This is the April 2015 edition of the AIDSFree Prevention Update, an initiative of the Strengthening High Impact Interventions for an AIDS-free Generation (AIDSFree) Project. The AIDSFree Prevention Update is your monthly snapshot of current peer-reviewed literature and state-of-the-art program resources, tools, and curricula on HIV prevention.

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Conference on Retroviruses and Opportunistic Infections (CROI)

CROI Foundation and International Antiviral Society, Seattle, Washington (February 23 – 26, 2015).

The annual Conference on Retroviruses and Opportunistic Infections (CROI) brought together top basic, translational, and clinical researchers from around the world to share the latest studies, important developments, and best research methods in the ongoing battle against HIV and related infectious diseases. CROI is a global model of collaborative science and the premier international venue for translating basic and clinical investigation into clinical practice in the field of HIV and related viruses. Researchers presented new, globally important data on three oral pre-exposure prophylaxis (PrEP) trials and findings from the Follow-on African Consortium for Tenofovir Studies (FACTS 001) on tenofovir microbicide gel. All three PrEP trials showed high rates of consistent use and very high rates of protection against HIV infection, while the FACTS 001 trial of 1 percent tenofovir gel found low adherence and no protection. The conference also included presentations on evolving knowledge and practice in the areas of medical male circumcision, and on prevention, treatment, and diagnosis of pediatric HIV infections. In addition, several conference sessions presented programmatic experience on how to scale up existing interventions and demonstrate impact.

Webcasts, abstracts, electronic posters, and other electronic resources from CROI 2015 are now available online here.

See major conference outcomes below:

- Pre-exposure Prophylaxis (PrEP) Stops 86 Percent of HIV Infections in PROUD Study
- Pre-exposure Prophylaxis also Stops 86 Percent of HIV Infections in Ipergay Study
- Partners Demonstration Project
- Disappointing Results for Women’s Microbicide: FACTS 001 Study
- Triple-drug Combination Superior for Preventing HIV in Infants: The PROMISE Study
- Mobile VMMC Teams in Tanzania See Older Clients and Have Higher Follow-up Rates
- High Acceptability of PrePex™ Device in Routine Programmatic Settings in Rwanda
- Potential Protection From HIV Transmission by Penile Cuttings in Papua New Guinea
- HSV-2 Shedding From Male Circumcision Wounds Among HIV-Infected Men
- Self-Selection of Circumcision Acceptors, Risk Compensation and Effectiveness of Circumcision Among Service Recipients, Rakai, Uganda
- The Impact of PEPFAR Abstinence and Faithfulness Funding Upon HIV Risk Behaviors in Sub-Saharan Africa
Tailored Combination Prevention Packages and PrEP for Young Key Populations


The authors conducted a comprehensive review of the evidence to date on prevention strategies, challenges to prevention, and combination prevention packages for young key populations, defined as men who have sex with men (MSM), transgender persons, people who sell sex, and people who inject drugs (PWID). The study focused specifically on the role of pre-exposure prophylaxis (PrEP) in prevention packages for those under the age of 24, and particularly those under 18 years of age. The authors noted that PrEP could offer highly effective, time-limited primary prevention for adolescents and young key populations, provided that they could access health services and were motivated to use PrEP. However, young key populations face unique challenges to accessing PrEP. For PWID, these challenges included adherence to medications (due to low social support), incarceration, and detoxification. Challenges for young MSM and transgender women included unstable housing, discrimination, and violence; challenges for young sex workers included increased risk of sexual and physical violence from clients and law enforcement, along with social and economic marginalization. The authors concluded that conducting effective PrEP interventions will require addressing structural barriers, such as access to HIV testing, prevention, and care, health services, and PrEP, along with other prevention strategies, including decriminalizing the practices of key populations, reducing stigma and discrimination, and empowering communities.

View Abstract

Tenofovir-Based Preexposure Prophylaxis for HIV Infection among African Women


This randomized, placebo-controlled trial of daily treatment with oral tenofovir disoproxil fumarate (TDF), oral tenofovir–emtricitabine (TDF-FTC), or 1 percent tenofovir (TFV) vaginal gel as pre-exposure prophylaxis against HIV-1 infection enrolled 5,029 women in South Africa, Uganda, and Zimbabwe. Participants were assigned to one of five regimens: oral TDF (300 mg) and TDF-FTC placebo; oral TDF-FTC (300 mg of TDF and 200 mg of FTC) and TDF placebo; oral TDF placebo and oral TDF-FTC placebo; vaginal 1 percent TFV gel; or vaginal placebo gel. The primary analysis included as end points only HIV-1 infections that were acquired after enrollment. The authors reported -49 percent effectiveness with TDF; -4.4 percent with TDF-FTC; and 14.5 percent with TFV gel. TFV was detected in 30 percent, 29 percent, and 25 percent of randomly-selected plasma samples from participants receiving TDF, TDF-FTC, and TFV gel, respectively. The authors concluded that none of the drug regimens evaluated during this study reduced rates of HIV-1 acquisition in an intent to treat analysis and that daily adherence to study products, both oral and vaginal TFV-based formulations, was low. They called for effective and acceptable prevention interventions for women at high risk for sexual acquisition of HIV-1, and stated that more accurate measures were required to estimate product use during biomedical HIV-1 prevention trials.

View Abstract
Traumatic Stress and the Mediating Role of Alcohol Use on HIV-Related Sexual Risk Behavior: Results from a Longitudinal Cohort of South African Women Who Attend Alcohol-Serving Venues


Following a secondary analysis of data from a 2009–2012 study of 560 women patrons of 12 alcohol serving venues in Cape Town, South Africa, the authors developed a model estimating the effects of and interrelationships among traumatic stress, alcohol use, and unprotected sex. Eighty percent of participants reported elevated levels of traumatic stress, and 88 percent reported hazardous alcohol use. The authors' analysis showed that alcohol use was a significant behavioral facilitator that influenced the effect of traumatic stress on sexual risk behavior. Also, women with significant symptoms of traumatic stress (independent of alcohol use) were 82 percent more likely to have unprotected sex than women without traumatic stress. Similarly, high alcohol use was associated with higher rates of unprotected sex, regardless of traumatic stress levels. The authors concluded that women who had both traumatic stress and alcohol abuse were at higher risk for HIV, and that problem drinking exacerbated the relationship between trauma experiences and sexual risk behavior. They recommended that interventions to reduce the impact of alcohol use on HIV risk should be adapted to address both traumatic stress and alcohol use.

View Abstract

Voluntary Medical Male Circumcision Scale-Up in Nyanza, Kenya: Evaluating Technical Efficiency and Productivity of Service Delivery


The authors evaluated technical efficiency and productivity of voluntary medical male circumcision (VMMC) facilities in Nyanza province, Kenya. They collected site-level data from 21 randomly sampled facilities, including nine fixed and 12 outreach and mobile locations that provided VMMC services in 2011 and 2012. Using modified national VMMC monitoring instruments and seven variables describing input or output, they assessed the procedures performed, availability of guidelines, supplies and equipment, and continuity of care. Their analysis showed significant improvement in only one of the variables (total elapsed operation time for the VMMC procedure, which decreased from 32.8 minutes in 2011 to 30 minutes in 2012). Additionally, technical efficiency improved from 91 percent in 2011 to 99 percent in 2012, with the greatest gains among the outreach and mobile facilities. The main driver of the productivity increase at these facilities was the acceleration of program activities, which motivated the facilities to provide services more efficiently. The decline in factor productivity (changes in output due to influences beyond traditionally analyzed inputs) among fixed VMMC facilities was most likely due to...
the effects of institutional management factors, such as operating environments and staff skills. This study illustrates the need for program planners to understand resource use and sources of variation in VMMC service delivery at the level of individual sites.

**View Abstract**

**Disclosure of HIV Serostatus among Pregnant and Postpartum Women in Sub-Saharan Africa: A Systematic Review**


The authors conducted a systematic review of articles published between 2001 and 2014 to determine rates of disclosure to partners, family members, friends, and religious leaders by HIV-positive pregnant and postpartum women in sub-Saharan Africa. They also examined the timing of disclosure and factors affecting women’s decisions to share their HIV status. Analysis of the 47 eligible articles, which provided data from 14 countries, showed that 67 percent of the women had disclosed their HIV status to another person, although rates of disclosure varied widely, from 5 percent to 96.7 percent. Women disclosed their status to their sexual partners more often than to other family members, friends, or religious leaders. The majority of women disclosed their status before delivery. Women who disclosed after delivery did so around the period of weaning the infant or resuming sexual activity. Factors increasing the likelihood of disclosure included younger age, first pregnancies, knowing someone with HIV, lower levels of internalized stigma, and lower levels of avoidant coping. The authors concluded by advocating expansion of programs for prevention of mother-to-child transmission (PMTCT) to include partners, family members, and the broader community. This would increase the effectiveness of PMTCT programs while supporting safe disclosure of HIV status by pregnant and postpartum women.

**View Abstract**

**Combination Prevention**

**One Size Does Not Fit All: HIV Testing Preferences Differ Among High-Risk Groups in Northern Tanzania**


This study assessed the HIV testing preferences of female bar workers and male Kilimanjaro porters, two important high-risk groups in the Kilimanjaro Region of Tanzania. The authors used direct assessment and discrete choice experiment (DCE) methods to identify the HIV testing preferences of 162 bar workers and 194 porters, and compared them to 486 randomly selected community members. They found that bar workers, who are required to participate in a municipality-mandated health screening program, had significantly higher rates of HIV testing within the past year compared to female community members (59.3 percent versus 37.9 percent), while testing rates among porters versus males in the community were similar (25.1 percent versus 20.6 percent). Bar workers were less likely than other female community members to report a preference for home testing over facility-
based testing (23 percent versus 68.6 percent). Both methods showed that porters preferred testing in venues where antiretroviral therapy was readily available (42.4 percent versus 59.4 percent in the general male population). Additionally, bar workers and porters were more likely to travel longer distances for testing compared to their community counterparts. The authors highlighted the differences in testing preferences between high-risk populations and others in the community, and called for better alignment of HIV testing services with the preferences of key populations.

View Abstract

Providing Comprehensive Health Services for Young Key Populations: Needs, Barriers and Gaps


This review summarized the health needs of young key populations (YKPs) aged 10–24, including sexual and reproductive health, mental health, violence, and substance use problems, and barriers to care for young sex workers, men who have sex with men, transgender people, and people who inject drugs. The findings from the 110 eligible articles demonstrated, overall, that YKPs experienced a higher burden of disease relative to both older key population members and their age peers in the general population. For example, younger sex workers are less experienced in condom negotiation than older sex workers and thus, are more vulnerable to forced sex without a condom. In addition, stigma, discrimination, social exclusion, and victimization contributed to higher rates of mental health problems in YKPs compared to their peers in the general population. Barriers to care for YKPs occur at the individual, health system, and structural levels; these include low levels of education and HIV knowledge or risk perception, concerns about privacy and confidentiality, lack of “youth-friendly” facilities, and the requirement, in many countries, of parental permission to access testing, treatment, or procedures. The authors concluded that programming for YKPs requires comprehensive, integrated services that respond to their specific developmental and health needs, along with educational and social services within the context of a human rights-based approach.

View Abstract

HIV Testing and Linkage to Services for Youth


In both low- and high-income countries, HIV testing is an important entry point for primary and secondary prevention, as well as care and treatment for young people, including young key populations (YKPs). The authors of this paper discussed critical issues for young people, including YKPs, along the HIV testing-prevention-treatment continuum. They noted that existing school-based HIV education does not always encourage youth to seek testing, and there are few youth-friendly facilities available. In most countries, minors require consent from parents or guardians for HIV testing, and providers deny unaccompanied adolescents an HIV test. Youth who discuss testing with their parents are more likely to test for HIV. However, young people often rightfully fear negative reactions from parents and providers, and also from schools, where they fear isolation and missed opportunities and employment prospects, if they are known to be HIV positive. In some communities, women cannot give consent without the
consent of family members. The authors suggested making testing venues more youth-friendly, and monitoring promising new approaches, such as self-testing, to assess how well they work for youth. They also recommended that, in general, HIV testing venues encourage empathetic and professional health provider behaviors, including assurance of confidentiality about test results, and social and clinical support for those testing positive for HIV.

View Abstract

Structural Prevention

Scaling-Up HIV Responses with Key Populations in West Africa


HIV prevalence among men who have sex with men in West and Central Africa (WCA) is between 13.5 percent and 25.3 percent, and prevalence among female sex workers is at least eight times higher than in the general population; there are very few studies on people who inject drugs and transgender women. However, HIV responses in most WCA countries do not focus on key populations. This article summarized new studies that improve understanding of the HIV epidemic in WCA’s key populations and recommended ways to target these populations effectively with HIV services. The authors stressed that all WCA countries should define a specific key population strategy within their national HIV strategic and operational plans. This approach should include soliciting inputs from members of key populations who can fill gaps in data to inform the response. Interventions for key populations should be comprehensive, including both immediate access to HIV and other health services and interventions to address structural issues, such as violence and community empowerment. Budgetary and other resources should be prioritized to address the disproportionate burden of HIV and poor access to services among key populations. The authors emphasized the importance of ensuring development of human rights-based policies, access to HIV services, and organizational development as critical strategies for addressing HIV in these populations.

View Abstract

Adolescent Girls and Young Women: Key Populations for HIV Epidemic Control


This article urged attention to girls and young women as critical populations within the HIV epidemic. Young women are at increased risk for HIV acquisition for many reasons: age-disparate and intergenerational sexual relationships, early sexual debut, limited schooling, food insecurity, loss of a family member, and gender-based violence. Additionally, younger women are more biologically susceptible to HIV infection compared to older women. Some programs have demonstrated success in improving young women’s HIV knowledge and attitudes and uptake of HIV testing. For example, a recent randomized controlled cash transfer trial in Lesotho of financial incentives reduced the
probability of acquiring HIV by 25 percent over two years. School and community-based education programs are commonplace in many settings, but the few that were evaluated did not demonstrate efficacy in preventing HIV infection. The authors stressed that action is needed to mobilize and empower this key population to mediate their own risk, especially for those women who cannot negotiate monogamy, condom use, or male circumcision with their sexual partners. Efforts should focus on the development of new biomedical, structural, and behavioral HIV prevention programs for this group. The authors also recommended including adolescents in biomedical HIV prevention trials, and providing accessible and integrated sexual and reproductive health and HIV prevention services for this population.

View Abstract

Estimating the Effect of Intimate Partner Violence on Women's Use of Contraception: A Systematic Review and Meta-Analysis


Studies from a number of countries have demonstrated that intimate partner violence (IPV) is associated with negative women's reproductive health outcomes, specifically those linked to contraceptive use, such as rapid repeat pregnancy, unintended pregnancy, pregnancy termination, and HIV infection. The authors of the study conducted a systematic review to estimate the causal effect of IPV on contraceptive use. Analysis of the 12 eligible articles showed that, overall, IPV had an impact on women's use of contraception. IPV was associated with a decrease in women's use of partner-dependent methods; women who experienced IPV were less likely to report that their male partners used condoms than women who did not. However, the authors also noted that the specific context influenced the association between IPV and contraceptive use. In Nicaragua, for example, open access to contraceptive methods and the wide cultural acceptability of contraception may mean that women who experience IPV are more likely to use contraception than women who do not. The authors concluded that more research was needed to define the relationship between IPV and women's use of modern contraceptive methods so as to better understand women's adoption of contraception. Additionally, because sexual and physical IPV can affect contraceptive use differently, the authors called for new research to clarify these effects.

View Abstract
Prevalence of Sexually Transmitted Infections Including HIV in Street-Connected Adolescents in Western Kenya


This study characterized the sexual risk behaviors of street-connected children and youth (SCCY) (children who spend their days or nights on the streets) in Eldoret, Kenya and analyzed the gender disparities of these risks to estimate the prevalence of and factors associated with sexually transmitted infections (STIs), including HIV. The study enrolled 200 participants between the ages of 12 and 21. Participants completed structured interviews detailing their sociodemographics, street life, risk behaviors, abuse and exploitation, and access to reproductive health care. All participants self-collected vaginal and rectal swabs. Because all HIV-positive participants were female (15 percent of all participants), the authors analyzed only factors associated with HIV in females. More than a quarter of adolescents in this study had at least one STI, and young women were again disproportionately affected (35 percent with HSV-2, compared to 27.1 percent among women aged 20–24 years nationally). The authors also found that the SCCY were engaged in high-risk sexual behaviors, including early sexual debut, multiple partners, transactional sex, and inconsistent condom use. Young women were at particularly high risk, reporting significantly more forced sex, transactional sex, and prior STIs. The authors concluded that SCCY in Eldoret, females particularly, were at high risk for STIs and HIV, and called for programmers and implementers to target prevention and education programs specifically to this population.

View Abstract

PEPFAR Human Resources for Health Strategy, PEPFAR 3.0

U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) (February, 2015).

In February 2015, the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) issued its Human Resources for Health Strategy (HRH) 3.0. The strategy is intended to ensure availability of sufficient trained human resources to expand HIV and AIDS services in moderate- and high-volume sites or high HIV burden areas that receive PEPFAR support. PEPFAR’s HRH investments will focus on five objectives that directly support PEPFAR’s realignment and strategies for achieving an AIDS-free generation:

1. Assess HRH capacity needs for delivering HIV and AIDS services (prevention, care, and treatment) at PEPFAR-supported sites and areas.
2. Support development of an appropriate number and skills mix of health workers to enable delivery of HIV and AIDS services in these locations.
3. Establish recruitment, deployment, and retention strategies to ensure a consistent and sustainable supply of trained health workers.

4. Establish sustainable financing for health workers to ensure adequate local financing for health workers who can provide HIV and AIDS services in PEPFAR sites.

5. Improve health worker performance to build service quality at all PEPFAR-supported sites.

Some activities supporting the implementation of this strategy will be programmed as stand-alone activities; others may be combined within the technical areas of core activities and implementing mechanisms.

View Full Document (PDF, 737 KB)

**AVAC Report 2014/15: Prevention on the Line**

AVAC: Global Advocacy for HIV Prevention (February 19, 2015).

Global Advocacy for HIV Prevention (AVAC) issued its 2015 annual report in February 2015. The first part of the report provides in-depth information on the current state of global targets in HIV prevention, including an in-depth discussion on global targets and a call for advocates to work together to ensure that strategic targets are in place across the spectrum of prevention options. The second part explores resources and actions required to meet these targets. Specifically, the report identifies three recommendations for action:

1. Align high-impact strategies with human rights and realities
2. Invest in a paradigm shift driven by pre-exposure prophylaxis (PrEP)
3. Demand short-term results on the path to long-term goals

The report also provides concise updates and calls to action on key prevention interventions, including HIV vaccines, voluntary medical male circumcision, microbicides, PrEP, and hormonal contraceptive use and HIV risk. This document is intended for use as a roadmap and a basis for discussion about how to advance comprehensive combination prevention—deploying existing tools, demonstrating the potential of emerging strategies, and discovering novel interventions such as an effective HIV vaccine.

View Full Report (PDF, 3.76 MB)

The *AIDSFree Prevention Update* provides a representative sample of summaries and abstracts of recent articles on global HIV prevention issues from a variety of scientific, peer-reviewed journals. It also includes state-of-the-art program resources, such as tools, curricula, program reports, and unpublished research findings.

We would like the *AIDSFree Prevention Update* to be as helpful to you as possible. If you would like to recommend a recently published, web-accessible article or other information for inclusion, please let us know by sending an email to info@aidsfree.org.

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