SCIENCE AND SUCCESS

Science-Based Programs that Work to Prevent Teen Pregnancy, HIV & Sexually Transmitted Infections among Hispanics/Latinos

Advocates for Youth

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Science-Based Programs that Work to Prevent Teen Pregnancy, HIV & Sexually Transmitted Infections among Hispanics/Latinos

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Advocates for Youth—Rights. Respect. Responsibility.®
Advocates for Youth is dedicated to creating programs and advocating for policies that help young people make informed and responsible decisions about their reproductive and sexual health. Advocates provides information, training, and strategic assistance to youth-serving organizations, policy makers, youth activists, and the media in the United States and low and middle income countries.

This document is an excerpted version of the 2008 edition of *Science & Success: Sex Education and Other Programs that Work to Prevent Teen Pregnancy, HIV & Sexually Transmitted Infections*. Both documents were principally researched and compiled by Sue Alford, with assistance from Tanya Gonzalez, Laura Davis, Debra Hauser, and Emily Bridges.

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Science and Success: Science Based Programs that Work to Prevent Teen Pregnancy, HIV & Sexually Transmitted Infections among Hispanics/Latinos*

Introduction

U.S. teen pregnancy and birth rates remain among the highest in the western world. And although Latina teens were the only group to experience a decline in birth rate between 2006 and 2007, they continue to experience the highest rates in most states and across the nation. About half of all Latina teens experience pregnancy before they reach their 20th birthday, compared to slightly less than one-third (31 percent) of all U.S. teenage women.[1] Latinos are also affected by HIV and other STIs. In 2005, Latinos accounted for 17 percent of all new cases of HIV or AIDS diagnosed among U.S. teens; yet Latino teens account for less than 16 percent of all U.S. teens.[2] In 2007, gonorrhea and chlamydia rates among Latina teens were 45 and 106 percent greater, respectively, than rates among their white female peers.[3]

Given the need to focus limited prevention resources on effective programs, Advocates for Youth undertook exhaustive reviews of existing research to compile a list of the programs that have been proven effective through rigorous evaluation at reducing adolescent sexual risk-taking. Advocates identified 26 programs that met its criteria for effectiveness. These programs and their evaluations are described in detail in Science and Success (2nd Edition).

To be included in Science and Success (2nd Edition), programs had to meet the following evaluation criteria to be considered effective.

Effective Programs:

- Were published in peer-reviewed journals (a proxy for the quality of evaluation design and analysis);
- Used an experimental or quasi-experimental design, with treatment and control / comparison conditions;
- Included at least 100 young people in treatment and control / comparison groups combined; and
- Collected baseline and post-intervention data from both treatment and control / comparison groups.

Further, the evaluations either:

- Continued to collect data from both groups at three months or later after intervention;

And

- Demonstrated that the program led to at least two positive behavior changes among program youth, relative to controls:
  - Reduction in the frequency of sexual intercourse
  - Reduction in the number of sex partners / increase in monogamy
  - Increase in the use, or consistency of use, of effective methods of contraception and/or condoms
  - Reduction in the incidence of unprotected sex

Or

- Showed program effectiveness in reducing rates of pregnancy, STIs, or HIV in intervention youth, relative to controls.

*Although the introduction uses the term Latinos to include all youth whose ancestry and/or culture is of Latin American or Spanish origin, each individual program's description includes the terminology used by its evaluators.

Of the 26 programs included in Science and Success (2nd Edition), 15 showed evidence of effectiveness with Latino participants.

- Four were designed specifically for Latino youth (¡Cuídate!; HIV Risk Reduction for African American and Latina Adolescent Women; Poder Latino; and Safer Choices).
- Three programs, although not designed specifically for Latino youth, had evaluations in which the majority of the participants were Latino (California's Adolescent Sibling Pregnancy Prevention Project; Children's Aid Society – Carrera Program; and Project SAFE).
- The remaining 8 programs included Latino youth in sufficient numbers to suggest that the programs may be effective with these young people.

Seven of the programs effective among Latino youth are school-based, five are community-based and three are clinic-based (noted below).

Section I. Programs Designed for Latino Youth

1. *¡Cuídate!** (community-based)
2. *HIV Risk Reduction for African American & Latina Adolescent Women* (clinic-based)
3. *Poder Latino: A Community AIDS Prevention Program for Inner-City Latino Youth* (community-based)
4. *Safer Choices* (school-based)

Section II. Programs in which the Majority of the Evaluation Participants were Latino Youth

5. *California's Adolescent Sibling Pregnancy Prevention Project* (community-based)
6. *Children's Aid Society – Carrera Program* (community-based)
7. *Project SAFE: Sexual Awareness for Everyone* (clinic-based)

Section III. Programs that included Latino Youth in Sufficient Numbers in the Evaluation

8. *Adolescents Living Safely: AIDS Awareness, Attitudes & Actions* (community-based)
9. *AIDS Prevention for Adolescents in School* (school-based)
10. *Get Real about AIDS* (school-based)
11. *Postponing Sexual Involvement: Human Sexuality & Health Screening* (school-based)
12. *Reach for Health Community Youth Service* (school-based)
13. *Reducing the Risk* (school-based)
14. *Teen Outreach Program* (school-based)
15. *TLC: Together Learning Choices* (clinic-based)

*This program was designed for and effective with youth whose first language is Spanish.

Table A. Effective Programs and Their Impact on Adolescents' Risk for Pregnancy, HIV & STI

PROGRAMS	BEHAVIORAL OUTCOMES							HEALTH IMPACTS	
	Delayed Initiation of Sex	*Reduced Frequency of Sex*	*Reduced Number of Sex Partners*	*Increased Monogamy*	*Reduced Incidence of Unprotected Sex*	*Increased Use of Condoms*	*Increased Use of Contra-ception*	*Reduced Incidence of STIs*	*Decreased Number or Rate of Teen Pregnancy / Birth*
Programs Designed for Latino Youth									
1. ¡Cuídate! Community Based		★	★		★	★			
2. HIV Risk Reduction for African American & Latina Adolescent Women Clinic-based			★		★			★	
3. Poder Latino: A Community AIDS Prevention Program for Inner-City Latino Youth Community-based	★		★						
4. Safer Choices School-based					★	★	★		
Programs in which the Majority of Evaluation Participants were Latino Youth									
5. California's Adolescent Sibling Pregnancy Prevention Project Community-based	★						★		★
6. Children's Aid Society – Carrera Program Community-based	★					★	★		★
7. Project SAFE: Sexual Awareness for Everyone Clinic-based			★	★	★			★	

PROGRAMS	BEHAVIORAL OUTCOMES							HEALTH IMPACTS	
	Delayed Initiation of Sex	*Reduced Frequency of Sex*	*Reduced Number of Sex Partners*	*Increased Monogamy*	*Reduced Incidence of Unprotected Sex*	*Increased Use of Condoms*	*Increased Use of Contra-ception*	*Reduced Incidence of STIs*	*Decreased Number or Rate of Teen Pregnancy / Birth*
Programs that Included Latino Youth in Sufficient Numbers in the Evaluation									
8. Adolescents Living Safely: AIDS Awareness, Attitudes & Actions Community-based		★	★			★			
9. AIDS Prevention for Adolescents in School School-based			★	★		★		★	
10. Get Real about AIDS School-based			★			★			
11. Postponing Sexual Involvement: Human Sexuality & Health Screening School-based	★						★		
12. Reach for Health Community Youth Service School-based	★	★				★	★		
13. Reducing the Risk School-based	★				★		★		
14. Teen Outreach Program School-based									★
15. TLC: Together Learning Choices Clinic-based			★		★				

Note: Blank boxes indicate either 1) that the program did not measure nor aim at this particular outcome/impact or 2) that the program did not achieve a signficant positive outcome in regard to the particular behvaior or impact.

Table B. Effective Programs: Settings & Populations Served

PROGRAMS	LOCALE			AGE RANGE				POPULATIONS			
	Urban	*Sub urban*	*Rural*	*Ele mentary*	*Jr. High*	*Sr. High*	*18-24*	*White*	*Black*	*Hispanic /Latino*	*Asian*
Programs Designed for Latino Youth											
1. ¡Cuídate!	★					★				★	
2. HIV Risk Reduction for African American & Latina Adolescent Women	★				★	★	★		★	★	
3. Poder Latino: A Community AIDS Prevention Program for Inner-City Latino Youth	★					★	★			★	
4. Safer Choices	★	★				★		★	★	★	★
Programs in which the Majority of Evaluation Participants were Latino Youth											
5. California's Adolescent Sibling Pregnancy Prevention Project	★		★		★	★		★	★	★	
6. Children's Aid Society – Carrera Program	★				★	★			★	★	
7. Project SAFE: Sexual Awareness for Everyone	★					★	★		★	★	
Programs that Included Latino Youth in Sufficient Numbers in the Evaluation											
8. Adolescents Living Safely: AIDS Awareness, Attitudes & Actions	★				★	★		★	★	★	
9. AIDS Prevention for Adolescents in School	★					★		★	★	★	★
10. Get Real about AIDS	★	★	★			★		★		★	

PROGRAMS	LOCALE			AGE RANGE				POPULATIONS			
	Urban	*Sub urban*	*Rural*	*Ele mentary*	*Jr. High*	*Sr. High*	*18-24*	*White*	*Black*	*Hispanic /Latino*	*Asian*
11. Postponing Sexual Involvement: Human Sexuality & Health Screening	★				★				★	★	
12. Reach for Health Community Youth Service	★				★				★	★	
13. Reducing the Risk	★	★	★			★		★	★	★	★
14. Teen Outreach Program	★	★	★			★		★	★	★	
15. TLC: Together Learning Choices	★				★	★	★			★	

Section I. Programs Designed Specifically for Latino Youth

This sections describes the four programs designed specifically for Latino youth that have been evaluated and found to be effective among this population in changing or delaying behaviors that relate to teenage pregnancy and sexually transmitted infections (STIs), including HIV.

Of these four programs, two are community-based programs (¡Cuídate! and Poder Latino); one is a clinic-based program (HIV Risk Reduction for African American & Latina Adolescent Women); and the last program is a school-based curriculum (Safer Choices). Additionally, ¡Cuídate! was designed for youth whose first language is Spanish.

Three programs helped young people reduce their number of sex partners; three helped young people reduce the incidence of unprotected sex; and two helped youth increase their use of condoms.

Each of these programs fits the stringent criteria for inclusion in this document, as described in the introduction, and should be considered for replication by those organizations and individuals serving primarily Latino youth. The following programs are described in detail in this section:

1. *¡Cuídate!®* (community-based)
2. *HIV Risk Reduction for African American & Latina Adolescent Women* (clinic-based)
3. *Poder Latino: A Community AIDS Prevention Program for Inner-City Latino Youth* (community-based)
4. *Safer Choices* (school-based)

¡Cuídate!

Program Components

- HIV-prevention curriculum tailored for use with Latino adolescents
- Six one-hour modules, delivered over consecutive days
- Interactive format, including small group discussion, videos, interactive exercises, and activities to build skills
- Salient aspects of Latino culture, including the importance of family and gender role expectations
- Spanish and English versions, led by trained, bilingual facilitators
- Facilitator training highly recommended

For Use With

- Latino youth
- Latino youth whose first language is Spanish
- Urban, high school youth

Evaluation Methodology

- Randomized, controlled trial, including treatment and control youth from three high schools and community-based organizations in Philadelphia, Pennsylvania
- Self-identified Latino youth (n=553 at baseline), divided into treatment (n=263) and control conditions (n=287); pre- and post-tests; and follow-up at three, six, and 12 months post-intervention

Evaluation Findings

- Reduced incidence of repeat pregnancy
- Improved attendance to recommended health care for infants

Evaluators' comments: *The intervention was tailored to Latino culture, and we found that it had greater effects among Spanish-speaking adolescents on several outcomes. Specifically, Spanish speakers who participated in the HIV risk-reduction intervention had a higher proportion of days of protected sex and more frequent condom use at last sexual intercourse. To our knowledge, this is the first randomized controlled trial to demonstrate greater efficacy of a culturally tailored HIV risk-reduction intervention* [in the United States] *among people who speak the language of the culture for which it was tailored.*

Villarruel, Jemmott, Jemmott, 2007

Program Description

The HIV risk reduction curriculum was culturally adapted from *Be Proud! Be Responsible! ¡Cuídate!* is based on social cognitive theory and the theories of reasoned action and planned behavior. It incorporates salient aspects of Latino culture, especially the importance of family and gender role expectations. It presents both abstinence and condom use as culturally acceptable and effective ways to prevent STIs, including HIV.[26]

The program's goals are to: 1) influence attitudes, beliefs, and self-efficacy regarding HIV risk reduction, especially abstinence and condom use; 2) highlight cultural values that support safer sex practices; 3) reframe cultural values that might be perceived as barriers to safer sex; and 4) emphasize how cultural values influence attitudes and beliefs in ways that affect sexual risk behaviors.[26,27]

Youth receive the course over six consecutive days. Bilingual facilitators receive a two-and-a-half day training to deliver *¡Cuídate!* , which is available in both Spanish and English. Each version is designed to meet the sexual health education needs of Latino adolescents in their own preferred language.[26,27]

Evaluation Methodology

Latino students were recruited from three northeast Philadelphia high schools and nearby community-based organizations. The study was implemented with a pilot group and five subsequent groups enrolled sequentially across five months. Youth were eligible to participate if they self-identified as Latino, were aged 13 through 18, and provided assent and parental consent. Non-Latino students (n=102) were eligible to participate in the intervention, but were excluded from analysis. Students were asked their language preference and subsequently received the English (n=412) or Spanish (n=141) versions.[26]

Data analysis included 553 self-identified Latinos; 249 were male and 304 were female. Most (85 percent) were Puerto Rican; nearly half (n=249; 45 percent) were born outside the mainland United States. Participants' mean age was 14.9 years; 87 percent of students were in grades eight through 11. At baseline, 235 (43 percent) reported ever having had sex; the mean age for first sexual intercourse among sexually experienced students was 13.5 years.[26]

Adolescents were randomly assigned to the HIV risk-reduction intervention (participants; n=263) or to a health promotion intervention (controls; n=287) that focused on behaviors related to significant health issues for Latinos, such as cigarette, alcohol, and other drug use. Both the HIV-risk reduction and the health promotion intervention presented Latino cultural values as an important context for positive health behaviors.[26]

At baseline, there was no significant difference between participants and controls in gender, primary language, or age; nor were there significant differences between the two groups in sexual behavior. Forty-one percent of participants (n=106) and 45 percent of controls (n=127) had ever had sex at baseline. Twenty-six percent of participants reported sex in the previous three months as did 29 percent of controls. Twenty-one percent of participants reported having had two or more sex partners, as did 16 percent of control youth. For condom use, 47 percent of sexually experienced participants and 35 percent of sexually experienced controls reported consistent condom use; 58 and 50 percent, respectively, reported condom use at most recent sex.[26]

Evaluators found little attrition and no significant differences in attrition between participating and control youth. The only significant predictor of attrition was primary language. English speakers were 90 percent more likely to attend a follow-up session that were Spanish speakers (OR=1.91).[26]

Outcomes

- **Behaviors—**
  - **Reduced frequency of sexual intercourse**—Across follow-up, participants were less likely than control youth to report sexual intercourse in the previous three months (OR, 0.66; 95% CI, 0.46-0.96). Specifically, 26 percent, 28 percent, and 36 percent of participants reported sexual intercourse in the previous three months at three-, six-, and 12- month follow-up, respectively. By comparison, control youth's percentages were 31, 33, and 41 percent at each follow-up, respectively.[26]
  - **Reduced number of sex partners**—Assessed across 12 months, sexually active adolescents in the HIV risk reduction intervention were less likely than sexually active control youth to report having multiple partners (OR,0.53; 95% percent CI, 0.31-0.90). Although participants were more likely than controls to report having had multiple partners in the previous three months at baseline and at three-month follow-up, this pattern reversed at six- and 12-month follow-up. At baseline, 10 percent of sexually experienced participants reported multiple partners, compared to eight percent of sexually experienced control youth.[26]
  - **Increased use of condoms**—Participants were more likely than control youth to report using condoms consistently (OR,1.91; 95% CI, 1.24-2.93). At baseline and at all follow-up points, significantly larger percentages of sexually active participants than sexually active control youth reported consistent condom use. Forty-seven percent of sexually active participants reported

consistent condom use at baseline; 43 percent at three-months, 45 percent at six-months, and 42 percent at 12-month follow-up . By comparison, 35 percent of sexually experienced participants reported consistent use at baseline; 26 percent at three months; 29 percent at six months; and 28 percent at 12 months. In addition, Spanish speaking participants had a higher proportion of protected sex than did Spanish speaking control youth (mean difference, 0.35; $p<.01$).[26]

- **Condom use at most recent sex**—Among Spanish speaking adolescents, the odds of having used a condom at most recent sexual intercourse where nearly five times higher for participants than for control youth (OR, 4.73; 95% CI, 1.72-12.97).[26]
- **Reduced incidence of unprotected sex**—Sexually active participants were less likely than sexually active control youth to report days of unprotected sex (relative risk, 0.47; 95% CI, 0.26-0.84). Among adolescents who were sexually inexperienced at baseline, participants had fewer days than control youth of unprotected sex (relative risk, 0.22; 95% CI, 0.08-0.63).[26]

For More Information, Contact

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- ***Centers for Disease Control & Prevention***, Replicating Effective Programs Plus; Web: http://www.cdc.gov/hiv/topics/prev_prog/rep/packages/!cuídate!.htm

HIV Risk Reduction for African American and Latina Adolescent Women

Program Components

- Clinic-based HIV-risk reduction program
- Culturally specific program
- Gender specific program
- Single 250-minute (four and one-quarter hours) group session
- Interactive exercises, discussions, games, and experiential activities
- 8-hour training for facilitators

For Use With

- Urban adolescent Latinas
- Urban African American adolescent females
- Economically disadvantaged youth

Evaluation Methodology

- Experimental evaluation design with two randomized treatment conditions and one control condition
- Sexually active clients (n=682) at an adolescent medicine clinic randomly assigned to skills-based treatment (n=235), information-based treatment (n=228), and health-promotion control (n=219) conditions
- Baseline data and follow-up at three, six, and 12 months after the intervention
- Participants received reimbursement for participating in baseline and follow-up surveys

Evaluation Findings

- Reduced incidence of unprotected sexual intercourse
- Reduced number of sex partners
- Long-term: Reduced incidence of STIs

Evaluators' comments: *In the present study, the effects of the intervention were significant primarily at 12-month follow-up, not at shorter-term follow-ups. Such a delayed effect has been observed in other prevention trials. One possible explanation for why the magnitude of intervention effects might increase at later follow-ups is that people have difficulty introducing safer-sex practices into existing relationships. As they become involved with new partners over time, they are able to implement those practices. Hence, intervention effects on behavior are larger at longer-term follow-up. …* [From the results of this intervention] *it cannot be assumed that an intervention developed for one ethnic group will be ineffective with another group.*

Jemmott, Jemmott, Braverman *et al*, 2005

Program Description

The skills-based HIV and STI risk reduction intervention is based in cognitive behavioral theories and formative research. Designed for use in an adolescent medicine clinic that also provides young clients with confidential and free family planning services, the program teaches young women skills necessary to use condoms. In particular, it illustrates correct condom use, and depicts effective condom-use negotiation with a sex partner. In addition to providing accurate information, it also addresses personal vulnerability and the heightened HIV risk facing young, inner-city Latinas and African American women. It addresses barriers to condom use, including negative beliefs and alcohol and drug use as well as ways to surmount these barriers. Most importantly, the young women practice handling condoms correctly on anatomical models and engage in role plays to increase their partner negotiation skills.[30]

Evaluation Methodology

Evaluators tested the effects of the skills-based intervention in relation to an information-based HIV prevention intervention and to a generalized health promotion intervention. Participants had volunteered for a women's health project designed to reduce young women's risk of eventually developing serious health problems like heart disease, cancer, and AIDS. Each was reimbursed up to $120 ($40 for completing the intervention and pre- and post-intervention questionnaires; $25 for the three- and the six-month follow-up; and $30 for the 12-month follow-up). The young women completed a confidential, self-administered questionnaire immediately before and after the intervention and at three, six, and 12 months later. All questionnaires assessed sexual behavior and variables on demographics and conceptual mediators. Biological specimens for STI testing were collected at baseline and at 6- and 12-month follow-up.[30]

Participants were 682 sexually experienced African American (n=463) and Latina (n=219) young women, ages 12 to 19, who were family planning clients at an adolescent medicine clinic within a children's hospital that served low-income, inner-city youth in Philadelphia, Pennsylvania. Participants were randomly assigned to the skills-based intervention (n=235), to an information-based treatment (n=228), or to a health promotion control condition (n=219). Of all the adolescents eligible for the study (n=1,150), 59 percent chose to participate, including a greater percentage of eligible African Americans than Latinas (69 versus 46 percent, respectively; $P \leq .001$). Participants were also somewhat younger than non-participants (15.5 versus 16.1 years; $P \leq .001$). Participants and eligible non-participants did not differ in STI prevalence at baseline.[30]

At baseline, 87 percent of respondents reported previous sexual intercourse. About 52 percent reported unprotected sexual intercourse. Sixteen percent reported sexual intercourse with multiple partners in the previous three months. Ten percent of respondents had at least one child. Twenty-two percent tested positive for gonorrhea, chlamydia, or trichomoniasis. Less than one percent reported having same-gender sexual relationships (0.4 percent) or using injection drugs (0.6 percent).[30]

Ninety-eight percent of participants attended at least one follow-up; 94 percent, the 3-month; 93 percent, the six-month; and 89 percent, the 12-month follow-up. There were few significant differences between those who returned for follow-up and those who did not. Non-returnees reported more frequent sex at baseline (mean, 3.44 versus 0.40; $P \leq .001$) and more unprotected sex while intoxicated (mean 0.94 versus 0.24; $P \leq .001$); were more likely to be Latina than African American (96 versus 99 percent; $P = .04$); and were less likely to live with their mother (94 versus 99 percent; $P = .001$). At follow-up, evaluators found no significant differences between adolescents assigned to the information-based HIV/STI prevention condition and to the health promotion control condition.[30]

Outcomes

- **Reduced incidence of unprotected sexual intercourse**—By 12-month follow-up, participants in the skills-based intervention reported significantly fewer days in the past three months when they had sex without using a condom, compared to either the information-based or the health promotion condition (2.27 days versus 4.04 [P=.03] and 5.05 [P=.002], respectively). In addition, young women in the skills-based intervention reported significantly fewer days when they had unprotected sex while using drugs or alcohol, compared to those in the health promotion condition (0.1 days versus 0.22 days; P=.02).[30]

- **Reduced number of sex partners**—By 12-month follow-up, a significantly smaller proportion of participants in the skills-based intervention reported multiple sex partners in the previous three months compared to youth in the health promotion condition (seven percent versus 17 percent, respectively; P=.002).[30]

Long-Term Impact

- **Reduced incidence of STIs**— By 12-month follow-up, a significantly smaller proportion of participants in the skills-based intervention tested positive for STIs compared to youth in the health promotion condition (mean 11 percent versus 18 percent, respectively; P=.05).[30]

Note: There were no significant differences in outcomes related to frequency of unprotected sex, number of sex partners, or rates of STIs by intervention at the three- or six-month follow-up.

For More Information, Contact:

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Poder Latino: A Community AIDS Prevention Program for Inner-City Latino Youth

Program Components

- Peer education workshops on HIV awareness and prevention and peer-led group discussions in various settings in the community
- Peer-led efforts to make condoms available via door-to-door and street canvassing
- Presentations at major community events
- Radio and television public service announcements (PSAs)
- Posters in local businesses and public transit
- Quarterly newsletter produced by the peer educators
- Extensive training for peer educators
- Length of intervention—18 months

For Use With

- Latino adolescents, ages 14-19
- Urban youth

Evaluation Methodology

- Quasi-experimental design, including treatment and comparison conditions
- Latino teens (n=586 at baseline; n=536 at follow-up) in Boston, Massachusetts (intervention community) and Hartford, Connecticut (control community); ages 14 to 20
- Pretest and 18-month follow-up

Evaluation Findings

- Delayed initiation of sexual intercourse (males)
- Reduced number of sex partners (females)

Evaluators' comments: *Evaluation of an HIV prevention program that included the promotion and distribution of condoms provided no evidence to suggest that the availability of condoms increased sexual activity or promoted promiscuity… Adolescents in the intervention city who were not sexually active prior to the intervention were no more likely to become sexually active than those in the comparison city. In fact, male respondents in the intervention city were less likely than those in the comparison city to experience the onset of sexual activity.*

Sellers, McGraw & McKinlay, 1994

Program Description

This multifaceted, community-wide intervention is designed to increase HIV/AIDS awareness and to reduce the risk of HIV infection by increasing condom use among sexually experienced Latino teens. Activities are led by specially trained peer leaders and include workshops in schools, community organizations, and health centers; group discussions in the homes of Latino youth; presentations at community-wide events; and door-to-door and street corner canvassing to make available both condoms and pamphlets on how to use them. Radio and television PSAs, posters in local businesses and public transit facilities, and a quarterly newsletter published by the peer leaders provide messages promoting the use of condoms.[28]

Evaluation Methodology

In the 18-month intervention, trained, bilingual staff completed baseline and post-intervention interviews among Latino youth (n=586 at baseline; n=536 at follow-up) in Boston, Massachusetts (intervention site) and in Hartford, Connecticut (comparison site). Adolescents were identified in two ways. First, many Latino youth participated in a smoking prevention

project begun three years earlier. Members of the households of these teens were screened for eligibility in the evaluation of *Poder Latino*. Second, city blocks were identified in which at least 20 percent of households had Latino residents. Bilingual researchers then screened the selected blocks for eligible Latino youth, who were then interviewed either in-home (under circumstances that protected youth's confidentiality) or by phone, in cases where in-home visits could not be scheduled. Initial personal interviews were completed with 586 Latino teens, ages 14 through 19, and follow-up interviews with 536.[28]

This evaluation used an infection probability model to estimate youth's risk for HIV infection. Latino youth were classified for analysis as 1) never having had vaginal or anal intercourse; 2) sexually experienced but not having had vaginal or anal intercourse in the past six months; 3) sexually experienced and having had vaginal or anal intercourse in the past six months. Youth were then placed into risk groups. Teens were considered at high risk if they reported needle sharing, anal intercourse, or sex with a prostitute, a bisexual or homosexual man, or an intravenous drug user. Teens were considered at moderate risk if they reported using a condom inconsistently and had vaginal sex in the past six months. Teens were considered at no risk if they reported no sexual activity or needle sharing during the previous six months. Ninety-four percent of the youth were Puerto Rican; 48 percent reported never having had sex at baseline. Nearly all of the 46 youth considered to be at high risk were female (43 of 46).[28,29]

Outcomes

- **Behaviors**—
  - **Delayed initiation of sexual intercourse—**At 18-month follow-up, males in the intervention community (Boston) were less likely than males in the comparison community (Hartford) to have initiated sexual intercourse (odds ratio=0.08). The intervention did not significantly increase or decrease the odds of females initiating sex.[28]
  - **Reduced number of sex partners—**At 18-month follow-up, female teens in the intervention community were significantly less likely to report multiple sex partners in the last six months, compared to females in the comparison community (odds ratio=0.06).[28]
  - **Increased likelihood of possessing a condom—**Sexually active male and female youth in the intervention community were more than twice as likely to have a condom in their possession at 18-month follow-up as were youth in the comparison community (odds ratio=2.3 and 2.0 greater for males and females, respectively).[28]
  - **Frequency of sex unaffected—**The intervention did not significantly affect the frequency of sex for either male or female participants, relative to comparison youth.[28,29]

For More Information or to Order, Contact:

- ***Sociometrics Program Archive on Sexuality, Health & Adolescence***; Phone: 1.800.846.3475; Fax: 1.650.949.3299; E-mail: pasha@socio.com; Web: http://www.socio.com

Safer Choices

Program Components

- HIV/STI and teen pregnancy prevention curriculum
- Twenty sessions, each lasting one class period, divided evenly over two years
- Experiential activities included to build skills in communication, delaying sex among sexually active youth, using condoms
- School health protection council
- Peer team or club to host school-wide activities
- Parenting education
- Links to community services
- HIV-positive speakers (optional)
- Educator training

For Use With

- High school students in ninth and 10th grades
- Sexually inexperienced Hispanic youth
- Urban and suburban youth
- Multiethnic populations – including white, Hispanic, African American, and Asian youth
- Sexually experienced youth

Evaluation Methodology

- Experimental design, including treatment and control conditions, in 20 schools in Texas and California
- Urban and suburban youth (n=3,869 at baseline; n=3,058 at final follow-up)
- Pretest and follow-up surveys at seven months (end of first year of intervention), at 19 months (end of second year of the intervention), at 31 months after baseline, and at 12 months after second year of the intervention

Evaluation Findings

- Delayed initiation of sexual intercourse – among Hispanic youth only
- Increased use of effective contraception
- Increased condom use
- Reduced number of sex partners without the use of condoms
- Reduced incidence of unprotected sex
- Increased HIV testing – among students who heard an HIV-positive speaker

Evaluators' comments: *First, Safer Choices had positive impacts across a variety of groups, regardless of their gender, ethnicity, or sexual experience before taking Safer Choices… Second, regarding all four outcome measures affected by condom use, Safer Choices appeared to have a greater impact among males than females… Third, Safer Choices appeared to have a greater number of positive behavioral effects on Hispanics… Fourth, Safer Choices appeared to have a greater impact on condom-related measures among higher-risk youth who engaged in unprotected sex before the intervention.*

Kirby, Baumler, Coyle *et al.* 2004

Program Description

Safer Choices is a two-year, school-based, HIV/STI and teen pregnancy prevention program with the primary goal of reducing unprotected sexual intercourse by encouraging abstinence and, among students who report having sex, encouraging condom use. The program seeks to modify:

- HIV/STI knowledge;
- Attitudes and norms about abstinence and condom use as well as barriers to condom use;
- Students' belief in their ability to refuse sex and avoid unprotected sex, use condoms, and communicate with partners about safer sex;
- Perceptions of risk for infection with HIV or other STIs; and
- Communication with parents.[15]

Based on social cognitive theory, social influence theory, and models of social change, *Safer Choices* is a high school program that includes:

- A school health protection council;
- The curriculum;
- Peer club or team to sponsor school-wide activities;
- Parenting education; and
- Links between schools and community-based services.
- In some schools, programs also incorporate an HIV-positive speaker.[15]

The program is delivered in 20 sequential sessions, divided evenly between ninth and 10th grades. Parents receive a newsletter and participate in some student-parent homework assignments. School-community links center on activities to enhance students' familiarity with and access to support services in the community. Each year of the program, schools implement activities across all five components.[15,16,17]

Evaluation Methodology

Safer Choices was evaluated in 20 high schools in California and Texas. In each state, five high schools were randomly assigned to receive *Safer Choices*. At the same time, five schools were randomly assigned to receive a standard, knowledge-based, HIV prevention curriculum. A total of 3,869 ninth grade students completed the baseline survey in fall 1993. Twenty-nine percent of participants and control youth were white; 29 percent, Hispanic; 20 percent, African American; and 14 percent, Asian. Participants and control youth were 50 percent male, 50 percent female. The cohort was tracked for 31 months, and follow-up data were collected from 3,058 students, using self-reported surveys administered by trained data collectors.[15,16,17]

Outcomes

- Knowledge—At 31-month follow-up, evaluation found significant improvements in participants' knowledge about HIV and STIs, in comparison to control youth.[15]

- Attitudes and perceptions—At 31-month follow-up, intervention participants expressed significantly more positive attitudes about condoms and reported greater condom use self-efficacy, fewer barriers to condom use, and higher levels of perceived risk for HIV than did control youth.[15]

- **Behaviors—**

  - **Delayed initiation of sexual intercourse**—Early analysis of evaluation data found no significant differences between intervention and control youth in the incidence of sexual initiation, either at three-month post-test or at final follow-up.[15,16] Yet, when the evaluators later analyzed the data by race/ethnicity, they found that Safer Choices had a significant impact on delaying the initiation of sexual intercourse among Hispanic students (OR=0.57; P =.02).[17] *Safer Choices* did not significantly delay the onset of sexual intercourse among white, Asian, or black participants, nor did it have a significant effect by gender.[17]

- **Increased use of effective contraception—**Sexually experienced students in intervention schools were 1.76 times more likely to use an effective pregnancy prevention method (birth control pills, birth control pills plus condoms, or condoms alone) than were students in comparison schools.[15]
- **Increased condom use—***Safer Choices* had its greatest effect regarding condom use. Sexually experienced intervention students were less likely to report having sex without a condom in the three months prior to follow-up surveys than were sexually experienced control students. Intervention students who reported having sexual intercourse during the prior three months were 1.68 times more likely to have used condoms than were control students.[16] Safer Choices increased condom use at most recent sex more among Hispanics and whites than among blacks (OR=1.65 and 1.57 versus 1.07, respectively).[17]
- **Reduced incidence of unprotected sexual intercourse**—*Safer Choices* did not have a significant direct effect on incidence of unprotected sex among blacks, Hispanics, or whites. Yet, one or more condom-related measures were significant or close to significance in the desired direction. Among blacks, effects were close to significance for number of partners unprotected (*P* =.07). Among Hispanics, effects were significant or close to significance for number of times of unprotected sex (P =.03), condom use at last sex (P =.04), and use of contraception (P =.06). Among whites, effects were significant for number of times of unprotected sex (*P* =.04) and condom use at last sex (*P* =.04).[17]

  In combination, these results suggest that blacks decreased risk by reducing their number of unprotected partners. Hispanics reduced risk by delaying sex, increasing condom use, and increasing contraceptive use, thereby decreasing frequency of unprotected sex. Whites decreased risk by increasing condom use and thereby decreasing frequency of unprotected sex.[17]
- **Reduced number of partners with whom teens had intercourse without a condom—**Intervention students reduced the number of sex partners with whom they had sexual intercourse without a condom by a ratio of 0.73.[16]
- **Number of sex partners and use of substances prior to sex unaffected—**Evaluation found no significant differences between intervention and control youth on number of sex partners reported in the last three months, nor on use of alcohol and other drugs before sexual intercourse in the last three months.[15,16]

■ **Outcomes from integrating HIV-positive speakers into the program**

Separate evaluation found that integrating HIV-positive speakers into the program also produced positive outcomes for inner-city youth. During the two-year intervention in Texas, about 384 high school classrooms (mostly ninth and 10th grade) heard an HIV-positive speaker.[18]

- **Attitudes—**Evaluation found that students who heard the speaker's presentation reported significantly higher perceived risk of HIV infection, compared to control students. Results also suggested that students in the intervention who heard the speaker were more willing to help a person with HIV and were less fearful of hugging an HIV-infected classmate than were those who did not hear the speaker.[18]
- **Behaviors—**Students in the intervention condition who heard the HIV-positive speaker were more likely to get tested for HIV, compared to students who did not hear the speaker.[18]

For More Information or to Order, Contact:

■ ***Sociometrics, Program Archive on Sexuality, Health & Adolescence***; Phone: 1.800.846.3475; Fax: 1.650.949.3299; E-mail: pasha@socio.com; Web: http://www.socio.com

■ ***ETR Associates***; Phone: 1.800.321.4407; Fax: 1.800.435.8433; Web: http://www.etr.org

Section II. Programs in which the Majority of Evaluation Participants were Latino Youth

This section describes three programs that have been evaluated in which the majority of evaluation participants were Latino youth and which were found to be effective in changing or delaying behaviors that relate to teenage pregnancy and sexually transmitted infections (STIs), including HIV, and where the majority of evaluation participants were Latino youth.

Of these three programs, two are community-based programs (*California's Adolescent Sibling Pregnancy Prevention Project* and *Children's Aid Society – Carrera Program*); and one is a clinic-based program (*Project SAFE: Sexual Awareness for Everyone*). The former two were designed for use with all youth in the community, while the latter was designed for Latinas and African American women.

Two programs helped youth delay first sex; two helped youth increase use of contraception; and two resulted in a decrease in teen pregnancy among participating youth.

Each of these programs fits the stringent criteria for inclusion in this document, as described in the introduction. Organizations and individuals that work with a diverse community that includes majority of Latino youth should explore replicating one of the three programs described in this section:

5. *California's Adolescent Sibling Pregnancy Prevention Project* (community-based: in evaluation, 77 percent of participants were Hispanic/Latino)
6. *Children's Aid Society – Carrera Program* (community-based: in evaluation, 53 percent of participants were Hispanic/Latino)
7. *Project SAFE: Sexual Awareness for Everyone* (clinic-based: in evaluation, 69 percent of participants in first evaluation were Hispanic/Latino and 75 percent in second evaluation)

California's Adolescent Sibling Pregnancy Prevention Program

Program Components

- Individualized case management
- Some combination of services, possibly including academic guidance, access to health care, sports, and activities to improve social skills and competency
- Sex education, including information on abstinence and contraception

For Use With

- Siblings of pregnant and parenting teens
- Youth at high risk[1] ages 11 through 17
- Hispanic youth
- Economically disadvantaged youth

Evaluation Methodology

- Quasi-experimental design, including treatment and comparison conditions, at 16 Adolescent Sibling Pregnancy Prevention Program (ASPPP) social service agencies across the state of California
- Urban and rural, mostly Hispanic youth, ages 11 through 17.
- Siblings of pregnant or parenting adolescents; average age 13.5; (n=1,594 at baseline; n=1,271 at nine-month post-test; n=1,466 at final evaluation)
- Pretest and follow-up after nine months

Evaluation Findings

- Delayed initiation of sexual intercourse – females only
- Increased use of contraception – males only
- Long-term: Reduced teen pregnancy rate

Evaluators' comments: *California's special sibling program was effective at reducing the pregnancy rate and several pregnancy-related behaviors in this high risk sample… Although such specially targeted programs are certainly a challenge to implement, they hold great promise for significantly lowering rates of teenage pregnancy and births.*

East, Kiernan, Chavez , 2003

Program Description

In 1996, California created the *Adolescent Sibling Pregnancy Prevention Program* (ASPPP). It operates at 44 nonprofit social service agencies, community-based organizations, school districts, and county health departments throughout California. ASPPP targets the brothers and sisters of pregnant and parenting teens. Each program site provides some combination of services that may include individual case management, academic guidance, decision-making skills, job placement, self-esteem enhancement, and sex education, including information on abstinence and contraception. The overall goal of the program is to reduce rates of teen pregnancy among young adolescents.[24]

No specific program services are required of providers other than to have at least one face-to-face contact with each client each month. Program personnel are expected to implement a variety of services to prevent pregnancy and related risk behaviors. Sample programs offer:

[*] In this program, high risk teens are defined as those who have pregnant or parenting siblings that also participate in California's CAL-LEARN program.

- Counseling about abstinence and contraception;
- Access to quality reproductive health care;
- Transportation to health care facilities;
- Incentives to avoid sexual risk-taking;
- Tutoring and assistance with library research;
- Advocacy at expulsion and court hearings;
- Assistance in meeting with teachers, school administrators, and counselors;
- Help in acquiring medical insurance;
- Access to sports;
- Education about media messages regarding body image and sexual behavior;
- Field trips; and
- Group activities to improve social skills and social competency.[24]

Evaluation Methodology

When evaluation began, approximately 3,300 youth were participating in ASPPP at all the program sites across the state. Sixteen sites were selected to participate in the evaluation. The 16 sites served 1,011 youth (31 percent) participating in ASPPP. Sites were chosen on the basis of being representative geographically, by area of residence (urban or rural), and by clients' age and race / ethnicity. Overall, clients at chosen sites were more likely than all ASPPP clients to be urban, Hispanic, and younger than average. However, the gender breakdown was identical to overall gender representation in ASPPP (60 percent female, 40 percent male).[24]

Evaluation involved a group of current participants and a comparison group of youth not in ASPPP. Overall, 1,594 youth were enrolled in the evaluation: 1,011 ASPPP participants and 583 comparison youth. All youth (participants and comparisons) were ages 11 to 17, had never been pregnant or caused a pregnancy, and were the biological teenage sibling (half or full sibling) of another teen who was pregnant or parenting and also enrolled in California's Adolescent Family Life Program. Adolescents in the participating group also had to be currently enrolled in ASPPP. Comparison youth were usually identified through providers' existing caseloads, since providers were normally familiar with the families and siblings of teens already enrolled in their programs. Neither comparison youth nor their siblings could ever have been enrolled in ASPPP. Post-test data were collected nine months after enrollment from 1,271 adolescents. In final evaluation, the information from 731 program participants was compared with a weighted sample of 735 comparison youth.[24]

Characteristics of program and comparison groups included the following: program youth were 77 percent Hispanic, 10 percent black, eight percent white, and five percent "other". Comparison youth were 71 percent Hispanic, 11 percent black, nine percent white, and nine percent "other". The groups differed in that 59 percent of ASPPP youth spoke Spanish at home while 46 percent of comparison youth did so. Sixty-six percent of participating youth had a family that currently received public assistance, while 75 percent of comparison youth did so. Youth were mostly urban (71 percent of participants and 70 percent of comparison youth) or rural (17 and 18 percent, respectively). Slightly over half lived in two-parent households. Mean age of all youth participating in the evaluation was 13.5 for participants and 13.6 for comparison youth; mean grade in school was eighth. The program was assessed using data from an enrollment survey and a post-test at nine months after enrollment.[24]

Outcomes

- Attitudes and perceptions—At nine months post-test, participating females scored significantly higher than comparison females on intentions to practice abstinence.[24]

- **Behaviors**—
  - **Delayed initiation of sexual intercourse—**A significantly lower proportion of participating females than comparison females initiated sex over the nine-month study period (seven and 16 percent, respectively).[24]
  - **Increased use of contraception—**Sexually active participating males were significantly more likely than sexually active comparison males to have increased their consistency of contraceptive use. Over

time, comparison males were more likely to decrease their consistent use of contraceptives.[24]

- **Decreased rate of truancy—**Program females' frequency of truancy (staying out of school without permission) declined from pretest to post-test while it rose among comparison females.[24]

Long-Term Impact

- Decreased teen pregnancy rate—A significantly lower proportion of participating than comparison females experienced pregnancy during the nine-month study period. The reduced pregnancy rate among participating females versus comparison females (four and seven percent, respectively) translates into a 43 percent reduction in teenage pregnancy.[24]

For More Information, Contact:

- ***California Department of Health Services, Maternal & Child Health Branch***, 1615 Capitol Ave MS 8306 Sacramento, CA 95899; Phone: 916.558.1784; Web: http://www.cdph.ca.gov/programs/MCAH/Pages/default.aspx

- Please note the California Department of Public Health no longer implements this program. With the permission of the California Department of Public Health, an overview of the program and a sample scope of work is available on Advocates' for Youth website at: http://www.advocatesforyouth.org/programsthatwork/aflp_background.pdf and http://www.advocatesforyouth.org/programsthatwork/aflp_scopeofwork.pdf

Children's Aid Society – Carrera Program

Program Components

- Youth development program
- Daily after-school activities, lasting three to five hours, and including
  - Job club and career exploration
  - Academic tutoring and assistance
  - Comprehensive sex education, including information about abstinence and contraception
  - Arts workshops
  - Individual sports activities
- Summer program, offering enrichment activities, employment assistance, and tutoring
- Comprehensive health care, including primary care and also mental, dental, and reproductive health care
- Family involvement
- Activities to develop interpersonal skills
- Access to social services

For Use With

- Youth at risk2
- Socio-economically disadvantaged youth
- Urban youth, ages 13 through 15
- Black and Hispanic young women

Evaluation Methodology

- Experimental design, including treatment and control conditions, in seven community-based service agencies in New York City
- Urban youth ages 13 through 15 (n=600 at baseline; n=484 at three-year follow-up)
- Pre-test and annual follow-up in each of three succeeding years

Evaluation Findings

- Delayed initiation of sexual intercourse – females only
- Increased resistance to sexual pressure – females only
- Increased use of dual methods of contraception (condoms plus another effective contraceptive method) – females only
- Increased use of reproductive health care
- Long-term: Reduced rates of teen pregnancy

Evaluators' comments: *Our study clearly documents the effectiveness among females of a comprehensive program to prevent adolescent pregnancy. Although our analyses cannot determine the relative importance of the model's components, the philosophy, structure, and specific staff roles may each contribute to the successful long-term relationships that a large proportion of the young people formed with the program and its staff.*

Philliber, Williams, Herrling *et al*, 2002

Program Description

This is a sex education, pregnancy prevention, and youth development program for urban youth considered to be at high risk. The comprehensive intervention rests on six principles:

- Staff treats young participants as if they were family.

[*] In this program, youth at risk are defined as "disadvantaged, inner-city populations" who are not already enrolled in an after-school program AND were neither pregnant or parenting at enrollment.

- Staff views each young person as pure potential.
- The program offers holistic services and comprehensive, integrated case management.
- The program includes continuous, long-term contact with participants.
- The program involves parents and family.
- All services are available under one roof in a non-punitive, gentle, generous, and forgiving environment.[25]

The program has five activity components and two service components. Activity components include:

- Job Club, offering stipends, help with bank accounts, employment experience, and career awareness
- Academics, including individual assessment, tutoring, PSAT and SAT preparation, and assistance with applying to colleges
- Comprehensive family life and sex education
- Arts, including weekly music, dance, writing, and drama workshops
- Individual sports activities that emphasize impulse control, such as squash, golf, and swimming.[25]

The two service components are 1) mental health care and 2) medical care, including primary care, reproductive health care, and dental care.[25]

Throughout the school year, program activities run all five weekdays, generally for about three hours per day. Participants are divided into groups which rotate among the five major activities offered. One group might receive sex education on Tuesdays and Thursdays, for example, while another group attends Job Club. On Monday and Wednesday, the groups would be reversed. Most students participate in sports and creative activities at least once a week and receive academic assistance daily. Over the summer, program activities include maintenance meetings to reinforce youth's sex education and academic skills. Also during the summer, participants receive job assistance and participate in social events, recreational activities, and cultural trips.[25]

Evaluation Methodology

A multi-site evaluation compared youth in the Children's Aid Society Carrera Program to youth recruited at six other service agencies throughout New York City. Youth were randomly assigned to the Children's Aid Society Carrera Program or to an alternative program. At most sites, the alternative was the agency's regular program for youth. Young people (n=600 at baseline; n=484 at three-year follow-up) ranged in age from 13 to 15. Fifty percent of participants were male. Among females, 54 percent of participants were black and 46 percent were Hispanic. Among males, 47 percent were black and 53 percent were Hispanic. The majority of the youth (55 percent) lived in single parent homes. The program's effectiveness was assessed using annual surveys.[25]

Outcomes

- Knowledge—Overall after three years, program participants' knowledge of sexual health issues rose by 22 percent, compared to 11 percent among control youth, a statistically significant difference. Male participants showed higher sexual health knowledge gains than did control males (18 and six percent, respectively).[25]

- **Behavior—**
  - **Delayed initiation of sexual intercourse—**Program young women were significantly *less* likely than control females to have ever had sex; 46 percent had *never* had sex versus 34 percent of control females.[25]
  - **Increased resistance to sexual pressure—**Females in the program were significantly *more* likely than those in the control group to say they had successfully resisted pressure to have sex (75 percent and 36 percent, respectively).[25]
  - **Increased use of contraception *and* condoms together—**Sexually experienced program females were significantly *more* likely than control females to have used a condom along with another effective method of contraception (i.e., the pill, injection, or implant) at most recent sex (36 percent and 20 percent, respectively).[25]
  - **Increased receipt of good health care—**Both male and female participants had significantly increased odds of receiving good health care. Among sexually experienced males, the proportion

who had made a visit for reproductive health care was significantly higher among program than control males (74 and 46 percent, respectively).[25]

- **Other findings related to young men—**Overall, program males showed no positive, significant behavioral differences relative to control males, except increased receipt of good health care. Program males were less likely than control males to report use of dual methods of contraception at most recent sex.[25]

  Researchers speculated that the program effects may have been weaker among young men, in part because:

  - Young men who had initiated sex prior to enrolling in the program were the least likely to attend regularly.
  - Strong social norms among these inner-city young males might stress the benefits of early sexual intercourse and parenthood.
  - Program males may not have repeated the program's messages to their non-enrolled female partners.

  The data suggest that reaching young men sooner may strengthen outcomes, and, as a result, the Children's Aid Society has begun implementing programs with 11- and 12-year-old males.[25]

Long-Term Impact

- Reduced rates of teen pregnancy—At third-year follow-up, females in the Children's Aid Society—Carrera Program had significantly lower rates of pregnancy and births than did control females.[25]

For More Information, Contact:

- ***Children's Aid Society***, 105 East 22nd Street, New York, NY 10010; Phone: 212.949.4800; Web: http://www.childrensaidsociety.org

Project SAFE—Sexual Awareness for Everyone

Program Components

- STI clinic-based behavioral intervention to reduce risk for HIV
- Culturally specific
- Gender specific
- STI screening, counseling, and treatment
- Three small group sessions once a week for consecutive weeks and each lasting three to four hours, focusing on: 1) recognizing risk; 2) committing to change; and 3) building skills
- Interactive teaching, including games, discussion, role plays, and behavior modeling
- Follow-up screening visits at six and 12-months after baseline as well as whenever symptoms or concerns about re-infection arise
- Trained facilitators of the same gender and race/ethnicity as participants
- Optional support groups meeting once a month for five months

For Use With

- Latinas, ages 15 through 24
- African American women, ages 15 through 24
- Urban minority young women

Evaluation Methodology

Project SAFE:

- Experimental evaluation using a randomized controlled trial with treatment (n=313) and control (n=304) conditions
- Baseline data on African American (n=193) and English-speaking Mexican-American (n=424) women
- Follow-up at six- and 12-months post intervention
- Participants received incentives for taking the baseline and follow-up surveys

Project SAFE-2:

- Experimental evaluation with two treatment conditions (n=237 standard intervention; n=262 enhanced intervention) and one control condition (n=276)
- Baseline data on English-speaking Mexican-American (n=585) and African American (n=190) women
- Follow-up at six-, 12-, 18-, and 24-months after baseline
- Participants received incentives for taking the baseline and follow-up surveys

Evaluation Findings

- Increased monogamy (Project SAFE-2)
- Reduced number of new sex partners (both)
- Reduced incidence of unprotected sex (Project SAFE)
- Increased compliance with STI treatment protocols (both)
- Long-term: Reduced incidence of STIs (both)

Evaluators' comments: *Despite substantial observed ethnic differences in attitudes, behaviors, and re-infection rates, the cognitive-behavioral intervention used in Project SAFE resulted in similar, proportionate reductions in the rate of re-infection among both ethnic groups, comparing study women with control women. This accomplishment is encouraging, in light of the disproportionate burden of sexually transmitted disease borne by low-income minority populations in the United States.*

Korte, Shain, Holden *et al*, 2004

Program Description

This gender specific and culture specific behavioral intervention is based on cognitive behavioral theories, including the Health Belief Model, self-efficacy theory, diffusion theory, and decision-making models. It conforms to the stages of the AIDS Risk Reduction Model. The intervention consists of three multi-component sessions, each lasting three to four hours. Participants (ranging from three to 12 in a group) and a female facilitator (of the same race or ethnicity as participants) meet once a week for three consecutive weeks. Contents of the culture specific interventions are the same, although emphases and cultural cues vary. Highly trained facilitators provide information and also actively involve participants in lively and open discussions and games as well as in watching videos, modeling behaviors, and participating in role plays. Facilitators encourage participants to identify realistic risk-reduction strategies within the context of their own life and values. Discussion covers abstinence, mutual monogamy, correct and consistent condom use, full compliance with STI treatment protocols, and reducing the number of one's sex partners. In addition, participants are also encouraged to continue with optional support groups in meeting in five once-a-month sessions.[31,32]

In addition to the multi-component sessions, participants receive screening and treatment for STIs along with routine follow-up appointments at six, 12, 18, and 24 months after the baseline screening as well as encouragement to come in for screening whenever symptoms of STIs arise.[31,32]

Evaluation Methodology

Project SAFE:

Participants were recruited from public health clinics in San Antonio, Texas. They were Latinas and African American women who had a non-viral STI, such as chlamydia, gonorrhea, syphilis, or trichomoniasis. All participants spoke English. After giving informed consent, participants were interviewed and received baseline examination, screening for STIs, treatment where necessary, and counseling. At this point, participants were randomly divided into treatment and control conditions. Controls received standard STI counseling, lasting about 15 minutes, provided by nurse clinicians and conforming to guidelines issued by the Centers for Disease Control & Prevention. Participants, whether treatment or control, also received follow-up appointments for six and 12 months later and encouragement to come in if and when they experienced STI symptoms or feared re-infection. Participants received $25.00 for their initial visit and for their six-month visit; they received $50.00 for the 12-month visit.[31]

Seventy-one percent of participants were younger than age 24; the mean age of intervention group was 21.8 years and that of the control group was 21.3 years. Monthly income for the intervention group was a mean of $243.00 while that of the control group was $267.00. Women's mean educational attainment was 10.8 years in both groups. Seventy percent of participants were Mexican American (70 percent of intervention group and 68 percent of control group); the rest of the women were African American (30 and 32 percent, respectively). At baseline, 28 percent of women in the intervention group and 33 percent of the control group were pregnant. There were no significant differences at baseline between intervention and control group participants in the proportion infected with various STIs. Among the intervention group, 21 percent were infected with gonorrhea, 67 percent with chlamydia, 26 percent with trichomoniasis, and six percent with syphilis. Among the control group, 21 percent were infected with gonorrhea, 71 percent with chlamydia, 21 percent with trichomoniasis, and six percent with syphilis.[31]

After stratification according to race/ethnicity, a total of 424 Mexican American and 193 African American women were randomly assigned to study (n=313) or control (n=304) conditions. Rates of participation among the study group were 90 percent for the first session, 82 percent for at least two sessions, and 75 percent for all three sessions. Enrollment began in January 1993 and ended in July 1994. Six- and 12-month retention rates were 82 percent at six months (84 percent of study group; 80 percent of controls; total=508), and 89 percent at 12 months (91 percent of study group; 87 percent of controls; total=549). Twenty-six women with six-month visits were lost to follow-up at 12 months, while 67 women who missed the six-month screening returned at 12 months. Repeat screening for chlamydia and gonorrhea were also performed at a total of 260 problem visits. The analysis included 509 women at six months, 545 at 12 months, and 549 for the total study period. Behavioral analysis included results for 477 women who attended both follow-up visits. Rates of loss at follow-up did not differ significantly between study and control groups for any subgroup analysis.[31]

Project SAFE-2:

The evaluation protocol was nearly the same as in the first Project SAFE except that there were two treatment conditions (with and without optional support group meetings). All Mexican American and African American women diagnosed with gonorrhea, chlamydia, syphilis, or trichomoniasis in public health clinics were referred to the study for potential participation. Eligible English speaking women of reproductive age (15 to 45 years old) were offered enrollment.[32]

Fourteen-year-old women were enrolled only at the specific request of the Health Department or their guardians and with special Institutional Review Board permission. Researchers unexpectedly enrolled a much higher proportion of alcoholics and drug addicts in this study than in the previous study. Substance users were not excluded unless they were under age 18, used hard drugs, and had dropped out of middle or high school. Women with only two of these three risk factors were still allowed to enroll. Young teens, ages 14 and 15, who had been sexually abused were allowed to participate but were excluded from analysis. Fifty-three enrolled women were later declared ineligible because of: protocol violations (n=5); severe mental illness (n=2); criminal activity in the clinic (n=1); being sexually abused 14- to 15-year-olds (n=16); or 14- to 17-year-old dropout users of hard drugs (n=29).[32]

A total of 585 Mexican American and 190 African American women were randomly assigned to enhanced intervention (Project Safe-2; n=262; with follow-up for a full two years), standard intervention (Project SAFE; n=237; with follow-up for one year), or a control group (n=276). All participants received follow-up appointments for six, 12, 18, and 24 months later and were encouraged to come in if and when they experienced STI symptoms or feared re-infection. Participants received $25.00 for their initial and their six-month visits; they received $15.00 for the 18-month visit and $50.00 for each of the two annual visits (12 and 24 months).[32]

Enrollment began in March 1996 and ended in June 1998. Of 1,271 potentially eligible women 33 percent declined to participate. Intervention show rates (before the six-month visit) were 96 percent for at least one session, 92 percent for at least two sessions, and 86 percent for all three sessions. Among women assigned to the enhanced intervention, 63 percent chose not to attend the optional support groups; however, 37 percent attended at least one session prior to their six-month visit and 26 percent attended two or more sessions. Twelve-month and 24-month retention rates (based on 775 eligible women) were both 91 percent (n=709 and 707, respectively). No group differences in retention rates were detected although, within the enhanced intervention group, women who attended support groups had higher retention rates than those who did not attend (96 versus 84 percent, P=0.004). Support-group non-attendees subsequently lost to follow-up (compared to non-attendees who were retained in the program) were more likely to have had more than one partner at baseline ($P \leq 0.06$) and to have had syphilis ($P \leq 0.001$).[32]

Low levels of income and education characterized the study participants; 53 percent were under age 20 and 85 percent were under age 25. Less than 10 percent were married and over 60 percent had more than one partner in the previous year. Most importantly and despite random assignment, one or both intervention groups had a higher percentage of women who were under age 20, were in high substance risk categories, and/or had multiple additional screenings for gonorrhea and/or chlamydia. Support group attendees, compared to non-attendees, had less education (10.1 versus 10.7 years; $P \leq 0.02$), were more likely to be young (62 versus 50 percent; P=0.056), and were likely to report three or more partners in the previous three (13 versus five percent; $P \leq 0.03$) and six month periods (27 versus 13 percent; $P=0.007$).[32]

Project SAFE Outcomes:

- Reduced number of sex partners—Significantly fewer women in the intervention group than in the control group reported multiple partners (P=0.004). Specifically, nearly 68 percent of women in the intervention group reported no partner or only one partner in the 12 months after baseline compared to 56 percent of women in the control group. Nearly 33 percent of women in the intervention group reported more than one sex partner, compared to 44 percent in the control group.[32]

- Reduced incidence of unprotected sex— Significantly fewer women in the intervention group than in the control group reported multiple acts of unprotected sexual intercourse (P=0.03). Specifically, 30 percent of women in the intervention group reported fewer than five acts of unprotected sex in the three months preceding each follow-up appointment, compared to 20 percent of women in the control group. Of those reporting five or more acts of

unprotected sex, the proportions were 70 and 80 percent, respectively.[31]

- Compliance with treatment protocols—Significantly fewer women in the intervention group than controls were noncompliant with treatment protocols (P≤0.001). Specifically, 84 percent of women in the intervention group were in compliance with treatment protocols, compared to 72 percent of the control group. Noncompliance with treatment protocols was defined as having sex with an untreated or incompletely treated partner, having multiple partners, and having five or more acts of unprotected sex during the three-month period preceding each follow-up visit. Follow-up analysis showed that women in mutually non-monogamous unions and who had sex with partners who were untreated or incompletely treated were also 13 times more likely to have an STI infection than those who were monogamous and who complied with treatment protocols.[31,33]

Long-Term Impact

- Reduced incidence of STI infection—Women in the intervention group were significantly less likely than those in the control group to have gonorrhea or chlamydia infections at six months after baseline (P=0.05), at between six and 12 months (P=0.008) after baseline, and from entry through 12 months (P=0.004).30 The infection rate in the intervention group was 34 percent less than in the control group at six months, 49 percent less at 12 months, and 38 percent less overall.[31,33,34]

Project SAFE-2 Outcomes:

- Increased monogamy—Significantly more participants in the enhanced intervention group (especially support group attendees) and standard intervention group had only one partner during the entire study, compared to control group participants. Specifically, 37 percent of enhanced intervention participants and 39 percent of support group attendees had only one partner throughout the study compared to 24 percent of controls. Among standard intervention participants, 31 percent reported only one partner during the entire two-year period.[32]

- Reduced incidence of unprotected sex—Significantly fewer women in the standard and enhanced intervention groups than in the control group reported multiple partners in any follow-up year (P=0.004). Specifically, 43, 43, and 55 percent of participants, respectively, reported more than one sex partner in year one. In year two, 38, 36, and 51 percent, respectively, reported more than one sex partner. During the two-year period, 69, 63, and 76 percent (P≤0.052, 0.003), respectively, reported more than one sex partner.[32]

- Compliance with treatment protocols— Significantly more women in both the standard and enhanced intervention groups than in the control group were compliant with treatment protocols (92, 90, and 82 percent, respectively; P≤0.001 and P≤0.01, respectively for standard and enhanced interventions compared to controls). Noncompliance with treatment protocols was defined as having sex with an untreated or incompletely treated partner.[32]

Long-Term Impact

- In Project SAFE-2, women in both the enhanced and standard interventions were significantly less likely at all intervals to be infected with either gonorrhea or chlamydia. Over the two-year study period, women in the enhanced and standard interventions, respectively, were 41 and 34 percent less likely to be infected than were controls (P≤0.001, P≤0.008, respectively). Additionally, enhanced and standard intervention participants were significantly less likely than controls to be infected in year one (43 and 41 percent less likely; P=0.004, 0.006, respectively) and in year two (36 and 36 percent less likely; P≤0.03, 0.03, respectively).[32]

Note: Analysis of the effects of support group attendance indicated that both attendees and non-attendees were less likely than controls to be infected with gonorrhea or chlamydia (45 and 37 percent less likely; P≤0.004, 0.01, respectively). In year two, attendees were 42 percent less likely than controls to be infected (P≤0.05) whereas differences between non-attendees and controls did not reach statistical significance.[32]

Note on Project SAFE: When the evaluators looked at racial/ethnic differences in regard to risk and protective behaviors of women in the intervention and control groups, they found that the intervention was equally effective with both groups (OR=0.58 and 0.54, respectively). African American women reported more douching after sex, less mutual monogamy, and more rapid partner turnover. However, Mexican American women appeared slightly more likely to have sex with an untreated partner. There were no other differences in sexual behaviors likely to lead to STIs. A consistent pattern emerged in which most sexual risk behaviors were less common in intervention group participants than in control participants, regardless of their race/ethnicity.[31,33]

For More Information or to Order, Contact:

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Section III. Programs that included Latino Youth

This section describes the eight programs that have been evaluated and found to be effective among a diverse population in changing or delaying behaviors that relate to teenage pregnancy and sexually transmitted infections (STIs), including HIV, and where Latino youth were included in sufficient numbers in the evaluation. Seven of the programs were school-based while one was clinic-based.

Three programs helped youth delay first sex; four helped youth reduce their number of sex partners; four helped youth increase use of condoms; and three helped youth increase use of contraception.

Each of these programs fits the stringent criteria for inclusion in this document, as described in the introduction. Organizations and individuals that work with a diverse community that includes Latino youth should explore replicating one of the eight programs described in this section:

1. *Adolescents Living Safely: AIDS Awareness, Attitudes & Actions* (school-based; 22 percent of evaluation participants were Hispanic/Latino)
2. *AIDS Prevention for Adolescents in School* (school-based; 35 percent were Hispanic/Latino)
3. *Get Real about AIDS* (school-based; 21 percent were Hispanic/Latino)
4. *Postponing Sexual Involvement: Human Sexuality & Health Screening* (school-based; 12 percent were Hispanic/Latino)
5. *Reach for Health Community Youth Service* (school-based; 16 percent were Hispanic/Latino)
6. *Reducing the Risk* (school-based; 20 percent were Hispanic/Latino)
7. *Teen Outreach Program* (school-based; ten percent were Hispanic/Latino)
8. *TLC: Together Learning Choices* (clinic-based; 37 percent were Hispanic/Latino)

Adolescents Living Safely: AIDS Awareness, Attitudes, and Actions

Program Components

- HIV prevention program to augment services traditionally available at shelters for runaway youth
- 30 discussion sessions in small groups, each session lasting one-and-a-half to two hours
- Experiential activities included to build cognitive and coping skills
- Health care, including mental health services
- Intensive training of shelter staff

For Use With

- Runaway youth
- Youth living in city shelters
- Black and Hispanic youth
- Urban youth, ages 11 to 18

Evaluation Methodology

- Quasi-experimental design, involving a non-randomized control trial at two residential shelters in New York, New York
- Urban, runaway youth (n=197 at baseline; n=145 at follow-up) living in shelters; average age, 15.5
- Baseline interview and reassessment at three and six months after baseline
- Participants received monetary incentives for participating in interviews

Evaluation Findings

- Reduced frequency of sex
- Reduced number of sex partners
- Increased condom use

Evaluators' comments: *This study… has potentially important implications. First, adolescents do change their behaviors in response to an intensive intervention… Second, these data indicate that programs designed to prevent HIV infection need to provide more than the two or three sessions currently being implemented with adolescents.*

Rotheram-Borus, Koopman, Haignere *et al*, 1991

Program Description

The goal of this intervention is to promote behavior change to prevent HIV infection among runaway youth, ages 11 to 18. The program is designed to augment traditional services at shelters for runaway youth. An important program component is the small group discussion, designed to:

- Develop and improve interpersonal skills
- Promote behavioral self-management
- Increase HIV prevention knowledge and
- Provide peer support for HIV preventive behaviors.[23]

Because the program targets runaways, a group experiencing many stressful life events and highly unstable living arrangements, the program also provides access to ongoing physical and mental health care. Shelter staff receives intensive training in intervention techniques.[23]

The intervention is based on successful programs targeting: 1) other adolescent health risk behaviors, such as cigarette smoking; and 2) HIV prevention among adult men who have sex with men. Such programs have demonstrated the effectiveness of skills training, behavioral self-management, and group and social support from peers.[23]

Evaluation Methodology

Runaways were recruited at two residential shelters in New York City. Seventy-nine runaways at the non-intervention site and 118 runaways at the intervention site volunteered to participate. Ninety-eight percent of runaways were from the New York metropolitan area. Each youth was paid $2.00 for participating in the initial assessment and $20 to $25 for each follow-up interview. During six months, 145 runaways received a three- and/or a six-month follow-up interview (78 intervention participants and 67 non-intervention youth). About 64 percent of participants were female; nearly 36 percent were male. Sixty-three percent were black; 22 percent were Hispanic. Eight percent were white while the rest identified as "other". The youth ranged in age from 11 to 18 years (median age, 15.5). Most runaways identified as heterosexual (93 percent of males, 99 percent of females).[23]

Runaways at the two sites did not differ significantly in age, gender, race / ethnicity, or length of time since living at home. The duration of runaways' stay in shelters varied because of the availability of permanent housing in group homes and independent living situations. However, the median length of stay was 37 days (range from one to 214 days). At baseline, 19 percent of comparison youth and 25 percent of intervention youth reported high risk patterns of behavior, including multiple sex partners. At baseline, 24 percent of sexually experienced runaways reported consistent condom use in the past three months. The only sexual behavior that was significantly related to age at baseline was abstinence. Forty-eight percent of younger runaways (ages 11 to 15) and 23 percent of older runaways (ages 16 to 18) had been sexually abstinent in the preceding three months.[23]

Outcomes

- **Behaviors—**
  - **Reduced frequency of sex and number of sex partners—**The number of sessions attended by participants was significantly associated with a reduction in high-risk pattern (frequency of sex and number of sex partners in the past three months) reported by participants at three- and six-month follow-up. For sexually experienced runaways, attending 15 or more sessions was significantly associated with a reduction in sexual risk behaviors from 20 percent at baseline to zero percent at three- and six-month follow-up.[23]

    Receiving no intervention (comparison youth) or as many as two sessions of the intervention was associated with an increase in such behaviors (from 17 to 20 percent) at six-month follow-up. Receiving three to 14 sessions was associated with a decrease in such behaviors (from 30 to 18 and from 28 to 10 percent, respectively) at six-months follow-up.[23]
  - **Increased condom use—**Runaways who received 15 or more of the sessions were significantly more likely to be consistent condom users at three- and six-month follow-up, compared to youth who received fewer sessions or to non-intervention youth. Among sexually experienced runaways who received 15 or more sessions, consistent condom use rose from 33 percent at baseline to 57 percent at three-month and 63 percent at six-month follow-up.[23]

    Among sexually experienced runaways who attended fewer than 15 sessions, condom use increased and decreased in a discouraging pattern, with reported condom use at six-months follow-up only slightly higher than at baseline for those attending 10 to 14 sessions, and less than baseline for those attending fewer than 10 sessions and for comparison youth.[23]
  - **Timing of sexual initiation unaffected—**Receiving the intervention had no significant effect on reported abstinence, neither hastening nor delaying the onset of sexual activity. Findings showed that abstinence at baseline was associated with abstinence at three- and six-month follow-up.[23]

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AIDS Prevention for Adolescents in School

Program Components

- HIV/STI prevention curriculum
- Six sessions, each lasting one hour, delivered on consecutive days
- Experiential activities included to build skills in refusal as well as in risk assessment and risk reduction
- Educator training recommended

For Use With

- High school students
- Urban youth
- Multiethnic populations – black and Hispanic youth as well as white and Asian youth

Evaluation Methodology

- A quasi-experimental design, including treatment and comparison conditions, in four high schools in New York, New York
- Urban youth (n=1,201 at baseline; n=867 at follow-up); mean age 15.7
- Pretest and follow-up survey at three months post-intervention

Evaluation Findings

- Increased monogamy
- Reduced number of high risk sex partners
- Increased condom use
- Long-term: Reduced incidence of STIs

Evaluators' comments: *[This] special, theoretically and empirically based HIV/AIDS preventive curriculum was feasible to implement on a large scale in an inner-city school system, was acceptable to key constituent groups, and was associated with favorable changes in students' involvement in sexual…risk behaviors.*

Walter and Vaughan, 1993

Program Description

This school-based, teacher-delivered curriculum for urban high school students seeks to increase knowledge about HIV and AIDS, build skills to recognize and prevent behaviors that put youth at risk of HIV infection, and encourage youth to make healthy decisions. Based on three theories of health behavior change (the health belief model, social cognitive theory, and a model of social influence), the curriculum emphasizes delaying the initiation of sex and, among youth who choose to have sex, consistently using condoms. The program uses role-playing and other experiential activities to enhance students' confidence and their ability to avoid risky situations. The overall goal of the program is to prevent unprotected sexual intercourse.[8]

The curriculum comprises six hour-long lessons, implemented on consecutive days.
The first two lessons focus on conveying correct information about HIV transmission and prevention, including:

- Teaching students to accurately appraise their risk of HIV infection;
- Fostering appropriate concern about HIV infection, based on youth's individual risk behaviors; and
- Directing students to HIV prevention resources within the school and community.

The next two lessons focus on:

- Delayed initiation of sexual intercourse – females only
- Increased use of contraception – males only

- Correcting students' misperceptions regarding their peers' HIV risk behaviors
- Helping students clarify their individual values; and
- Empowering students, via role-playing, with negotiation skills to delay the initiation of sexual intercourse.

The final two lessons focus on:

- Empowering students with skills to negotiate condom use; and
- Giving youth the skills to obtain and use condoms correctly when they become sexually active[8]

Teachers receive an eight-hour in-service training prior to implementing this curriculum, which is also suitable for use in community-based organizations.[8]

Evaluation Methodology

The study population consisted of ninth and 11th grade students (n=1,201) enrolled in required general education courses in four academic high schools in New York City. The four schools were selected on the basis of their combined demographic representation of the total population of schools in the borough and were grouped into two pairs of schools. Thirty percent of ninth grade classrooms in the first two schools were randomly selected to receive the HIV prevention curriculum. Twenty percent of ninth grade classes in the second pair of schools were randomly selected as comparison classes and received no formal HIV prevention education. At the same time, 30 percent of 11th grade classrooms in the second pair of schools received the intervention, while 20 percent of 11th grade classes in the first pair of schools acted as comparisons.[8]

In evaluation, participating (n=667) and comparison (n=534) students were mostly female (59 percent). Youth were mostly black (37 percent) or Hispanic (35 percent); the remaining 28 percent of youth were mostly non-Hispanic white or Asian. The mean age of students was 15.7. Forty-eight percent were in ninth grade and 52 percent in 11th grade. At baseline, one-third of students reported having had sex in the past three months. Among these sexually experienced students: over half reported inconsistently or never using condoms; one-fifth reported two or more sex partners; and one in 20 reported having a high risk sex partner.[8]*

At baseline, 11th graders reported more risk factors (i.e., inconsistent or no use of condoms, multiple sex partners, sex with high risk partners, or diagnosis with an STI) than did ninth graders; males reported more risk factors than females; and blacks reported more risk factors than whites, Asians, or Hispanics. When assessed against the comparison group at baseline, a higher percentage of students in the intervention group were older, male, black or Hispanic, and held more unfavorable beliefs about the benefits of preventive action. The program's effectiveness was assessed at three-months post-intervention, when 71 percent of intervention youth and 73 percent of comparison youth completed the follow-up assessment.[8]

Outcomes

- Knowledge—Evaluation showed that participants' net change in knowledge regarding HIV transmission was significantly greater than that of comparison students.[8]

- Attitudes and perceptions—Participants' net change in attitudes related to risk reduction and self-efficacy was significantly greater than comparisons' net change in attitudes. Significant, favorable net change was observed in the participants' beliefs about their susceptibility to HIV, attitudes about the benefits of using condoms, and self-efficacy related to condom use.[8]

- **Behaviors**[ϕ]—
  - **Increased monogamy**—A significantly greater percentage of intervention than comparison youth reported behaviors baseline to follow-up that included initiating or continuing monogamy (approximately 23 and 16 percent, respectively).[8]
  - **Reduced number of high risk sex partners**—A significantly smaller percentage of intervention participants than comparison youth reported having high-risk sex partners between baseline and follow-up (approximately two and eight percent, respectively).[8]

* A high risk sex partner was one who injected, inhaled, or smoked drugs.

ϕ Effects did not vary significantly by students' age, race /ethnicity, or gender.

- **Increased condom use**—A significantly greater percentage of intervention participants than comparison youth reported consistent condom use from baseline to follow-up (approximately six and three percent, respectively).[8]

- **Timing of sexual initiation unaffected**—The program had no significant impact on delaying the initiation of sex.[8]

Long-Term Impact

- Reduced incidence of STIs—The intervention appeared to be associated with a favorable trend in incidence of STIs.8

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Get Real about AIDS

Program Components

- HIV risk reduction curriculum
- Fifteen sessions, each lasting one class period and delivered over consecutive days
- Experiential activities included to build skills in refusal, communication, and using condoms
- Activities to reach more youth, such as making public service announcements (PSAs) and distributing wallet-size HIV information cards
- Educator training recommended

For Use With

- High school students in grades nine through[12]
- Urban, suburban, and rural youth
- Sexually active youth
- Multiethnic populations – white and Hispanic youth as well as black and Asian youth

Evaluation Methodology

- Quasi-experimental design, including treatment and comparison conditions, in 17 schools in Colorado, including two alternative schools
- Rural, urban, and suburban youth (n=2,015 at baseline; n=1,816 at two-month follow-up; n=1,477 at six-months follow-up); average age 15.0
- Pretest and two- and six-month follow-up assessment

Evaluation Findings

- Reduced number of sex partners
- Increased condom use

Evaluators' comments: *Skills-based HIV risk reduction programs should be implemented before the onset of sexual activity and continued through high schools. They should be taught by trained teachers who are comfortable teaching skills-based HIV curricula and programs and [they] should be taught in their entirety… If anything less than this occurs, the impact of the programs will likely be minimal…*

Main, Iverson, McGloin *et al*, 1994

Program Description

Get Real about AIDS is a skills-based, HIV risk reduction curriculum designed for high school students. It consists of 15 sessions delivered over consecutive days. It utilizes interactive activities, such as discussions, role-playing, simulation, and videos, to give teens the knowledge and skills to reduce their risk of HIV infection. The goal of *Get Real about AIDS* is to reduce sexual risk behaviors by delaying the initiation of sex. The goal for youth who choose to have sex is to encourage them to abstain from drug use, use condoms consistently and correctly, practice monogamy, and get tested for HIV. Class lessons are reinforced through activities implemented by teachers, such as displaying posters and distributing wallet cards with HIV information. This intervention is based on social cognitive theory and the theory of reasoned action.[9]

Evaluation Methodology

Seventeen high schools in six Colorado school districts were assigned to intervention (n=10) or comparison (n=7) groups. Two were alternative schools. One alternative school was included in the intervention group and one in the comparison group. Within each district, intervention and comparison schools were matched as closely as possible with respect to grade, gender, and racial/ethnic distribution. In comparison schools, teachers were encouraged to offer their usual HIV prevention programs. In fact, four comparison schools offered no HIV education. The remaining comparison schools offered minimal

HIV education. Teachers for the intervention program received a five-day, 40-hour training, designed to enhance fidelity to the written curriculum. Students completed a baseline survey (n=2,015), a follow-up survey at two months post-intervention (n=1,816), and another at six-months post-intervention (n=1,477).[9]

At baseline, 65 percent of students were white; 21 percent were Hispanic; six percent were black; and three percent were Asian. Forty-nine percent were female. Students' average age was 15; and 60 percent of youth were in ninth grade. At baseline, 44 percent of students indicated that they had had sexual intercourse. Less than two percent said they had injected drugs. Students' self-reports, comparing baseline and follow-up results at two and six months post-intervention, were used to determine the program's effectiveliness.[9]

Outcomes

- Knowledge—At six-month follow-up, students in intervention classes scored significantly higher on knowledge of HIV and HIV prevention, relative to those in the comparison group.[9]

- Attitudes and perceptions—At six-month follow-up, students in intervention classes demonstrated significantly healthier intentions than did youth in comparison classes, especially their intentions to engage in sex less often and to use a condom when they have sexual intercourse.[9]

- Behaviors—
  - **Reduced number of sex partners—**At six-month follow-up, sexually active intervention students reported significantly fewer sex partners within the past two months than did those in comparison schools.[9]
  - **Increased condom use—**At six-month follow-up, sexually active intervention students reported significantly more frequent use of condoms during sexual intercourse in the past two months than did those in comparison schools.[9]
  - **Increased condom purchases—**At six-month follow-up, students in intervention classes were more likely than those in comparison schools to report purchasing a condom.[9]
  - **Timing of sexual initiation unaffected—**The intervention did not significantly postpone the initiation of sexual intercourse among participants, relative to comparison youth, measured at six-month follow-up.[9]
  - **Frequency of sex and use of alcohol and other drugs unaffected—**At six-month follow-up, the intervention had not reduced the frequency of sex among sexually experienced students nor had it reduced their use of alcohol and other drugs before having sex.[9]

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- ***Sociometrics, Program Archive on Sexuality, Health & Adolescence***; Phone: 1.800.846.3475; Fax: 1.650.949.3299; E-mail: pasha@socio.com; Web: http://www.socio.com
- ***Discovery Education***; Phone: 1.800.892.3484; Web: http://teacherstore.discovery.com/stores/servlet/StoreCatalogDisplay?langId=-1&catalogId=10003&storeId=10003

Postponing Sexual Involvement, Human Sexuality & Health Screening

Program Components

- Two-year intervention, beginning in the seventh grade
- Three 45-minute classroom sessions on reproductive health, delivered by health professionals to seventh graders and again the next year to eighth graders
- Five 45-minute sessions of Postponing Sexual Involvement for seventh graders, led by trained peer educators in 10th and 11th grades
- Eight brown bag sessions for small groups of eighth grade program participants
- Eighth grade assembly
- Contest for eighth grade participants
- Full-time health professional from outside the school, working in each school
- Individual health risk screening of students

For Use With

- Seventh and eighth grade students
- Urban youth at high risk*
- African American and Hispanic youth
- Economically disadvantaged youth

Evaluation Methodology

- Experimental evaluation design, including treatment and control conditions, in six junior high schools in Washington, DC
- Urban seventh graders (n=522 at baseline; n=503 at first follow-up; n=459 at second follow-up; n=422 at final follow-up at the end of eighth grade)
- Surveys at baseline (winter of seventh grade) with follow-up at the end of seventh and beginning of eighth grades and post-intervention follow-up at the end of eighth grade

Evaluation Findings

- Delayed initiation of sexual intercourse – females only
- Increased use of contraception – females only

Evaluators' comments: *The study's positive findings in reproductive health knowledge and contraceptive use suggest that recruiting outside health professionals to provide education and outreach in the school setting may be a useful prevention strategy.*

Aarons, Jenkins, Raine *et al*, 2000

Program Description

This pregnancy and HIV/STI prevention intervention combines elements of two evaluated programs: *Postponing Sexual Involvement* and *Self Center*.§ Here, the *Postponing Sexual Involvement* peer education curriculum is coupled with individual and small group educational methods, adapted from the *Self Center*, bringing outside health professionals to provide education and assistance to students in school settings. The goal of the program is to delay students' initiation of sexual intercourse. This intervention is based on social cognitive theory.[10]

* For this evaluation, high risk was defined by responses to the health assessment survey, including reports of substance use, physical abuse, sexual activity, and/or emotional problems.

§ For more information on these programs, please visit http://www.advocatesforyouth.org/programsthatwork/toc.htm

A full-time health professional serves as the project facilitator and leads three 45-minute classroom sessions for seventh grade classes on reproductive health, including information about abstinence and contraception. These classes are followed by five 45-minute classroom sessions of *Postponing Sexual Involvement*, led by trained peer educators. The peer educators are 10th and 11th grade students recruited from nearby high schools. Toward the end of the first year of the program, students complete a health risk assessment questionnaire that addresses self-rated health, risk behavior, school performance, physical fitness, social support, and depression. Using a series of questions adapted from GAPS (Guidelines for Adolescent Preventive Services), health professionals conduct individual interviews with students whose questionnaires indicated substance use, physical abuse, sexual activity, and/or emotional problems.[10]

In the fall of the next year, facilitators present the three reproductive health classes again to all eighth grade students. A series of booster activities reinforces the concepts of abstinence and self-care. Booster activities include: brown bag sessions for small, informal groups of no more than 15 students; an eighth grade assembly; and a contest for eighth grade participants, featuring their poetry, artwork, etc. Eight brown bag sessions are offered—one per week, covering a range of adolescent health issues, such as gang violence, drug use, and teen pregnancy. Facilitators speak privately with each student who attends a brown bag session, asking if the student has any questions about the topic or other health related matters. The assembly is presented by health professionals from affiliated clinics. Eighth grade intervention students may also participate in a contest on a topic related to the intervention. Contestants enter poems, songs, essays, drawings, and T-shirt designs.[10]

Evaluation Methodology

A non-probability sample of six schools was selected from among 18 middle and junior high schools in the District of Columbia. Schools were chosen based on their proximity to one of the three adolescent health clinics affiliated with the study. Two schools were selected because of their high enrollment of Hispanic students. Schools were paired according to seventh grade class size, location, and racial / ethnic distribution. Pairs of schools were then randomly assigned to the intervention or control group.[10]

Of 896 seventh graders enrolled in the six schools at the beginning of the study, 522 received parental consent to participate. Of these, 274 were female (52 percent); 85 percent were African American and about 12 percent were Hispanic. Participants' average age at baseline was 12.8 years. Sixty-three percent of youth participated in the free or reduced price school lunch program. Forty-six percent of students lived with both parents and an equal percentage lived with one parent or with one parent and another adult. The intervention was assessed by comparing the answers of intervention participants and control students at baseline (n=522); at the end of the seventh grade (n=503); at the beginning of eighth grade (n=459); and at the end of eighth grade (n=422).[10]

Outcomes

- Knowledge—Participating males had significantly more knowledge of birth control methods and services than did control males at all follow-up times. Participating females had significantly more knowledge than control females only at the end of eighth grade.[10]

- Attitudes and perceptions—
  - At the end of seventh grade, female program participants were significantly more likely than control females to say that they would not have sex in the next six months (57 and 46 percent, respectively).[10]
  - A significantly higher percentage of participating females than control females reported feeling able to refuse sex.[10]
  - Participating males had significantly more positive beliefs about the benefits of delaying childbearing than did control males.[10]

- **Behaviors—**
  - **Delayed initiation of sexual intercourse—**In post-intervention surveys, intervention group females had higher virginity rates than did control females. The odds ratios were statistically significant at the end of seventh grade (2.09) and at the end of eighth grade (1.9).[10]

- **Increased use of contraception—**At three measurement intervals, sexually active female participants were 3.5 to five times more likely than control females to report using birth control at most recent sex.[10]

- **Behavioral findings relating to young men—**The program had no statistically significant impact on sexual behaviors in participating males. Evaluators noted that knowledge gains made by participating males had no impact on their timing of sexual initiation or on their contraceptive use.[10]

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Reach for Health Community Youth Service

Program Components

- Health promotion curriculum
- Forty lessons per year in each of two years, each lesson lasting one class period
- Three hours per week of community service in assigned placements
- Reflection and activities to help students learn from their community experiences
- Educator training recommended

For Use With

- Seventh and eighth graders / middle school students
- Urban youth
- Black and Hispanic youth
- Economically disadvantaged youth

Evaluation Methodology

- Quasi-experimental and experimental designs, including treatment and comparison groups, in two large, public middle schools in New York, New York
- Urban youth (n=1,157 at baseline; n=1,061 at spring follow-up); average age at baseline, 12.2 for seventh graders and 13.3 for eighth graders
- Pretest and follow-up nine months later; longitudinal follow-up after a further 24 months

Evaluation Findings

- Delayed initiation of sexual intercourse
- Reduced frequency of sex
- Increased condom use
- Increased use of contraception
- Long-term: Sustained reduction in rates of initiation of sexual intercourse
- Long-term: Sustained reduction in frequency of sex

Evaluators' comments: *A service learning intervention that combines community involvement with [sexual] health instruction can have a long-term benefit by reducing sexual risk-taking among urban adolescents.*

O'Donnell, Steuve, O'Donnell *et al*, 2002

Program Description

The *Reach for Health Community Youth Service* (CYS+) program builds upon community-based service learning. It includes a health promotion curriculum (*Reach for Health*) that is based upon *Teenage Health Teaching Modules*. The curriculum includes information regarding human sexuality and is delivered to seventh and eighth graders by educators trained specifically in the curriculum. The health curriculum consists of 40 core lessons that focus on three primary health risks faced by urban youth: 1) drug and alcohol use; 2) violence; and 3) sexual behaviors that may result in pregnancy or infection with HIV and other STIs.[11]

Students spend about three hours each week providing service in community settings, such as nursing homes, senior centers, full-service clinics, and child day care centers. Under the guidance of their health teachers as well as staff from placement sites, students perform such tasks as reading to elders, assisting with meals, and helping with exercise, recreation, and arts. Students prepare for their service activities by learning more about the organization to which they are assigned and by setting personal goals for their service learning.[11]

The program is based on the health belief model and theories of social learning. As such, the program expects students to learn both by doing and by reflecting on their experiences.[11]

Evaluation Methodology

The evaluation was designed to compare the impact of receiving CYS+ (*Reach for Health* curriculum *plus* service learning) to that of receiving the health curriculum only and of receiving no intervention. The study sites included two large, urban middle schools. One school served as the intervention school and one as the comparison. Classes in the intervention school were randomly assigned to receive:

- Health curriculum only (Reach for Health, including information about human sexuality) or
- Health curriculum plus the service-learning component (CYS+).

All students in grades seven and eight at the two school sites were eligible to participate in the evaluation study if they had written parental consent. Ninety-four percent of eligible students participated. Forty-eight percent of the students who completed surveys at both baseline and follow-up were eighth graders.[11]

Among participants in the study, 47 percent were male. At baseline, the average age of seventh graders was 12.2. Average age of eighth graders was 13.3. Sixteen percent of students self-identified as Hispanic and 79 percent as non-Hispanic black. Five percent self-identified as "other". Of 1,061 students completing both fall and spring surveys, 255 participated in the CYS+ intervention; 222 participated in the curriculum only intervention; and 584 served as comparisons. At baseline, 68 percent of the sample had never had sex while 23 percent reported having had sex in the three months prior to the survey. Among those reporting recent sex at baseline, 40 percent reported no use or inconsistent use of condoms.[11]

Outcomes

- **Behaviors—**
  - **Delayed initiation of sexual intercourse—**Rates of sexual initiation increased by eight percentage points among comparison youth. Rates increased less among curriculum-only and CYS+ youth (three and four percentage points, respectively).[11]
  - **Reduced frequency of sex—**Rates of recent sex increased five percentage points among comparison youth and by three percentage points among curriculum-only youth. Rates *decreased* by nearly half a percentage point among CYS+ youth. The difference between comparison and CYS+ youth was statistically significant.[11]
  - **Increased condom use—**Comparison students reported an increase of three percentage points in recent sex without a condom. Rates among curriculum-only and CYS+ youth *decreased* by 13 and 16 percentage points, respectively.[11]
  - **Increased use of contraception—**Comparison students reported an increase of nine percentage points in recent sex without birth control pills. Rates *decreased* by five and eight percentage points, respectively, among curriculum-only and CYS+ youth.[11]
  - **Behavioral changes among special education students—**Although the number of special education students in this study was small and findings must be used with caution, this group appeared to experience some of the greatest benefits of the curriculum alone.[11]
    - Among special education students, comparison youth reported a 26 percentage point increase in ever having had sex and CYS+ youth reported a four percentage point increase. The rate *decreased* by 13 percentage points among curriculum-only youth.[11]
    - Among special education students, comparison and CYS+ youth reported an increase of 31 and three percentage points, respectively, in recent sex. The rate *decreased* 11 percentage points among curriculum-only youth.[11]

- Rates of recent sex without a condom decreased by eight, 100, and 27 percentage points, respectively, among comparison, CYS+, and curriculum-only groups of special education students.[11]

- Special education comparison youth reported an increase of 22 percentage points in recent sex without birth control pills. Rates *decreased* by 50 and 22 percentage points, respectively, among CYS+ and curriculum-only youth.[11]

Long-Term Impact

- Delayed initiation of sexual intercourse—Follow-up when youth had reached 10th grade found that CYS+ youth were less likely than youth who received the health curriculum only to report having initiated sex or to report recent sex. Among those who had not had sex at baseline, 44 percent of male and 57 percent of female CYS+ youth had not initiated sex by 10th grade, compared to 27 percent of males and 47 percent of females who received the curriculum only.[12]

- Reduced frequency of sex—Similarly, sexually experienced curriculum-only youth were more likely to report recent sex than were sexually experienced CYS+ youth. Among sexually experienced curriculum-only youth, 69 percent of males and 47 percent of females reported recent sex versus 45 percent of sexually experienced CYS+ males and 38 percent of sexually experienced CYS+ females.[12]

For More Information or to Order, Contact:

- ***Sociometrics, Program Archive on Sexuality, Health & Adolescence***; Phone: 1.800.846.3475; Fax: 1.650.949.3299; E-mail: pasha@socio.com; Web: http://www.socio.com

Reducing the Risk

Program Components

- Sex education curriculum, including information on abstinence and contraception
- Sixteen sessions, each lasting 45 minutes and expandable to 90 minutes, if desired
- Experiential activities included to build skills in refusal, negotiation, and communication
- Educator training recommended

For Use With

- High school students, especially those in grades nine and 10
- Low risk youth*
- Sexually inexperienced youth
- Multi-ethnic populations – white, Latino, Asian, and black youth
- Urban, suburban, and rural youth

Evaluation Methodology

- Quasi-experimental design, including treatment and comparison conditions, in 13 California high schools
- Urban and rural high school students (n=1,033 at baseline; n=758 at 18 month follow-up); mean age at baseline, 15.3 years
- Pretest and post-test at program exit, with six- and 18-month follow-up

Evaluation Findings

- Increased parent-child communication – especially among Latino youth
- Delayed initiation of sexual intercourse
- Reduced incidence of unprotected sex – among lower risk youth

Replication Evaluation Methodology & Findings

- Quasi-experimental design, including treatment and comparison conditions, in five school districts in Arkansas
- Rural and urban, mostly white youth (n=512 at baseline; n=212 at 18-month follow-up); average age 15 to 16
- Pretest and 18-month follow-up
- Achieved knowledge and behavior changes similar to those of original evaluation and also achieved increased use of contraception among sexually active youth

Evaluators' comments: *The curriculum…reduced the chance that a student would initiate intercourse, possibly by as much as 24 percent. Moreover, it did not increase the frequency of intercourse among students who had already initiated intercourse.*

Kirby, Barth, Leland *et al*, 1991

Program Description

Reducing the Risk is a sex education curriculum for grades nine through 12, but especially recommended for grades nine and 10. Lasting 16 class periods and instructor-led, it focuses on the overall behavioral goal of encouraging youth to avoid unprotected sex by:

- Practicing abstinence or
- Using contraception.

* Evaluators defined low risk youth as those who were not higher risk. Higher risk students were any who did not live with both parents, whose mother did not finish high school, whose high school grades were mostly Ds or lower, who drank alcohol one or more times during the preceding month, and/or who normally drank five or more drinks on each drinking occasion.

Nearly every activity supports this goal by assisting teens to personalize information on the risks of unprotected sex and by teaching them how to avoid unprotected sex. As such, *Reducing the Risk* addresses sexual risk-taking related to both pregnancy and HIV/STI prevention.[13,14]

Through experiential activities, participants learn to recognize and resist peer pressure, make decisions, and negotiate safer sex behaviors. The curriculum is based on social learning theory, social inoculation (social influence) theory, and cognitive behavioral theory. *Reducing the Risk* also encourages students to talk to their parents about abstinence and birth control.[13,14]

Evaluation Methodology

Reducing the Risk was implemented in 13 high schools in urban and rural California school districts. Although 1,033 students took the pretest, 758 completed all surveys and were included in the evaluation. The treatment participants (n=429) and comparison youth (n=329) were surveyed at four points—prior to their exposure to the curriculum, immediately afterwards, and at six and 18 months after receiving the curriculum. Students were mostly in ninth (27 percent) or 10th (56 percent) grade and female (53 percent). Youth were mostly white (62 percent) or Latino (20 percent). Nine percent were Asian; two percent were black; and two percent, Native American; five percent checked "other". The average age at baseline was 15.3. Seventy percent of students lived with both their parents; 24 percent lived with a single parent, and seven percent lived in other situations.[13]

At pretest, there were no significant differences between students assigned to participate in *Reducing the Risk* (treatment condition) or to comparison groups that received whatever sexual health education teachers were already providing (comparison condition). In evaluation, 46 classrooms of students taking a mandatory health education class were randomly assigned to either the treatment or the comparison condition. Thus, the evaluation measured the impact of *Reducing the Risk* relative to other sex education curricula.[13]

Outcomes

- Knowledge—Participating and comparison students' knowledge of contraception increased substantially over time. However, knowledge increased significantly more among participants than among comparison youth.[13]

- Attitudes and perceptions—The curriculum significantly affected students' perceptions of the proportion of their peers who had ever had sexual intercourse. The two groups' perceptions were similar at pretest (all respondents believed that about one-half of their peers had initiated sex). By the six-month post-test, comparison group members believed that more than half of their peers had initiated sex, while no such change was apparent in the perceptions of the treatment group.[13]

- **Behaviors**—
  - **Increased parent-child communication about abstinence and contraception—**Participating students, ***particularly Latinos***, significantly increased their discussions with parents about abstinence and contraception at six-months post-intervention.[13]
  - **Delayed initiation of sexual intercourse—**Among youth who had not initiated sex at the time of receiving *Reducing the Risk*, a significantly smaller percentage (29 percent) had initiated sex 18 months later versus comparison youth (38 percent). This amounted to a 24 percent reduction in the initiation of sex among participants as opposed to that among comparison youth.[13]
  - **Reduced incidence of unprotected sex among lower risk youth—**Among all lower risk youth, regardless of sexual experience at pretest, there were significant differences in unprotected sexual intercourse (as measured by comparing those who delayed initiating sexual intercourse *and* those who had sex but used contraception at most recent sexual intercourse with those who had sex and did not use contraception at most recent intercourse). At pretest, 11 percent of both comparison and treatment groups had engaged in unprotected sexual intercourse. At 18 months follow-up, only 13 percent of the treatment group had engaged in unprotected sex; but 23 percent of the comparison group had done so.[13]

Replication Evaluation Methodology

Reducing the Risk was replicated in Arkansas. Participants and comparison youth (n=212) were white (85 percent) and black (14 percent); 52 percent were female; 49 percent were in grade 10, and 31 percent in grade 11. The comparison group consisted of five school districts matched to five treatment school districts based on geographic location, racial / ethnic distribution, and average per capita income. Comparison classes received a one-semester health education program that included whatever sexuality education was provided in that school district. One classroom in each treatment and comparison school district was randomly selected for testing.[14]

Replication Outcomes

- **Behaviors—**
  - **Increased parent-child communication—***Reducing the Risk* resulted in a significantly higher proportion of participants than comparison youth talking with their parents about birth control and about protection from HIV/STI.[14]
  - **Delayed initiation of sexual intercourse—**Evaluation showed that a significantly smaller percentage of participants than comparison youth who were sexually inexperienced at pretest had initiated sex after 18 months (28 and 43 percent, respectively).[14]
  - **Increased use of contraception—**Significantly more participants than comparison youth who initiated sexual intercourse after baseline also reported using effective methods to prevent pregnancy and HIV/STI (89 and 46 percent, respectively).[14]

For More Information or to Order, Contact:

- ***Sociometrics, Program Archive on Sexuality, Health & Adolescence***; Phone: 1.800.846.3475; Fax: 1.650.949.3299; E-mail: pasha@socio.com; Web: http://www.socio.com
- ***ETR Associates***; Phone: 1.800.321.4407; Fax: 1.800.435.8433; Web: http://www.etr.org/

Teen Outreach Program

Program Components

- School-based teen pregnancy and school dropout prevention program
- Supervised community volunteer service
- Classroom discussion of service experience
- Classroom discussion and activities related to key social and developmental tasks
- Nine month program
- Educator training recommended

For Use With

- High school students
- Youth at high risk*
- Multi-ethnic populations – white, black, and Hispanic youth
- Adolescent mothers
- Students with academic difficulties, such as previous suspension
- Urban, suburban, and rural youth

Evaluation Methodology

- Quasi-experimental design, including treatment and comparison conditions in 30 schools nationwide in 1986-1987
- Students in grades seven through 12 (n=1,487); average age 15.65
- Pretest and posttest at program end (nine months after pretest)

Evaluation Findings

- Long-term findings: Reduced rates of behavior-related problems (pregnancy, school suspension, class failure, and/or school dropout)

First Replication Evaluation Methodology (1991-1995) & Findings

- Experimental design, including treatment and control conditions at 25 sites nationwide
- High school students (n=695)
- Pretest and posttest at program exit (nine months after pretest)
- Long-term findings: Reduced rate of teen pregnancy

Second Replication Evaluation Methodology (1996-2000) & Findings

- Quasi-experimental design, including treatment and comparison conditions at 60 sites nationwide
- High school students (n=3,277)
- Pretest and posttest at program exit (nine months after pretest)
- Long-term findings: Reduced rate of teen pregnancy

First replication evaluator's comments: *One of the more striking features of the Teen Outreach Program is that it does not explicitly focus upon the problem behaviors it seeks to prevent but rather seeks to enhance participants' competence in decision making, in interacting with peers and adults, and in recognizing and handling their own emotions. Particularly in the field of teen pregnancy prevention, this focus has important practical implications, because it means the program may be politically acceptable in communities where programs that explicitly focus upon sexual behavior may not be feasible to implement.*

Allen JP, Philliber S, Herrling S, *et al.* 1997

[+] High risk youth are defined in this program as youth with a history of class failure, school dropout, school suspension, or involvement in pregnancy.

Second replication evaluator's comments: *The most striking finding was that Teen Outreach appeared most effective as a prevention program with youths who were most at-risk of the specific type of problem behaviors being assessed. The program had the greatest impact in reducing future pregnancies among the group at highest risk of such pregnancies (those who have already given birth to a child). For this group, the likelihood of an additional pregnancy was less than one-fifth as large in the Teen Outreach group as in the comparison group, even after accounting for other background factors that may have also affected pregnancy rates. For academic failure, Teen Outreach demonstrated greater efficacy for youths who had been previously suspended than for those who had not. The program was also found to be more effective for members of racial ethnic minority groups, who were also at greater risk for academic difficulty in this study.*

Allen JP, Philliber S, 2001

Program Description

The *Teen Outreach Program* is a program for high school-aged students, consisting of three interrelated components: supervised community service, classroom discussion of service experiences, and classroom discussion and activities related to key social and developmental tasks of adolescence. In class, participants work in small groups with a facilitator or mentor. The groups discuss:

- Values
- Human growth and development
- Relationships
- Dealing with family stress and
- Issues related to the social and emotional transitions from adolescence to adulthood.

During group discussions, youth develop skills in communication and making decisions.[19]

Service learning projects take students into their communities, creating a combination of education and community service that is intended to empower young people to succeed. In keeping with the program's broad developmental focus, the program places little direct emphasis upon its two target behaviors: 1) preventing pregnancy and 2) preventing school dropout. Sex education materials constitute only 10 to 15 percent of the overall curriculum and are incorporated within the general program emphasis on making good decisions about life options. Trained facilitators, usually teachers or guidance counselors, lead the classroom discussions, which also incorporate opportunities for youth to reflect on their volunteer activities in the community and to ratify the meaning of these activities for their own lives. *Teen Outreach Program* is based on the "helper-therapy" principle and the theory of empowerment.[19,20,21]

Evaluation Methodology

High school students (n=1,487) were randomly assigned to either an intervention or comparison group in each of 30 schools across the United States. Although programs varied widely, all involved both classroom and volunteer activities. Participating and comparison youth were in grades seven through 12, most in grades nine or 10. Over 70 percent of intervention participants were female; 67 percent of comparison youth were female. Among all youth, about one-third were black, about 50 percent were white, less than 10 percent were Hispanic. Program effects were assessed by students' self-reports of pregnancy or pregnancy involvement, course failure, and suspension at baseline and nine months later at program exit.[19]

At entry, nearly 54 percent of intervention participants and 44 percent of comparison youth reported course failure in the prior year. Rates of suspension in the prior year were also relatively high (22 and 17 percent, respectively). About five percent in each group reported a previous pregnancy. Because each problem behavior had a low base rate, problem behaviors were combined into an overall problem behavior syndrome scale.[19]

Long-Term Findings

The evaluation did not provide information about specific knowledge, attitudes, or behavior changes. Rather, the evaluation focused on specific health and academic indicators.[19]

- **Fewer problem behaviors**—At entry, Teen Outreach participants reported significantly more problem behaviors (class failure, school suspension, school dropout, and involvement in a pregnancy) than did comparison students. At exit, Teen Outreach participants reported significantly fewer problem behaviors in the past nine months, than did comparison youth. Moreover, the program was significantly more effective with high school than with junior high school students.[19]

First Replication Evaluation Methodology (1991-1995)

Teen Outreach Program was re-evaluated, using data collected during 1991-1995 at 25 sites nationwide. Students (n=695) were randomly assigned to either the *Teen Outreach Program* or the control condition, either at the individual level or at the classroom level. Participants and control youth were in grades nine through 12; 69 percent were in ninth or 10th grade. Average age of intervention participants was 15.8; that of control youth, 15.9. Less than 85 percent were female. About 67 percent were black. Students were surveyed regarding school suspension, course failure, and pregnancy at pretest and nine months later, at the program's end.[20]

First Replication Outcomes

- **Reduced teen pregnancy rate**—At program exit and after controlling for demographic factors and past problem behaviors, the risk of pregnancy was only 41 percent as large among Teen Outreach participants as among the risk among the control group.[20]

- **Reduced risk of school suspension**—After controlling for demographic variables and prior problem behaviors, risk of school suspension in the Teen Outreach group was less than half (42 percent) that of the risk for school suspension for members of the control group.[20]

- **Reduced risk of course failure**—After controlling for demographic variables and prior problem behaviors, the risk of course failure among Teen Outreach participants was 39 percent less than among the control group.[20]

Second Replication, Evaluation Methodology (1996-2000)

Another evaluation of *Teen Outreach Program* (conducted in 1996-2000) was designed to assess the program's impact on youth at highest risk for teen pregnancy and school dropout. Data were collected data from 3,277 participants and comparison youth at 60 sites nationwide. Youth's average age was 15.9 to 16.0; youth were in ninth through 12th grade; and about three-quarters were male. About 45 percent were black. Nearly 37 percent were white. Nearly 13 percent Hispanic. Once again, youth were surveyed at baseline and at program exit, nine months later.[21]

Second Replication Outcomes

- **Reduced rate of teen pregnancy and involvement in pregnancy**—Students in Teen Outreach were at 53 percent the risk of pregnancy as those in the comparison group.[21]

- **Reduced repeat teen pregnancy outcomes**—Teenage parents who participated in Teen Outreach Program were at one fifth the risk of repeat pregnancy (or of fathering another pregnancy) at the end of nine months relative to teen parents in the comparison group.[21]

- **Reduced risk of course failure**—Participants in Teen Outreach were at 60 percent less the risk of course failure as comparison youth.[21]

- **Reduced risk of suspension from school**—Participants in Teen Outreach were at 52 percent less the risk of suspension from school as the comparison youth.[21]

- **Reaching youth at highest risk**—The program was most effective as a prevention program for youth most at risk of the specific types of problems the intervention sought to prevent (academic problems, school dropout, and teen pregnancy).[21]

For More Information or to Order, Contact:

- ***Wyman Teen Outreach Program***, 600 Kiwanis Drive, Eureka, MO 63025; Phone: 636.938.5245 X 231; E-mail: teenoutreachprogram@wymancenter.org; Web: http://www.wymanteens.org.

TLC: Together Learning Choices (formerly Teens Linked to Care)

Program Components

- Health promotion intervention for HIV-positive adolescents and young adults
- Sixteen sessions in two parts: Staying Healthy and Acting Safe modules, each eight sessions
- Small group intervention
- Activities to promote problem solving, goal setting, assertive behavior, communication and negotiation skills, and self-awareness
- Interactive techniques, including role playing, discussions, and appreciation
- Two trained facilitators

For Use With

- HIV-positive youth, ages 13 through 24
- African American youth
- Latino youth

Evaluation Methodology

- Quasi-experimental design, conducted in nine adolescent clinical care sites in four AIDS epicenters: Los Angeles, New York, San Francisco, and Miami
- HIV-infected youth receiving care at the clinical sites, randomly assigned to treatment (n=208) and control (n=102) conditions
- Two pre-intervention assessments, three months apart (n= 310); follow-up at nine months (n=257) and 15-months (n=154) post intervention
- Participants received incentives for taking each survey

Evaluation Findings

- Reduced numbers of sex partners
- Reduced incidence of unprotected sex
- Increased positive lifestyle changes – females only
- Increased positive coping actions

Evaluators' comments: *HIV-infected youth who do not change their sexual risk acts or injection drug use may infect others and also become re-infected with new viral strains… It is important to note that the behavioral changes were specific to the content of each module. For example, the Stay Healthy module did not affect sexual risk even though health behaviors did change. The Act Safe module changed substance use and sexual risk but no further changes occurred in health acts.*

Rotheram-Borus, Lee, Murphy et al, 2001

Program Description

This small group intervention is designed to help young people who are living with HIV or AIDS to maintain their health, reduce transmission of HIV and other sexually transmitted infections (STIs), and improve the quality of their life. The intervention is based on social action theory and comprises two eight-session modules: Staying Healthy and Acting Safe.[35,36]

Under the guidance of trained facilitators, participants learn skills in solving problems, setting goals, communicating effectively, being assertive, and negotiating safer sex practices. They also improve their self-awareness regarding their feelings, thoughts, and beliefs, especially related to health promotion and positive social interactions. Techniques used in TLC include: role playing;

helping youth discern his/her own ideal self; helping participants discuss their feelings of comfort and discomfort; and actions to acknowledge and appreciate participants' positive behaviors. Sessions are highly interactive and include about 15 participants and two facilitators (usually one male and one female). The program can be delivered in clinical settings or community agencies. The program requires a large room, free from interruptions.[35,36]

Evaluation Methodology

Evaluation comprised nine adolescent clinical care sites in four AIDS epicenters: Los Angeles, New York, San Francisco, and Miami. Evaluation occurred over a 21-month period between 1994 and 1996. Of the 393 HIV-infected youth eligible to participate, 25 refused and 17 were too ill to participate; 351 HIV-infected youth agreed to participate. Every youth gave informed consent and evaluators received parental consent, as well, for non-emancipated youth under age 18. Evaluators conducted two baseline assessments, three months apart, to establish the stability of risk behaviors. Of the 351 recruited, 41 were lost to follow-up at the second pretest. Thus, 310 HIV-infected youth participated in the study: 126 from Los Angeles; 91 from New York City; 49 from San Francisco; and 44 from Miami.[35]

Both baseline assessments were conducted *before* youth were assigned to treatment or control condition. Then, cohorts of about 15 youth were assigned sequentially to treatment and control conditions. Across nine sites, there were 16 cohorts in the intervention condition (n=208) and nine cohorts in the control condition (n=102). Youth received an incentive of $20 to $25 for each assessment. Regression analysis found no significant differences between treatment and control youth across the two pretests.[35]

Module One, *Stay Healthy,* was delivered over a period of three months to the youth in the treatment cohorts. Treatment and control cohorts were both reassessed at nine months after the second pretest. At nine months, 257 youth were successfully reassessed (treatment youth n=181; control youth n=76). Module Two, *Act Safe*, was then delivered over a period of three months and youth were re-assessed at 15 months after the second pretest. At 15 months, 154 were successfully reassessed (treatment youth n=124; control youth n=30).[35]

At baseline, 72 percent of participants were male; 88 percent of males self-identified as gay or bisexual. Participants ranged in age from 13 to 24 years; mean age 20.7. Female participants were younger than males by about 1.5 years ($P < .001$). Most (64 percent) belonged to ethnic minority groups; 55 percent had graduated from high school. For those still enrolled in school (31 percent), the mean grade was 11th. On average, participants had tested positive for HIV more than two years prior to recruitment.[35]

Extensive analyses to assess the presence of selection bias found that subgroups were comparable throughout the study. Evaluation found only three differences. First, treatment and control conditions were not balanced by site because seven of nine sites ended with a treatment cohort. Second, because Miami had more female HIV-infected youth and because Miami's youth were ineligible for Module Two, more males attended only Module One than attended both modules. Finally, treatment youth were more likely than controls to use social support as a coping strategy (an outcome measure at baseline). In assessment, evaluators controlled for city, gender, ethnicity, and baseline status so that these factors would not confound the findings.[35]

Outcomes

- **Behaviors**—
  - **Positive lifestyle changes**—Evaluation found that female participants in Module One showed a significant number of positive lifestyle changes compared to controls (relative effect size [RES]=46 percent; P=.003) and also compared to intervention non-attendees (RES=35 percent; P =.016).[35]
  - **Positive coping changes**—Evaluation found that female participants in Module One had a significantly higher positive action coping score than did female controls (RES=18 percent; P =.029). In addition, both male and female participants showed higher social support coping scores than did controls (RES=11 percent; P =.04) or intervention non-attendees (RES=17 percent; P =.006).[35]
  - **Reduced number of sex partners**—Compared with non-attendees, treatment youth in Module Two reported significantly fewer sex partners (RES=55 percent; P =.033) and fewer HIV-negative sexual partners (RES=54 percent; P =.035).[35]

- **Reduced incidence of unprotected sex—**Compared to control youth, treatment youth reported a lower percentage of unprotected sex acts (RES=82 percent; *P* =.013). Treatment youth also had a lower percentage of unprotected sex acts than did non-attendees (RES=74 percent; *P* =.075).[35]

- Other findings—
  - **Reduced use of drugs** – Evaluation found significant reductions in the weighted substance use index between treatment youth and non-attendees (RES=50 percent; *P* =.024). Differences included prevalence of alcohol or marijuana use (RES=26 percent; *P* =.045) and the use of hard drugs (RES=45 percent; *P* =.097).[35]

  - **Emotional distress unaffected –** Evaluation found *no* significant differences between treatment youth and controls or non-attendees in emotional distress or in the number of drugs used.[35]

  - **Disclosure of serostatus unaffected** – Evaluation also found *no* significant difference between treatment and control youth or non-attendees in disclosure of serostatus to sex partners.[35]

For More Information, Contact:

- A detailed manual for the two sessions is available online at http://chipts.ucla.edu.
- **In addition, this program is a part of Center for Disease Control and Prevention's Diffusion of Effective Behavioral Interventions (DEBI) project. For additional information and training visit:** http://www.cdc.gov/hiv/topics/prev_prog/rep/packages/TLC.htm.

Glossary of Terms

Although Advocates for Youth strove for consistency in terminology, it may still vary between programs. For example, some evaluations provide information about African American participants, others about black participants. These two terms are not necessarily interchangeable since they may denote different populations. Therefore, Advocates for Youth used the evaluators' language as to race/ethnicity and risk (i.e., low risk, high risk, or moderate risk).

Participant Groups

- Control or comparison group = young people with similar socioeconomic, ethnic, and demographic characteristics as the intervention group, yet who did not receive the program being evaluated, and whose answers at pretest and post-intervention follow-up provided evaluators with data for comparison with intervention participants, in order to determine the effectiveness of the program. The nonparticipant group is called a control group when youth are selected randomly and a comparison group when they are not.
- Treatment or intervention group = the young people who received the program being evaluated.

Evaluation Design

- Experimental design = an evaluation design that involves gathering a set of individuals equally eligible and willing to participate in a program and randomly dividing them into two groups: those who receive the intervention (treatment group) and those from whom the intervention is withheld (control group). By randomly allocating the intervention among eligible beneficiaries, the assignment process creates comparable treatment and control groups that are statistically equivalent with one another, given appropriate sample sizes.
- Non-experimental design = an evaluation design for use when it is not possible to select a control group, identify a suitable comparison group through matching methods, or use methods, or use reflexive comparisons.*
- Quasi-experimental design = an evaluation design that constructs a comparison group using matching or reflexive comparisons. Matching involves identifying non-program participants comparable in essential characteristics to participants; both groups are matched on the basis of either a few observed characteristics or a number of characteristics that are known, or believed, to influence program outcomes. Reflexive comparison involves program participants, compared to themselves before and after the intervention and who function as both treatment and control group.*

Related Terms

- Replication = the same program, evaluated in another place with different young people.
- Fidelity = careful replication of a program to include all its elements as included in the original evaluation. Where programs were altered, lack of fidelity is noted in this document.
- For Use With = used here to denote the populations of young people with whom evaluation has shown a particular program to be most effective as well as the population for whom it was designed.
- Significant = statistically significant, or meaningful difference, as determined by evaluation.

* Definition from http://www.worldbank.org/poverty/impact/methods/overview.htm

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