Community Preventive Services Task Force

Preventing HIV/AIDS, Other STIs, and Teen Pregnancy: Group-Based Abstinence Education Interventions for Adolescents

Task Force Finding and Rationale Statement

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Intervention Definition

Abstinence education (AE) interventions promote abstinence from sexual activity (either delayed initiation or abstinence until marriage) and mention condoms or other birth control methods only to highlight their failure rates if at all. These interventions usually include messages about the psychological and health benefits of abstinence and could also include other components, such as media campaigns and community service events.

This review evaluated AE interventions delivered in school or community settings to groups of adolescents (10–19 years old), and most adhered to eight federal guidelines that were required to obtain federal funding (the Federal A-H guidelines).

Task Force Finding (June 2009)

The Community Preventive Services Task Force finds insufficient evidence to determine the effectiveness of group-based abstinence education interventions delivered to adolescents to prevent pregnancy, HIV and other sexually transmitted infections (STIs). Evidence was considered insufficient because of inconsistent results across studies.

Rationale

Our review identified 21 studies and 23 study arms that used an abstinence education (AE) strategy. The summary statistics for each outcome are listed in the table below.

Meta-Analysis Results: Abstinence Education

Outcomes [A]	# of observations	OR	95% CI	Estimated RR
Sexual Activity [B]	23	0.81	0.70, 0.94	0.84
Frequency of Sexual Activity [B]	5	0.77	0.57, 1.04	C
Number of Partners	10	0.96	0.83, 1.11	0.96
Unprotected Sexual Activity	5	1.07	0.86, 1.33	1.06
Protection [D]	19	1.06	0.96, 1.17	1.06
Condom Use [D]	10	1.04	0.91, 1.19	1.03
Oral Contraceptive Use [D]	9	1.08	0.94, 1.24	1.05
Sexually Transmitted Infections [B]	9	1.08	0.90, 1.29	1.08

Outcomes [A]	# of observations	OR	95% CI	Estimated RR
Pregnancy [B]	10	1.15 [E]	1.00, 1.32	1.15
HIV [B]	0	--	--	--

[A] All of these outcomes were self-reported, with the exception of STIs, which were either self reported or clinically documented.
[B] These outcomes reflect primary intended outcomes.
[C] Unable to calculate
[D] Odds ratio (OR)>1.0 indicate beneficial effects.
[E] Secondary analyses suggest that this is an unreliable effect estimate.
CI = Confidence Interval
RR = Relative Risk

Twenty-one studies were included in the body of evidence for the AE strategy. The effect estimates differed substantially by study design. For the self-reported sexual activity outcome, which was the only one with a sufficient number of controlled before- after (CBA) studies to directly compare randomized controlled trials (RCTs) versus CBA studies, the effect estimate was 0.94 (95% CI 0.81, 1.10) for RCTs and 0.66 for CBAs (95% CI 0.54, 0.81), and this difference was statistically significant (p=.007). For the remaining outcomes of interest, the body of evidence was primarily from RCTs and showed no clear evidence of benefits or harms. Because RCTs and CBAs systematically differed in several respects in addition to study design (e.g., follow-up time, multiple studies conducted by same researchers), it is hard to determine the explanation for the observed differences by study design. As a result, it is difficult to ascertain the public health benefits or harms of abstinence education.

Publications

Chin HB, Sipe TA, Elder RW, Mercer SL, Chattopadhyay SK, Jacob V, Wethington HR, Kirby D, Elliston DB, Griffith M, Chuke SO, Briss SC, Ericksen I, Galbraith JS, Herbst JH, Johnson RL, Kraft JM, Noar SM, Romero LM, Santelli J, Community Preventive Services Task Force. The effectiveness of group-based comprehensive risk-reduction and abstinence education interventions to prevent or reduce the risk of adolescent pregnancy, Human Immunodeficiency Virus, and sexually transmitted infections: two systematic reviews for the Guide to Community Preventive Services. *Am J Prev Med* 2012;42(3):272-94.

Sipe TA, Chin HB, Elder RW, Mercer SL, Chattopadhyay SK, Jacob V, Community Preventive Services Task Force. Methods for conducting Community Guide systematic reviews of evidence on effectiveness and economic efficiency of group-based behavioral interventions to prevent adolescent pregnancy, Human Immunodeficiency Virus, and other sexually transmitted infections: comprehensive risk reduction and abstinence education. *Am J Prev Med* 2012;42(3):295-303.

Community Preventive Services Task Force. Recommendations for group-based behavioral interventions to prevent adolescent pregnancy, Human Immunodeficiency Virus, and other sexually transmitted infections: comprehensive risk reduction and abstinence education. *Am J Prev Med* 2012;42(3):304-7.

Barbot O. Getting our heads out of the sand: using evidence to make systemwide changes. *Am J Prev Med* 2012;42(3):311-12.

Weed SE. Sex education programs for schools still in question: a commentary on meta-analysis. *Am J Prev Med* 2012;42(3):313-15.

Wiley DC. Using science to improve the sexual health of America's youth. *Am J Prev Med* 2012;42(3):308-10.

Disclaimer

The findings and conclusions on this page are those of the Community Preventive Services Task Force and do not necessarily represent those of CDC. Task Force evidence-based recommendations are not mandates for compliance or spending. Instead, they provide information and options for decision makers and stakeholders to consider when determining which programs, services, and policies best meet the needs, preferences, available resources, and constraints of their constituents.

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