



Peer Education for Adolescent Reproductive and Sexual Health

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Research Question

What is the evidence for use of peer education in programs supporting adolescent reproductive and sexual health?

Bottom Line

The findings do not provide convincing evidence that peer-led education improves adolescent sexual outcomes.

Background

Peer educators are sometimes used in programs promoting adolescent reproductive and sexual health to engage participants and convey information. This popular method of program delivery has been the subject of six systematic reviews of research evidence since 2001. To help inform decisions about using peer education in adolescent reproductive health programs, this article summarizes the results of those reviews, providing an overview of the current state of the evidence.

Peer education is a method for intervention or program delivery that is defined by the use of members of the learner group to partly or fully facilitate program activities. Using members of similar age or status (Tolli, 2012) to share health information is thought to work through the social influence of the peer group, which can have a strong impact on adolescents (Maticka-Tyndale & Barnett, 2010). The role of these peer educators ranges from low responsibility to high responsibility (Hart, 1992): Low responsibility might include only specific aspects of implementation such as visiting to share stories, or participating in role plays. Higher levels of participation might include full input on program development, co-facilitation, or full facilitation.

Methods

A systematic translational review was conducted in the fall of 2016. Electronic databases were searched using EBSCOHost for studies of programs that aimed to reduce teen pregnancy, sexually transmitted diseases (STDs), and HIV/AIDS. Six systematic reviews were identified, and this review is limited to those studies. The earliest review (Harden, Oakley, & Oliver, 2001) examined various methods of peer education and the appropriateness of designs for young people. Kim and Free (2008) reviewed 13 experimental and quasi-experimental studies of peer education within sexual and reproductive health interventions between 2005 and 2008. Two systematic reviews covered programs for HIV/AIDS risk reduction with a peer-education component in low-

income, middle-income, and developing countries (Maticka-Tyndale & Barnett, 2010; Medley, Kennedy, O'Reilly, & Sweat, 2009). Tolli (2012) expanded on this by reviewing studies focused on both HIV prevention and adolescent pregnancy prevention in the European Union. Most recently, Sun and colleagues (2016) looked at the state of evidence for peer sexual health education, including reducing teen pregnancy and STDs in "more developed" countries. These reviews provide a comprehensive look at outcomes reported for teen reproductive health programs using a peer education approach.

Findings

Benefits for program participants

Together, these systematic reviews report results of 99 randomized experimental and quasi-experimental studies (see **Table 1**). Most of these programs found at least some positive change in participant knowledge, attitudes, and/or self-efficacy; however, the majority of them did not report positive results for behavior change. For example, Kim and Free concluded, "Overall findings do not provide convincing evidence that peer-led education improves sexual outcomes among adolescents" (2008, p.89). Maticka-Tyndale and Barnett (2010) suggest that peer-led interventions should be developed with attention to implementation factors, a premise supported by Hart (1992) in his examination of the range of roles peer educators play. More research is needed to determine whether peer education can be used to affect behavior change, and to determine the most effective role that peer educators might play in the delivery of adolescent sexual health interventions.

Benefits to peer educators

Some individual studies support the value of peer education for the educators themselves. Benefits include positive changes in self-confidence, critical thinking, introspection, communication, and interpersonal skills (Conner, 2014). A randomized, multi-site HIV prevention intervention trial

by Mackesy-Amiti and colleagues (2011) reported that peer educators who are I.V. drug users have an increased likelihood of injection cessation. Peer education was included in a recent meta-analysis of youth engagement in policy and programs for sexual health; however, the authors acknowledged the lack of evidence for the effectiveness of the approach to learners, and need for further study (Villa-Torres & Svanemyr, 2015). In a 2001 study of peer-led and adult-led school sex education, Mellanby and colleagues found that while peer leaders were more effective than adults when it came to establishing norms and attitudes, they were less effective than adults when it came to conveying the facts and involving students in program activities. The authors of this study suggest that adult and peer facilitation may both have an appropriate place in sex education.

Conclusion

Although many programs have used peer education, few studies of these programs are conducted with rigorous evaluation methods that use standardized measures of outcomes or address differences in the various types of peer education program delivery. Many individual studies did not meet the quality standards for inclusion in the six systematic reviews that were included in this summary. However, the body of evidence summarized in the systematic reviews fails to support the effectiveness of peer education for adolescent sexual and reproductive health. Promising results reporting improvements in knowledge, attitudes, and self-efficacy are hopeful, but unless those secondary outcomes lead to behavior change, the value of peer education remains in question.

Table 1. Systematic Reviews of Peer Education for Youth

First Author/Year Title	Focus	Results
Harden, 2001 <i>Peer-delivered health promotion for young people: A systematic review of different study designs</i>	12 studies reporting the effectiveness and appropriateness of designs of peer-delivered health promotion efforts for young people	Seven studies found the method to be effective for at least one behavioral outcome; however, five studies found contradictory results. Methodological problems within studies included unclear details of sample and methodology suggesting conclusions might not be reliable. Authors conclude that the evidence for peer-delivered health promotion is not clear.
Kim, 2008 <i>Recent evaluations of the peer-led approach in adolescent sexual health education: A systematic review</i>	13 experimental and quasi-experimental research studies on peer-led adolescent sexual health education published between 1998 and 2005	Seven studies found no effect on condom use at last sex, three studies found no effect on consistent condom use. One study reported reduced risk of chlamydia, but another found no impact on STD incidence. Most interventions produced improvements in knowledge, attitudes, and intentions. Overall findings do not provide convincing evidence that peer-led education improves sexual outcomes among adolescents.
Maticka-Tyndale, 2010 <i>Peer-led interventions to reduce HIV risk of youth: A review</i>	Results from 24 peer-led programs with an HIV/AIDS risk reduction component targeting youth in low- and middle-income countries	Improvements were observed in knowledge, condom use, and community attitudes and norms. Effects on sexual behaviors and STD rates were equivocal. Few of the interventions had strong evaluation designs. Authors note that peer-led intervention can effect change, but must be developed with attention to implementation factors and more rigorous evaluation.
Medley, 2009 <i>Effectiveness of peer education interventions for HIV prevention in developing countries: A systematic review and meta-analysis</i>	Systematic review and meta-analysis of 30 studies on peer education for HIV prevention in developing countries between 1990 and 2006	Peer education interventions were significantly associated with increased HIV knowledge, reduced equipment sharing among IV drug users, and increased condom use, but had a non-significant effect on STD infections.

Table 1. Systematic Reviews of Peer Education for Youth - cont.		
First Author/Year Title	Focus	Results
Sun, 2016 <i>Assessing participation and effectiveness of the peer-led approach in youth sexual health education: Systematic review and meta-analysis in more developed countries</i>	15 peer-led sexual health education interventions in more developed countries, including an examination of the extent of peer participation	The majority of included studies (10 of 15) gave low responsibility to peers. A majority found improvements in sexual health knowledge (13 of 14) and attitudes (11 of 15). Two studies showed improved self-efficacy and three showed behavioral change. This approach is effective in changing knowledge and attitudes, but not behaviors.
Tolli, 2012 <i>Effectiveness of peer education interventions for HIV prevention, adolescent pregnancy prevention, and sexual health promotion for young people: A systematic review of European studies</i>	5 studies focused on peer education interventions for HIV prevention, adolescent pregnancy prevention, and promotion of sexual health among young people in the European Union published between 1999 and 2010	Analysis found no clear evidence of effectiveness in HIV prevention, adolescent pregnancy prevention, or sexual health promotion. One study showed improvements in knowledge about HIV and another showed a change in attitudes related to sexual behavior. Authors suggest, "the benefits of peer education are not as evident as the popularity of the method suggests."

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For an overview of the review process, please see [Systematic Translation Review Description](#) at www.bctr.cornell.edu/?attachment_id=3965

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