

Hispanic Youth in Pregnancy Prevention Programs Research: An Analysis of the Research Literature

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Abstract

Recently, the Office of Adolescent Health (OAS) of the U.S. Department of Health and Human Services called for applications to replicate 28 evidence-based programs with fidelity to reduce teenage pregnancy. While the announcement was laudable for its potential impact on minority youth, it identified programs based on evidence that seldom included Hispanic youth, and the emphasis on faithful replication reduced the possibility of cultural adaptations. This is not an inconsequential concern: Hispanic youth comprise a sizable portion of the population between 10 and 19 years of age and are at high risk for teenage pregnancy.

To what extent were Hispanic youth included in the 28 teen pregnancy prevention programs identified by OAS? We conducted a review of the literature on the 28 programs plus one new program and two replications (N = 31 program). Based on the averages reported in all studies, we found that African American youth comprised 61.6% of participants. Hispanic youth comprised only about 18.3% of samples. When numerical totals of participants were used, the proportions that were derived were approximately the same. Findings raise serious question about the evidentiary base of these programs, which have omitted a large swath of the American youth population. If implemented with fidelity in populations that have not been included in past research or for which cultural adaptations have not been developed, the results may undermine confidence in the effectiveness of the intervention with Hispanic youth.

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Background

In a recent Funding Opportunity Announcement¹, the Office of Adolescent Health (OAS) of the U.S. Department of Health and Human Services called for applications for the “purpose of replicating evidence-based programs that have been proven through rigorous evaluation to reduce teenage pregnancy, behavioral risks underlying teenage pregnancy, or other associated risk factors” (p. 3). The FOA reflects our nation’s focus, more than ever, on using evidence-based, data-driven means to address public health challenges such as teen pregnancy rates. The FOA set forth 28 pregnancy prevention and youth development programs that the OAS determined were evidence-based” and effective. Applicants for funding were required to select one of the 28 programs and ensure that it was implemented with “fidelity.”

The call for applications from community-based sources is an important step in reducing the risks of teenage pregnancy, especially among minority teens, and ensures that the efforts occur within service organizations that minority youth are likely to access. The focus on teenage pregnancy prevention is equally as important since minority youth, particularly African Americans and Hispanics, have the highest rates of teenage pregnancy and early parenthood in our country. The Guttmacher Institute reports that in 2006 the rate of pregnancy among women under the age of 20 increased after a general decline in teen pregnancy between 1990 and 2005 (Kost, Henshaw, & Carlin, 2010). The decline for Hispanic women, however, was much lower (26%) than the decline for African American (45%) and non-Hispanic White (50%) women. Then, when the increases in teen pregnancy surged from 2005 to 2006, rates for Hispanic women rose from 124.9 per 1,000 to 126.6 per 1,000, in contrast to the increase in the rates among African American women, which rose from 122.7 to 126.3, and the rates among non-Hispanic White teens, which rose from 43.3 to 44.0 in 2006. Therefore, the decline was lowest for Hispanic women in the 15 years between 1990 and 2005, and their surge started from a higher point than African American females and went to a slightly higher rate than African American women. Moreover, teen pregnancies were highest in those states with the largest Hispanic populations—California, Texas, New York, Florida, and Illinois (Kost et al., 2010), suggesting that the rates nationally may have reduced the average difference between Hispanic and African American women. But the average may conceal the significance of the fact that Hispanic women experience higher rates in the most populous states in the U.S. that also have the highest concentrations of Hispanics. This background information affirms the need for more intervention testing in community settings and including more Hispanic youth—both females and males—in adolescent pregnancy prevention efforts.

However, the insistence on implementing 28 programs deemed to be evidence-based and the further requirement that they be implemented with fidelity raises several potential problems. First, the general situation in the field of intervention research is that most interventions have been developed, tested and standardized with a narrow representation of the population. Most often, interventions are developed with a restricted population that may not be representative of the ethnic and racial make-up of the U.S. The empirical evidence of interventions is usually derived from randomized control trials, with their restrictive criteria for inclusion criteria to show efficacy or effectiveness. In efficacy testing, strict and narrow criterion are used to identify those persons who can enter the

¹OPHS/OAHTPP Tier1-2010

study and cannot. While some groups may be included due to their minority status or their identification as having the highest risk for the problem targeted by the intervention or their income level, other groups who are either equal in size or risk as the groups targeted by the intervention may be omitted. A major drawback of this is that of generalizability, that is, whether the intervention will work equally well or better when administered with other groups that were not in the original efficacy testing and that may have unique characteristics and different from those in the standardization sample.

A second major drawback is that fidelity imposes limits on how much adaptation can be done to an intervention. One argument against adaptation is that it may reduce the potency or intensity of the core ingredient that makes the intervention efficacious or effective. Therefore, intervention-developers impose limits on what adaptations can be made to their product. And this is an understandable situation since unabridged or wholesale adaptation of an intervention can ruin its effectiveness. Also, insisting on fidelity to the original model further restricts the application of programs to those populations that were not included in the standardization samples. Fidelity, therefore, restricts adaptation—the targeting and tailoring—of interventions to match the needs, values, norms, and behavioral repertory of people in distinct settings(urban/rural) and of diverse ethnicities and cultures. Fidelity without adaptation not only has the potential of lowering the effectiveness of the intervention but can affect the availability, acceptability, accessibility, and uptake of the un-adapted intervention by new populations. Our research on parenting interventions, for example, indicates that Hispanic parents may reject an intervention or parts of an intervention because it does not fit their cultural values and parenting beliefs, or may selectively use those elements of the intervention that they find most appealing. The same can occur among adolescents who are recruited to pregnancy prevention interventions. If the exercises, symbols, or language of an intervention are not attractive to Hispanic youth or resonate with their lived experience, Hispanic adolescents may reject the intervention and not attend, or attend without engaging actively in it. Cultural adaptations customarily include tailoring the intervention to characteristics of the target population without affecting the core or active therapeutic ingredients of the interventions.

Given that Hispanic youth comprise a sizable portion of the population between 10 and 19 years of age and are at high risk for teenage pregnancy and early parenthood, we agree that testing empirically supported interventions should be conducted. However, we question the extent to which Hispanic youth were included in the 28 teen pregnancy prevention programs that were identified for selection by OAS as evidence-based. In the present project, we undertook a thorough literature review to determine the extent to which Hispanic youth have been included in past testing of the interventions that OAS determined could be used by applicants for funding.

Method

All 28 teenage pregnancy prevention programs and curricula listed in Appendix A—List of Evidence-based Program Models (p. 38) of the FOA were subjected to an exhaustive literature search. The criteria for the selection of publications were that they have appeared in peer-reviewed publications and constituted research reports (not literature reviews or syntheses) that described the effectiveness of the intervention. If more than one report was found for a program, each was carefully read to ensure that they constituted distinct, unduplicated samples (i.e., that each study had a unique group of youth). Through exhaustive electronic and manual searches for literature, we reviewed all of the publications and extracted specific information.

Search Strategy

We began our review of literature through searches using the names of the 28 different evidence-based teen pregnancy prevention models. Through our initial review of the programs, we created specific categories of interest to draw out from the literature based on the design and purpose of each study. We used these categories to guide our search of publications that cited the original program study or replication studies.

We generated our initial literature references from available program homepages that generally provided a citation for the original publication from which the data were drawn. From there, we searched for the publications in reputable literature databases (i.e., Academic Search Premier, Article First, Medline, PsychINFO, PubMed) and found additional publications and some replication studies that we included in our review when relevant. Another helpful resource was the ReCAPP Resource Center for Adolescent Pregnancy Prevention, which provided curriculum overviews for several of the program models, as well as details of the research design, findings, and the original publication. Our first search, after eliminating random hits and unrelated results (i.e., news articles, program announcements, popular media) generated 175 related publications. We then separated out the research reports from these publications. Finally, from the remaining list of 59 research reports, we included 33 into our final report. Table 1 includes the publication, the findings, and other relevant variations for this project.

Relevant Variations

Publications were separated by program and categorized by the following variations: outcome, evaluation design, age, race/ethnicity, gender, program setting, location, sample, and relevant findings. A final column was created for additional comments or findings we identified as significant, particularly if there were any adaptations or translations of the models. Relevant findings were based on those provided within the article, not our own interpretations.

Results

Our searches yielded a total of 31 examples of unduplicated empirical tests of the teen pregnancy prevention programs. This represented all 28 OAS-selected programs, one not included in the OAS list of evidence-based programs, and two replications or adaptations of one of those on the list. Based on their percentage (proportion) of all samples in the 31 studies that were reported, African American youth comprised, on average, 61.6% of participants. African American youth were participants in all but one study (the ¡Cuidate! program, an adaptation of the Be Proud program in Philadelphia and directed to Hispanic youth). In the 30 studies in which African American youth participated, they comprise about 63.7% of samples, nearly two-thirds of all youth.

Contrasting the participation rates of Hispanic youth in the studies of the evidence-based teenage pregnancy prevention programs to those of African American youth, we find a considerable difference. In the 31 reports surveyed, Hispanic youth comprised only about 18.3% of the samples. When we look at only the 15 reports that included Hispanic youth in their samples, the average participation rate was 33.5%.

When contrasting the numbers of Hispanic participants in contrast to all youth in the studies, the results reflect a similar pattern of low Hispanic representation. In the 29 studies that reported the number of participants (one study focused on parents and another did not report totals), 28,263 youth participated in the research nationally as either intervention or control subjects. A total

of 5,841 Hispanic youth participated, and they were present in only 15 of the 29 studies on the interventions. Hispanic youth, therefore, represent about 20.6% of all studies reported. In the 15 studies that included Hispanic youth, the total number of participants was 19,220, making Hispanic youth only 30.3% of the sample.

Conclusions

Despite the growth of the Hispanic youth population (i.e., between the ages of 10 and 19) and projections that Hispanic youth will constitute 29% of all youth by 2050, research on pregnancy prevention has lagged significantly in including Hispanic youth in study samples. Only about half of the 31 programs that were identified through our literature review included Hispanic youth, making them about less than one-fifth of all participants. Considering that Hispanic youth are at higher risk for unplanned adolescent pregnancies in comparison to other youth, the underrepresentation of Hispanic in evidence-based pregnancy prevention studies is troubling.

Selecting evidence-based programs that have not included Hispanic youth in proportion to their presence in the U.S. youth population or, worse, in proportion to their high risk raises serious concerns about the potential outcomes. Moreover, without adaptation of interventions for the diverse cultures represented by Hispanics, the core therapeutic aspects of the intervention may not resonate with the needs of the target population of Hispanic youth.

Table 1. Summary of Studies Reviewed

Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Aban Aya Youth	Flay, Graumlich, Segawa, Burns, & Holliday, 2004.	Experimental Design	School-based, after school	Urban: Chicago, IL (12 metropolitan schools)	Baseline: 1153 Completion: 668; N= 552	Improved contraceptive use	Upper Elementary & Middle School (5th-8th Grade) ages: 10-11 and 13-14; African American (100%); Male & Female
	Relevant Findings	Reduced risky behavior at the short term—not at 9 month follow up; improved rate of condom use (95% and 165%); theoretically derived social-emotional programs that are culturally sensitive, developmentally appropriate, and offered in multiple grades can reduce multiple risk behaviors for inner-city African American boys in grades 5 through 8. Lack of effects for girls needs more research. No significant intervention effects for girls. For boys, significantly reduced rate of increase in violent behavior (by 35% compared with controls), provoking behavior (41%) school delinquency (31%) drug use (32%), and recent sexual intercourse (44%). Also improved rate of increase in condom use (95%) as compared to the health education control condition.			Additional comments	Most publications focus on the violence prevention aspect of this program; culturally specific for African-American male youth; same data used in publications	
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
All4You	Coyle, Kirby, Robin, Banspach, Baumler, & Glassman, 2006.	Experimental design	School-based (Alternative Schools)	Urban: 24 community day schools in Northern California); Thirteen schools randomly assigned to intervention. Other 11 schools were	N=988; follow-up survey N=743	Improved contraceptive use	High School; 29% African American, 16.9% Asian American, 27.6% Latino, 12.2% White, 14.2% Other or multi-ethnic; 61.2% Males 38.8% Females

				control sites.			
	Relevant Findings	At the 6-month follow-up, intervention reduced frequency of intercourse without condom during previous 3 months; frequency of intercourse without a condom with steady partners; and number of times students reported having intercourse in previous 3 months. Also increased condom use at last intercourse. Effects were not statistically significant at the 12- and 18-month follow-ups. Intervention was effective in reducing selected sexual risk behaviors among students in alternative school settings; but effects were modest, short term.			Additional comments	Instrument used for evaluation available in English and Spanish	
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
ASSESS (Awareness, Skills, Self-efficacy/Self-esteem, and Social Support)	Boekeloo, Schamus, Simmens, Cheng, O'Connor, & D'Angelo 1999.	Experimental design	Clinic based	Urban: Washington, DC	N=197 (data at baseline, 3 and 9 months) n = 7 Hispanics (4 intervention, 3 control)	Improved contraceptive use	Middle & High School (ages 12-15); 65% African American, 19%, Caucasian, 7% Hispanic, and 13% Other; Males and females
	Relevant Findings	Reduced risky behavior at short term—not at 9-month follow-up			Additional comments		
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Be proud! Be responsible!	1) Jemmott, 1992; 2) Borawski, Trapl, Adams-Tufts, Haymen, Goodwin, & Lovegreen, 2009.	1) Experimental design; study 2) Experimental replication (quantitative study)	School-based, after school	1) Philadelphia 2) Midwestern Metropolitan area	1) N = 157; 2) N = 1357 Totals: N = 631 intervention; N = 726 control	Improved contraceptive use; Increased knowledge of HIV /AIDS & STIs, enhanced feelings of pride, and built support for safer sexbehavior	1) 10 th , 11 th , 12 th grades; 2) 9 th and 10 th grades; 1) African American male adolescents; 2) White: 49.7%; Black 35.8%; Hispanic 11.9 %. Other 2.6%. Males m + 14.6 yrs

	Relevant Findings	<p>1) Compared with control group, Intervention showed gains in knowledge about HIV/AIDS and risky sexual behavior; engaged in significantly less high-risk sexual behavior than controls at 3-month follow up; greater confidence in ability to control sex impulses, to use condoms and to negotiate use of condoms and stronger intentions to use condoms. At 3-month follow-up: teens in intervention reported significantly fewer female sexual partners and fewer days of vaginal intercourse and vaginal intercourse without a condom (prior 3 months), and significantly less likely to report having heterosexual anal sex.</p> <p>2) Compared to control, intervention students reported significantly greater knowledge of HIV, other STDs and condoms; greater confidence in ability to control sexual impulses, to use condoms and to negotiate the use of condoms; and stronger intentions to use condoms. Stratified analyses show that strongest intervention impacts were on knowledge and efficacy among males and students attending suburban schools. Intervention had no impact on sexual initiation, frequency of intercourse or condom use. (99% completed immediate posttest, 97% completed four-month follow-up and 92% completed 12-month follow-up.)</p>			Additional comments	<p>replication study (2): Effects by ethnicity. BPBR had a strong and sustainable impact on condom knowledge among white students and on STD knowledge among black students. White students exposed to intervention had higher scores on condom negotiation and condom technical skills at 4 months than did white controls; Black students showed no significant differences on these measures; however, may reflect the higher starting point of Black students.</p>	
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Becoming a Responsible Teen (B.A.R.T.)	Jemmott, Jemmott, Fong, & McCaffree, 1999.	Experimental Design	After-school, community based	Urban: Jackson, MI	N= 246	Delayed sexual initiation, improved contraceptive use	High School (ages 14-18), Avg age 15 years; 100% African American; 28% males 72% females
	Relevant Findings	Of youth who were sexually abstinent prior to intervention, only 11.5% were sexually active 1 year later compared with 31% of participants in control group. Among those sexually active prior to intervention, 42% of control group remained so after			Additional comments		

		1year versus 27% of intervention group. Prior to intervention, youth assigned to intervention were more likely to use condoms and less likely to engage in unprotected vaginal or anal intercourse.					
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Children's Aid Society-Carrera Program	Philliber, Kaye, Herrling, & West, 2002.	Experimental Design	Community based, after-school	Urban: New York City	N = 484, 6 sites (242 control, 242 intervention)	Delayed sexual initiation Improved contraceptive use. Reduced teen pregnancy.	High School (ages 13-15); 60% African American; 39% Hispanic (n =189); Males & females
	Relevant Findings	Better outcomes for girls, less likely to become pregnant, more likely to use condom and hormonal method, less likely to have had sex, more likely to have had positive health care.			Additional comments	No significant difference in outcomes between Hispanic and African America participants	
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Cuidate (adaptation of Be proud! Be responsible!)	Villarruel, Jemmott, & Jemmott, 2005.	Experimental Design	Community based, after-school (Saturdays)	Urban -- 3 Philadelphia high schools	N = 553	Improved contraceptive use	n = 249 males, n = 304 females; 100% Hispanic: (85% Puerto Rican)
	Relevant Findings	Over follow-up period, intervention adolescents were less likely to report sexual intercourse, multiple partners, and days of unprotected intercourse, and more likely to report using condoms consistently. Baseline sexual experience and language use moderated intervention efficacy. Adolescents assigned to the HIV intervention who were sexually inexperienced at baseline reported fewer days of unprotected sex; Spanish speakers were more likely to have used a condomat last intercourse and had a greater proportion of protected sex compared with adolescents in the			Additional comments	Also implemented in Denver in a school setting, publication does not talk about results, only about implementation; available in English and Spanish	

health-promotion intervention.							
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Draw the Line/Respect the Line	Coyle, Kirby, Marin, Gomez, & Gregorich, 2004.	Experimental Design	School-based	Urban (Northern California) (10 schools and 3 districts)	N = 2829 at baseline	Delayed sexual initiation	Middle School (ages 11-14); 59% Latino, 17 % White, 16% Asian, 5 % African American, 3% Other; 50% male, 50% female
	Relevant Findings	Delayed sexual initiation in males and fewer sexual partners at 24-month follow-up, but not at 36. Intervention delayed sexual initiation among boys, but not girls. Boys in intervention also showed significantly greater knowledge than control students, perceived fewer peer norms supporting sexual intercourse, had more positive attitudes toward not having sex, had stronger sexual limits, and were less likely to be in situations that could lead to sexual behaviors. Psychosocial effects for girls were limited.			Additional comments		
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Focus on Kids (Focus on Youth)	Li, Stanton, Feigelman, & Galbraith, 2002.	Experimental Design	Community based, after-school	Urban: Baltimore, Maryland	N= 383 (90% follow up) n = 206 intervention n = 177 control	Improved contraceptive use	Middle and High School (ages 9-15 years old); 100% African American Males and females
	Relevant Findings	Cumulatively over 3 years, intervention youth reported significantly lower rates of failure to use a condom. Findings indicate that face-to-face interventions may offer significant cumulative protection from unprotected sex over long-term.			Additional comments	The intervention was especially strong among boys (85% versus 57%) and among teens aged 13 to 15 years (95% versus 60%)	

Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Focus on Kids plus ImPACT (Focus on Youth plus ImPACT)	Wu, Stanton, Galbraith, et al., 2003. Stanton, Cole, Galbraith, et al., 2004.	Experimental Design	School based	Urban: Baltimore, Maryland (Housing developments, community centers, and recreation centers)	N = 817, Recruitment sites were randomly assigned to one of three groups: FOK+ImPACT and multiple booster sessions (n = 238), FOK+ImPACT (n = 258), and FOK only comparison (n = 321).	Improved contraceptive use Reduced Teen pregnancy	Middle and High School (13-16); 100% African American; 58% Female, 42% Male
	Relevant Findings	Reduced sexual intercourse, unprotected sex compared to FOK only comparison group, youth who received the FOK+ImPACT intervention were less likely to report other risk behaviors, including: cigarette smoking at 6 and 24 months, alcohol use at 6 and 12 months, marijuana use at 12-month follow-up, and been pregnant or gotten a girl pregnant at 24 months. A significantly larger percentage of youth participating in intervention reported a pregnancy compared to youth participating in FOK+ImPACT intervention at 24 months.			Additional comments	Has parent component; The FOK+ImPACT+Booster intervention, which included booster sessions at 7, 10, 13, and 16 months, did not meet the best evidence criteria.	
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Get Real About AIDS	Main, Iverson, McGloin, & Banspach, 1994.	Quasi-experimental design	School based	Urban, rural, and suburban: 17 Colorado high	N = 2,015	Improved contraceptive use	High school (9-12 th grade; average age-15 years; 60% were in the 9 th grade; 6% African American, 3% Asian,

				schools			21% Hispanic, 65% White, 5% Other; 51% male 49% female
	Relevant Findings	No significant difference in two groups regarding behavioral measures of actual sexual activity; students in intervention classes were more likely to report that they had purchased a condom than students in control condition. Sexually active students reported having fewer sexual partners within past 2 months and using a condom more often during sexual intercourse. Intervention did not significantly postpone onset of sexual intercourse.			Additional comments	A tool for assessment available; 44% were sexually experienced prior to study	
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Teen Health Project: HIV Prevention for Adolescents in Low-Income Housing Developments	Sikkema, Anderson, Kelly, Winett, Gore-Felton, Roffman, et al., 2005.	Experimental design	Community-based, after-school	Milwaukee, Racine, Roanoke, Seattle, and Tacoma (15 low-income housing developments)	Baseline (N = 1172), short-term follow-up (n = 865), and long-term follow-up (n = 763)	Delayed sexual initiation. Improved contraceptive use	Middle and high school (12-17); 51% African American, 20% Asian, 10% East African, 5% White, 3% Hispanic, 3% Ukrainian, 2% Russian, 1% Native American, 5% other; Males and females
	Relevant Findings	More condom use after program, but not in long-term follow-up. At long-term follow-up, adolescents in housing developments receiving community-level intervention were more likely to delay onset of first intercourse (85%) than those in control developments (76%), while those in workshop developments (78%) did not differ from control condition adolescents. Adolescents in both intervention (77%) and workshop (76%) developments were more likely to use a condom at last intercourse than those in control (62%) developments.			Additional comments		

Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Keepin' it R.E.A.L. Responsible, Empowered, Aware Lifestyles: HIV Risk Reduction Among Detained Adolescents	DiIorio, Resnicow, Thomas, Wang, Dudley, Van Marter, et al., 2002.	Experimental design	After school parent program	Original study: Suburban: 12 different sites in a "Large southeastern city"	Original study: N = 612 adolescents and N = 491 mothers	Improved contraception use; Delayed sexual initiation	High school (ages 11-14); African American = 601 or 98.2% African American 1% White 0.8% Other 60.6% males, 39.4% females
	Relevant Findings	One control group and two treatment groups: one based on social cognitive theory (SCT) and other a life skills program (LSK). Assessments were conducted before intervention and at 4, 12 & 24 months after baseline assessment. Among adolescents, LSK group demonstrated increase in condom use, and those in SCT and control groups scored higher on HIV knowledge than those in LSK group. Mothers showed substantial increase in comfort of talking about sex and self-efficacy. Mothers in SCT group scored higher on knowledge of HIV than those in LSK and control groups.			Additional comments	50% of participants were sexually active; Mothers' mean age 37.9 years, most African American and single	
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Sisters Saving Sisters: HIV Risk Reduction for African-American and Latina Adolescent Women	Jemmott, Jemmott,, Braverman, & Fong, 2005.	Experimental design	Clinic-based	Urban: Philadelphia PA	Adolescents (N = 682) randomly assigned to 1 of 3 groups: Skills-based HIV/STD intervention (n = 235), HIV/STD information comparison (n = 228), or Health	Improved Contraceptive Use	Middle school & high school (ages 12-19); 68 % African American 32% Latino 100% females

Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
					Promotion comparison (n = 219)		
	Relevant Findings	Skills-based intervention changed behaviors, but there was no impact on behavior from the information-based intervention. More specifically, 12 months after the program, teen girls in the skills-based intervention were less likely to have sex without a condom in the three months before the survey, less likely to report multiple partners in the three months before the survey, and less likely to test positive for a STI.			Additional comments		
HORIZONS HIV Intervention	DiClemente, Wingood,, Rose, Sales , Lang, Caliendo, Hardin, & Crosby, 2009.	Experimental Design	Community Based/After School Clinic Based	Urban: Atlanta, Georgia	N = 715	Improved contraception use	High School; ages 15-21; 100% African American females
	Relevant Findings	At 12-month follow-up, fewer adolescents in ontervention had a chlamydial infection (42 vs 67) or recurrent chlamydial infection (4 vs 14). Adolescents in intervention also reported higher proportion of condom-protected sex acts in the 60 days preceding follow-up assessments and less frequent douching. Adolescents in intervention were also more likely to report consistent condom use in the 60 days preceding follow-up assessments and condom use at last intercourse.			Additional comments		
It's Your Game: Keep it Real!	Tortolero, Markham, Peskin, Shegog, Addy, Escobar-Chaves, et al., 2010.	Experimental Design	School-based	Urban: 10 middle schools in Southeast Texas	Baseline =1,193 seventh graders, N=907 ninth graders who followed up	Delayed sexual initiation	Middle School (mean age: 12.5 years, 7 th graders followed up in 9 th grade); 44% Hispanic, 42.3% African American, 13.7% Other; 41% male

	Relevant Findings	24 months after baseline- 24% of the group who participated in the program had initiated sex vs. 30% of the control group. Materials only in English; At 5-month post-test, following first half of intervention (7th grade curriculum only), intervention students reported lower prevalence of any type of intercourse during past 3 months and lower initiation rates; However, sexually inexperienced students reported greater intentions to have vaginal intercourse in the next year			Additional comments	More than one-quarter of Hispanic students in the comparison condition initiated sex compared with 17.4% of Hispanic students in the intervention condition. After adjusting for covariates, Hispanic students in the comparison condition were 64% more likely to initiate sex than Hispanic students in the intervention condition. The subgroup analysis showed significant differences between intervention and comparison groups for initiation of vaginal sex only among Hispanic students and for initiation of anal sex among African-Americans, male, and female students.	
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Making a Difference!	Jemmott, Jemmott, & Fong, 1998.	Experimental design	Community Based, After School	Urban: Columbia, SC	N=215	Delayed sexual initiation & Improved contraceptive use	Middle School (12-13); 659 6th and 7th grade; 100% African-American
	Relevant Findings	Participants were less likely to initiate sex than control group participants 3 months after the program, but no difference 12 months after. Program participants had higher frequency of condom use after 12 months than control group.			Additional comments		
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Making Proud Choices	Jemmott, Jemmott, & Fong, 1998.	Experimental design (randomized control trial)	Community based/After school	Urban: Philadelphia, PA	N=659 For the program evaluation, teens were randomly assigned to the program	Improved contraceptive use; Reduced frequency of sex	Middle School (6th & 7th Grade); ages 9-15; 100% African-American 53% female

					(218 participants) or the control group (214 participants)		
	Relevant Findings	<p>Reduced frequency of sex and increased condom use; At the 12 month follow-up, sexually experienced teens in Making Proud Choices! reported a lower frequency of unprotected sex than those in the control group. The evaluation results suggest that intensive, culturally-appropriate approaches that are based on theory can reduce some risky sexual behaviors among inner-city African American adolescents. Among youth who were sexually active before the program, those in Making Proud Choices! reported a lower frequency of intercourse (1.3 days vs. 3.8 days), a lower likelihood of unprotected intercourse (9.7 percent vs. 31.6 percent), and a lower frequency of unprotected intercourse (.04 days vs. 1.9 days) than teens in the control group. Youth who were virgins at the start of the program did not differ on any of the outcomes measured compared to virgins in the control group.</p>			Additional comments	<p>*This program curriculum was supplemented by Promoting Health Among Teens (PHAT) as a maintenance component; This program is for Young African-American, Hispanic and White adolescents, ages 11-13, who attend middle schools and youth-serving community based programs. The program can be implemented in schools or in community organizations.</p>	
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Project TALC	Rotheram-Borus, Stein, & Lester, 2006.	Experimental Design	Community based and after school	Urban: New York City	N=288	Reduced teen pregnancy	Middle School (6th-7th) mean age was 12.2 years; 35% African American, 50% Latino, 4% white, 11% Other 53.5% female
	Relevant Findings	<p>Parent component- works with adolescent children of parents with HIV. 24% of the participants became parents over the time of the intervention v. 34% in the control group (over the 4 years) – only ethnic/race differences for Hispanics: more depressive symptoms in Latina adolescents: At the 4-year follow-up (from</p>			Additional comments		

		program start): adolescents participating in the intervention were significantly less likely to report being a teenage parent.					
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Promoting Health Among Teens!	Jemmott, Jemmott, & Fong, 2010.	Experimental Design; Randomized control trial	Community-based/After school	Urban: Columbia, SC, Macon, GA, Providence, RI, & Syracuse, NY	N= 662	Delayed sexual initiation	Middle school (6 th and 7 th grade) with mean age of 12.2 years; 100% African American 53.5% female
	Relevant Findings	At the 2 year follow-up, 1/3 of the participants in the program had initiated sex vs. 1/2 of the control group. The model-estimated probability of ever having sexual intercourse by the 24-month follow-up was 33.5% in the abstinence-only intervention and 48.5% in the control group. Fewer abstinence-only intervention participants (20.6%) than control participants (29.0%) reported having coitus in the previous 3 months during the follow-up period (RR, 0.94; 95% CI, 0.90-0.99). Abstinence-only intervention did not affect condom use. The 8-hour (RR, 0.96; 95% CI, 0.92-1.00) and 12-hour comprehensive (RR, 0.95; 95% CI, 0.91-0.99) interventions reduced reports of having multiple partners compared with the control group.			Additional comments	Evaluated with African American participants but "considered suitable for White and Latino youth"	
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Reducing the Risk	Kirby, Barth, Leland, & Fetro, 1991.	Quasi-Experimental design	School-based	Rural, Suburban, Urban: California (13 schools)	N=758, participants= 429, comparison group = 329	Delayed sexual initiation, improved contraceptive use	High school; 2% African American, 2% American Indian, 9% Asian, 20% Hispanic, 62% White, 5% Other

							53% female
	Relevant Findings	28% initiated sex vs. 38% of comparison group at 18-mo follow up. Females in the program reported using contraception all or most of the time compared to those in comparison group. Program participants were less likely to have unprotected sex than comparison group (9% v. 16%).			Additional comments		
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Safer Choices	Coyle, K.K., Kirby, D., Parcel, G., Basen-Engquist, K., Banspach, S., Rugg, D., & Weil, M. (1996).	Experimental Design (randomized control)	School-based	Suburban & Urban: Northern California & Southeast Texas	N=3869 ninth-grade students tracked for 31 months from fall semester 1993 to spring semester 1996 (79% follow-up)	Delayed sexual initiation, improved contraceptive (condom) use	High school (9 th -10 th grade); 31% white, 27% Hispanic (562 at baseline), 18% Asian, 17% African American, and 7% of other ethnicity; Male & Female
	Relevant Findings	Sexually active teens in Safer Choices were more likely than control group teens to use a condom or other contraceptive method at last sexual intercourse at the 31-month follow-up. Safer Choices had its greatest effect on measures involving condom use. The program reduced the frequency of intercourse without a condom during the three months prior to the survey, reduced the number of sexual partners with whom students had intercourse without a condom, and increased use of condoms and other protection against pregnancy at last intercourse. Safer Choices also improved 7 of 13 psychosocial variables, many related to condom use, but did not have a significant effect upon rates of sexual initiation. Safer Choices' students, relative to comparison students, scored significantly higher on the HIV and other STD knowledge scales, expressed significantly more positive attitudes about condoms; and reported significantly greater condom			Additional comments	Latinos in the program were 43% less likely to initiate sexual intercourse than Latinos in the control group. *All publications found (8) use same data	

		use self-efficacy, fewer barriers to condom use, and higher levels of perceived risk for HIV and other STD. Safer Choices' students also reported greater normative beliefs about condom use and communication with parents					
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Seattle Social Development Project	Lonczak, H.S., Abbott, R.D., Hawkins, J.D., Kosterman, R., & Castalano, R.F. (2002).	Quasi-experimental design	School-based	Suburban & Urban: Seattle, WA (18 Seattle inner-city schools)	N= 808 (baseline), (92.5% follow-up at 21 years old = 747)	Delayed sexual initiation, improved contraceptive use, reduced teen pregnancy	Elementary school (5 th grade); 47% European American; 22% African American; 22 Asian American; 5% Native American; Male (51%) and female (49%)
	Relevant Findings	The full-intervention group reported significantly fewer sexual partners and experienced a marginally reduced risk for initiating intercourse by age 21 years as compared with the control group. Among females, treatment group status was associated with a significantly reduced likelihood of both becoming pregnant and experiencing a birth by age 21 years. Among single individuals, a significantly increased probability of condom use during last intercourse was predicted by full-intervention group membership; Sexual behaviors measured at age 21 and results showed delayed sexual initiation (72% of participants v. 83% comparison), more use of condom 60% v. 44%, and decreased teen pregnancy, 17% v. 26%. African Americans were especially responsive to the intervention in terms of this outcome.			Additional comments	A significant ethnic group x intervention group interaction indicated that after controlling for socioeconomic status, single African Americans were especially responsive to the intervention in terms of this outcome.	
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
SiHLE	DiClemente, R. J., Wingood, G. M., Harrington, K. F., et al. (2004).	Experimental Design	Community-Based/After School, Clinic Based	Urban: Southern U.S. (city not	N=522 sexually active African	Improved Contraception, Reduced Teen Pregnancy	High School (14 – 18 years of age); African American (100%); Female

				specified in publication – recruited from 4 local community health agencies)	American girls: HIV prevention intervention (n = 251) or the general health control group (n = 271)		
	Relevant Findings	At both the six-month and the twelve-month follow-ups, SiHLE females reported significantly more consistent condom use than did control group females. SiHLE females were marginally less likely to report having become pregnant during the follow-up period and were less likely to report having acquired new sexual partners in the month leading up to the follow-up assessment. Vaginal swabs revealed that SiHLE females were significantly less likely to have acquired Chlamydia, but were not less likely to have acquired trichomonas or gonorrhea. SiHLE females demonstrated greater condom use proficiency than control females at both follow-ups on the condom use demonstration task. SiHLE females also had higher condom-use self-efficacy and higher HIV prevention knowledge scores. Compared with control females, SiHLE females reported perceiving fewer barriers to condom use, having more favorable attitudes towards condoms, and having more frequent discussions with their sex partners about HIV prevention.			Additional comments		
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Teen Outreach Project (TOP)	Philliber, S., & Allen, J.P. (1992).	Experimental Design	School-based	Suburban & Urban: St. Louis, MO (originally) and tested in over 25 sites throughout	N=1,487 (632 students who participated in the TOP and 855 comparison students)	Reduced teen pregnancy	High School (grades 9-12, ages 11-19 years); Black-66.7%, White-17.0%, Hispanic-12.9%, Other-2.4%; Male 75.4%, Female 24.6%

				t the nation (120 schools)			
	Relevant Findings	At program completion: Control group adolescents experienced more than twice the percentage of pregnancies than did adolescents in the program (9.8% vs. 4.2%). 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 of those who have already given birth to a child			Additional comments	Two replication studies produced by same investigators (1997 and 2001); other publications measure additional variables (ie., school failure and pregnancy)	
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Assisting in Rehabilitating Kids (ARK)	St. Lawrence, J. S., Crosby, R. A., Brasfield, T. L., & O'Bannon III, R. E. (2002).	Experimental design	Clinic-based	Mississippi (two residential drug treatment programs)	N = 161, RK Behavior Skills + Risk Sensitization intervention (n = 54), Behavior Skills only intervention (n = 54), or Health Education comparison (n = 53).	Increased abstinence, Reduced unprotected sex, increased protected sex and condom use	Mean age: 16 years, Mean education: 10 years; 75% White, 22% African American, 2% Native American, 1% Hispanic; 68% Male, 32% Female
	Relevant Findings	At drug treatment facility, intervention participants reported abstinence at the 6-month and 12-month followup, intervention participants reported a significantly lower frequency of unprotected vaginal sex and greater frequency of condom-protected sex than the health education participants at the 6-month and 12-month follow-ups and also reported a significantly lower frequency of unprotected vaginal sex and greater frequency of condom-protected sex than participants in the behavioral skills training			Additional comments		

		intervention at the 12-month follow-up.						
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity	
Project AIM: Adult Identity Mentoring	Clark, Miller, Nagy, Avery, Roth, Liddon, & Mukherjee, 2005.	Experimental Design	School-based	Suburban: SanBernad ino, CA	N= 278 seventh graders	Increased abstinence, and delayed sexual initiation	7th grade (12-14 years); 98% African American (no other racial/ethnic group mentioned);	
	Relevant Findings	At the 19-week follow-up: adolescents participating in the intervention were significantly less likely to report having had sexual intercourse. At the 1-year follow-up: male adolescents participating in the intervention were significantly less likely to report having had sexual intercourse.			Additional comments			
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity	
Project CHARM: Children's Health and Responsible Mothering renamed: Be Proud! Be responsible! Be protective!	Koniak-Griffin, D., Lesser, J., Nyamathi, A., Uman, G., Stein, J. A., & Cumberland, W. G. (2003).	Experimental Design	School based	Urban: Los Angeles, CA	N= 572 pregnant adolescents and young mothers; at 12-month follow up (N=525)	Increase use of contraception; decreased number of sexual partners	Grades 7 through 12; 78% Hispanic, 18% African American, and 4% other; Female	
	Relevant Findings	At the 6-month follow-up: adolescents participating in the intervention reported having significantly fewer sexual partners in the previous 3 months. Immediately after the intervention, the adolescents in the HIV prevention program scored significantly higher on the self-efficacy measure and demonstrated greater condom-use knowledge than did those in the control group. Group differences in hedonistic beliefs approached significance. Adolescents in the intervention group did not differ from those in the control group on measures of prevention beliefs, partner reaction beliefs, subjective norms, behavioral control, or maternal protectiveness; however,			Additional comments	*Project CHARM was renamed as Be Proud! Be responsible! Be protective! to reflect the new focus on maternal protectiveness as an impetus to reduce or eliminate sexual risk-taking behavior. However, much of the original class content and activities were retained.		

		significant time effects were found for all of these theoretical variables with the exception of subjective norms. Scores improved for adolescents in both groups from baseline to post-intervention.					
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
Rikers Health Advocacy Program (RHAP)	Gurdin, J., Niego, S., Park, M., & Mince, J. (2008).	Experimental design	School or community based	Urban: New York City	N= 110	Increase use of contraception	16 and 18 years; 64% African American, 33% Hispanic, 3% other; Male
	Relevant Findings	At the 5-month follow-up: adolescents who had engaged in heterosexual sex (prior to arrest) and who participated in the intervention reported significantly higher frequency of condom use during vaginal, oral, or anal sex. Following the intervention, program participants were more likely to use condoms during intercourse, compared to the comparison group of teens.			Additional comments	HIV/AIDS prevention; high risk attitudes and behaviors prevention	
Program	Publication	Evaluation Design	Setting	Location	Sample	Outcome	Age, Gender Race/Ethnicity
What could you do?	Downs, Murray, Bruine de Bruin, White, Palmgren, & Fischhoff. (in press).	Experimental Design	Clinic based	Urban: Pittsburgh	N= 300	Delayed sexual initiation, improved contraceptive use	14-18 years; 75% African American, 15% White, 10% other; Female
	Relevant Findings	Video based. At 3-month follow up, less likely to have initiated sex and less likely to have condom failure, and at 6 month less likely to have STI			Additional		

References

- Boekeloo, B.O., Schamus, L.A., Simmens, S.J., Cheng, T.L., O'Connor, K., & D'Angelo, L.J. (1999). A STD/HIV prevention trial among adolescents in managed care. *Pediatrics*, 103(1), 107.
- Borawski, E.A., Trapl, E.S., Adams-Tufts, K., Haymen, L.L., Goodwin, M.A., & Lovegreen, L.D. (2009). Taking Be Proud! Be Responsible! to the suburbs: A replication study. *Perspectives on Sexual and Reproductive Health*, 41(1), 12-22.
- Clark, L.F., Miller, K.S., Nagy, S.S., Avery, J., Roth, D.L., Liddon, N., et al. (2005). Adult identity mentoring: Reducing sexual risk for African-American seventh grade students. *Journal of Adolescent Health*, 37(4), 337e1-337e10.
- Coyle, K.K., Kirby, D.B., Marin, B.V., Gomez, C.A., & Gregorich, S.E. (2004). Draw the Line/Respect the Line: A randomized trial of a middle school intervention to reduce sexual risk behaviors. *American Public Health Association*, 94(5), 843-851.
- Coyle, K.K., Kirby, D., Parcel, G., Basen-Engquist, K., Banspach, S., Rugg, D., et al. (1996). Safer Choices: A multi-component school-based HIV/STD and pregnancy prevention program for adolescents. *Journal of School Health*, 66(3), 89-94.
- Coyle, K.K., Kirby, D.B., Robin, L.E., Banspach, S.W., Baumler, E., & Glassman, J.R. (2006). All4You! A randomized trial of an HIV, other STDs, and pregnancy prevention intervention for alternative school students. *AIDS Education and Prevention*, 18(3), 187-203.
- DiClemente, R., Wingood, G., Harrington, K., Lang, D., Davies, S., Hook, E., et al. (2004). Efficacy of an HIV Prevention Intervention for African American Adolescent Girls A Randomized Controlled Trial. *JAMA: Journal of the American Medical Association*, 292(2), 171-179.
- DiClemente, R.J., Wingood, G.M., Rose, E.S., Sales, J.M., Lang, D.L., Caliendo, A.M., et al. (2009). Efficacy of sexually transmitted disease/human immunodeficiency virus sexual risk-reduction intervention for African American adolescent females seeking sexual health services: A randomized controlled trial. *Archives of Pediatrics and Adolescent Medicine*, 163(12), 1112-21.
- DiIorio, C., Resnicow, K., Thomas, S., Wang, D., Dudley, W., Van Marter, D., et al. (2002). Keepin' it R.E.A.L.: Program description and results of baseline assessment. *Health Education & Behavior*, 29(1), 104-123.
- Downs, J., Murray, P., de Bruin, W., Penrose, J., Palmgren, C., & Fischhoff, B. (2004). Interactive video behavioral intervention to reduce adolescent females' STD risk: A randomized controlled trial. *Social Science & Medicine*, 59(8), 1561-1572.
- Flay, B.R., Graumlich, S., Segawa, E., Burns, J.L., & Holliday, M.Y. (2004). Effects of 2 prevention programs on high-risk behaviors among African American youth: A randomized trial. *Archives of Pediatrics and Adolescent Medicine*, 158(4), 377-384.
- Gurdin, J., Niego, S., Park, M., & Mince, J. (2008). Rikers Health Advocacy Program (RHAP): An STI/HIV/AIDS prevention program for young men. *Model programs for adolescent sexual*

health: Evidence-based HIV, STI, and pregnancy prevention interventions (pp. 263-271). New York, NY: Springer Publishing Co.

- Jemmott, J.B., Jemmott, L.S., Braverman, P.K., & Fong, G.T. (2005). HIV/STD risk reduction interventions for African American and Latino adolescent girls at an adolescent medicine clinic: A randomized control trial. *Archives of Pediatric and Adolescent Medicine*, 159(5), 440-449.
- Jemmott, J., Jemmott, L., & Fong, G. (1992). Reductions in HIV risk-associated sexual behaviors among Black male adolescents: Effects of an AIDS prevention intervention. *American Journal of Public Health*, 82(3), 372-377.
- Jemmott, J., Jemmott, L., & Fong, G. (1998). Abstinence and safer sex HIV risk-reduction interventions for African American adolescents. *Journal of the American Medical Association*, 279(19), 1529-1536.
- Jemmott, J.B., Jemmott, L.S., & Fong, G.T. (2010). Efficacy of a Theory-Based Abstinence-Only Intervention Over 24 Months: A Randomized Controlled Trial with Young Adolescents. *Archives of Pediatrics and Adolescent Medicine*, 164(2), 152-159.
- Jemmott, J.B., Jemmott, L.S., Fong, G.T., & McCaffree, K. (1999). Reducing HIV risk-associated sexual behavior among African American adolescents: Testing the generality of intervention effects. *American Journal of Community Psychology*, 27(2), 161-187.
- Kirby, D. (2002). Effective approaches to reducing adolescent unprotected sex, pregnancy, and childbearing. *Journal of Sex Research*, 39(1), 51-57.
- Kirby, D., Barth, R.P., Leland, N., & Fetro, J.V. (1991). Reducing the risk: Impact of a new curriculum on sexual risk-taking. *Family Planning Perspectives*, 23(6), 253-263.
- Koniak-Griffin, D., Lesser, J., Nyamathi, A., Uman, G., Stein, J., & Cumberland, W. (2003). Project CHARM: An HIV prevention program for adolescent mothers. *Family & Community Health: The Journal of Health Promotion & Maintenance*, 26(2), 94-107.
- Li, X., Stanton, B., Feigelman, S., & Galbraith, J. (2002). Three-year cumulative risk behaviors among African American adolescents participating in a trial of an HIV -risk reduction intervention. *Journal of the National Medical Association*, 94, 784-796.
- Lonczak, H.S., Abbott, R.D., Hawkins, J.D., Kosterman, R., & Castalano, R.F. (2002). Effects of the Seattle Social Development Project on Sexual Behavior, Pregnancy, Birth, and Sexually Transmitted Disease Outcomes by Age 21 Years. *Archives of Pediatrics and Adolescent Medicine*, 156(5), 438-447.
- Main, D., Iverson, D., McGloin, J., & Banspach, S. (1994). Preventing HIV infection among adolescents: Evaluation of a school-based education program. *Preventive Medicine: An International Journal Devoted to Practice and Theory*, 23(4), 409-417.

- Philliber, S., & Allen, J.P. (1992). Life options and community service: Teen Outreach Program. In Miller, B.C., Card, J.J., Paikoff, R.L., & Peterson, J.L. (Eds.) *Preventing adolescent pregnancy: Model programs and evaluations* (pp.139-155). Newbury Park, CA: Sage.
- Philliber, S., Kaye, J.W., Herrling, S., & West, E. (2002). Preventing pregnancy and improving health care access among teenagers: An evaluation of the children's aid society-carrera program. *Perspectives on Sexual and Reproductive Health*, 34(5), 244-251.
- Rotheram-Borus, M.J., Stein, J.A., & Lester, P. (2006). Adolescent adjustment over six years in HIV-affected families. *Journal of Adolescent Health*, 39(2), 174-182.
- Sikkema, K., Anderson, E., Kelly, J., Winett, R., Gore-Felton, C., Roffman, R., et al. (2005). Outcomes of a randomized, controlled community-level HIV prevention intervention for adolescents in low-income housing developments. *AIDS*, 19(14), 1509-1516.
- St. Lawrence, J.S., Brasfield, T., Jefferson, K.W., Alleyne, E., O'Bannon, R.E., & Shirley, A. (1995). Cognitive-behavioral intervention to reduce African-American adolescents' risk for HIV infection. *Journal of Consulting and Clinical Psychology*, 63(2), 221-237.
- Stanton, B., Cole, M., Galbraith, J., Li, X., Pendleton, S., Cottrel, L., et al. (2004). Randomized trial of a parent intervention: Parents can make a difference in long-term adolescent risk behaviors, perceptions, and knowledge. *Archives of Pediatrics and Adolescent Medicine*, 158(10), 947-955.
- Tortolero, S., Markham, C., Peskin, M., Shegog, R., Addy, R., Escobar-Chaves, S., et al. (2010). It's your game: Keep it real: Delaying sexual behavior with an effective middle school program. *Journal of Adolescent Health*, 46(2), 169-179.
- Villarruel, A., Jemmott, L., & Jemmott, J. (2005). Designing a culturally based intervention to reduce HIV sexual risk for Latino adolescents. *Journal of the Association of Nurses in AIDS Care*, 16(2), 23-31.
- Wu, Y., Stanton, B.F., Galbraith, J., Kaljee, L., Cottrell, L., Li, X., et al. (2003). Sustaining and broadening intervention impact: A longitudinal randomized trial of 3 adolescent risk reduction approaches. *Pediatrics*, 111(1), e32-e38.