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This is the November 2016 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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Why Do Marital Partners of People Living with HIV Not Test for HIV? A Qualitative Study in Lusaka, Zambia
Are Women More Likely to Self-Test? A Short Report from an Acceptability Study of the HIV Self-Testing Kit in South Africa


The authors conducted 16 focus group discussions (FGDs) among 118 men and women in South Africa to determine the acceptability of HIV self-testing. FGDs were separated according to location, sex, age (20–34, and 35–49), and history of HIV testing. Nearly all participants reported increased privacy, convenience, and time-saving (no need to attend a clinic) as benefits of self-testing. Participants who had a prior history of testing also mentioned the optional counseling associated with testing as an advantage. However, some participants, especially men, viewed the lack of counseling with self-testing as a disadvantage, and discussed the risk of suicide for those who test positive. Women, on the other hand, generally felt prepared to handle results and did not feel that counseling was required. Many respondents mentioned that those who test positive could benefit from a hotline; however, some respondents, mainly men, did not feel that telephone assistance would be sufficient. Participants also expressed confusion about modes of HIV transmission, given that the test kit uses saliva to determine the result. They asked if HIV could be transmitted via saliva. The authors concluded that the major advantage of HIV self-testing is privacy, and that it is an acceptable complement to the HIV counseling and testing services offered at health facilities.

Revisiting the Understanding of “Transactional Sex” in Sub-Saharan Africa: A Review and Synthesis of the Literature


This literature review examined motivations behind participation in transactional sex (TS) among adolescents and young women in sub-Saharan Africa. The authors examined 339 articles and broke down findings into 3 categories. Category 1, "sex for basic needs," described women who are vulnerable due to poverty and victimization. Poverty was often attributed to female economic reliance upon men, and victimization due to gender inequalities, including age-disparate relationships and sex manipulated by teachers. HIV prevention interventions for this context would include providing economic opportunities for women and addressing incidence of sex through intimidation. Category 2, "sex for improved social status," described TS as a response to globalization, which has led to a perceived deprivation of material goods that increase social status. Rather than being victims, women in this category expressed power by controlling their partner and thus benefiting socially and economically. Prevention interventions addressing this rationale should acknowledge women’s power and help them define limits to reduce risk. In category 3, "sex and material expressions of love," men provided money and goods as a demonstration of love, in exchange for sex. TS is deeply ingrained in customary gender norms, and requires interventions that address women’s sexual subservience. The authors urged considering the full spectrum of contexts and precursors to TS to identify and interrupt HIV risk pathways.

View Abstract
The Joint United Nations Programme for HIV/AIDS (UNAIDS) 2014 prevention target calls for a 75 percent reduction in new HIV infections by 2020 and a 90 percent reduction by 2030. HIV prevention interventions have been more successful with adolescents and adults than with children, because of inadequate governance, funding, effective programming, and accountability. The authors argued that establishing prevention targets can reenergize prevention approaches, and outlined strategies, including four outcome targets:

- **Target 1** includes 90 percent condom use at most recent sex with non-exclusive partners, and 95 percent condom use among sex workers.
- **Target 2** concerns treatment as prevention and calls for 90 percent of HIV-positive people receiving a diagnosis, 90 percent on treatment, and 90 percent achieving viral suppression.
- **Target 3** consists of voluntary medical male circumcision for 90 percent of 15–49-year-old men in 14 priority countries.
- **Target 4** consists of harm reduction services for 90 percent of people who inject drugs, with 95 percent using clean needles at most recent injection.

Meeting the UNAIDS targets will require subnational population and geographic data to inform national interventions. The authors concluded that to achieve targets, policymakers must remove obstacles by empowering communities and easing policy restrictions that reduce service accessibility and uptake. Prevention programs should be service-focused and quality-oriented; scale up quickly; and hold stakeholders accountable.
Behavioral Prevention

Sexual Risk Related Behaviour among Youth Living with HIV in Central Uganda: Implications for HIV Prevention


The authors used structured questionnaires to explore factors associated with sexual risk-taking and abstinence among 338 15- to 24-year-old unmarried HIV-positive youth. They found that 83 percent of youth reported a future desire to marry, and 50 percent would prefer to have an HIV-negative partner. Fewer than half (45%) reported ever having had sex; average age of sexual debut was 16.9, and girls were significantly more likely to have had sex than boys. In both boys and girls, 37 percent were currently in a heterosexual relationship. Sixty-nine percent had not shared their HIV-positive status with their partner and 37 percent were unaware if their partner was HIV-positive. Among sexually active youth, 30 percent had more than one sexual partner, and 46 percent reported using a condom during each sexual act during the last six months. About one-fourth (24%) had not had sex within the past six months. Factors associated with abstinence included being younger, not having a biological child, and not consuming alcohol in the month before the study. The authors emphasized that developing interventions that specifically address adolescent HIV transmission risk, including disclosure, condom use, and reducing alcohol use among HIV-positive youth, may help to reduce HIV transmission.

View Full Study

Biomedical Prevention

Anti-retroviral Therapy Based HIV Prevention Among a Sample of Men Who Have Sex with Men in Cape Town, South Africa: Use of Post-exposure Prophylaxis and Knowledge on Pre-exposure Prophylaxis


This study examined factors associated with use of and adherence to post-exposure prophylaxis (PEP), and awareness of pre-exposure prophylaxis (PrEP) among 44 men who have sex with men (MSM). MSM who were accessing PEP participated in self-administered computer surveys followed by interviews on side effects and self-reported adherence; and received a follow-up HIV test and a final self-administered computer survey at 12 weeks. Findings showed that 14 participants requested PEP following receptive anal condomless sex, 8 following unprotected insertive anal sex, 11 following condom breakage during receptive anal sex, and 2 following condom breakage during insertive anal sex. Over 50 percent of the participants reported complete PEP adherence, and nearly 32 percent reported only missing one dose; just under 10 percent reported missing more than one dose. The most common side effects included nausea, diarrhea, and fatigue. Ninety percent were aware of PrEP, and 75 percent said that they would be interested in taking it. A large majority also reported that they would use PrEP even if they experienced short-term side effects, and if they still needed to use condoms. Facilities can provide PEP adherence support, the authors said, and individuals on PEP with consistent high-risk behaviors require additional prevention interventions, including transitioning from PEP to PrEP.

View Abstract
Pre-exposure Prophylaxis Use by Breastfeeding HIV-Uninfected Women: A Prospective Short-Term Study of Antiretroviral Excretion in Breast Milk and Infant Absorption


This study examined use of pre-exposure prophylaxis (PrEP) using daily oral emtricitabine±tenofovir disoproxil fumarate among 50 high-risk, HIV-negative mothers and their breastfeeding infants (aged 1–24 weeks) to determine if maternal PrEP use was safe for breastfeeding infants. Mothers were observed within the health facility taking oral PrEP during a 10-day period, with blood and breast milk samples taken at day 4 and day 7, and blood collected from the infant on day 7. Mothers responded to short daily surveys on infant welfare, including breastfeeding patterns and any side effects potentially associated with PrEP use. Results showed that maternal blood samples had higher concentrations of tenofovir than did breast milk samples. Plasma and breast milk samples revealed similar concentrations of emtricitabine. Tenofovir was not detected in 94 percent of infant blood samples; but 96 percent of infant samples contained emtricitabine. The authors calculated that the amount of emtricitabine ingested by infants through breast milk daily was 0.5 percent of the usual recommended infant dosage. Two mothers reported infant diarrhea that improved after 2–3 days; there were no other reported infant side effects. The authors concluded that maternal PrEP is safe for breastfeeding infants, and that PrEP may be considered for breastfeeding mothers at risk for contracting HIV.

View Full Study

Gaps in Adolescent Engagement in Antenatal Care and Prevention of Mother-to-Child HIV Transmission Services in Kenya


This study compared HIV-positive adolescents’ engagement in prevention of mother-to-child transmission (PMTCT) services to that of adult HIV-positive women. The authors conducted a cross-sectional survey of 2,521 mother-infant pairs attending 141 Kenyan maternal child health clinics. They examined acceptance of antenatal care (ANC), HIV testing, and mother and child antiretroviral therapy (ART); and studied factors that led to increased engagement in PMTCT services. Adolescents were less likely than adults to attend four ANC visits (35.2% versus 45.6%); married adolescents, or those who had disclosed their HIV status to their partner, were more likely to attend all four visits. HIV testing uptake was similar between adolescents and adults. Sixty-five percent of the adolescents had taken ART for their own benefit before pregnancy, compared to 85.8% of the adult women. Common explanations for not taking ART included providers not offering it and late HIV diagnosis during pregnancy. Infants born to adolescents were also less likely to receive ART prophylaxis than those born to adult women (85.7% versus 97.7%), mainly because providers did not offer prophylaxis; HIV was diagnosed after delivery; or the adolescents did not want to share their HIV status. The authors concluded that maternal age can act as a risk signal, indicating a need to provide additional support.

View Abstract
Effects of a Multicomponent Intervention to Streamline Initiation of Antiretroviral Therapy in Africa: A Stepped-Wedge Cluster-Randomised Trial


This randomized controlled trial (2013–2015) examined the impact on uptake of antiretroviral therapy (ART) of four interventions to address barriers to access at 20 facilities (training of health care workers by opinion leaders, point-of-care CD4 cell count testing, adapted counseling interventions, and feedback to facilities on their ART uptake) relative to the 20 control facilities. Of the 4,747 ART-eligible patients in the intervention group, 80 percent started ART within two weeks, while only 38 percent of the 7,066 eligible patients in the control group had done so. Seventy-one percent of those in the intervention group (versus 18% in the control group) had same-day initiation; and 90 percent of intervention participants had begun treatment by 90 days after eligibility, while only 70 percent of control group participants had done so. Timing to initiation did not vary by sex, age, CD4 count, health facility patient load, pregnancy, or tuberculosis status. HIV RNA samples from randomly selected study participants were collected one year after study initiation; retention and mortality rates were similar between the two groups. Sixty-six percent of intervention participants achieved viral suppression, compared to 58 percent of control study participants. The authors concluded that this multicomponent behavioral intervention, focused on ART initiation and targeting service providers, can magnify the impact of testing and retention interventions to reduce morbidity and mortality.

View Abstract

What Messages are Adolescent Voluntary Medical Male Circumcision (VMMC) Clients Getting and How? Findings From an Observational Study in Tanzania


The authors observed 320 clients accessing VMMC, and assessed group and individual counseling sessions with youth aged 15–19 and adults older than 20 for the quality and content of information provided. Adolescents <18 years who received group counseling were more likely to receive information on reducing the number of sexual partners, abstaining for six weeks post-procedure, and the inability of VMMC to decrease transmission from man to partner. Men >19 were more likely to receive the same information, plus messages on being faithful and using condoms, and condom demonstrations. Groups with participants of various ages, but mainly 18–19-year-olds, were less likely to be informed about sexual conduct, reducing sexual partners, and being faithful; and were less likely to receive condoms. Individual counseling was more consistent in providing all adolescents with HIV prevention education; and 18–19 year olds were more likely than adults to receive education about confidentiality, abstaining from sex, and correct and consistent condom use. The authors concluded that individual counseling offers more comprehensive and consistent prevention messages for younger and older adolescents. Approaches to increase the effectiveness of group counseling, such as grouping clients by age, or using prepared tools and scripts for mixed ages, may help to deliver consistent HIV prevention messages.

View Abstract
Paediatric HIV Testing Beyond the Context of Prevention of Mother-to-Child Transmission: A Systematic Review and Meta-Analysis


This systematic review (2004–2016) examined 26 articles on HIV prevalence in children (ages 0–5) identified through screening provided in inpatient, outpatient, nutrition, and immunization settings. Across sites, HIV prevalence was 15.6 percent, with the highest prevalence in inpatient sites, followed by nutrition centers, immunization centers, and then outpatient sites. Symptom-based versus universal testing in inpatient settings trended towards slightly higher HIV prevalence, but findings were not significant. Caregiver acceptance of testing was 92.2 percent. Agreement to testing was often attributed to concerns about the frequency of a child’s illness and a desire to learn a child’s HIV status; reasons for rejecting a test included anxiety about a potentially positive result, not being emotionally prepared, and needing to speak with the male partner before testing. Provider-initiated testing and counseling (PITC) was more likely to be provided in inpatient settings; recurrent trainings are needed to maintain PITC uptake. Rationales for not providing PITC included children’s young age, severe illness, and being overburdened with work. Inpatient settings had the highest retention in care as measured by parents returning for test results. The authors concluded that pediatric health services, outside the prevention of mother-to-child transmission context, represent an important avenue for identifying HIV-positive children, especially in settings that provide inpatient and nutrition services.

Promotion and Persistence of HIV Testing and HIV/AIDS Knowledge: Evidence from a Randomized Controlled Trial in Ethiopia


This study used data from a randomized controlled trial to determine voluntary counseling and testing (VCT) uptake among households exposed to HIV education, home-based VCT, or conditional cash transfers (CCTs) to incentivize clinic-based VCT. The authors developed four experimental groups: 1) home-based HIV education with VCT promotion; 2) home-based HIV education with VCT provided that day or within the following 10 days; 3) home-based HIV education for clinic-based VCT with CCT on receiving test results (to compensate for missed wages and required travel for clinic-based VCT); and 4) a control group. To examine recurrent HIV testing, the authors subsequently randomized the four groups into a group receiving home-based VCT and a clinic-based VCT group using CCT. The results showed that relative to those in the control group, individuals receiving home-based VCT, clinic-based VCT, and education only were 63, 57, and 8 times more likely, respectively, to know their status. Despite similar uptake in HIV testing between home- and clinic-based VCT, those who tested at home were more likely to have a positive test result. Previous history of HIV testing did not decrease the likelihood of future HIV testing uptake. The authors concluded that HIV testing uptake is most effective when HIV education is paired with home- or clinic-based VCT, and that VCT promotion campaigns should be linked to improved VCT access.
School, Supervision and Adolescent-Sensitive Clinic Care: Combination Social Protection and Reduced Unprotected Sex Among HIV-Positive Adolescents in South Africa


The study examined the impact of social protection provisions on unprotected sex among 1,060 HIV-positive adolescents eligible for treatment. Nine different types of social protection provisions were included. Cash/cash in-kind provisions comprised social cash transfers, past-week food security, free education, free food in school, and free clothing. Psychosocial provisions comprised positive parenting, strong parental supervision, support groups, and adolescent-sensitive care. Results showed that 18 percent of adolescents reported condomless sex at last intercourse; girls reported significantly higher rates of condomless sex than boys did. Among adolescents who provided a viral load, it was found that viral failure was strongly associated with condomless sex, indicating high risk of HIV transmission. Adolescents who received free education, strong parental supervision, and (particularly for girls) adolescent-sensitive care were less likely to have unprotected sex. The findings also indicated that adolescents exposed to free school, strong parental supervision, and adolescent-sensitive care were least likely to have condomless sex when exposed to all three of these interventions, and were incrementally more likely to have condomless sex when exposed to fewer social protection provisions.

View Abstract

HIV, Prisoners, and Human Rights


This review focused on criminal laws, policies, and practices around law enforcement and judicial systems, and their effect on rights to HIV prevention and treatment among incarcerated people at risk of or living with HIV. Nearly half of all new HIV infections occur among key populations, who are often arrested without reason, do not receive pretrial release, and are subject to biased sentencing and higher likelihood of imprisonment. Punitive law enforcement practices, such as exchanging sex for freedom, using possession of condoms as proof of sex work, and criminalizing harm reduction services, increase prisoners’ HIV risks. Prolonged incarceration periods increase HIV risk and reduce access to HIV treatment. Prisoners also face human rights violations, including overcrowding, sexual violence, and inadequate health care (including discontinuity of health services), that further increase their vulnerability. The quality of prison health services is low due to structural barriers, inadequate staffing, non-alignment between prison services and national standards and negative attitudes among providers. Often, HIV testing lacks confidentiality, and treatment and associated laboratory testing are not available. Limited discharge planning and linkages to post-prison clinical services lead to reduced adherence to HIV treatment and increased virologic failure, particularly among minority populations. The authors concluded that a foundational step is to address factors that lead to disproportionate incarceration of individuals at risk for HIV, as a way to minimize imprisonment and improve HIV outcomes.

View Abstract
The Perfect Storm: Incarceration and the High-Risk Environment Perpetuating Transmission of HIV, Hepatitis C Virus, and Tuberculosis in Eastern Europe and Central Asia


This review examined the junction of HIV, tuberculosis, hepatitis C virus (HCV), and imprisonment among people who inject drugs (PWID), and HIV risk factors that are associated with incarceration. The region of Eastern Europe and Central Asia is the only area where HIV incidence and mortality, largely associated with PWID, are increasing. In this region, opioid agonist therapies and needle and syringe exchange programs are banned or limited, and HIV diagnosis and treatment availability is limited. Modeling studies show that opioid agonist therapy would be the most cost-effective HIV prevention intervention, and would be even more effective when combined with HIV treatment. Criminalization of injection drug use, high HIV prevalence among PWID within prisons, and needle sharing facilitate high HIV transmission among prisoners. Policies that require PWID to register for opioid agonist therapy outside of prison, allow arrest for accessing harm reduction services, and criminalize same-sex behaviors and sex work increase the risk of arrest and imprisonment. The authors concluded that structural factors significantly contribute to the incarceration of vulnerable populations including PWID, increasing their risk of HIV. Approaches that reduce incarceration risk and increase availability of opioid agonist therapy during and after imprisonment have the potential to reduce HIV and HCV transmission among PWID in the criminal justice system.

View Abstract

Why Do Marital Partners of People Living with HIV Not Test for HIV? A Qualitative Study in Lusaka, Zambia


This qualitative study examined barriers to HIV testing for marriage partners of an HIV-positive person. The authors conducted interviews with 30 HIV-negative partners who refused testing and 10 health care providers and held a focus group discussion with 8 HIV counselors. The results showed that some partners identified self-perceived wellness as a reason not to test, although others voiced assumptions that they were already HIV-positive, given their partner’s status. Men discussed their fear of emasculation due to illness and medication, although they often took natural or traditional supplements to address symptoms of opportunistic infection. Both men and women avoided HIV testing out of concern that their partner would view a positive diagnosis as proof of infidelity. They also expressed concerns about the impact of HIV on their mental health and their lack of confidence in their ability to adhere to treatment. Many cited the misconception that antiretroviral treatment causes illness or death, and said that they preferred herbal and traditional medicine and faith healing. The authors concluded that increasing awareness of serodiscordant relationships and providing education on treatment and the benefits of HIV testing (despite feelings of wellness) could decrease barriers to testing among partners of seropositive persons.

View Full Study
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.

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