Adolescents continue to be at considerable risk for HIV and other sexually transmitted infections (STIs) in the U.S. and globally. To reduce the incidence of HIV and other STIs among adolescents, social, behavioral, and public health experts have developed interventions to reduce sexual risk among adolescents.

Previously, we synthesized the intervention literature and found that interventions are successful in decreasing sexual encounters and increasing condom use among adolescents[1]; we also found that intervention content, and especially the provision of condom use skills facilitated condom use. Since then, 35 new trials assessing sexual risk reduction interventions have appeared in the literature, making it important to determine if the state-of-the-science has changed.

In the current meta-analysis, we examine the extent to which sexual risk reduction interventions have been successful in modifying behaviors that place adolescents at risk for HIV and other STIs.

Methods:
We updated our previous database by searching electronic databases, leading health journals, and the document archive held by the Syntheses of HIV/AIDS Research Project. Studies available by December 31, 2008 were included if they:

a) Investigated any behavioral intervention advocating sexual risk reduction for HIV prevention
b) Sampled adolescents (age range, 11-19 years)
c) Measured a behavioral outcome relevant to sexual risk, and
d) Provided sufficient information to calculate effect sizes

Three raters independently coded the content of each study for the purposes of describing the studies and to determine in stratified analyses whether variation in effect sizes can be attributed to features of the sample, intervention or method used in the studies.

Results:
The mean age of the total adolescents included was 15 years (SD=2.02), and 45% of participants were of an African-American or African background.

Comprehensive behavioral interventions reduce risky sexual behavior and prevent transmission of STIs. Interventions reduce sexual frequency if they do not work with institutionalized samples and they do not focus on abstinence. Interventions to increase condom use are most successful when administered in larger doses of skills and motivational training for condom use. Such interventions do not suffer from the side effect of increased sexual frequencies; in fact, there was evidence of no evidence of decay following the intervention.

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