent condom use with a casual partner, compared with non-sanctioned SEP youth.

No difference or negative findings:

Behaviors--There was no association between groups found for cotton-sharing, but male gender and greater number of speed injections were protective against this risk.

Individual Level Interventions

1. Title: *Sexual behavior change among human-immunodeficiency virus-infected adolescents with hemophilia.*

Authors: Brown LK, Schultz JR, Parsons JT, Butler RB, Forsberg AD, Kocik SM, King G, Manco-Johnson M, Aledort L.

Published: *Pediatrics*, 2000, 106(2) E22.

See Group Level Interventions.

Title: *Long-term effectiveness of a peer-based intervention to promote condom and contraceptive use among HIV-positive and at-risk women.*

Authors: Fogarty LA, Heilig CM, Armstrong K, Cabral R, Galavotti C, Gielen AC, Green BM.

Published: *Public Health Reports*, 116 Suppl 1, 103-19, 2001.

See Group Level interventions.

2. Title: *Reducing Risk of Sexually Transmitted Disease and Human Immunodeficiency Virus Infection in a Military STD Clinic: Evaluation of a Randomized Preventive Intervention Trial.*

Authors: Jenkins PR, Jenkins RA, Nannis ED, McKee KT, Temoshok LR.

Published: *Clinical Infectious Diseases*, 30 April, 730-735, 2000.

Type of Intervention: Individual level intervention.

Target Population: Military men with symptoms of acute urethritis, who were reported to be HIV sero-negative and who had more than two months remaining before military discharge.

Intervention Goal: To increase condom use, decrease risky behaviors, and increase readiness to change high-risk behavior.

Intervention Site: Womack Army Medical Center Epidemiology and Disease Control Clinic, Fort Bragg, North Carolina, December 1994-January 1996

Description of Intervention: There were three intervention conditions and a control condition. The interventions were based on the stages of change behavior model. The first condition was the Health Risk Appraisal (HRA), given in conjunction with standard STD care. After a risk-assessment questionnaire, participants were given a computer-generated individualized risk profile with specific feedback messages. The second intervention was the Interactive Video Disk (IAVD), also given in conjunction with standard STD care. This allowed interaction between the viewer and the video screen, and provided tailored feedback based on responses to questions in the video. The third intervention was the Targeted Situational Behavior (TSB) intervention. This intervention was based on the theory that certain behavior is scripted and shaped by cultural norms. The participants were guided through a role-playing scenario that fit their individual partner-seeking behavior. They were asked to identify ways in which this behavior put them at risk. Assessments were conducted at baseline, two-week, and two-month follow-up intervals to determine how many participants returned for test-for-cure, maintained abstinence after diagnosis for the prescribed number of weeks, and notified partners of their STD diagnosis. Measures taken were baseline risk characteristics, treatment efficacy, follow-up behavioral risk, condom use and availability, meeting new partners, readiness to change behavior, partner characteristics, alcohol consumption, and adherence to medical orders. Baseline risk characteristics included number of partners or high-risk partners with whom participants had vaginal, anal, or oral sex.

Comparison Condition: Comparison condition was standard care given at STD clinic.

Population Characteristics: N=400, median age 23 years, mostly African American or Caucasian. Specific demographics were not listed. The group included men with predominantly high-school level education and lower enlisted rank. Most participants reported more than 11 lifetime partners with whom they had had sex of some kind; 62.3% reported having more than one high-risk partner during the past year.

Findings were as follows:

Positive findings:

Attitudes--The participants of the targeted situational behavior group was more likely than the IAV or the HRA groups to be willing to use condoms consistently. The HRA and IAVD groups were more likely to change their partner selection practices than the TSB or control group.

Behaviors--Participants in the health-risk assessment, and the interactive video were less likely than the targeted situational behavior group or the control group to meet new partners, but these results should be interpreted with caution because of small sample size. Participants in the IAVD group increased abstinence compared to the HRA, TSB and control condition. The HRA and TSB groups increased their abstinence more than the control condition.

No difference or negative findings:

Attitudes--The control group was more likely than the IAVD group or the HRA group to be willing to use condoms consistently. There were no differences or improvements in readiness to change alcohol consumption.

Behaviors--There were no differences between groups and no improvement in the number of sexual partners. There were no differences between groups and no improvements in the reports of high-risk partners. There were no differences between groups and no improvement in the frequency of carrying condoms. There were no differences between groups for adherence to partner notification.

3. Title: *Pretest Assessment as a Component of Safer Sex Intervention: A Pilot Study of Brief One-Session Interventions for Women Partners of Male Injection Drug Users in New York City.*

Authors: Krauss BJ, Goldsamt L, Bula E, Godfrey C, Yee DS, Palij M.

Published: *Journal of Urban Health*, 77(3) 383-395, 2000.

Type of Intervention: Individual Level Intervention.

Target Population: Inner-city women partners of IDUs.

Intervention Goal: To increase the odds of consistent safer sex practices among women who have sex with IDUs.

Intervention Site: Local store-front in Lower East Side, New York City.

Description of Intervention: The interventions were brief, one-session interventions. In both interventions, women were given pamphlets to review with staff followed by a seven-minute scripted discussion of the pamphlet including positive and negative aspects of safer sex options, ease of use, use within a relationship, opportunities for eroticization, and local cost. The two intervention conditions were 35 minutes long. One intervention modified the pamphlet review by including a discussion of a range of safer sex choices by the counselor. The demonstrations included a description of how the counselor would handle various situations and issues such as partner objections. The second intervention added a skills practice by the client such as role-playing and client practice on models with guidance from the counselor. The comparison group was nested within the two intervention conditions and divided into participants who received a pre-test assessment, compared to participants who did not receive a pre-test assessment, regardless of the intervention condition to which they were assigned. Measures taken included HIV knowledge using a 50-item scale concerning transmission routes, prevalence, treatment, risk behaviors, perceived partner risk, consistent safer sex, observation of male condom use, lifetime history of safer sex practices, demographics and social desirability. Women were paid \$15 for completing the assessment.

Comparison Condition: The comparison condition was a cohort of women without pretest assessment, in interventions using only review of sexual prevention pamphlets.

Population Characteristics: N=73. There were 45 women who were given a pretest assessment. Eligibility criteria consisted of women between the ages of 21-55 years, who were sexually active in the last 30 days with men known or suspected to have injected drugs within last ten years. Demographics were as follows: 23.3% were single (not in a committed relationship averaging more than 5 years), 16.4 % were white, 38.4% were Black, 45.2% were Latino. No other information was given on how many women were assigned to the various treatment conditions.

Findings were as follows:

Positive findings:

Knowledge--For those in the Pre-test group, there was a greater increase in HIV knowledge among those in the demonstration and skills intervention group than in the group with only pamphlet review, but no difference between the demonstration and the skills practice. There were greater scores, under observation, of correct condom usage for the demonstration and skills practice groups compared to the group that had only pamphlet review, but no differences were observed between the two groups for pre-test compared with no-pretest. Women in the pretest group displayed more HIV knowledge overall than the women in the no-pretest group.

Beliefs--Rating of partner risk was higher among women with pretest assessment than without.

Behaviors--Consistent safer sex behaviors were higher among those who had a pretest assessment and those who did not take the pretest assessment but were involved in either of the two interactive interventions: demonstration of many safer sex methods or skills practice.

No difference or negative findings:

Attitudes--There were no differences in social desirability: behaviors scored as socially desirable such as having sex with only someone they loved, vs. social undesirability, such as faking an orgasm between any of the measures, pretest vs. no pretest, or between any of the interventions.

Beliefs--There was no difference for perception of partner risk among the participants of the different interventions.

Section Three: Best Practices

This section summarizes features which were common to many of those interventions that produced positive changes in areas of knowledge, attitudes, beliefs and/or behaviors. The studies that illustrated use of those features are included to help the reader identify the populations and settings in which the features occurred.

This summary is a collection of the most effective features of each of the reviewed interventions.

1. **Development of a plan for health care, for decision-making, or behavior change.**

The development of specific goals and plans to achieve those goals appeared to help participants to progress through the Stages of Change by assisting in the formation of a strategy for change, with achievable goals, based on participants' needs.

Interventions with this feature:

Stay Healthy/Act Safe—"Efficacy of a Preventive Intervention for Youths Living With HIV," Rotheram-Borus, et al., *American Journal of Public Health*, 91(3), 2001.

"Effectiveness of an Intervention to Reduce HIV Transmission Risks in HIV-Positive People," Kalichman, et al., *American Journal of Preventive Medicine*, 21(2), 2001.

"The Long-Term Effectiveness of an HIV Prevention Intervention for Low-Income African American Women," Dancy BL, et al., *AIDS Education and Prevention*, 12(2), 2000.

"Using Information, Motivational Enhancement, and Skills Training to Reduce the Risk of HIV Infection for Low-Income Urban Women: A Second Randomized Clinical Trial," Carey MP, et al., *Health Psychology*, 19(1), 2000.

"Sexual Behavior Change Among Human-Immunodeficiency Virus-Infected Adolescents With Hemophilia," Brown LK, et al., *Pediatrics* 106(2), 2000.

"Effects of a Brief Theory-Based STD-Prevention Program for Female College Students," Jaworski BC, Carey MP, *Journal of Adolescent Health* 29(6) 2001.

2. Identification and discussion of risk triggers and barriers to changing behavior.

Recognizing a trigger or barrier seemed to help clients to begin identifying ways of surmounting that barrier or changing the trigger in order to adopt or maintain safe behaviors.

Interventions with this feature:

Stay Healthy/Act Safe—“Efficacy of a Preventive Intervention for Youths Living With HIV,” Rotheram-Borus, et al., *American Journal of Public Health*, 91(3), 2001.

“Effectiveness of an Intervention to Reduce HIV Transmission Risks in HIV-Positive People,” Kalichman, et al., *American Journal of Preventive Medicine*, 21(2), 2001.

“Ourselves, Our Bodies, Our Realities: An HIV Prevention Intervention for Women With Severe Mental Illness,” Collins PY, et al., *Journal of Urban Health*, 78(1) 2001.

“The Long-Term Effectiveness of an HIV Prevention Intervention for Low-Income African American Women,” Dancy BL, et al., *AIDS Education and Prevention*, 12(2), 2000.

“Sexual Behavior Change Among Human-Immunodeficiency Virus-Infected Adolescents With Hemophilia,” Brown LK, et al., *Pediatrics* 106(2), 2000.

“Effects of a Brief Theory-Based STD-Prevention Program for Female College Students,” Jaworski BC, Carey MP, *Journal of Adolescent Health* 29(6) 2001.

“Long-Term Effectiveness of a Peer-Based Intervention to Promote Condom and Contraceptive Use Among HIV-Positive and At-Risk Women,” Fogarty LA, et al., *Public Health Reports* 116 Suppl 1, 2001.

3. Use of skills-building exercises, such as negotiation skill, and condom use.

Many effective interventions allowed participants to acquire and practice skills in a non-threatening setting.

Interventions with this feature:

Stay Healthy/Act Safe—“Efficacy of a Preventive Intervention for Youths Living With HIV,” Rotheram-Borus, et al., *American Journal of Public Health*, 91(3), 2001.

Project Light—“Social-Cognitive Theory Mediators of Behavior Change in the National Institute of Mental Health Multisite HIV Prevention Trial,” National

Institute of Mental Health Multisite HIV Prevention Trial Group, *Health Psychology*, 20(5) 2001.

“Effectiveness of an Intervention to Reduce HIV Transmission Risks in HIV-Positive People,” Kalichman, et al., *American Journal of Preventive Medicine*, 21(2), 2001.

“Ourselves, Our Bodies, Our Realities: An HIV Prevention Intervention for Women With Severe Mental Illness,” Collins PY, et al., *Journal of Urban Health*, 78(1) 2001.

“Pretest Assessment as a Component of Safer Sex Intervention: A Pilot Study of Brief One-Session Interventions for Women Partners of Male Injection Drug Users in New York City,” Krauss BJ, et al., *Journal of Urban Health* 77(3), 2000.

“The Long-Term Effectiveness of an HIV Prevention Intervention for Low-Income African American Women,” Dancy BL, et al., *AIDS Education and Prevention*, 12(2), 2000.

“Using Information, Motivational Enhancement, and Skills Training to Reduce the Risk of HIV Infection for Low-Income Urban Women: A Second Randomized Clinical Trial,” Carey MP, et al., *Health Psychology*, 19(1), 2000.

“Long-Term Effectiveness of a Peer-Based Intervention to Promote Condom and Contraceptive Use Among HIV-Positive and At-Risk Women,” Fogarty LA, et al., *Public Health Reports* 116 Suppl 1, 2001.

“Sexual Behavior Change Among Human-Immunodeficiency Virus-Infected Adolescents With Hemophilia,” Brown LK, et al., *Pediatrics* 106(2), 2000.

“Effect of an STD/HIV Behavioral Intervention on Women’s Use of the Female Condom,” Van Devanter N, et al., *American Journal Of Public Health* 92(1) 2002.

“Effects of a Brief Theory-Based STD-Prevention Program for Female College Students,” Jaworski BC, Carey MP, *Journal of Adolescent Health* 29(6) 2001.

“Long-Term Effects of a Middle-School and High School-Based Human Immunodeficiency Virus Sexual Risk Prevention Intervention,” Siegel DM, et al., *Archives of Pediatric and Adolescent Medicine* 155(10) 2001.

4. Use of role-playing exercises.

Role-playing exercises may have helped participants to identify situations in which triggers or barriers to safe practices may exist, allowed participants to practice skills, and identify ways of negotiating the situations in which barriers exist.

The interventions with this feature:

“Ourselves, Our Bodies, Our Realities: An HIV Prevention Intervention for Women With Severe Mental Illness,” Collins PY, et al., *Journal of Urban Health*, 78(1) 2001.

“Pretest Assessment as a Component of Safer Sex Intervention: A Pilot Study of Brief One-Session Interventions for Women Partners of Male Injection Drug Users in New York City,” Krauss BJ, et al., *Journal of Urban Health* 77(3), 2000.

“The Long-Term Effectiveness of an HIV Prevention Intervention for Low-Income African American Women,” Dancy BL, et al., *AIDS Education and Prevention*, 12(2), 2000.

“Reducing Risk of Sexually Transmitted Disease and Human Immunodeficiency Virus Infection in a Military Clinic: Evaluation of a Randomized Preventive Intervention Trial,” Jenkins PR, et al., *CID* April 30, 2000.

“Long-Term Effectiveness of a Peer-Based Intervention to Promote Condom and Contraceptive Use Among HIV-Positive and At-Risk Women,” Fogarty LA, et al., *Public Health Reports* 116 Suppl 1, 2001.

“Effects of a Brief Theory-Based STD-Prevention Program for Female College Students,” Jaworski BC, Carey MP, *Journal of Adolescent Health* 29(6) 2001.

“Long-Term Effects of a Middle-School and High School-Based Human Immunodeficiency Virus Sexual Risk Prevention Intervention,” Siegel DM, et al., *Archives of Pediatric and Adolescent Medicine* 155(10) 2001.

5. **The use of culture-specific intervention.** Culture-specific interventions may be useful in addressing differing ethnic, cultural, or community foci, motivations, or patterns of behavior. Behavior can be better addressed or altered with an understanding of the context of those behaviors.

The interventions with this feature:

Project Cope II—“Lowering HIV Risk Among Ethnic Minority Drug Users: Comparing Culturally Targeted Intervention to a Standard Intervention,” Dushay RA, et al., *American Journal of Drug and Alcohol Abuse* 27(3) 2001.

6. **Use of more than one session.**

Engagement in multiple sessions gave participants time to build rapport and explore their issues in depth.

The interventions with this feature:

All of the interventions included in the report.

Section Four: Cross-References

The following section lists articles according to risk group.

Men Who Have Sex With Men:

Effectiveness of an Intervention to Reduce HIV Transmission Risks in HIV-Positive People. **Authors:** Kalichman SC, Rompa D, Cage M, DiFonzo K, Simpson D, Austin J, Luke W, Kyomugisha F, Benotsch E, Pinkerton S, Graham J.

Efficacy of a preventive intervention for youths living with HIV. **Authors:** Rotheram-Borus MJ, Lee MB, Murphy DA, Futterman D, Duan N, Birnbaum JM, Lightfoot M; Teens Linked to Care Consortium.

Intravenous Drug Users/Substance Users

Using Information, Motivational Enhancement, and Skills Training to Reduce the Risk of HIV Infection for Low-Income Urban Women: A Second Randomized Clinical Trial. **Authors:** Carey MP, Braaten LS, Maisto SA, Gleason JR, Forsyth AD, Durant LE, Jaworski BC

Lowering HIV Risk Among Ethnic Minority Drug Users: Comparing Culturally Targeted Intervention to a Standard Intervention. **Authors:** Dushay RA, Singer M, Weeks MR, Rohena L, Gruber R.

Pretest Assessment as a Component of Safer Sex Intervention: A Pilot Study of Brief One-Session Interventions for Women Partners of Male Injection Drug Users in New York City. **Authors:** Krauss BJ, Goldsamt L, Bula E, Godfrey C, Yee DS, Palij M

Social-Cognitive Theory Mediators of Behavior Change in the National Institute of Mental Health Multisite HIV Prevention Trial. **Authors:** National Institute of Mental Health Multisite HIV Prevention Trial Group.

Reintegrating Women Leaving Jail Into Urban Communities: A Description of a Model Community. **Authors:** Richie BE, Freudenberg N, Page J.

Efficacy of a preventive intervention for youths living with HIV. **Authors:** Rotheram-Borus MJ, Lee MB, Murphy DA, Futterman D, Duan N, Birnbaum JM, Lightfoot M; Teens Linked to Care Consortium.

Investigation of a Secondary Syringe Exchange Program for Homeless Young Adult Injection Drug Users in San Francisco, California, USA. **Authors:** Sears C, Guydish JR, Weltzien EK, Lum PJ.

Reducing STD and HIV Risk Behavior of Substance-Dependent Adolescents: A Randomized Controlled Trial. **Authors:** St. Lawrence JS, Crosby RA, Brasfield TL, O'Bannon III RE

Women

Using Information, Motivational Enhancement, and Skills Training to Reduce the Risk of HIV Infection for Low-Income Urban Women: A Second Randomized Clinical Trial. **Authors:** Carey MP, Braaten LS, Maisto SA, Gleason JR, Forsyth AD, Durant LE, Jaworski BC

Ourselves, Our Bodies, Our Realities: An HIV Prevention Intervention for Women With Severe Mental Illness. **Authors:** Collins PY, Geller PA, Miller S, Toro P, Susser ES

The Long-Term Effectiveness of an HIV Prevention Intervention for Low-Income African American Women. **Authors:** Dancy BL, Marcantonio R, Norr K

Long-term effectiveness of a peer-based intervention to promote condom and contraceptive use among HIV-positive and at-risk women. **Authors:** Fogarty LA, Heilig CM, Armstrong K, Cabral R, Galavotti C, Gielen AC, Green BM

Effects and Generalizability of Communally-Oriented HIV-AIDS Prevention Versus General Health Promotion Groups for Single, Inner-City Women in Urban Clinics. **Authors:** Hobfoll SE, Jackson AP, Lavin J, Johnson RJ, Schroder KE

Effects of a Brief Theory-based STD-Prevention Program for Female College Students. **Authors:** Jaworski BC, Carey MP

Pretest Assessment as a Component of Safer Sex Intervention: A Pilot Study of Brief One-Session Interventions for Women Partners of Male Injection Drug Users in New York City. **Authors:** Krauss BJ, Goldsamt L, Bula E, Godfrey C, Yee DS, Palij M

Reintegrating Women Leaving Jail Into Urban Communities: A Description of a Model Community. **Authors:** Richie BE, Freudenberg N, Page J.

Effect of an STD/HIV Behavioral Intervention on Women's Use of the Female Condom. **Authors:** Van Devanter N, Gonzales V, Merzel C, Parikh NS, Celantano D, Greenberg J

HIV-Positive Persons

Sexual behavior change among human-immunodeficiency virus-infected adolescents with hemophilia **Authors:** Brown LK, Schultz JR, Parsons JT, Butler RB, Forsberg AD, Kocik SM, King G, Manco-Johnson M, Aledort L

Long-term effectiveness of a peer-based intervention to promote condom and contraceptive use among HIV-positive and at-risk women. **Authors:** Fogarty LA, Heilig CM, Armstrong K, Cabral R, Galavotti C, Gielen AC, Green BM

Effectiveness of an Intervention to Reduce HIV Transmission Risks in HIV-Positive People. **Authors:** Kalichman SC, Rompa D, Cage M, DiFonzo K, Simpson D, Austin J, Luke W, Kyomugisha F, Benotsch E, Pinkerton S, Graham J.

Efficacy of a preventive intervention for youths living with HIV. **Authors:** Rotheram-Borus MJ, Lee MB, Murphy DA, Futterman D, Duan N, Birnbaum JM, Lightfoot M; Teens Linked to Care Consortium.

Hispanic Persons

Lowering HIV Risk Among Ethnic Minority Drug Users: Comparing Culturally Targeted Intervention to a Standard Intervention. **Authors:** Dushay RA, Singer M, Weeks MR, Rohena L, Gruber R.

African American Persons

Using Information, Motivational Enhancement, and Skills Training to Reduce the Risk of HIV Infection for Low-Income Urban Women: A Second Randomized Clinical Trial. **Authors:** Carey MP, Braaten LS, Maisto SA, Gleason JR, Forsyth AD, Durant LE, Jaworski BC

The Long-Term Effectiveness of an HIV Prevention Intervention for Low-Income African American Women. **Authors:** Dancy BL, Marcantonio R, Norr K

Lowering HIV Risk Among Ethnic Minority Drug Users: Comparing Culturally Targeted Intervention to a Standard Intervention. **Authors:** Dushay RA, Singer M, Weeks MR, Rohena L, Gruber R.

Social-Cognitive Theory Mediators of Behavior Change in the National Institute of Mental Health Multisite HIV Prevention Trial. **Authors:** National Institute of Mental Health Multisite HIV Prevention Trial Group.

Reintegrating Women Leaving Jail Into Urban Communities: A Description of a Model Community. **Authors:** Richie BE, Freudenberg N, Page J.

*Effect of an STD/HIV Behavioral Intervention on Women's Use of the Female Condom. **Authors:** Van Devanter N, Gonzales V, Merzel C, Parikh NS, Celantano D, Greenberg J*

Youth

*Sexual behavior change among human-immunodeficiency virus-infected adolescents with hemophilia. **Authors:** Brown LK, Schultz JR, Parsons JT, Butler RB, Forsberg AD, Kocik SM, King G, Manco-Johnson M, Aledort L*

*Information-Motivation-Behavioral Skills Model-Based HIV Risk Behavior Change Intervention for Inner-City High School Youth. **Authors:** Fisher JD, Fisher WA, Bryan AD, Misovich SJ*

*Impact of HIV-positive speakers in a multi-component, school-based HIV/STD prevention program for inner-city adolescents. **Authors:** Markham C, Baumler E, Richesson R, Parcel G, Basen-Engquist K, Kok G, Wilkerson D.*

*Efficacy of a preventive intervention for youths living with HIV. **Authors:** Rotheram-Borus MJ, Lee MB, Murphy DA, Futterman D, Duan N, Birnbaum JM, Lightfoot M; Teens Linked to Care Consortium.*

*Investigation of a Secondary Syringe Exchange Program for Homeless Young Adult Injection Drug Users in San Francisco, California, USA. **Authors:** Sears C, Guydish JR, Weltzien EK, Lum PJ.*

*Long-Term Effects of a Middle-School and High School-Based Human Immunodeficiency Virus Sexual Risk Prevention Intervention. **Authors:** Siegel DM, Aten MJ, Enaharo M*

*Reducing STD and HIV Risk Behavior of Substance-Dependent Adolescents: A Randomized Controlled Trial. **Authors:** St. Lawrence JS, Crosby RA, Brasfield TL, O'Bannon III RE*