

Promoting abstinence, fidelity for HIV prevention is ineffective, study finds

May 2 2016



HIV-1 Virus. Credit: J Roberto Trujillo/Wikipedia

The U.S. government has invested \$1.4 billion in HIV prevention programs that promote sexual abstinence and marital fidelity, but there is no evidence that these programs have been effective at changing sexual behavior and reducing HIV risk, according to a new Stanford University School of Medicine study.

Since 2004, the U.S. President's Emergency Fund for AIDS Relief, known as PEPFAR, has supported local initiatives that encourage men and women to limit their number of [sexual partners](#) and delay their first sexual experience and, in the process, help to reduce the number of teen pregnancies. However, in a study of nearly 500,000 individuals in 22 countries, the researchers could not find any evidence that these initiatives had an impact on changing individual behavior.

Although PEPFAR has been gradually reducing its support for abstinence and fidelity programs, the researchers suggest that the remaining \$50 million or so in annual funding for such programs could have greater health benefits if spent on effective HIV prevention methods. Their findings will be published online May 2 and in the May issue of *Health Affairs*.

"Overall we were not able to detect any population-level benefit from this program," said Nathan Lo, a Stanford MD/PhD student and lead author of the study. "We did not detect any effect of PEPFAR funding on the number of sexual partners or upon the age of [sexual intercourse](#). And we did not detect any effect on the proportion of teen pregnancy.

"We believe funding should be considered for programs that have a stronger evidence basis," he added.

A human cost

Senior author Eran Bendavid, MD, said the ineffective use of these

funds has a human cost because it diverts money away from other valuable, risk-reduction efforts, such as male circumcision and methods to prevent transmission from mothers to their children.

"Spending money and having no effect is a pretty costly thing because the money could be used elsewhere to save lives," said Bendavid, an assistant professor of medicine at Stanford.

PEPFAR was launched in 2004 by President George W. Bush with a five-year, \$15 million investment in global AIDS treatment and prevention in 15 countries. The program has had some demonstrated success: A 2012 study by Bendavid showed that it had reduced mortality rates and saved 740,000 lives in nine of the targeted countries between 2004 and 2008.

However, the program's initial requirement that one-third of the prevention funds be dedicated to abstinence and "be faithful" programs has been highly controversial. Critics questioned whether this approach could work and argued that focusing only on these methods would deprive people of information on other potentially lifesaving options, such as condom use, [male circumcision](#) and ways to prevent mother-to-child transmission, and divert resources from these and other proven prevention measures.

Abstinence, faithfulness funding continues

In 2008, when President Barack Obama came into office, the one-third requirement was eliminated, but U.S. funds continued to flow to abstinence and "be faithful" programs, albeit at lower levels. In 2008, \$260 million was committed to these programs, but by 2013 by that figure had fallen to \$45 million.

Although PEPFAR continues to fund abstinence and faithfulness

programs as part of its broader behavior-based prevention efforts, there is no routine evaluation of the success of these programs. "We hope our work will emphasize the difficulty in changing [sexual behavior](#) and the need to measure the impact of these programs if they are going to continue to be funded," Lo said.

While many in the medical community were critical of the abstinence-fidelity component, no one had ever analyzed its real-world impact, Lo said. When he presented the results of the study in February at the Conference on Retroviruses and Opportunistic Infection, he received rousing applause from the scientists in the audience, some of whom came to the microphone to congratulate him on the work.

To measure the program's effectiveness, Lo and his colleagues used data from the Demographic and Health Surveys, a detailed database with individual and household statistics related to population, health, HIV and nutrition. The scientists reviewed the records of nearly 500,000 men and women in 14 of the PEPFAR-targeted countries in sub-Saharan Africa that received funds for abstinence-fidelity programs and eight non-PEPFAR nations in the region. They compared changes in risk behaviors between individuals who were living in countries with U.S.-funded programs and those who were not.

The scientists included data from 1998 through 2013 so they could measure changes before and after the program began. They also controlled for country differences, including gross domestic product, HIV prevalence and contraceptive prevalence, and for individuals' ages, education, whether they lived in an urban or rural environment, and wealth. All of the individuals in the study were younger than 30.

Number of sexual partners

In one measure, the scientists looked at the number of sexual partners

reported by individuals in the previous year. Among the 345,000 women studied, they found essentially no difference in the number of sexual partners among those living in PEPFAR-supported countries compared with those living in areas not reached by PEPFAR programs. The same was true for the more than 132,000 men in the study.

The researchers also looked at the age of first sexual intercourse among 178,000 women and more than 71,000 men. Among women, they found a slightly later age of intercourse among women living in PEPFAR countries versus those in non-PEPFAR countries, but the difference was slight—fewer than four months—and not statistically significant. Again, no difference was found among the men.

Finally, they examined teenage pregnancy rates among a total of 27,000 women in both PEPFAR-funded and nonfunded countries and found no difference in rates between the two.

Bendavid noted that, in any setting, it is difficult to change sexual behavior. For instance, a 2012 federal Centers for Disease Control analysis of U.S.-based abstinence programs found they had little impact in altering high-risk sexual practices in this country.

"Changing sexual behavior is not an easy thing," Bendavid said. "These are very personal decisions. When individuals make decisions about sex, they are not typically thinking about the billboard they may have seen or the guy who came by the village and said they should wait until marriage. Behavioral change is much more complicated than that."

Level of education

The one factor that the researchers found to be clearly related to sexual behavior, particularly in women, was education level. Women with at least a primary school education had much lower rates of high-risk

sexual behavior than those with no formal education, they found.

"One would expect that women who are educated have more agency and the means to know what behaviors are high-risk," Bendavid said. "We found a pretty strong association."

The researchers concluded that the "study contributes to the growing body of evidence that abstinence and faithfulness campaigns may not reduce high-risk sexual behaviors and supports the importance of investing in alternative evidence-based programs for HIV prevention in the developing world."

The authors noted that PEPFAR representatives have been open to discussing these findings and the implications for funding decisions regarding HIV prevention programs.

Provided by Stanford University Medical Center

Citation: Promoting abstinence, fidelity for HIV prevention is ineffective, study finds (2016, May 2) retrieved 1 May 2024 from <https://medicalxpress.com/news/2016-05-abstinence-fidelity-hiv-ineffective.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--