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This is the November 2017 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 program resources, tools, and curricula on HIV prevention.

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Substance Use and HIV Risk among Men Who Have Sex with Men in Africa: A Systematic Review


This systematic review of 68 studies examined associations between substance use and HIV among men who have sex with men (MSM) in sub-Saharan Africa. Only one of eight studies describing alcohol use found any link between alcohol use and HIV infection, though in one study alcohol consumption was marginally associated with lower pre-exposure prophylaxis adherence. One study found that alcohol consumption was associated with increased likelihood of numerous risky behaviors, including unprotected anal intercourse, multiple sexual partners, and lack of partner disclosure. The proportion of men reporting sex under the influence of alcohol ranged from 47.3 percent in South Africa to 77.5 percent in Kenya. Drug use and its association with HIV depended on the type of drug, whether/how it was injected, and HIV prevalence. The proportion of men reporting drug use ranged from 7 percent in the past year in Nigeria to 61.2 percent in the last three months in Zanzibar. Reported injection drug use ranged from 1.4 percent in Kenya to 13.9 percent in Tanzania, and was associated with having two or more male receptive partners, group sex, and symptoms of sexually transmitted infections. The authors concluded that future interventions for MSM should be contextually based on local alcohol and drug use practices and their link to risky sex.

View Abstract

Fertility Intentions, Pregnancy, and Use of PrEP and ART for Safer Conception among East African HIV Serodiscordant Couples


This study examined fertility desires, pregnancy incidence, use of antiretroviral therapy (ART) and pre-exposure prophylaxis (PrEP), and HIV transmission during pregnancy among 1,013 serodiscordant couples in Kenya and Uganda. The majority of couples (80 percent) reported wanting to have children in the future and 9 percent reported actively trying to become pregnant; 50 percent of women were not using any form of contraception. Couples reported having sex a median of five times monthly; 64 percent reported having sex without a condom at least once in the past month. Pregnancy incidence was 18.5/100 person-years for HIV-negative women, and 18.7/100 person-years for HIV-positive women. Ninety percent of women on ART had high adherence. In the six months prior to conception, 82.9 percent of couples used ART or PrEP consistently, 14.5 percent used ART or PrEP irregularly, and 2.6 percent did not use anything. Among consistent users, 31.7 percent used both PrEP and ART, 21.7 percent only used PrEP, and 46.6 percent only used ART. There were no seroconversions in the six months prior to pregnancy; during pregnancy, three women and one man were diagnosed with HIV. One of the women reported the pregnancy as unplanned and had no detectable tenofovir levels. The authors concluded that integrating sexual and reproductive health and HIV prevention services can meet the needs of serodiscordant couples who wish to conceive.

View Abstract
The Relationship between Health Worker Stigma and Uptake of HIV Counseling and Testing and Utilization of Non-HIV Health Services: The Experience of Male and Female Sex Workers in Kenya


This study examined sex work-associated stigma from health care workers (HCWs) directed toward male and female sex workers (MSWs and FSWs) and the impact of stigma on uptake of HIV counseling and testing (HCT) services and non-HIV-health-related services. A total of 497 FSWs and 232 MSWs were interviewed in four counties across Kenya. Half of the participants reported expecting to be stigmatized by an HCW in the past 12 months. Around half of FSWs and MSWs reported experiencing verbal stigma from HCWs; 72 percent of FSWs and 54 percent of MSWs reported experiencing any form of stigma. MSWs and FSWs who experienced stigma were more likely to avoid HCT and men were also more likely to delay HCT. FSWs and MSWs who experienced stigma were more likely to delay non-HIV-health-related services, and FSWs who anticipated stigma were more likely to avoid non-HIV-health-related services. The authors concluded that addressing HCWs' stigma toward key populations is critical to achieving the goal of having 90 percent of all people know their HIV status.

*View Abstract*
Xpert HIV-1 Point-of-Care Test for Neonatal Diagnosis of HIV in the Birth Testing Programme of a Maternity Hospital: A Field Evaluation Study


This study described point-of-care testing (POCT) for HIV-exposed newborns and compares outcomes to universal laboratory-based testing (LABT). Mothers of 3,097 infants agreed to participate; 2,238 of these infants concurrently received POCT and LABT. Of the 3,970 infants undergoing LABT at birth, 57 were positive. Of the 2,238 infants undergoing POCT, 32 were positive. All infants identified as HIV-positive by LABT were also identified by POCT. There were two false positives among infants undergoing POCT. For LABT, median turnaround time from blood draw to return of result was 43 hours; for POCT it was 2.6 hours. Mothers whose infants received POCT and LABT received their results in 96 percent of cases, while only 53 percent of mothers whose infants received LABT received their results. Of the 30 infants diagnosed through POCT as HIV-positive, all mothers received the result, and all infants started antiretroviral therapy (ART). Of the 27 infants diagnosed through LABT as HIV-positive, 24 mothers received the result, and all of their infants started ART. Infants diagnosed via POCT initiated treatment earlier than infants diagnosed via LABT (one day versus six days). The authors concluded that POCT is accurate, increases the likelihood of the mother receiving the result, reduces waiting time for the result, and decreases time to ART initiation.

View Abstract

Comparative Efficacy and Safety of Second-Line Antiretroviral Therapy for Treatment of HIV/AIDS: A Systematic Review and Network Meta-Analysis


This systematic review assessed the safety and efficacy of second-line antiretroviral treatment (ART) options after failure of non-nucleoside reverse transcriptase inhibitor (NNRTI)-based first-line treatment for adolescents and adults. It was conducted to inform the World Health Organization (WHO) 2016 HIV treatment guidelines. Ritonavir-boosted atazanavir plus two nucleoside reverse transcriptase inhibitors (NRTIs) was found slightly more effective than the ritonavir-boosted lopinavir plus two NRTIs. Worse viral outcomes were found for ritonavir-boosted lopinavir (with and without raltegravir) than for any other regimen. At 48 and 96 weeks, viral suppression was similar between ritonavir-boosted lopinavir with raltegravir and ritonavir-boosted lopinavir and two NRTIs. At 48 weeks, ritonavir-boosted atazanavir plus two NRTIs was more effective than ritonavir-boosted lopinavir. At 48 weeks and 96 weeks, average CD4 cell count increase was higher with ritonavir-boosted lopinavir plus raltegravir than with ritonavir-boosted lopinavir and two NRTIs. Mortality at last visit, and presence of AIDS-defining illnesses, did not significantly differ between regimens. There was no evidence that ritonavir-boosted darunavir is more effective than WHO’s current recommendation. The authors concluded that the current WHO approach to viral failure, ritonavir-boosted atazanavir or lopinavir plus two NRTIs, is appropriate. However, more research is needed to identify other potential second-line ART regimens.

View Abstract
Care Requirements for Clients Who Present after Rape and Clients Who Presented After Consensual Sex as a Minor at a Clinic in Harare, Zimbabwe, from 2011 to 2014


This study (2011–2014) examined the differences in care needs between adolescents who were raped and those who had consensual sex at a sexual and gender-based violence clinic in Zimbabwe. Of the study’s 3,617 individual patients, 26 percent were under 12 years old, 43 percent were 12–15, and 30 percent were ≥16. Sixty-two percent accessed services due to rape. Only half of clients attended follow-up appointments; rape survivors were more likely to follow up. Factors that increased the likelihood of using services within 72 hours (making them eligible for post-exposure prophylaxis, or PEP) included sexual violence by an unknown perpetrator, a referral from police, a physical injury, experiencing violence, and being over age 16. Symptoms of a sexually transmitted infection and pregnancy were associated with service access after 72 hours. Eighty-two percent of eligible individuals received PEP. Rape survivors were more likely to use emergency contraception and to terminate a pregnancy. The authors concluded that care needs are different for minors who consent to sex and those who experience rape. Consenting minors may benefit more from long-term family planning and HIV testing to identify serodiscordant relationships, whereas rape survivors need quick access to PEP and emergency contraception.

View Full Study

Combination Prevention

“I Think It Is Right”: A Qualitative Exploration of the Acceptability and Desired Future Use of Oral Swab and Finger-Prick HIV Self-Tests by Lay Users in KwaZulu-Natal, South Africa


This qualitative study examined the acceptability and usability of HIV self-testing (HIVST) prototypes (including oral swab and finger-prick) among 50 lay-users in South Africa. Eighty percent found the tests easy to use, regardless of prototype. Respondents praised the convenience and confidentiality of HIVST and liked that they could test alone. A few respondents mentioned a need for counseling, information, and follow-up, suggesting several solutions, including printed counseling inside the test package, SMS messaging, and a telephone number to call. Suggestions for future HIVST use included improved instructions for finger-prick tests, though some respondents expressed concerns about the pain associated with the finger-prick. Participants felt that HIVST should be offered free of charge, or made available to buy at health facilities, pharmacies, or supermarkets. Ninety-eight percent stated that they would use the HIVST again if it was free, and 86 percent would purchase an HIVST. The 14 percent who were neutral or would not buy a test used the finger-prick test. Respondents said that HIVST would likely encourage greater testing coverage. The authors concluded that HIVST is acceptable among lay users, and that the oral swab was found the most acceptable. Policymakers should further consider these findings when considering the rollout of HIVST.

View Full Study
When Are Declines in Condom Use While Using PrEP a Concern? Modelling Insights from a Hillbrow, South Africa Case Study


This modeling study assessed the possible outcomes of behavioral disinhibition (specifically, reduced use of condoms) related to the use of pre-exposure prophylaxis (PrEP) among female sex workers (FSWs) in South Africa. The authors modeled outcomes of PrEP and condom use based on three scenarios: 1) an FSW and her clients; 2) an FSW and her clients while accounting for exposure to sexually transmitted infection (STI); and 3) an FSW, her clients, and regular partners while accounting for STI exposure.

Analysis of interactions with clients showed that if the effectiveness of PrEP use equaled or exceeded that of condom use, the FSW could stop using condoms without increasing HIV risk. FSWs who used condoms less than half the time (and thus had greater exposure to STIs) had reduced HIV risk if their adherence to PrEP was high. Analysis of the “clients and regular partners” scenario showed that FSWs with low baseline condom use, or with high PrEP effectiveness, had minimal HIV risk when reducing condom use. However, the authors cautioned that their study did not address the potential for developing resistance, or the effects of different stages of disease. Programmers should prioritize reaching FSWs who have high condom use and limited expected PrEP adherence, and provide support for PrEP adherence and continued condom use.

View Full Study

HIV Testing and the Care Continuum among Transgender Women: Population Estimates from Rio de Janeiro, Brazil


This study estimated population-level indicators for the HIV care cascade and elements associated with viral suppression among transwomen in Rio de Janeiro, Brazil. The authors conducted a secondary analysis of a respondent-driven sampling study among 141 self-identified transwomen. Among these women, 89.2 percent had been tested for HIV, 77.5 percent had been diagnosed with HIV, 67.2 percent had been linked to care, 62.2 percent were on antiretroviral treatment (ART), and 35.4 percent had an undetectable viral load. Among the 101 transwomen who knew their HIV status, 80 percent were on ART, and 45 percent had an undetectable viral load. Transwomen who knew their HIV status and were on ART had a higher CD4 count than those who knew their status and were not on ART (695 cells/mm$^3$ versus 398 cells/mm$^3$). Nine transwomen had not been linked to care. Transwomen who were black, earned <$US$160/month, or reported unstable housing were less likely to achieve viral suppression. Only around 12 percent of transwomen had access to trans-specific health care services. The authors concluded that transwomen experience significantly lower rates of viral suppression compared to other populations. Focused interventions are required that help them to link to and engage in HIV care and treatment services.

View Full Study


This clinical trial tested an assessment and protocol among 255 women who had experienced intimate partner violence (IPV) and tested HIV-positive during mobile counseling and testing in South Africa. Women in the control group (n=83) received the standard of care (SOC) including mobile testing, “edutainment,” and call center linkages to care. Women in the intervention group (n=167) received SOC plus either a risk assessment and safety plan or a risk assessment, safety plan, and a follow-up safety plan. During the pre-test, almost all women reported nonviolent controlling acts; 41 percent reported physical abuse, 45 percent sexual abuse, and 67 percent physical or sexual abuse. Nearly 42 percent linked to services within 30 days of testing. SOC group participants were less likely to link to care (particularly women ≤23 years, and 33–44 years) than in either of the intervention groups. The majority found the intervention as helpful, and 80 percent reported using at least one safety strategy. Intervention participants experienced less violence than SOC group participants (98 percent versus 88 percent) when notifying their partner of their HIV status; but women in both groups reported still feeling unsafe getting to medical appointments. The authors concluded that women in the intervention groups were four times less likely to experience violence after they notified their partner, but given the small effect size, more research is needed.

Scaling a Waterfall: A Meta-Ethnography of Adolescent Progression through the Stages of HIV Care in Sub-Saharan Africa


This meta-analysis of 24 qualitative studies examined prominent issues that affect initiation and retention in care for adolescents living with HIV (ALHIV) in sub-Saharan Africa. All studies identified anticipated, internal, and external stigma as having significant negative impacts on receiving test results, treatment initiation and retention, and adherence. Diminished self-efficacy interfered with HIV testing and self-care behaviors, including adherence. Insufficient family support led to lack of full disclosure to ALHIV, lack of consent for ALHIV to access health services, and neglect or abuse. When available, community-based social support positively influenced engagement in the care cascade. Services that cater to ALHIV’s needs and increase retention in the care cascade include youth-friendly hours, trained health care workers, and integrated sexual and reproductive health services. Past experiences with illness also served as a reminder for ALHIV to remain adherent and engaged. Financial instability reduced ALHIV’s ability to pay for transport and food. The authors noted that mass media were effective in reaching ALHIV, but did not always translate to changed behaviors. The authors said that while there are multiple barriers for ALHIV, stigma is the most pervasive, affecting engagement in each step of the care cascade. They urged prioritizing psychosocial interventions to increase ALHIV’s engagement in care.

View Abstract

View Full Study
Evaluation of a Male Engagement Intervention to Transform Gender Norms and Improve Family Planning and HIV Service Uptake in Kabale, Uganda


This study examined a male engagement intervention that sought to change harmful gender norms, attitudes, and behaviors that influence women’s family planning (FP) and HIV service uptake in Uganda. In the community-based arm of the intervention, 32 men in the community were recruited to increase their male community members’ FP and HIV knowledge, encourage their use of health services, and reduce harmful gender norms. In the facility-based arm, HIV counseling and testing providers were trained to counsel both men and women on FP and provide HIV testing for couples. The Gender Equitable Men (GEM) scale measured the interventions’ impact. Post-intervention findings indicated some small, but significant shifts toward more equitable gender norms; but overall, the intervention did not create real changes in gender equity. There was little change in GEM items pertaining to childrearing responsibility, contraceptive decision-making, and women tolerating violence to keep their family together. However, respondents reported increases in condom use, HIV testing, discussions of contraception between partners, and health-seeking behaviors for themselves, and were more likely to accompany their partner to services. Future interventions should conduct a field test to inform adaptation before rollout, invest more time in training peer educators, and consider using existing community health workers as peer educators.

View Abstract

Policy-Maker Attitudes to the Ageing of the HIV Cohort in Botswana


This qualitative study examined the attitudes of Botswanan policymakers (n=15: providers and staff of the Ministry of Health and nongovernmental organizations, or NGOs, involved in developing policies) toward HIV-positive adults aged 50 years and older. Interviews revealed that although activism and coordination with civil society organizations often influence government leaders, there are no elderly activists, and NGOs do not focus on older people. Respondents noted that though health care for the elderly is important, there are no geriatric services, nursing homes, or other specialized services available. It is assumed that family will take care of their elders. Yet urban migration leaves the elderly vulnerable as their families move away. Integrated services are needed that link facility- and community-based health services with mental, spiritual, and social health care for this population. Interviewees described the need to either integrate elder care services, or to simply expand siloed HIV care to include older adults. Providers of preventive services overlook the elderly because they assume that they are not sexually active. HIV interventions mainly focus on preventing HIV among younger populations versus preventing HIV or providing services to older adults who are living with a chronic HIV infection. HIV policy should be adapted to reflect the changing epidemic in Botswana and address the needs of the elderly.

View Abstract
HIV Incidence and Predictors of HIV Acquisition from an Outside Partner in Serodiscordant Couples in Lusaka, Zambia


This study examined incidence of HIV infection from an outside partner and factors associated with HIV acquisition among cohabiting serodiscordant couples in Zambia. Among 3,049 serodiscordant couples, 478 tested HIV-positive; and analysis showed that 100 of these were infected by an outside partner. Men were more likely than women to contract HIV from an outside partner (24 percent versus 18 percent). Women who remained HIV-negative were more likely than those who acquired HIV through an outside partner to be older and have more children, and to have lived with their partner for a longer time. Women who seroconverted with an outside partner were poorer, less educated; and more likely to drink heavily, have a history of sexually transmitted infections (STIs) or genital ulceration or inflammation, and use oral contraceptive pills. Men who acquired HIV from an outside partner were more likely than those who remained negative to be younger and poorer, drink more heavily, and have a history of an STI or genital ulceration or inflammation. Pre-exposure prophylaxis interventions among serodiscordant couples may need to be adapted when outside sexual relationships are present. HIV-negative partners in serodiscordant relationships should also be routinely screened for STIs and genital inflammation to reduce HIV risk.

View Full Study

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HIV Continuum of Care in Europe and Central Asia


This report assessed how the HIV continuum of care is measured across 55 European and Central Asian countries. It includes quantitative data from 40 countries; the data most often provided were the number of people diagnosed with HIV and the number of people on antiretroviral treatment (ART). Most countries defined “diagnosed with HIV” as a cumulative number ever diagnosed, without excluding individuals who may have died. Countries defined “linkage to care” in multiple ways, including registration and having specified lab tests or CD4 cell count results. The definition of “retained in care” also varied, including one visit/year and having a visit within one year of enrollment. The definition of “on treatment and undetectable viral load (VL)” most often included the number of individuals ever on ART, or on ART at the end of the year. There was a wide range of VL thresholds, from <20 to <500 copies/mL. Among countries reporting data, cumulative estimates indicated that 76 percent of people living with HIV (PLHIV) are diagnosed, 78 percent of diagnosed PLHIV are on treatment, and 88 percent of PLHIV on treatment are virally suppressed. Globally, however, only 53 percent of all PLHIV are virally suppressed. Countries need to identify standard definitions for each step within the continuum of care to improve planning for HIV testing and treatment programs in Europe and Central Asia.

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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 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@aids-free.org. The selection of material, the summaries, and any other editorial comments are the responsibility of the Editorial Board and do not represent any official endorsement by AIDSFree or USAID. The authors and/or publishers retain copyright of the original published materials.

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