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Abstinence Promotion Under PEPFAR: The Shifting Focus of HIV Prevention For Youth

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Abstract

Abstinence-until-marriage (AUM) – strongly supported by religious conservatives in the U.S. - became a key element of initial HIV prevention efforts under the President's Emergency Plan for AIDS Relief (PEPFAR). AUM programs have demonstrated limited efficacy in changing behaviors, promoted medically inaccurate information, and withheld life-saving information about risk reduction. A focus on AUM also undermined national efforts in Africa to create integrated youth HIV prevention programs. PEPFAR prevention efforts after 2008 shifted to science-based programming, however vestiges of AUM remain. Primary prevention programs within PEPFAR are essential and nations must be able to design HIV prevention based on local needs and prevention science.

Keywords

HIV; PEPFAR; Abstinence; Youth; Prevention

Introduction

Globally, young people ages 15–24 represent about 40% of all new cases of Human Immunodeficiency Virus (HIV) among persons ages 15–49 (Oki *et al.* 2009). Notably, HIV prevalence among young people has dropped recently in many high prevalence countries and these declines have been concurrent with declines in high risk behaviors among youth (UNAIDS 2010). Many community-level factors influence HIV infection among youth, including prevention programs, prevalence of risk behaviors, prevalence of male circumcision, mortality from HIV, stage of the epidemic and community viral load. Moreover, HIV risk among youth is influenced by individual behavioral and social factors including early sexual initiation, unprotected sex, multiple partnerships, sexual concurrency, having sex with older sexual partners, alcohol use, lack of empowerment of youth and women, engagement in transactional sex, and having experienced psychological, physical, or sexual abuse (Mmari and Blum 2009, Ross *et al.* 2006, Mavedzenge *et al.* 2011a). In generalized epidemics, which many President's Emergency Plan for AIDS Relief (PEPFAR) countries are experiencing, HIV transmission among youth is often heterosexual. However, specific groups of youth are often at increased risk including young people engaged in sex work; young men who have sex with men (MSM); and intravenous drug users (IVD). Key influences on the HIV epidemic in sub-Saharan Africa are sexual concurrency and levels of

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male circumcision (Epstein and Morris 2011, Santelli *et al.* 2006). Sexual initiation is an important HIV risk factor among youth, particularly younger adolescents (Mmari and Blum 2009, Santelli *et al.* 2006).

Primary prevention of HIV among young people has until recently focused primarily on individual-level HIV risk factors. These programs are commonly designed to increase young people's knowledge of HIV/AIDS; promote delay in sexual debut; encourage the use of condoms with non-marital partners; and reduce the number of sexual partners including concurrent partnerships (Ross *et al.* 2006, Michielsen *et al.* 2010, Speizer *et al.* 2003, Kirby and Ecker 2009, Mavedzenge *et al.* 2011b, Underhill *et al.* 2007, Chin *et al.* 2012, Kirby 2008). HIV risk reduction and comprehensive sexuality education programs focus on all of these behaviors whereas abstinence-until-marriage (AUM) or abstinence-only programs focus primarily on sexual abstinence outside of marriage and fidelity within marriage (Santelli *et al.* 2006, Underhill *et al.* 2007, Chin *et al.* 2012, Kirby 2008).

In this commentary, we explore the evolving role of AUM in PEPFAR prevention funding and policy (up to and after 2008) and the remaining vestiges of AUM within PEPFAR. We describe the human rights critiques of AUM and review the program evaluation literature on HIV behavioral prevention with youth, contrasting AUM programs with comprehensive sexuality education. We also describe the U.S. government critiques of its AUM program. We conclude with some thoughts on the lasting legacy of AUM and ways to strengthen HIV prevention policy to protect youth.

Methods

In writing this commentary, we searched peer-reviewed literature related to *HIV risk* and *HIV prevention among youth*, using standard search engines. We specifically sought authoritative reviews on HIV risk and prevention approaches. We also reviewed U.S. government reports on the PEPFAR prevention activities and commentaries published in professional health journals. We reviewed budgetary information, program reports, and program requirements from the PEPFAR website (www.pepfar.gov). We also spoke with current and former federal officials and PEPFAR contractors to understand how current and prior PEPFAR program guidance has been interpreted by U.S. government project officers, contract officers, and grantees. Finally, the authors of this review have written extensively about domestic AUM programs (JS) and have been involved in evaluation of PEPFAR abstinence and faithfulness interventions for youth (IS).

Abstinence Promotion under PEPFAR

Promotion of AUM to prevent HIV, other STIs, and unplanned pregnancy was strongly promoted by social and religious conservatives in U.S. domestic programs beginning in the 1990s and became a key component of PEPFAR (Santelli *et al.* 2006). Funding mechanisms for both U.S. domestic programs and PEPFAR insisted on stand-alone abstinence promotion, e.g., risk reduction could not be included within AUM programs. Condom promotion specifically had to be segregated in separate programs.

Launched in 2003, PEPFAR was initially a five-year, $15 billion program of treatment and prevention in countries with a high prevalence of HIV. In 2004, the program set a goal of spending 20% of funds on the prevention of HIV with 50% designated for prevention of sexual transmission and 50% for other prevention activities. Beginning in 2006, PEPFAR specified that 33% of all prevention funds (and two-thirds of funds for sexual transmission) would be earmarked for AUM programs (United States Leadership Against HIV/AIDS, Tuberculosis and Malaria Act of 2003; United States Government Accountability Office 2006). Since 2005 PEPFAR has tracked and reported expenditures for prevention and

treatment programs; bundling abstinence promotion with promotion of marriage (i.e., be faithful) and reported as abstinence and faithfulness programs. Other prevention programs included condom promotion and distribution, substance abuse prevention programs, management and treatment of sexually transmitted infections, prevention of mother-to-child transmission, safe medical injections, and blood safety. Table 1 lists funding for abstinence and faithfulness, other sexual prevention programs, and other prevention programs from 2005 to 2011, based on country operational plans.

The emphasis on AUM within PEPFAR prevention changed considerably after 2008. In the 2008 legislation that re-authorized the PEPFAR program, abstinence programming was still mandated, however, the new program no longer had “hard earmarks” for abstinence programming and primary prevention (United States Global Leadership Against HIV/AIDS, Tuberculosis and Malaria Reauthorization Act of 2008; The President’s Emergency Plan for AIDS Relief (PEPFAR) 2011a). Instead, countries now have reporting requirements on the proportion of sexual prevention funding devoted to abstinence and faithfulness indicators. Under the 2008 reauthorization, countries that did not meet the 50% threshold were required to submit a justification for the decision to the U.S. Congress (PEPFAR 2011a).

Funding for abstinence and faithfulness peaked in 2008 at $311 million and then declined (Table 1) as funding for other sexual prevention programs continued to rise; by 2011 abstinence and faithfulness programs had shrunk from 34.5% of the prevention budget in 2008 ($311.3 million) to 16.1% in 2011 ($165.5 million). After 2008, country programs were also allowed to include in the abstinence and faithfulness category, the portion of these activities within more comprehensive programs. Likewise, an emphasis on faithfulness shifted from a limited focus on marriage promotion to broader engagement in partner reduction, avoiding causal partners, and reducing sexual concurrency.

After 2006, all HIV prevention programs funded under PEPFAR were required to follow specific guidance on ABC (ABC - Abstinence, Being faithful, and Condom use) issued that year by the Office of the U.S. Global AIDS Coordinator (OGAC) (PEPFAR 2006). Entitled “*ABC Guidance #1 For United States Government In-Country Staff and Implementing Partners Applying the ABC Approach To Preventing Sexually-Transmitted HIV Infections,”* this guidance states that:

> Young people who have not had their sexual debut must be encouraged to practice abstinence until they have established a lifetime monogamous relationship. For those youth who have initiated sexual activity, returning to abstinence must be a primary message of prevention programs. Implementing partners must take great care not to give a conflicting message with regard to abstinence by confusing abstinence messages with condom marketing campaigns that appear to encourage sexual activity or appear to present abstinence and condom use as equally viable, alternative choices. (Emphasis added) Thus, marketing campaigns that target youth and encourage condom use as the primary intervention are not appropriate for youth, and the Emergency Plan will not fund them. (For this same reason, Emergency Plan funds may not be used to actively promote or provide condoms in school settings, but may be used in schools to support programs that deliver age-appropriate “ABC” information for youth.)

This language of the OGAC guidance was focused heavily on abstinence promotion and faithfulness within heterosexual marriage. For HIV prevention with youth 10–14 years old, the entire focus was on abstinence. For youth above age 14, condom use was endorsed with the caveat that correct and consistent condom use was required to reduce HIV risk. No caveats were provided regarding abstinence or marriage fidelity. OGAC guidance also included restrictions on condom education, marketing, and distribution within schools.

Although PEPFAR no longer enforces the funding restrictions about separate abstinence and faithfulness programs, curiously the 2006 ABC guidance is today listed prominently on websites of the State Department and PEPFAR (http://www.state.gov/s/gac/partners/guide/abc/ and http://www.pepfar.gov/guidance/c19545.htm, accessed November 13, 2012). New guidance on prevention of sexually transmitted HIV infections was issued in August 2011 (PEPFAR 2011b). The 2011 guidance focuses on country-specific epidemiology, combination prevention (biomedical, behavioral, and structural interventions), and a continuum of prevention activities tailored to country needs. Abstinence and faithfulness are barely mentioned – they are acknowledged as behavioral objectives but not as programs. Likewise, the 2012 Blueprint for an AIDS Free Generation makes no mention of abstinence promotion or ABC (PEPFAR 2012).

Human Rights Critiques

Both human rights groups and medical professionals, including Human Rights Watch (Humans Rights Watch 2002, Humans Rights Watch 2005), the Society for Adolescent Health and Medicine (Santelli *et al.* 2006), the American Academy of Pediatrics (2001), and the American Public Health Association (American Public Health Association 2006), have described the scientific and human rights problems with promoting abstinence as a sole option of young people. These include the withholding of life-saving information; censorship of textbooks and teachers; promotion of sexist and racist stereotypes; and insensitivity and unresponsiveness to lesbian, gay, bisexual, transgendered, and questioning (LGBTQ) youth (Santelli *et* al. 2006). As such, AUM programs fail to meet the ethical standards of health professionals who believe in the importance of informed consent and the right of young people to information needed to maintain health.

For example, Human Rights Watch issued reports describing problems with abstinence promotion by governments in Texas in 2002 and Uganda in 2005 (Humans Rights Watch 2002, Humans Rights Watch 2005). The report on Texas found that the AUM program violated students' right to information and to benefit from scientific progress (i.e. to benefit from the results of program evaluations) and discriminated against gay and lesbian students with the message that marriage is the only legitimate context for sex (Human Rights Watch 2002). (Gay marriage is illegal in Texas.) The Texas curriculum 'informed' students that condoms do not prevent HIV transmission. The report on Uganda revealed that condom distribution was removed from school-based programs and false information was provided about condom efficacy (Human Rights Watch 2005). Some teachers reported that they had been instructed by U.S.-supported organizations to drop all mention of condoms from classrooms. Respondents in Uganda reported that the focus on AUM was contrary to the prior open discussions about sexual transmission of HIV that had contributed to Uganda's success in reducing seroprevalence.

Efficacy of Behavioral Prevention with Youth, Including Abstinence-until-Marriage and Comprehensive Sexuality Education

A number of reviews of HIV behavioral prevention programs among young people have been undertaken during the last decade (Ross *et al.* 2006, Michielsen *et al.* 2010, Speizer *et al.* 2003, Kirby and Ecker 2009, Mavedzenge *et al.* 2011b, Underhill *et al.* 2007, Chin *et al.* 2012, Kirby 2008, Trenholm *et al.* 2008). HIV prevention programs for youth take place in a variety of settings including schools, health facilities, the mass media, and communities (e.g., community mobilization and outreach) (Ross *et al.* 2006). Facility-based programs that target service providers, mass media interventions through the radio and television, and community mobilization activities may be effective at changing youth sexual and reproductive health knowledge, attitudes, and behaviors (Ross *et al.* 2006, Speizer *et al.*

2003). Many studies focus on curricula such as HIV education or comprehensive sexuality education in schools (Ross *et al.* 2006, Kirby and Ecker 2009).

Many comprehensive sexuality education programs have been demonstrated in well-designed efficacy trials to improve knowledge and behavioral intentions and to reduce HIV risk behaviors, by delaying initiation of sexual intercourse, reducing the number of sexual partners, and increasing condom use (Kirby and Ecker 2009, Underhill *et al.* 2007, Chin *et al.* 2012, Kirby 2008). Kirby and colleagues (Kirby and Ecker 2009) have defined characteristics for effective curricular programs and classified them into three groups: 1) components of curriculum development (e.g., engagement of multiple stakeholders, ensure that needs of target population are met and that the program is consistent with community values); 2) the content of the curriculum (e.g., has clear health goals, focused on specific behaviors, address multiple risk and protective factors, creates a safe and supportive environment, uses instructionally sound teaching methods); and 3) the approach to implementation (e.g., have support of appropriate authorities, use appropriate facilitators, implement activities with fidelity).

In contrast, most AUM curricula rigorously evaluated in the U.S. or elsewhere have failed to demonstrate efficacy in delaying initiation of sexual intercourse, in reducing number of partners, in increasing condom use, or in promoting secondary abstinence (i.e., cessation of sexual intercourse among sexually experienced youth) (Kirby and Ecker 2009, Mavedzenge *et al.* 2011b, Underhill *et al.* 2007, Chin *et al.* 2012, Kirby 2008, Trenholm *et al.* 2008). Kirby (2008) has suggested that AUM programs often fail to incorporate the characteristics of effective comprehensive curriculum-based programs.

A comprehensive 2012 meta-analysis of 23 AUM curricula evaluations by the U.S. Centers for Disease Control and Prevention (Chin *et al.* 2012), suggested that no conclusions could be drawn about abstinence education given *"a small number of studies, with inconsistent findings across studies that varied by study design and follow-up time, leading to considerable uncertainty around effect estimates.*" The CDC described findings as "inconsistent", because there was evidence of a reduction in sexual activity in smaller non-experimental studies, however among those studies with the strongest study design (i.e. randomized control trials (RCT)) no protective effect was found (OR=0.94, CI= 0.81–1.10) in delaying sex, reducing the frequency of sex, reducing partners or reducing pregnancy or STI rates (Chin *et al.* 2012). The most comprehensive, experimental-design evaluation of AUM programs was undertaken in the U.S. and included four different programs and sites and over 2000 students (Trenholm *et al.* 2008); it found no impact on teen sexual activity or rates of unprotected sex. A small decline was found in the perceived effectiveness of condoms, a result most observers would not consider a positive impact.

None of the programs reviewed by CDC were from PEPFAR countries. Despite considerable emphasis on monitoring and evaluation (M&E) within PEPFAR, impact evaluation was not stressed as a component of abstinence and be faithful programs (Oki *et al.* 2009). We are not aware of any published evaluations of AUM programs under PEPFAR.

In contrast, the companion CDC meta-analysis of 66 comprehensive risk reduction programs for youth showed favorable effects on current sexual activity; frequency of sexual activity; number of sex partners; frequency of unprotected sexual activity; use of protection (either condoms and/or hormonal contraception); pregnancy; and STIs. Thus, comprehensive sexuality education programs - paradoxically - appear to be superior to AUM programs in promoting abstinence.

Other Scientific Critiques of Abstinence-until-Marriage Programs

Beyond program efficacy, other scientific concerns have been raised about the information content of AUM programs. Content analyses have identified problems with the medical and scientific accuracy of information provided within commonly used AUM curricula (United States House of Representatives 2004, Lin and Santelli 2008, Lopez and Speizer 2009). These inaccuracies often revolve around misinformation on condoms (United States House of Representatives 2004, Lin and Santelli 2008).

While AUM program supporters have insisted that promoting abstinence and condom use within the same program is a mixed message, scientific evidence does not support this assumption. For example, comprehensive sexuality education programs that promote abstinence, condom use, and other risk reduction strategies within the same program have been shown to be effective in achieving these behavioral goals simultaneously (Kirby and Ecker 2009, Chin *et al.* 2012).

Likewise, abstinence promotion is commonly inconsistent with the sexual realities of young people's lives, by promoting delay in sexual initiation to youth in populations where many young people have already initiated intercourse (Santelli *et al.* 2006, Speizer and Lopez 2009). For example, in the sub-Saharan African countries with generalized HIV epidemics, the prevalence of premarital sex in the last year among female youth ages 15–24 varies widely - from 2% and 69%; the corresponding values for male youth are between 8% and 66% (Measure DHS). Of course, these numbers are based on self-reported data and thus may be over- or under-estimates (Curtis and Sutherland 2004).

U.S. Government Reviews of Abstinence Promotion under PEPFAR

In 2006, the U.S. Government Accountability Office (GAO), the research arm of the USA Congress, stated that the 33% requirement impeded integration and coherence of HIV programs in some countries because 'condom-free' education had to be isolated from other programs (United States GAO 2006). The GAO noted that separate programming for abstinence often undermined country-level national efforts to create integrated messages and programs for HIV prevention (United States GAO 2006). In addition, the report illustrated that implementing partners in Africa were confused about what was permissible in school-based settings and what to do when young people asked explicit questions about condoms (United States GAO 2006). Intentionally or not, the PEPFAR focus on AUM had a dampening effect on prevention programs for young people in AIDS-affected African countries.

Around the same time, a process evaluation of 14 PEPFAR-funded, multi-country HIV prevention programs for youth revealed that there was widespread confusion on what could or could not be done with prevention funds (Speizer and Lopez 2007). Moreover, within the programs being implemented, the major emphasis was on abstinence messages, even within programs that included sexually active or older youth who clearly would have benefited from broader prevention programming that included partner reduction and condom messages (Speizer and Lopez 2007). Partner reduction strategies were particularly ignored.

Finally, a 2009 report of USAID's Inspector General noted that the overtly religious content of abstinence-only programs supported by USAID raised constitutional questions (2009). The Inspector General's report cited a USAID-supported curriculum that included this "key concept": "*God has a plan for sex, and this plan will help you and protect you from harm*" (2009).

Limitations

Assessing current implementation of PEPFAR program requirements was difficult given limited objective published program information. While numerous reports were found on the early years of the PEPFAR prevention program, we found no recent published information on how PEPFAR grantees understand or implement program requirements after 2008. The published program reviews from the U.S. Government all review PEPFAR prevention programs for the period through 2008.

Likewise, the literature on evaluation of AUM programs is limited and all published studies using strong evaluation designs come from developed nations. Moreover, there are considerable challenges with implementing evidence-based programs in contexts and policy environments that are not necessarily favorable to using the most effective evaluation strategies.

Finally, the literature is limited in the measures of impacts undertaken. Although impact on risk behaviors have been well-tested, few RCT of HIV behavioral prevention programs for youth and no AUM programs have used HIV status as an endpoint; among behavioral RCT with HIV as an endpoint, none (n=0 of 4) have demonstrated efficacy (Mavedzenge 2011b). (The evaluation of the MEMA kwa Vijuana program in Kenya demonstrated an impact on Herpes simplex virus 2 but not HIV.) In a review of 7 randomized behavioral trials not limited to youth, none showed protective effects against HIV infection (Padian *et al.* 2001). This lack of biological endpoints in behavioral trials may reflect inadequate resources to measure HIV incidence, low baseline HIV incidence, small sample sizes, limited behavioral impact, and/or the short duration of follow-up.

Strengthening Science-Based Prevention, Vestiges of Abstinence Only

As HIV transmission among youth remains high in many PEPFAR countries, the U.S. should continue to provide support for effective primary prevention efforts within PEPFAR. Effective programs to prevent HIV transition among youth include comprehensive sexuality education and HIV risk-reduction programs, programs to increase male circumcision and to reduce sexual concurrency, and prevention with positives. Our review of the literature suggests that the efficacy of AUM programs is unproven and these programs have other scientific and human rights flaws. By strictly mandating separation of abstinence promotion from risk reduction efforts in PEPFAR countries in the initial years of the program, countries were inhibited from building coherent HIV prevention programs based on local needs.

Secretary of State Hilary Clinton has called for the creation of “an AIDS-Free Generation” and a combination prevention strategy which focuses on interventions that have proven most effective, including prevention of mother to child transmission, male circumcision, and prevention with positives (Clinton 2012). While these approaches are sound, this initial recipe essentially ignored behavioral prevention and programs for youth such as comprehensive sexuality education.

The PEPFAR Blueprint, released in November 2012, provides a comprehensive approach to HIV prevention with a strong focus on scientific evidence, empowerment for young women, and specific ideas for protecting youth (PEPFAR 2012). Abstinence as a behavior is addressed but AUM is not. It includes the following statement: “All young people need broad education about sex, sexuality, and reproductive health, including HIV”, although sex education is given a limited focus. The Blueprint outlines a number of established and promising approaches, including youth friendly HIV care, access to primary and secondary

education, targeted and tailor programming for youth at risk of HIV, and economic empowerment approaches.

While promotion of AUM is no longer a priority for PEPFAR, vestiges of this approach remain. Country programs are still encouraged to report expenditures for abstinence and faithfulness programs. The original ABC program guidance, (PEPFAR 2006) which promotes AUM, remains inexplicably and prominently posted on PEPFAR and USAID websites.

Importantly, the reduced emphasis of behavioral approaches in the new 2011 PEPFAR Guidance and PEPFAR Blueprint appears to suggest a level of “prevention fatigue” with behavioral approaches. The PEPFAR program has embraced proven biomedical approaches and rejected those driven by religious or ideological agendas. Let us hope that PEPFAR will not reject effective behavioral approaches, such as risk reduction education for youth, when rejecting ineffective ones.

Notably, the impact of early government funding requirements – even when shown to be scientifically misguided - can take years to undo. The example of U.S. federal government support for AUM in the U.S. is telling. A decade of federal funding for AUM in the U.S. public schools legitimized this approach in many conservative states and communities. Even with greatly reduced federal support after 2009, in many places (e.g., Texas) public schools today overwhelmingly restrict youth programming to AUM (Tortolero and Cuccaro 2011). In the face of its own AUM legacy, PEPFAR needs to maintain a strong and continuing emphasis on prevention science and an openness to a multiplicity of promising and evidence-based approaches as outlined in its new Blueprint (PEPFAR 2012).

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Table 1

Expenditures in PEPFAR Operational Plans on Abstinence and Be Faithful Programs and Selected Prevention and Treatment Programs, FY 2005-FY2011

	Fiscal Year						
	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Budget for Prevention:							
Abstinence and Faithfulness	$ 102.5	$ 130.8	$ 198.4	$ 311.3	$ 213.6	$ 187.9	$ 165.5
Other Sexual Prevention	$ 65.2	$ 105.0	$ 147.3	$ 229.2	$ 268.3	$ 267.9	$ 283.3
MCTCP	$ 78.7	$ 91.8	$ 195.1	$ 263.9	$ 235.7	$ 313.3	$ 387.5
Male Circumcision	nrs	nrs	nrs	nrs	$ 56.3	$ 70.9	$ 86.9
Injecton and Blood Safety	$ 86.0	$ 68.8	$ 60.5	$ 98.2	$ 86.5	$ 77.1	$ 75.1
Injecting and non-Injecting Drug Use	nrs	nrs	nrs	nrs	$ 18.1	$ 23.8	$ 27.7
Total for Prevention	$ 332.4	$ 396.5	$ 601.2	$ 902.6	$ 878.5	$ 940.9	$ 1,026.0
Abstinence/Faithfulness as a % of Prevention Budget	30.9%	33.0%	33.0%	34.5%	24.3%	20.0%	16.1%
Budget for Counseling and Testing	$ 91.7	$ 130.5	$ 223.2	$ 267.0	$ 220.9	$ 201.6	$ 206.0
Total for All Prevention, Treatment, and Care	$ 1,107.9	$ 1,756.1	$ 2,845.1	$ 3,989.9	$ 3,433.1	$ 3,119.3	$ 3,199.0
Abstinence/Faithfulness as a % of Prevention, Treatment, and care	9.3%	7.5%	7.0%	7.8%	6.2%	6.0%	5.2%

Note: All data come from PEPFAR Fiscal Year Operational Plans, accessed @ http://www.pepfar.gov/about/c19388.htm, April 21, 2012

nrs= not reported separately

Source: PEPFAR fiscal year operation plans, accessed @ www.pepfar.gov/about/c19388.htm, April 21, 2012.