### Effective Interventions Suggested References

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<td><strong>Catania, J. A., et al.</strong> (1990). &quot;Towards an understanding of risk behavior: an AIDS risk reduction model (ARRM).&quot; Health Educ Q 17(1): 53-72.</td>
<td>This report presents a three-stage model (ARRM) that characterizes people's efforts to change sexual behaviors related to HIV transmission. ARRM focuses on social and psychological factors hypothesized to influence (1) labeling of high-risk behaviors as problematic, (2) making a commitment to changing high-risk behaviors, and (3) seeking and enacting solutions directed at reducing high-risk activities. The proposed model integrates important concepts from prior behavioral medicine and human sexuality studies, specifies their differential import to achieving the goals associated with each stage of the model, and denotes factors hypothesized to influence people's motivation to continue the change process over time. Current findings are discussed within this three-stage model and directions for further research are suggested. Recent findings from our ongoing studies of gays and heterosexuals in San Francisco are presented.</td>
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<td><strong>Chung, P. J., et al.</strong> (2006). &quot;Preventive care for children in the United States: quality and barriers.&quot; Annu Rev Public Health 27: 491-515.</td>
<td>Our objective was to examine the academic literature covering quality of childhood preventive care in the United States and to identify barriers that contribute to poor or disparate quality. We systematically reviewed articles related to childhood preventive care published from 1994 through 2003, focusing on 58 large observational studies and interventions addressing well-child visit frequency, developmental and psychosocial surveillance, disease screening, and anticipatory guidance. Although many children attend recommended well-child visits and receive comprehensive preventive care at those visits, many do not attend such visits. Estimates of children who attend all recommended visits range widely (from 37%-81%). In most studies, less than half is the proportion of children who receive developmental or psychosocial surveillance, adolescents who are asked about various health risks, children at risk for lead exposure who are screened, adolescents at risk for Chlamydia who are tested, or children and adolescents who receive anticipatory guidance on various topics. Major barriers include lack of insurance, lack of continuity with a clinician or place of care, lack of privacy for adolescents, lack of clinician awareness or skill, racial/ethnic barriers, language-related barriers, clinician and patient gender-related barriers, and lack of time. In summary, childhood preventive care quality is mixed, with large disparities among populations. Recent research has identified barriers that might be overcome through practice and policy interventions.</td>
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<td><strong>DiClemente, R. J., et al.</strong> (2004). &quot;Efficacy of an HIV prevention intervention for African American adolescent girls: a randomized controlled trial.&quot; JAMA 292(2): 171-179.</td>
<td><strong>CONTEXT:</strong> African American adolescent girls are at high risk for human immunodeficiency virus (HIV) infection, but interventions specifically designed for this population have not reduced HIV risk behaviors. <strong>OBJECTIVE:</strong> To evaluate the efficacy of an intervention to reduce sexual risk behaviors, sexually transmitted diseases (STDs), and pregnancy and enhance mediators of HIV-preventive behaviors. <strong>DESIGN, SETTING, AND PARTICIPANTS:</strong> Randomized controlled trial of 522 sexually experienced African American girls aged 14 to 18 years screened from December 1996 through April 1999 at 4 community health agencies. Participants completed a self-administered questionnaire and an interview, demonstrated condom application skills, and provided specimens for STD testing. Outcome assessments were made at 6- and 12-month follow-up. <strong>INTERVENTION:</strong> All participants received four 4-hour group sessions. The intervention emphasized ethnic and gender pride, HIV knowledge, communication, condom use skills, and healthy relationships. The comparison condition emphasized exercise and nutrition. <strong>MAIN OUTCOME MEASURES:</strong> The primary outcome measure was consistent condom use, defined as condom use during every episode of vaginal intercourse; other outcome measures were sexual behaviors, observed condom application skills, incident STD infection, self-reported pregnancy, and mediators of HIV-preventive behaviors. <strong>RESULTS:</strong> Relative to the comparison condition, participants in the intervention reported using condoms more consistently in the 30 days preceding the 6-month assessment (unadjusted analysis, intervention, 75.3% vs comparison, 58.2%) and the 12-month assessment (unadjusted analysis, intervention, 73.3% vs comparison, 56.5%) and over the entire 12-month period (adjusted odds ratio, 2.01; 95% confidence interval [CI], 1.28-3.17; P =.003). Participants in the intervention reported using condoms more consistently in the 6 months preceding the 6-month assessment (unadjusted analysis, intervention, 58.1% vs comparison, 45.3%),...</td>
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and over the entire 12-month period (adjusted odds ratio, 2.30; 95% CI, 1.51-3.50; P<.001). Using generalized estimating equation analyses over the 12-month follow-up, adolescents in the intervention were more likely to use a condom at last intercourse, less likely to have a new vaginal sex partner in the past 30 days, and more likely to apply condoms to sex partners and had better condom application skills, a higher percentage of condom-protected sex acts, fewer unprotected vaginal sex acts, and higher scores on measures of mediators. Promising effects were also observed for chlamydia infections and self-reported pregnancy. **CONCLUSION:** Interventions for African American adolescent girls that are gender-tailored and culturally congruent can enhance HIV-preventive behaviors, skills, and mediators and may reduce pregnancy and chlamydia infection.

**Evidence-based, single-session behavioral interventions are urgently needed for preventing the spread of HIV and other sexually transmitted infections (STIs).** To estimate the efficacy of single-session, behavioral interventions for STI prevention, we collected data from 29 single-session interventions (20 studies; n = 52,465) with an STI outcome. Infection with an STI was 35% less likely (odds ratio = 0.65; 95% confidence interval = 0.55-0.77) among intervention group participants than among control group participants. Single-session interventions offer considerable benefits in terms of disease prevention and create minimal burden for both the patient and the provider. Brief and effective STI prevention interventions are a valuable tool and can be readily adapted to bolster the benefits of biomedical technologies focusing on the prevention of HIV and other STIs.

**OBJECTIVES:** We tested the efficacy of brief HIV/sexually transmitted disease (STD) risk-reduction interventions for African American women in primary care settings. **METHODS:** In a randomized controlled trial, 564 African American women recruited at a Newark, NJ, inner-city women’s health clinic were assigned to a 20-minute one-on-one HIV/STD behavioral skill-building intervention, 200-minute group HIV/STD behavioral skill-building intervention, 20-minute one-on-one HIV/STD information intervention, 200-minute group HIV/STD information intervention, or 200-minute health intervention control group. Primary outcomes were self-reported sexual behaviors in the previous 3 months; secondary outcome was STD incidence. **RESULTS:** At 12-month follow-up, participants in the skill-building interventions reported less unprotected sexual intercourse than did participants in the information interventions (Cohen’s d [d]=0.23, P=.02), reported a greater proportion of protected sexual intercourse than did information intervention participants (d=0.21, P=.05) and control participants (d=0.24, P=.03), and were less likely to test positive for an STD than were control participants (d=0.20, P=.03). **CONCLUSIONS:** This study suggests that brief single-session, one-on-one or group skill-building interventions may reduce HIV/STD risk behaviors and STD morbidity among inner-city African American women in primary care settings.
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CONTEXT: The efficacy of counseling to prevent infection with the human immunodeficiency virus (HIV) and other sexually transmitted diseases (STDs) has not been definitively shown. OBJECTIVE: To compare the effects of 2 interactive HIV/STD counseling interventions with didactic prevention messages typical of current practice. DESIGN: Multicenter randomized controlled trial (Project RESPECT), with participants assigned to 1 of 3 individual face-to-face interventions. SETTING: Five public STD clinics (Baltimore, Md; Denver, Colo; Long Beach, Calif; Newark, NJ; and San Francisco, Calif) between July 1993 and September 1996. PARTICIPANTS: A total of 5758 heterosexual, HIV-negative patients aged 14 years or older who came for STD examinations. INTERVENTIONS: Arm 1 received enhanced counseling, 4 interactive theory-based sessions. Arm 2 received brief counseling, 2 interactive risk-reduction sessions. Arms 3 and 4 each received 2 brief didactic messages typical of current care. Arms 1, 2, and 3 were actively followed up after enrollment with questionnaires at 3, 6, 9, and 12 months and STD tests at 6 and 12 months. An intent-to-treat analysis was used to compare interventions. MAIN OUTCOME MEASURES: Self-reported condom use and new diagnoses of STDs (gonorrhea, chlamydia, syphilis, HIV) defined by laboratory tests. RESULTS: At the 3- and 6-month follow-up visits, self-reported 100% condom use was higher (P<.05) in both the enhanced counseling and brief counseling arms compared with participants in the didactic messages arm. Through the 6-month interval, 30% fewer participants had new STDs in both the enhanced counseling (7.2%; P=.002) and brief counseling (7.3%; P=.005) arms compared with those in the didactic messages arm (10.4%). Through the 12-month study, 20% fewer participants in each counseling intervention had new STDs compared with those in the didactic messages arm (P=.008). Consistently at each of the 5 study sites, STD incidence was lower in the counseling intervention arms than in the didactic messages intervention arm. Reduction of STD was similar for men and women and greater for adolescents and persons with an STD diagnosed at enrollment. CONCLUSIONS: Short counseling interventions using personalized risk reduction plans can increase condom use and prevent new STDs. Effective counseling can be conducted even in busy public clinics.


BACKGROUND: Sexually transmitted disease (STD) prevention remains a public health priority. Simple, practical interventions to reduce STD incidence that can be easily and inexpensively administered in high-volume clinical settings are needed. We evaluated whether a brief video, which contained STD prevention messages targeted to all patients in the waiting room, reduced acquisition of new infections after that clinic visit.

METHODS AND FINDINGS: In a controlled trial among patients attending three publicly funded STD clinics (one in each of three US cities) from December 2003 to August 2005, all patients (n = 38,635) were systematically assigned to either a theory-based 23-min video depicting couples overcoming barriers to safer sexual behaviors, or the standard waiting room environment. Condition assignment alternated every 4 wk and was determined by which condition (intervention or control) was in place in the clinic waiting room during the patient’s first visit within the study period. An intent-to-treat analysis was used to compare STD incidence between intervention and control patients. The primary endpoint was time to diagnosis of incident laboratory-confirmed infections (gonorrhea, chlamydia, trichomoniasis, syphilis, and HIV), as identified through review of medical records and county STD surveillance registries. During 14.8 mo (average) of follow-up, 2,042 patients (5.3%) were diagnosed with incident STD (4.9%, intervention condition; 5.7%, control condition). In survival analysis, patients assigned to the intervention condition had significantly fewer STDs compared with the control condition (hazard ratio [HR], 0.91; 95% confidence interval [CI], 0.84 to 0.99). CONCLUSIONS: Showing a brief video in STD clinic waiting rooms reduced new infections nearly 10% overall in three clinics. This simple, low-intensity intervention may be appropriate for adoption by clinics that serve similar patient populations.

Additional Resources: