Welcome to HIV this month! In this issue, we cover the following topics:

1. HIV testing and treatment
   - Assisted partner services a safe, effective strategy to identify undiagnosed HIV cases in sub-Saharan Africa
   - Peer support: not a panacea for poor adherence
   - Thymidine analogue mutations associated with extensive resistance in African people failing on tenofovir
   - Home-based HIV testing more effective than community testing, but fewer linked to care
   - At the halfway mark? Community viral suppression in East Africa
   - Creating welcoming spaces for men’s active involvement
   - ART has dramatically improved life expectancy for people living with HIV in KwaZulu-Natal, South Africa

2. Combination prevention
   - A step forward for HIV prevention in women
   - Study finds rectal gel to be safe in men, but not as acceptable for daily use

3. Key populations
   - MSM resilience to HIV
   - The hope and reality of injecting drug use among people living with HIV in Ukraine

4. Elimination of gender inequalities
   - High prevalence of gender based violence among adolescent female sex workers - need to improve access to health services

5. Financing
   - The Affordable Care Act at work – increasing health care access for people living with HIV in California
   - Community-based HIV testing for MSM: available at an acceptable cost in Europe
   - Is universal antenatal HIV testing still cost-effective?
6. Health systems and services

- Adolescents’ concerns: psychosocial needs of young people living with HIV in Thailand

To find out how you can access a majority of scientific journals free of charge, check the UNAIDS Science now website by clicking here. If you would like to subscribe to HIV this month issues, click here. Please let us know what your interests are and what you think of HIV this month by sending us an email here. If you would like to recommend an article for inclusion, please contact us. Remember, a wealth of information on the HIV epidemic and responses to it are accessible at www.unaids.org.

Peter Godfrey-Faussett and Celeste Sandoval
UNAIDS

UNAIDS is not responsible for the content of Science now or for any external publications, papers, reviews or internet sites linked to or referred to in the site. Any views or opinions expressed herein are those of the editors and not of UNAIDS.

Science now is a free service. When you register to make comments you are therefore agreeing with this disclaimer. Any copying, redistribution or republication of HIV this month, the Science now digest, for commercial gain is strictly prohibited.

HIV this month, published by UNAIDS, is a selective scan of new HIV-related information found in scientific journals. The Editors of HIV this month interpret original abstracts and provide editorial comment, so that information may be easily understood by people responding to the HIV epidemic in many diverse settings. The selection of material, its abridgement and other editorial changes, and also the original editorial comment are the responsibility of the Editors and do not represent any official statement of UNAIDS. It should be noted that (except for open access journals, e.g. PLoS) the authors and/or publishers retain copyright in the original published material to which HIV this month refers.
1. HIV testing and treatment

Assisted partner services for HIV in Kenya: a cluster randomised controlled trial.


Background: Assisted partner services for index patients with HIV infections involves elicitation of information about sex partners and contacting them to ensure that they test for HIV and link to care. Assisted partner services are not widely available in Africa. We aimed to establish whether or not assisted partner services increase HIV testing, diagnoses, and linkage to care among sex partners of people with HIV infections in Kenya.

Methods: In this cluster randomised controlled trial, we recruited non-pregnant adults aged at least 18 years with newly or recently diagnosed HIV without a recent history of intimate partner violence who had not yet or had only recently linked to HIV care from 18 HIV testing services clinics in Kenya. Consenting sites in Kenya were randomly assigned (1:1) by the study statistician (restricted randomisation; balanced distribution in terms of county and proximity to a city) to immediate versus delayed assisted partner services. Primary outcomes were the number of partners tested for HIV, the number who tested HIV positive, and the number enrolled in HIV care, in those who were interviewed at 6 week follow-up. Participants within each cluster were masked to treatment allocation because participants within each cluster received the same intervention. This trial is registered with ClinicalTrials.gov, number NCT01616420.

Findings: Between Aug 12, 2013, and Aug 31, 2015, we randomly allocated 18 clusters to immediate and delayed HIV assisted partner services (nine in each group), enrolling 1305 participants: 625 (48%) in the immediate group and 680 (52%) in the delayed group. 6 weeks after enrolment of index patients, 392 (67%) of 586 partners had tested for HIV in the immediate group and 85 (13%) of 680 had tested in the delayed group (incidence rate ratio 4.8, 95% CI 3.7-6.4). 136 (23%) partners had new HIV diagnoses in the immediate group compared with 28 (4%) in the delayed group (5.0, 3.2-7.9) and 88 (15%) versus 19 (3%) were newly enrolled in care (4.4, 2.6-7.4). Assisted partner services did not increase intimate partner violence (one intimate partner violence event related to partner notification or study procedures occurred in each group).

Interpretation: Assisted partner services are safe and increase HIV testing and case-finding; implementation at the population level could enhance linkage to care and antiretroviral therapy initiation and substantially decrease HIV transmission.

Abstract access

Editor’s notes: One of the greatest challenges to achieving goals such as the UNAIDS 90:90:90 treatment target is the development of more effective strategies to enable people undiagnosed living with HIV to be tested and engaged with care. One strategy for achieving this in high-income settings, albeit with a very limited evidence base, is assisted partner services. In this approach, health-care workers identify and attempt to contact the sexual partners of people recently diagnosed with HIV. These partners are then encouraged to be tested and engaged with care. This pragmatic cluster randomised study, conducted in Kenya, aimed to assess whether assisted partner services were feasible in a sub-Saharan African setting and if so, to measure the effectiveness in terms of additional individuals testing for HIV, receiving new HIV diagnoses and engaging with care as a result of the programme.
The results were striking, in that six weeks after enrolment almost five times as many partners of index cases in the immediate group (partners contacted at enrolment) had been tested for HIV compared to the delayed group (partners contacted six weeks after enrolment). There were five times as many new HIV diagnoses in the immediate group compared to the delayed group. There were also four times as many partners newly engaged with care in the immediate arm compared to the delayed arm. There was also no evidence that the tracing of sexual partners led to an increase in intimate partner violence.

These results illustrate that assisted partner services can make an important contribution to identifying people living with HIV who are undiagnosed, enabling people to get tested and engaged with care in a low-income setting. A major challenge, identified by the study authors, is whether the human resources would be available in already highly stretched settings to implement this strategy. They suggest that task shifting from professional healthcare providers to a less highly educated cadre of workers would be feasible and point to other areas of care such as safe male circumcision and ART delivery, where this has been successfully achieved.

Use of peers to improve adherence to antiretroviral therapy: a global network meta-analysis.


Introduction: It is unclear whether using peers can improve adherence to antiretroviral therapy (ART). To construct the World Health Organization's global guidance on adherence interventions, we conducted a systematic review and network meta-analysis to determine the effectiveness of using peers for achieving adequate adherence and viral suppression.

Methods: We searched for randomized clinical trials of peer-based interventions to promote adherence to ART in HIV populations. We searched six electronic databases from inception to July 2015 and major conference abstracts within the last three years. We examined the outcomes of adherence and viral suppression among trials done worldwide and those specific to low- and middle-income countries (LMIC) using pairwise and network meta-analyses.

Results and discussion: Twenty-two trials met the inclusion criteria. We found similar results between pairwise and network meta-analyses, and between the global and LMIC settings. Peer supporter+Telephone was superior in improving adherence than standard-of-care in both the global network (odds-ratio [OR]=4.79, 95% credible intervals [CrI]: 1.02, 23.57) and the LMIC settings (OR=4.83, 95% CrI: 1.88, 13.55). Peer support alone, however, did not lead to improvement in ART adherence in both settings. For viral suppression, we found no difference of effects among interventions due to limited trials.

Conclusions: Our analysis showed that peer support leads to modest improvement in adherence. These modest effects may be due to the fact that in many settings, particularly in LMICs, programmes already include peer supporters, adherence clubs and family disclosures for treatment support. Rather than introducing new interventions, a focus on improving the quality in the delivery of existing services may be a more practical and effective way to improve adherence to ART.

Abstract Full-text [free] access

Editor's notes: Sustained adherence to antiretroviral therapy (ART) is critical to ensure successful treatment outcomes and prevent drug resistance, AIDS-associated illness, death and onward transmission of HIV infection. In recent years, there has been much enthusiasm for use of peer
support as a programme to improve adherence. Most high HIV prevalence settings have limited resources. Stigma influences adherence to treatment, and peer-based support may be a practical solution both in terms of being low cost and a mechanism for addressing stigma.

In this systematic review, the authors evaluated the effectiveness of peer-supporter programmes alone or in combination with other activities, namely telephone calls, device reminders or cognitive behavioural therapy (CBT), globally and in low- and middle-income countries (LMIC). The systematic review findings were used to inform the 2015 World Health Organization HIV treatment guidelines.

The study demonstrates that peer support alone did not have any impact on adherence or on viral suppression. It did demonstrate modest improvements on adherence when combined with telephone activities. Several factors need to be considered in interpreting these findings. Firstly, adherence was assessed using a variety of methods including pill counts and the Medication Event Monitoring System (MEMS), which may have introduced heterogeneity. Secondly, few trials (particularly in LMICs) used HIV viral load as an outcome and therefore there may not have been adequate statistical power to detect an effect. Thirdly, populations included in the review were heterogeneous e.g. ART-naïve and experienced, people who inject drugs, non-adherent individuals. Notably, only one trial included children and adolescents among whom adherence is typically poorer.

Importantly, in many settings particularly in LMICs, programmes already include treatment supporters and adherence clubs and therefore additional peer support would likely not add additional impact. The findings of this study suggest that programmes should focus on improving the quality of existing services rather than introduce new programmes. The review also highlights the need to standardise adherence measures and the need for robust research on adherence, particularly among children.

Occult HIV-1 drug resistance to thymidine analogues following failure of first-line tenofovir combined with a cytosine analogue and nevirapine or efavirenz in sub-Saharan Africa: a retrospective multi-centre cohort study.


Background: HIV-1 drug resistance to older thymidine analogue nucleoside reverse transcriptase inhibitor drugs has been identified in sub-Saharan Africa in patients with virological failure of first-line combination antiretroviral therapy (ART) containing the modern nucleoside reverse transcriptase inhibitor tenofovir. We aimed to investigate the prevalence and correlates of thymidine analogue mutations (TAM) in patients with virological failure of first-line tenofovir-containing ART.

Methods: We retrospectively analysed patients from 20 studies within the TenoRes collaboration who had locally defined viral failure on first-line therapy with tenofovir plus a cytosine analogue (lamivudine or emtricitabine) plus a non-nucleoside reverse transcriptase inhibitor (NNRTI; nevirapine or efavirenz) in sub-Saharan Africa. Baseline visits in these studies occurred between 2005 and 2013. To assess between-study and within-study associations, we used meta-regression and meta-analyses to compare patients with and without TAMs for the presence of resistance to tenofovir, cytosine analogue, or NNRTIs.

Findings: Of 712 individuals with failure of first-line tenofovir-containing regimens, 115 (16%) had at least one TAM. In crude comparisons, patients with TAMs had lower CD4 counts at treatment initiation than did patients without TAMs (60.5 cells per µL [IQR 21.0-128.0] in patients with TAMS vs 95.0 cells per µL [37.0-177.0] in patients without TAMs; p=0.007) and were more likely to
have tenofovir resistance (93 [81%] of 115 patients with TAMs vs 352 [59%] of 597 patients without TAMs; p<0.0001), NNRTI resistance (107 [93%] vs 462 [77%]; p<0.0001), and cytosine analogue resistance (100 [87%] vs 378 [63%]; p=0.0002). We detected associations between TAMs and drug resistance mutations both between and within studies; the correlation between the study-level proportion of patients with tenofovir resistance and TAMs was 0.64 (p<0.0001), and the odds ratio for tenofovir resistance comparing patients with and without TAMs was 1.29 (1.13-1.47; p<0.0001).

Interpretation: TAMs are common in patients who have failure of first-line tenofovir-containing regimens in sub-Saharan Africa, and are associated with multidrug resistant HIV-1. Effective viral load monitoring and point-of-care resistance tests could help to mitigate the emergence and spread of such strains.

Abstract Full-text [free] access

Editor’s notes: Since 2012, WHO has recommended that tenofovir should be included in first-line antiretroviral therapy, in place of the thymidine analogues, zidovudine and stavudine, which have more significant adverse effects. When therapy fails to maintain virologic control, tenofovir is associated with characteristic resistance mutations that are different from the thymidine analogue mutations (TAMs) associated with the older drugs. This study looked at the resistance patterns of people in Africa with virologic failure after starting on WHO recommended first-line combination including tenofovir and a non-nucleoside reverse transcriptase inhibitor (NNRTI). TAMs were surprisingly common (16%) for a group who were not known to have received thymidine analogues. This is not what would be expected from this drug combination. The implication is that TAMs may have been present before tenofovir-containing treatment was started, possibly because of undeclared previous therapy. It is well known that TAMs make subsequent therapy with an NNRTI and nucleoside analogues very much more likely to fail. The presence of TAMs was associated with more extensive resistance to other drugs including lamivudine and NNRTIs, some of which may also have been present before the tenofovir based treatment.

Only people with treatment failure were studied. The total number entering into treatment is not recorded. However, based on other reports in Africa, the authors speculate a failure rate of 15 to 35% and that they may therefore have found TAMs in two to six percent of people who started treatment. That seems a realistic figure for undeclared prior treatment and gives some perspective to the scale of this problem.

There is continuing concern about drug resistance in low- and middle-income countries. As the thymidine analogues are phased out, people receiving them may be switched to tenofovir. In situations where there is no access to viral load monitoring, some people will have unrecognised virologic failure and may have developed resistance including TAMs. They are then likely to fail on tenofovir with additional resistance. Realistic strategies are necessary for the prompt detection of treatment failure.

A comparison of home-based versus outreach event-based community HIV testing in Ugandan fisherfolk communities.


We compared two community-based HIV testing models among fisherfolk in Lake Victoria, Uganda. From May to July 2015, 1364 fisherfolk residents of one island were offered (and 822 received)
home-based testing, and 344 fisherfolk on another island were offered testing during eight community mobilization events (outreach event-based testing). Of 207 home-based testing clients identified as HIV-positive (15% of residents), 82 were newly diagnosed, of whom 31 (38%) linked to care within 3 months. Of 41 who screened positive during event-based testing (12% of those tested), 33 were newly diagnosed, of whom 24 (75%) linked to care within 3 months. Testing costs per capita were similar for home-based ($45.09) and event-based testing ($46.99). Compared to event-based testing, home-based testing uncovered a higher number of new HIV cases but was associated with lower linkage to care. Novel community-based test-and-treat programs are needed to ensure timely linkage to care for newly diagnosed fisherfolk.

Abstract access

Editor’s notes: Regular and reliable HIV testing is necessary to ensure that people who need antiretroviral treatment know their status. When someone tests positive for HIV, it is critical that they are linked to care. This study compares two different types of HIV testing among fisherfolk in Uganda – home-based and community event-based testing. The authors find that home-based testing uncovered more people living with HIV than community event-based testing, but a lower proportion of people were successfully linked to care. The costs of both types of testing were similar. Fewer new people living with HIV were identified through community event-based testing. People who know that they are HIV positive are perhaps more likely to attend such events than people who have not sought to be tested recently, or who are HIV negative. Home-based testing requires less effort from persons receiving a test, and therefore may reach people less likely to test independently. This study further emphasises that linkage to care is a critical step in the HIV treatment cascade.

Population levels and geographical distribution of HIV RNA in rural Ugandan and Kenyan communities, including serodiscordant couples: a cross-sectional analysis.


Background: As sub-Saharan Africa transitions to a new era of universal antiretroviral therapy (ART), up-to-date assessments of population-level HIV RNA suppression are needed to inform interventions to optimise ART delivery. We sought to measure population viral load metrics to assess viral suppression and characterise demographic groups and geographical locations with high-level detectable viraemia in east Africa.

Methods: The Sustainable East Africa Research in Community Health (SEARCH) study is a cluster-randomised controlled trial of an HIV test-and-treat strategy in 32 rural communities in Uganda and Kenya, selected on the basis of rural setting, having an approximate population of 10 000 people, and being within the catchment area of a President’s Emergency Plan for AIDS Relief-supported HIV clinic. During the baseline population assessment in the SEARCH study, we did baseline HIV testing and HIV RNA measurement. We analysed stable adult (aged ≥15 years) community residents. We defined viral suppression as a viral load of less than 500 copies per mL. To assess geographical sources of transmission risk, we established the proportion of all adults (both HIV positive and HIV negative) with a detectable viral load (local prevalence of viraemia). We defined transmission risk hotspots as geopolitical subunits within communities with an at least 5% local prevalence of viraemia. We also assessed serodiscordant couples, measuring the proportion of
HIV-positive partners with detectable viraemia. The SEARCH study is registered with ClinicalTrials.gov, number NCT01864603.

Findings: Between April 2, 2013, and June 8, 2014, of 303,461 stable residents, we enumerated 274,040 (90.3%), of whom 132,030 (48.2%) were adults. Of these, 117,711 (89.2%) had their HIV status established, of whom 11,964 (10.2%) were HIV positive. Of these, we measured viral load in 8828 (73.8%) people. Viral suppression occurred in 3427 (81.6%) of 4202 HIV-positive adults on ART and 4490 (50.9%) of 8828 HIV-positive adults. Regional viral suppression among HIV-positive adults occurred in 881 (48.2%) of 1827 people in west Uganda, 516 (45.0%) of 1147 in east Uganda, and 3093 (52.8%) of 5854 in Kenya. Transmission risk hotspots occurred in three of 21 parishes in west Uganda and none in east Uganda and in 24 of 26 Kenya geopolitical subunits. In Uganda, 492 (2.9%) of 16,874 couples were serodiscordant: in 287 (58.3%) of these couples, the HIV-positive partner was viraemic (and in 69 [14.0%], viral load was >100,000 copies per mL). In Kenya, 859 (10.0%) of 8,616 couples were serodiscordant: in 445 (53.0%) of these couples, the HIV-positive partner was viraemic (and in 129 [15%], viral load was >100,000 copies per mL).

Interpretation: Before the start of the SEARCH trial, 51% of east African HIV-positive adults had viral suppression, reflecting ART scale-up efforts to date. Geographical hotspots of potential HIV transmission risk and detectable viraemia among serodiscordant couples warrant intensified interventions.

Abstract access

Editor’s notes: Half of all people living with HIV with a valid viral load measurement in these east African communities had viral suppression (<500 copies/mL) at the start of this cluster randomised trial in 2013-14. These results already provided good evidence of the effectiveness and impact of antiretroviral programmes in east Africa. However, at the AIDS conference in July 2016 the study group presented updated results following two years of a universal test and treat (UTT) strategy with expansion of community-based HIV testing services (access abstract here). By this point, the UNAIDS 90-90-90 treatment target had been exceeded in the study communities and, overall, 82% of people living with HIV had viral suppression.

These results highlight the role of community viral load metrics as indicators of programme impact. What gives rise to more debate is the role of these metrics in estimating the risk of ongoing HIV transmission in the community. Consensus seems to be emerging that the population prevalence of viraemia may be the metric best suited for this purpose. In this study, the estimated population prevalence of viraemia varied quite widely from 0.5 to 14.1% at the level of local communities (of between around 500 and 5000 people). This measure was also used to define several transmission hotspots, based on an arbitrary cut-off of five percent prevalence of viraemia.

Additional research is necessary in different epidemiological contexts to understand the association between these metrics and risk of HIV transmission. There is also some way to go to understand if such metrics can have practical public health implications for HIV prevention. Whether revealing such heterogeneity in transmission risk within generalized epidemics can inform the application of geographically focussed programmes is a question that now should be addressed.

What do you need to get male partners of pregnant women tested for HIV in resource limited settings? The baby shower cluster randomized trial.

Male partner involvement has the potential to increase uptake of interventions to prevent mother-to-child transmission of HIV (PMTCT). Finding cultural appropriate strategies to promote male partner involvement in PMTCT programs remains an abiding public health challenge. We assessed whether a congregation-based intervention, the Healthy Beginning Initiative (HBI), would lead to increased uptake of HIV testing among male partners of pregnant women during pregnancy. A cluster-randomized controlled trial of forty churches in Southeastern Nigeria randomly assigned to either the HBI (intervention group; IG) or standard of care referral to a health facility (control group; CG) was conducted. Participants in the IG received education and were offered onsite HIV testing. Overall, 2498 male partners enrolled and participated, a participation rate of 88.9%. Results showed that male partners in the IG were 12 times more likely to have had an HIV test compared to male partners of pregnant women in the CG (CG = 37.71% vs. IG = 84.00%; adjusted odds ratio = 11.9; p < .01). Culturally appropriate and community-based interventions can be effective in increasing HIV testing and counseling among male partners of pregnant women.

Abstract

Editor's notes: Barriers to male partner participation in antenatal care in sub-Saharan Africa include the timing of antenatal services during work hours and negative health care provider attitudes. Importantly, they also include gender norms against male participation that are anchored in deep-seated perceptions that pregnancy is a woman’s affair. This highly successful trial resulted in verified HIV testing by 84% of male partners in the programme group and 38% in the control group, well above the overall HIV testing uptake by males in Nigeria at the time of 23%. What were the elements of the programme that contributed to its success? Critically, it was conducted in communities where religious institutions and their leaders have strong community influence and where nearly 90% of the population attends places of worship. Next, it proposed integrated testing (haemoglobin, malaria, sickle cell genotype, HIV, hepatitis B, and syphilis) to reduce stigma associated with HIV testing. It included the haemoglobin test because men indicated in the formative stages that they wanted this test to find out how strong they were. Then, it engaged the couples publically, with the religious leader inviting all pregnant women and their partners each Sunday to approach the altar for a prayer, accompanied by information about the baby shower programme and the importance of antenatal care. The programme ran baby showers monthly for all participants with the programme group playing an educational game and being offered free integrated HIV testing. The control group was referred to a local health facility for antenatal care and free HIV testing. At baby receptions held every two to three months, the control groups were offered free integrated HIV testing. All in all, HIV testing for male partners was convenient, free, and integrated with other tests that men wanted. It was provided in a family-centred, congregation-based enabling environment that supported men to step forward with their pregnant partners to learn their HIV status. Such a strategy could work in other settings where influential community leaders are prepared to lead the design and implementation of innovative HIV prevention programmes that resonate with community cultural and spiritual values.


Background: Antiretroviral therapy (ART) substantially decreases morbidity and mortality in people living with HIV. In this study, we describe population-level trends in the adult life expectancy
and trends in the residual burden of HIV mortality after the roll-out of a public sector ART programme in KwaZulu-Natal, South Africa, one of the populations with the most severe HIV epidemics in the world.

Methods: Data come from the Africa Centre Demographic Information System (ACDIS), an observational community cohort study in the uMkhanyakude district in northern KwaZulu-Natal, South Africa. We used non-parametric survival analysis methods to estimate gains in the population-wide life expectancy at age 15 years since the introduction of ART, and the shortfall of the population-wide adult life expectancy compared with that of the HIV-negative population (ie, the life expectancy deficit). Life expectancy gains and deficits were further disaggregated by age and cause of death with demographic decomposition methods.

Findings: Covering the calendar years 2001 through to 2014, we obtained information on 93 903 adults who jointly contribute 535 428 person-years of observation to the analyses and 9992 deaths. Since the roll-out of ART in 2004, adult life expectancy increased by 15.2 years for men (95% CI 12.4-17.8) and 17.2 years for women (14.5-20.2). Reductions in pulmonary tuberculosis and HIV-related mortality account for 79.7% of the total life expectancy gains in men (8.4 adult life-years), and 90.7% in women (12.8 adult life-years). For men, 9.5% is the result of a decline in external injuries. By 2014, the life expectancy deficit had decreased to 1.2 years for men (-2.9 to 5.8) and to 5.3 years for women (2.6-7.8). In 2011-14, pulmonary tuberculosis and HIV were responsible for 84.9% of the life expectancy deficit in men and 80.8% in women.

Interpretation: The burden of HIV on adult mortality in this population is rapidly shrinking, but remains large for women, despite their better engagement with HIV-care services. Gains in adult life-years lived as well as the present life expectancy deficit are almost exclusively due to differences in mortality attributed to HIV and pulmonary tuberculosis.

Abstract access

Editor’s notes: Health and demographic surveillance system (HDSS) sites allow for monitoring of population health through the collection of detailed data on tens of thousands of individuals. Such sites in countries with high HIV prevalence have played an important role in measuring the effects of large-scale programmes, such as the global roll-out of antiretroviral therapy (ART). The data presented in this paper, from the Africa Centre Demographic Information System (ACDIS) in KwaZulu-Natal, South Africa, span 13 years (2001–14) and represent over 93 000 individuals living in an area with extremely high HIV prevalence (29% in adults aged 15–49 years in 2011). At least 15 000 of people studied were HIV-positive, of whom at least 2000 died. ART was first made available to people living with HIV (PLHIV) in this area in 2004.

Among adults aged 15–49 years, the authors report an overall reduction in death rate from 2001–14. This translates into large increases in life expectancy (i.e., the expected number of years lived from age 15) of 15 and 17 years for men and women, respectively, between 2001 and 2014. The changes in life expectancy are greater in people who were confirmed HIV-positive: 18 and 21 years for men and women, respectively, from 2007–14. The large difference in life expectancies between the sexes that still exists (31 versus 44 years in HIV-positive men and women, respectively) are consistent with previously published estimates from Rwanda and Uganda. This study, however, illustrates that HIV-positive men are catching up to their HIV-negative counterparts faster than women are. The ‘deficit’ in 2014 - the gap in life expectancies between HIV-positive and HIV-negative individuals, was 1.2 years in men but still 5.3 years in women.
The authors propose that increased access to ART is the primary driver of the gains in life expectancy seen in this cohort. To further support this, they include data from verbal autopsies (VAs), which suggest that reductions in deaths due to HIV and pulmonary tuberculosis were responsible for 80% and 90% of the increases in life expectancy in men and women, respectively. VAs have limitations, however, particularly in areas of high HIV prevalence, but the overall mortality patterns suggested by these findings are likely to be accurate, even if the precise estimates differ.

The dramatic increases in life expectancy, in only seven years, for HIV-positive individuals in this cohort add to the encouraging observations from other low- and middle-income countries that many people receiving ART can expect to live for nearly as long as HIV-negative individuals. Of course, people with advanced disease starting ART are still at high risk of death and there remain considerable challenges in getting treatment to all people in need of it.

2. Combination prevention

Safety and efficacy of a dapivirine vaginal ring for HIV prevention in women.


Background: The incidence of human immunodeficiency virus (HIV) infection remains high among women in sub-Saharan Africa. **We evaluated the safety and efficacy of extended use of a vaginal ring containing dapivirine for the prevention of HIV infection in 1959 healthy, sexually active women, 18 to 45 years of age, from seven communities in South Africa and Uganda.**

Methods: In this randomized, double-blind, placebo-controlled, phase 3 trial, we randomly assigned participants in a 2:1 ratio to receive vaginal rings containing either 25 mg of dapivirine or placebo. Participants inserted the rings themselves every 4 weeks for up to 24 months. **The primary efficacy end point was the rate of HIV type 1 (HIV-1) seroconversion.**

Results: A total of 77 participants in the dapivirine group underwent HIV-1 seroconversion during 1888 person-years of follow-up (4.1 seroconversions per 100 person-years), as compared with 56 in the placebo group who underwent HIV-1 seroconversion during 917 person-years of follow-up (6.1 seroconversions per 100 person-years). **The incidence of HIV-1 infection was 31% lower in the dapivirine group than in the placebo group (hazard ratio, 0.69; 95% confidence interval [CI], 0.49 to 0.99; P=0.04).** There was no significant difference in efficacy of the dapivirine ring among women older than 21 years of age (hazard ratio for infection, 0.63; 95% CI, 0.41 to 0.97) and those 21 years of age or younger (hazard ratio, 0.85; 95% CI, 0.45 to 1.60; P=0.43 for treatment-by-age interaction). Among participants with HIV-1 infection, nonnucleoside reverse-transcriptase inhibitor resistance mutations were detected in 14 of 77 participants in the dapivirine group (18.2%) and in 9 of 56 (16.1%) in the placebo group. **Serious adverse events occurred more often in the dapivirine group (in 38 participants [2.9%]) than in the placebo group (in 6 [0.9%]).** However, no clear pattern was identified.

Conclusions: Among women in sub-Saharan Africa, the dapivirine ring was not associated with any safety concerns and was associated with a rate of acquisition of HIV-1 infection that was lower than the rate with placebo. (Funded by the International Partnership for Microbicides; ClinicalTrials.gov number, NCT01539226.).
Abstract  Full-text [free] access

Editor’s notes: The need to develop safe, effective tools for women, particularly young women and adolescent girls, remains a high priority in sub-Saharan Africa. Self-inserted vaginal rings, which provide sustained release of antiretroviral drugs over time, offer an option that women can initiate themselves. Two large randomised trials have been conducted to assess the efficacy and safety of a vaginal ring containing dapivirine in preventing HIV infection in women. This trial is published in the same issue of the New England Journal of Medicine as the trial by Baeten et al. (reviewed by HIV This Month in March 2016). Both trials were conducted in eastern and southern Africa where the incidence of HIV remains high.

As in the Baeten trial, this trial found a moderate reduction in HIV infection (31% lower) among women using the dapivirine vaginal ring compared with placebo. In both trials, protection was higher among women older than 21 years of age, although, unlike the Baeten trial, the difference in efficacy between the two age groups in this trial was not statistically significant. Baeten et al. noted that biological measurement of adherence was higher among women older than 21 years (more than 70% overall) which may partly explain the higher protection observed. The investigators of both trials note that the genital tract of younger women may make them more susceptible to HIV infection. This warrants further investigation. Differences in the frequency of vaginal and/or anal sex across different age groups may also be important. In an editorial to accompany publication of these two important trials, Adimora notes that "providers and women must ensure that the HIV interventions that women adopt match their sexual behaviours and needs. Different women – and women at different life stages – will require different types of HIV prevention."

MTN-017: a rectal phase 2 extended safety and acceptability study of tenofovir reduced-glycerin 1% gel.


Background: HIV disproportionately affects men who have sex with men (MSM) and transgender women (TGW). Safe and acceptable topical HIV prevention methods that target the rectum are needed.

Methods: MTN-017 was a Phase 2, three-period, randomized sequence, open-label, expanded safety and acceptability crossover study comparing rectally applied reduced-glycerin (RG) 1% tenofovir (TFV) and oral emtricitabine/TFV disoproxil fumarate (FTC/TDF). In each 8-week study period participants were randomized to RG-TFV rectal gel daily; or RG-TFV rectal gel before and after receptive anal intercourse (RAI) (or at least twice weekly in the event of no RAI); or daily oral FTC/TDF.

Results: MSM and TGW (n=195) were enrolled from 8 sites in the United States, Thailand, Peru, and South Africa with mean age of 31.1 years (range 18-64). There were no differences in Grade 2 or higher adverse event rates in participants using daily gel (Incidence Rate Ratio (IRR): 1.09, p=0.59) or RAI gel (IRR: 0.90, p=0.51) compared to FTC/TDF. High adherence (≥80% of prescribed doses as assessed by unused product return and SMS reports) was less likely in the daily gel regimen (Odds Ratio (OR): 0.35, p<0.001) and participants reported less likelihood of future daily gel use for HIV protection compared to FTC/TDF (OR: 0.38, p<0.001).
Conclusions: Rectal application of RG TFV gel was safe in MSM and TGW. Adherence and product use likelihood were similar for the intermittent gel and daily oral FTC/TDF regimens, but lower for the daily gel regimen.

Abstract access

Editor’s notes: While microbicide gel to prevent HIV in women has not been consistently shown to be effective, scientific efforts to develop a rectal microbicide gel have continued in the hopes of finding a safe and effective product for HIV prevention in men. This paper presents a phase II clinical trial in which gay men and other men who have sex with men across four different countries were randomly assigned to one of three arms: oral pre-exposure prophylaxis (‘daily oral’), topical gel administered before and after receptive anal intercourse (‘RAI’), and topical gel administered daily (‘daily rectal’). The authors found that the rectal gel was safe to use, and was acceptable to participants, although the daily rectal application had lower acceptability and lower adherence than daily oral or the RAI. This safety, adherence, and acceptability seen in this Phase II study supports further development of the gel as a rectal microbicide candidate, although consideration will need to be given to dosing regimens to maximize adherence.

3. Key populations

Identifying resilience resources for HIV prevention among sexual minority men: a systematic review.

Woodward EN, Banks RJ, Marks AK, Pantalone DW. AIDS Behav. 2016 Dec 15. [Epub ahead of print]

Most HIV prevention for sexual minority men and men who have sex with men targets risk behaviors (e.g., condom use) and helps <50% of participants. Bolstering resilience might increase HIV prevention’s effectiveness. This systematic review identified resilience resources (protective factors) in high-risk, HIV-negative, sexual minority men. We reviewed PsycINFO, PsycARTICLES, MEDLINE, references, and Listservs for studies including sexual minority men with 1+ HIV risk factor (syndemics): childhood sexual abuse, partner abuse, substance abuse, or mental health symptoms. From 1356 articles screened, 20 articles met inclusion criteria. Across the articles, we identified and codified 31 resilience resources: socioeconomic (e.g., employment), behavioral coping strategies (e.g., mental health treatment), cognitions/emotions (e.g., acceptance), and relationships. Resilience resources were generally associated with lower HIV risk; there were 18 low-risk associations, 4 high-risk associations, 8 non-significant associations. We generated a set of empirically based resilience variables and a hypothesis to be evaluated further to improve HIV prevention.

Abstract access

Editor’s notes: This systematic review sought to identify why gay men and other men who have sex with men, at high-risk of HIV, remain HIV negative. HIV-negative, gay men and other men who have sex with men, with a key risk factor for HIV were identified. These risk factors were childhood sexual abuse, partner abuse, substance abuse or mental health symptoms. The authors sought to identify why such men remain HIV negative. Why they are resilient to infection. Some 20 studies met the inclusion criteria. Four broad categories of resilience were identified; socioeconomic (e.g. degree, full-time job); behavioural coping strategies (e.g. accessing mental health services), cognitions/ emotions
(e.g. acceptance of a situation); and relationships (e.g. perceived sufficient social support). Of the 31 sub-categories of resilience resources identified, four were identified as protective for HIV infection: main sex partner is HIV negative, willingness to use PrEP, PrEP acceptance and condom use. Resilience resource research for HIV prevention is a sparse area of study. This study generated a set of resilience variables upon which further research can be built.

Attitudes toward addiction, methadone treatment, and recovery among HIV-infected Ukrainian prisoners who inject drugs: incarceration effects and exploration of mediators.


In this study, we use data from a survey conducted in Ukraine among 196 HIV-infected people who inject drugs, to explore attitudes toward drug addiction and methadone maintenance therapy (MMT), and intentions to change drug use during incarceration and after release from prison. Two groups were recruited: Group 1 (n = 99) was currently incarcerated and Group 2 (n = 97) had been recently released from prison. This paper’s key finding is that MMT treatment and addiction recovery were predominantly viewed as mutually exclusive processes. Group comparisons showed that participants in Group 1 (pre-release) exhibited higher optimism about changing their drug use, were less likely to endorse methadone, and reported higher intention to recover from their addiction. Group 2 participants (post-release), however, reported higher rates of HIV stigma. Structural equation modeling revealed that in both groups, optimism about recovery and awareness of addiction mediated the effect of drug addiction severity on intentions to recover from their addiction.

Abstract access

Editor's notes: Despite reductions in HIV incidence and mortality globally, the epidemic in Ukraine remains volatile and continues to expand, especially among people who inject drugs. People who inject drugs account for more than 40% of people living with HIV. At 20%, HIV prevalence among Ukrainian people living in prisons is the highest in Europe, with drug injection of opioids being the major driver of transmission. There exists a concentration of people who inject drugs among prisoners and other incarcerated people, especially people living with HIV. Programmes focusing on prisoners and other incarcerated people may play a central role in HIV prevention since nearly all of them transition back to the community. Opioid agonist therapies including methadone maintenance therapy have been shown to have many benefits including reducing HIV transmission by over 50% among people who inject drugs. Despite these benefits, moral biases, stigma and ideological prejudices are barriers to opioid agonist therapies scale-up globally including in Ukraine. Opioid agonist therapies are available free of charge through national and external Global Fund support. However, scale up of opioid agonist therapies and treatment retention in Ukraine have been low, with only about 2.7% of people who inject drugs enrolled. This has constrained HIV prevention efforts. Adoption of opioid agonist therapies has been especially slow among criminal justice populations. This study compares attitudes towards opioid agonist therapies among currently and previously incarcerated opioid-dependent people living with HIV in Ukraine.

The study uses data from a survey of people living with HIV conducted in Ukraine to explore attitudes to methadone treatment and intentions to change drug use behaviour before and after release from prison.

This study has important implications for future management of people who inject drugs who are living with HIV. While staff attitudes may undermine the successful opioid agonist therapies delivery in
prisons, the findings of this study suggest that prisoners and other incarcerated people are important foci for programmes that should be done in parallel with staff-based activities. The findings also suggest that optimism about recovery while in prison is falsely elevated. This may contribute to individual inability to comprehend addiction as a chronic relapsing condition, which in the absence of treatment, results in 85% relapsing within 12 months of release. Future programmes should take advantage of individuals’ sobriety while in prison and cultivate their ability to recognise the cycle of addiction and incarceration. This optimism should also be channelled to focus on evidence-based programmes, e.g., methadone maintenance therapy that has been associated with reduced illicit drug relapse, HIV risk-taking and reincarceration. Considerable health marketing work also needs to be done to focus on negative attitudes and prejudices about methadone maintenance therapy at both individual and societal level. This would importantly involve rebranding methadone maintenance therapy as a medical treatment for a chronic relapsing condition.

4. Elimination of gender inequalities

Prevalence and correlates of sexual and gender-based violence against Chinese adolescent women who are involved in commercial sex: a cross-sectional study.


Objectives: Despite the vast quantity of research among Chinese female sex workers (FSWs) to address concerns regarding HIV/sexually transmitted infection (STI) risk, there is a paucity of research on issues of sexual and gender-based violence (SGBV) and the missed opportunity for sexual and reproductive health (SRH) promotion among young FSWs. Our research aimed to assess the prevalence and correlates of SGBV among Chinese adolescent FSWs, and to explore SRH service utilisation.

Design and methods: A cross-sectional study using a one-stage cluster sampling method was employed. A semistructured questionnaire was administered by trained peer educators or health workers. Multivariable logistic regression was conducted to determine individual and structural correlates of SGBV.

Setting and participants: Between July and September 2012, 310 adolescent women aged 15-20 years, and who self-reported having received money or gifts in exchange for sex in the past 6 months were recruited and completed their interview in Kunming, Yunnan Province, China.

Results: Findings confirm the high prevalence of SGBV against adolescent FSWs in China, with 38% (118/310) of participants affected in the past year. Moreover, our study demonstrated the low uptake of public health services and high rates of prior unwanted pregnancy (52%; 61/118), abortion (53%; 63/118) and self-reported STI symptoms (84%; 99/118) in participants who were exposed to SGBV. Forced sexual debut was reported by nearly a quarter of FSWs (23%; 70/310) and was independently associated with having had a drug-using intimate partner and younger age (<17 years old) at first abortion. When controlling for potential confounders, having experienced SGBV was associated with frequent alcohol use, having self-reported symptoms of STI, having an intimate partner and having an intimate partner with illicit drug use.

Conclusions: This study calls for effective and integrated interventions addressing adolescent FSWs’ vulnerability to SGBV and broader SRH consequences.

Abstract Full-text [free] access
Editor’s notes: The paper reports a study conducted to measure the prevalence and correlates of sexual and gender-based violence among Chinese adolescent female sex workers, given the paucity of data on this. A cross-sectional survey was conducted in the Yunnan Province, which has a relatively high HIV-1 prevalence. Around 300 women aged 15-19 years, who had received money or gifts in exchange for sex in the past six months were recruited for a survey.

The survey revealed that over half the female sex workers were married or cohabiting but lived predominantly with other sex workers or friends, or alone. The majority reported that they had been a sex worker for less than six months. Over the past year, 82% of the female sex workers had an intimate partner, and most of these relationships were for less than one year. Alcohol use was common, with 83% of the female sex workers reporting drinking alcohol at least twice a week. Inconsistent condom use in the past month was reported by 57% of the female sex workers.

Around a quarter of women’s first sexual experience was forced. Thirty-eight per cent of the female sex workers reported having experienced sexual and gender-based violence in the past year, with three quarters of women reporting the perpetrator as their intimate male partner and (62%) a male paying client. The female sex workers experiencing sexual and gender-based violence in the past year were more likely to be frequent drinkers or have a drug-using intimate partner. Women who experienced sexual and gender-based violence were more likely to report unwanted pregnancy, and less likely to use public health facilities or HIV testing services.

The authors suggest that their findings reveal a missed opportunity for the public health sector to address sexual and gender-based violence and associated sexual and reproductive health issues. However, they suggested there is a need to involve women-led community-based organisations to build relationships with female sex workers to enable them to utilise such services. There is also a need for further research on integrated programmes to prevent or reduce sexual and gender-based violence against adolescent female sex workers.

5. Financing

Implementation and operational research: affordable care act implementation in a California health care system leads to growth in HIV-positive patient enrollment and changes in patient characteristics.


Objectives: This study examined implementation of the Affordable Care Act (ACA) in relation to HIV-positive patient enrollment in an integrated health care system; as well as changes in new enrollee characteristics, benefit structure, and health care utilization after key ACA provisions went into effect in 2014.

Methods: This mixed-methods study was set in Kaiser Permanente Northern California (KPNC). Qualitative interviews with 29 KPNC leaders explored planning for ACA implementation. Quantitative analyses compared newly enrolled HIV-positive patients in KPNC between January and December 2012 ("pre-ACA," N = 661) with newly enrolled HIV-positive patients between January and December 2014 ("post-ACA," N = 880) on demographics; medical, psychiatric, and substance use disorder diagnoses; HIV clinical indicators; and type of health care utilization.
Results: Interviews found that ACA preparation focused on enrollment growth, staffing, competition among health plans, concern about cost sharing, and HIV pre-exposure prophylaxis (PrEP) services. Quantitative analyses found that post-ACA HIV-positive patient enrollment grew. New enrollees in 2014 were more likely than 2012 enrollees to be enrolled in high-deductible plans ($P < 0.01$) or through Medicaid ($P < 0.01$), and marginally more likely to have better HIV viral control ($P < 0.10$). They also were more likely to be diagnosed with asthma ($P < 0.01$) or substance use disorders ($P < 0.05$) and to have used primary care health services in the 6 months postenrollment ($P < 0.05$) than the pre-ACA cohort.

Conclusions: As anticipated by KPNC interviewees, **ACA implementation was followed by HIV-positive patient enrollment growth and changing benefit structures and patient characteristics. Although HIV viral control improved, comorbid diagnosis findings reinforced the importance of coordinated health care.**

Abstract access

**Editor’s notes:** This paper provides a very useful assessment of the Affordable Care Act (ACA), commonly called ‘Obama-Care’) coverage for people living with HIV in part of California. As the authors note, a goal of the Affordable Care Act was to increase health-care coverage for people with chronic conditions. They also note that before the implementation of the ACA, many people living with HIV lacked health-care insurance covering HIV-medications and HIV medical care. It has the potential to make a difference to people with chronic conditions. The ACA has removed exclusions for insurance access, like pre-existing conditions. It has also removed caps on costs and provides financial support for health care premiums.

As anticipated by the authors, the passing of the ACA had provided greater access to care for people living with HIV. However, challenges exist in supporting people living with HIV who have co-morbidities. The authors note that people living with HIV in need of psychiatric care, or because of substance use, were not always reached. This is partly because people do not come forward for care. The authors suggest that integrated care where HIV-care is provided with support for other chronic conditions can help reach more people to come forward.

At a time of change in the United States, this paper is timely in highlighting the value of the Affordable Care Act for people living with HIV.

Economic evaluation of HIV testing for men who have sex with men in community-based organizations - results from six European cities.


The non-decreasing incidence of HIV among men who have sex with men (MSM) has motivated the emergence of Community Based Voluntary Counselling and Testing (CBVCT) services specifically addressed to MSM. The CBVCT services are characterized by facilitated access and linkage to care, a staff largely constituted by voluntary peers, and private not-for-profit structures outside the formal health system institutions. Encouraging results have been measured about their effectiveness, but these favourable results may have been obtained at high costs, questioning the opportunity to expand the experience. **We performed an economic evaluation of HIV testing for MSM at CBVCT services, and compared them across six European cities.** We collected retrospective data for six CBVCT services from six cities (Copenhagen, Paris, Lyon, Athens, Lisbon,
and Ljubljana), for the year 2014, on the number of HIV tests and HIV reactive tests, and on all expenditures to perform the testing activities. The total costs of CBVCTs varied from 54,390 € per year (Ljubljana) to 245,803 € per year (Athens). The cost per HIV test varied from to 41 € (Athens) to 113 € (Ljubljana). The cost per HIV reactive test varied from 1966 € (Athens) to 9065 € (Ljubljana). Our results show that the benefits of CBVCT services are obtained at an acceptable cost, in comparison with the literature (values, mostly from the USA, range from 1600$ to 16,985$ per HIV reactive test in clinical and non-clinical settings). This result was transversal to several European cities, highlighting that there is a common CBVCT model, the cost of which is comparable regardless of the epidemiological context and prices. The CBVCT services represent an effective and "worth it" experience, to be continued and expanded in future public health strategies towards HIV.

Abstract access

**Editor’s notes:** Although HIV incidence among some key populations in Europe has declined in recent years, new cases among gay men and other men who have sex with men have steadily increased over the last decade. Among those new cases, over a third are reported late, leading to worse health outcomes for the person, as well as an increased risk of onward transmission. As a result, community-based voluntary counselling and testing has been rolled out in European cities to encouraging results in terms of effectiveness.

In that context, the authors of this paper have carried out an economic evaluation of community-based voluntary counselling and testing programmes in six cities across Europe (Athens, Copenhagen, Lisbon, Lyon, Paris and Ljubljana). They collected total annual costs of running the programmes. They found that the cost per HIV test ranged from €41 in Athens to €113 in Ljubljana and the cost per reactive HIV test ranged from €1966 to €9065 in the same two cities. The authors found that these costs are acceptable compared to those found in the literature.

Oddly, one of the more interesting results found in the article, but not discussed within the text, is the cost per reactive HIV test link to care. This varied in absolute terms (€2297–€20,215) likely due to different linkages to care rates, from 100% in Copenhagen to under 40% in Paris. Given the ultimate aims of testing (which ought to be to improve health outcomes and reduce onward transmission) this is a more important figure than the cost per test. Further research therefore should explore the unit costs further down the treatment cascade resulting from these programmes. These would be, for example, cost per person on treatment and cost per person with a suppressed viral load.

Should HIV testing for all pregnant women continue? Cost-effectiveness of universal antenatal testing compared to focused approaches across high to very low HIV prevalence settings.


Introduction: HIV testing is the entry point for the elimination of mother-to-child transmission of HIV. Decreasing external funding for the HIV response in some low- and middle-income countries has triggered the question of whether a focused approach to HIV testing targeting pregnant women in high-burden areas should be considered. This study aimed at determining and comparing the cost-effectiveness of universal and focused HIV testing approaches for pregnant women across high to very low HIV prevalence settings.
Methods: We conducted a modelling analysis on health and cost outcomes of HIV testing for pregnant women using four country-based case scenarios (Namibia, Kenya, Haiti and Viet Nam) to illustrate high, intermediate, low and very low HIV prevalence settings. We used subnational prevalence data to divide each country into high-, medium- and low-burden areas, and modelled different antenatal and testing coverage in each.

Results: When HIV testing services were only focused in high-burden areas within a country, mother-to-child transmission rates remained high ranging from 18 to 23%, resulting in a 25 to 69% increase in new paediatric HIV infections and increased future treatment costs for children. Universal HIV testing was found to be dominant (i.e. more QALYs gained with less cost) compared to focused approaches in the Namibia, Kenya and Haiti scenarios. The universal approach was also very cost-effective compared to focused approaches, with $125 per quality-adjusted life years gained in the Viet Nam-based scenario of very low HIV prevalence. Sensitivity analysis further supported the findings.

Conclusions: Universal approach to antenatal HIV testing achieves the best health outcomes and is cost-saving or cost-effective in the long term across the range of HIV prevalence settings. It is further a prerequisite for quality maternal and child healthcare and for the elimination of mother-to-child transmission of HIV.

Abstract 

Editor’s notes: This paper describes research undertaken to support the consolidated guidelines on HIV testing services, published by World Health Organization in 2015. This analysis was conducted in response to growing questions as to whether focused HIV testing in high prevalence areas can improve value for money in investment for HIV testing.

A model was parameterized to represent four scenarios with high, intermediate, low, and very low HIV prevalence settings (Namibia, Kenya, Haiti, and Viet Nam). Three approaches to HIV testing in antenatal care are considered in comparison with current coverage in each setting. These three approaches were: a very focused approach, a targeted approach, and a universal testing approach for all pregnant women. The authors estimate the costs and effects of each scenario, including the future costs of treating paediatric HIV for 20 years. Universal testing was found to be cost-saving in Namibia, Kenya and Haiti and was found to be cost-effective in Viet Nam ($125 per QALY gained). The targeted testing approach was also more cost-effective than current coverage in all settings.

The clear policy implication from this analysis is that HIV testing for pregnant women saves both money and lives in the long term. Universal HIV testing in antenatal care can be regarded as a good investment in almost any HIV prevalence setting. However, it is also important to note that targeted testing was more cost-effective than current coverage in all settings. Countries that are currently struggling to provide testing in antenatal care may need to consider factors other than cost-effectiveness in their planning and strategy for scaling up. This is important in order to address HIV at a national scale.

6. Health systems and services

Psychosocial needs of perinatally HIV-infected youths in Thailand: lessons learnt from instructive counseling.
Identifying psychosocial needs of perinatally HIV-infected (pHIV) youth is a key step in ensuring good mental health care. We report psychosocial needs of pHIV youth identified using the “Youth Counseling Needs Survey” (YCS) and during individual counseling (IC) sessions. pHIV youth receiving care at two tertiary-care hospitals in Bangkok or at an orphanage in Lopburi province were invited to participate in IC sessions. The youths’ psychosocial needs were assessed using instructive IC sessions in four main areas: general health, reproductive health, mood, and psychosocial concerns. Prior to the IC session youth were asked to complete the YCS in which their concerns in the four areas were investigated. Issues identified from the YCS and the IC sessions were compared. During October 2010–July 2011, 150 (68.2%) of 220 eligible youths participated in the IC sessions and completed the YCS. Median age was 14 (range 11-18) years and 92 (61.3%) were female. Mean duration of the IC sessions was 36.5 minutes. One-hundred and thirty (86.7%) youths reported having at least one psychosocial problem discovered by either the IC session or the YCS. The most common problems identified during the IC session were poor health attitude and self-care (48.0%), lack of life skills (44.0%), lack of communication skills (40.0%), poor antiretroviral (ARV) adherence (38.7%), and low self-value (34.7%). The most common problems identified by the YCS were lack of communication skills (21.3%), poor health attitude and self-care (14.0%), and poor ARV adherence (12.7%). Youth were less likely to report psychosocial problems in the YCS than in the IC session. Common psychosocial needs among HIV-infected youth were issues about life skills, communication skills, knowledge on self-care, ARV adherence, and self-value. YCS can identify pHIV youths’ psychosocial needs but might underestimate issues. Regular IC sessions are useful to detect problems and provide opportunities for counseling.

Abstract access

Editor’s notes: The study reports on the psychological needs of young people who acquired HIV in the perinatal period. The needs were highlighted during counselling sessions and in a survey conducted as part of the Happy-Teen Programme in Thailand. Young people (age 11-18) who have perinatally acquired HIV were recruited in two hospitals and from a service run by an orphanage linked to one of the hospitals. Young people took part in two individual ‘instructive counselling’ sessions, and two survey sessions for a needs-assessment questionnaire. Participants reported higher levels of needs in the counselling sessions compared to the questionnaire. Key areas of need identified included: health attitudes and self-care (e.g., diet, sleep, drug use); issues with sexual risk and difficulties communicating with sexual partners; HIV treatment adherence problems; concerns about HIV-associated stigma; and concerns about peer pressure. The study illustrates the difference in the quality of findings obtained from data collected via the questionnaire in comparison with data collected via sessions with counsellors. The counsellors were people that the young people knew for some time and trusted. The study highlights the importance of counselling with young people to improve self-esteem and health-associated behaviours. Counsellors are also important to provide referrals for more severe mental health issues.