

HATiP

HIV & AIDS Treatment in Practice

Issue 71 | 27 July 2006



In this issue:

Routine or opt-out counselling and testing: findings from the 2006 PEPFAR meeting; *page 2*

- Botswana's routine HIV testing programme
- Kenyan experiences
- Integrating HIV testing into TB services
- Routine testing of children
- Operational issues
- Conclusion
- References

Routine or opt-out counselling and testing: findings from the 2006 PEPFAR meeting

By Keith Alcorn, with additional reporting by Theo Smart

Over the past two years there has been increasing movement in African countries towards a model of HIV testing and counselling that makes the HIV test a routine part of medical care in countries. This move follows joint UNAIDS and World Health Organization guidance in 2004. Testing, they argue, is the gateway to HIV treatment and an essential component of prevention programmes.

However, the move towards routine or opt-out testing has been greeted with caution and even resistance by community-based organisations because the routine offer of the test may in practice coerce some people to undergo a test, the results of which may result in serious discrimination, stigma and even violence in some settings, especially for women.

"Restricting the 'voluntariness' of HIV testing may adversely affect client perceptions and uptake of treatment, care and prevention services," says Mandeep Dhaliwal of the International HIV/AIDS Alliance.

Critics have also suggested that routine testing may involve less counselling, which in turn could undermine the prevention benefits of testing.

And, most importantly, many people question the benefits of encouraging people to learn their HIV status if no treatment is currently available.

Several countries have made major moves towards routine testing, most notably Botswana, which has been the flagship for the policy.

But the biggest experiment in routine testing has just begun in Lesotho, where the government has set out to offer every citizen an HIV test by sending counsellors door to door throughout the country over the next two years [link to news article].

And last week Malawi, one of the most severely affected countries in Africa, launched a drive to test 50,000 people in a single week.

How do these programmes work in practice, how acceptable are they to people who undergo testing, and what lessons are being learned from HIV testing scale-up in Africa?

At last month's PEPFAR Implementers meeting in Durban, South Africa, there were numerous presentations on HIV testing, and in particular on routine or opt-out testing.

Botswana's routine HIV testing programme

At the recent PEPFAR Implementers meeting further detail on the Botswana routine testing programme was presented, along with details of other efforts to expand HIV diagnosis.

Botswana now has 16 testing centres called Tebelopele, operating 15 satellite clinics, and 80% of the country's population live within 50km of a testing centre. In 2003 the national HIV programme began using mobile testing caravans to offer testing in more remote areas, and by December 2004 had carried out 176, 805 tests. In January 2004 the government announced that HIV

testing would become routine in all health facilities, and at least 60,000 tests were carried out that year alone.

In 2005, uptake of testing increased by 134%, and 90% of those who were offered the test opted to go ahead with it. Forty-one per cent were HIV-positive in 2005.

Mobile testing caravans were particularly effective at reaching people who had never tested before; over 90% of those who took a test at a mobile caravan were doing so for the first time, and they accounted for one in seven (14%) of all HIV tests carried out in Botswana in 2005. 'Door to door' testing in the rural areas of northern Botswana is to be introduced later in 2006.

The success of Botswana's efforts to promote universal testing have been ascribed to strong political leadership and a strong social marketing campaign which explained the benefits of testing – and the process – to the population. Botswana have been encouraged to 'take a loved one for testing', but it's important to remember that this campaign is occurring in the context of the most comprehensive roll out of treatment anywhere in Africa.

But what do people in Botswana think of the testing campaign? Independent research funded by the US organisation Physicians for Human Rights and the Tides Foundation found somewhat contradictory attitudes (Weiser).

Their cross-sectional study, which recruited 1268 people from a cross-section of Botswana households for private interviews, found that while 81% of people reported that they were either 'extremely' or very much in favour of routine testing, 43% thought that routine testing would discourage people from going to the doctor and 68% of the sample felt that they could not refuse a test. Just under half of those questioned (48%) had undergone testing (a much higher proportion than seen in other African countries), and those with stigmatising attitudes towards people with AIDS were significantly less likely to have tested. But the key barriers to testing were the same as those the world over: fear of learning one's HIV status, lack of perceived HIV risk and fear of having to change one's sexual practices.

The knowledge that treatment was available was a key factor in encouraging testing for two-thirds of those tested, as was the confidentiality of the test results, especially for men, but the national media advertising campaign was also very important in encouraging testing (69% said they were convinced by advertising messages of the need to test).

The study was not able to assess the effects of routine testing and knowledge of HIV status on subsequent sexual behaviour in Botswana, but clearly this will be an important issue to explore for all countries that follow the Botswana path, such as Uganda, Rwanda, Lesotho and Kenya, where large-scale efforts are already underway to encourage everyone to learn their HIV status.

In Rwanda, Family Health International reported at the PEPFAR Implementers meeting, voluntary counselling and testing has been associated with a reduction in non-regular partner numbers and an increase in condom use over six months of follow-up, especially among HIV-positive individuals, among a sample of 5200 individuals who had undergone VCT (Mukabarisi). Condom use doubled with non-regular partners.

Another important benefit of wider testing is the opportunity to identify people with HIV at an earlier stage. Many people start treatment very late when they are already experiencing wasting, and very advanced disease and low body mass index are repeatedly associated with poor response to ART in African studies.

Researchers in Uganda looked at the effects of introducing routine testing on the clinical profile of HIV-positive patients in their care, and found that over the course of a year, routine testing

shifted the profile strongly towards asymptomatic patients who needed less intensive clinical management when they started treatment. Prior to routine testing 65% of patients had CD4 counts below 200 and three-quarters were symptomatic. After routine testing was introduced, the proportion with CD4 counts below 200 fell to 45% and the proportion that were symptomatic fell to 55%. Although the Mbarara clinic had more patients under care as a result of routine testing, these patients were likely to have a better chance of success when they began treatment.

Another advantage for patients noted by the Ugandan researchers was the fact that routine testing was free; previously patients had had to pay for a test, which the researchers reported as a significant disincentive to testing.

Kenyan experiences

Kenyan researchers reported on the effectiveness of a universal test offer at a district hospital with a previously poor history of HIV test uptake.

Kenyan national guidelines state that failure to offer an HIV test when signs and symptoms of HIV infection are present amounts to sub-standard care. Nevertheless 80% of HIV-positive do not know their status, according to Ministry of Health estimates, and around 60% of TB patients and medical inpatients are estimated to be HIV-positive.

After introducing a routine test offer in 2005, the Machakos District Hospital counselled 2394 patients, of whom 90% chose to test. Fifty-seven per cent were HIV-positive. Of these, 566 (46%) began antiretroviral therapy, as compared to 273 patients who had been identified as eligible for antiretroviral therapy as a result of voluntary counselling and testing.

Routine offer of the HIV test was judged to have greatly increased access to treatment at this centre in Kenya, but it was not without its problems.

A lack of staff trained in counselling and burnout due to the increased workload were noted, and there was a lack of space to carry out private post-test counselling. Like many other programmes, the Kenyan researchers reported that their efforts had been seriously hampered by a shortage of HIV antibody test kits (Kyuvi).

The clinic plans to introduce group pre-test counselling sessions in order to reduce the pressure on the workforce, a solution identified by a number of the programmes that reported on routine testing at the conference.

So, in order to scale-up testing and treatment, HIV programmes may have no choice but to abandon lengthy pre-test counselling. There simply aren't enough counsellors to scale up to do traditional VCT, several speakers reported at the PEPFAR meeting. According to a presentation by Gilbert Kombe, in order reach PEPFAR targets for VCT by 2010, Kenya would have to train and hire 427 fulltime counsellors along with 438 lab technicians (spread throughout the country).

This doesn't account for the numbers of counselling personnel who may fall ill of HIV/AIDS themselves before treatment can be scaled up to reach all who need it. According to Isaiah Tanui of the Kenyan Ministry of Health, roughly 20% of HIV counsellors in Kenya are known to be HIV-infected.

Integrating HIV testing into TB services

Kenyan researchers also reported on efforts to expand counselling and testing in TB clinics. Although it is well known that TB is one of the most common opportunistic infections in HIV-positive people,

and very high proportions of TB patients are found to be HIV-positive in Africa, TB clinics in many countries do not routinely offer HIV testing or even refer TB patients to HIV services.

Josiah Onyango reported on efforts to improve the HIV diagnosis rate in TB patients in Nyanza province, the region with the highest HIV prevalence (around 15%). Nyanza has 265 TB treatment sites and is estimated to treat 20% of all TB cases in Kenya, so the region was an important testing ground for efforts to improve diagnosis of HIV.

The programme began with a pilot at Nyanza General Hospital in 2004, where 1001 TB patients received treatment. Patients were offered an opt-out HIV test with a same day result, and pre-test counselling emphasised the importance of diagnosing HIV infection for the patient's medical care at the TB clinic. Sixty-eight per cent received counselling, of whom 83% chose to undergo HIV-testing. Of those who tested 81% were HIV-positive.

Following the pilot at Nyanza General Hospital, province-wide scale-up began in 2005. From 935 TB patients tested in the first quarter of 2005, the province scaled up to test 2273 in the fourth quarter. Just over half of TB patients in the province were tested during 2005.

All patients who test HIV-positive receive cotrimoxazole through the TB clinic and are referred for HIV care. The programme also encourages TB patients to refer their partners for HIV testing, and includes HIV prevention counselling as well as condom provision.

Like the Kenyan study discussed previously, lack of private space for counselling and a shortage of antibody test kits dogged this programme.

However, the biggest difficulty facing the programme is the lack of access to ART for patients who test HIV-positive. Only 15% of those eligible for ART actually get it at present, said Josiah Onyango.

Research in South Africa by Management Sciences for Health found that, in primary care at least, the timing of an HIV test offer had a significant effect on HIV test uptake among TB patients. Reporting on a programme designed to integrate HIV testing and counselling into 30 primary health facilities in three South African provinces, Jackie Sallet, said that uptake of HIV testing improved hugely among TB patients when they were offered the test at least two months after starting TB treatment, whereas an offer of HIV testing at the same time as TB diagnosis had no substantive effect on uptake.

Michel Gasana presented a report on the integration of TB and HIV care in Rwanda, which also has high rates of coinfection. In 2004, 45.5% of the 6108 registered TB patients were tested for HIV, and 46% were found to be positive. By the first quarter of 2006, 64% of the 1909 registered TB patients were tested, and 49% were HIV positive.

Much of the increase in testing can be attributed to two sites, Gisenyi District Hospital and Health Center and Kicukiro Hospital, which served as models for the integration of HIV and TB services for the rest of the country. To coordinate the process at each site, they hired a TB/HIV focal point person and established multidisciplinary team meetings between the TB and HIV personnel. A simple TB screening questionnaire was piloted at the HIV clinic and the TB clinic began offering what they call "healthcare worker initiated HIV counselling and testing."

Between the 3rd and 4th quarter of 2005, and the 1st quarter of 2006, there were 206 newly registered TB patients at Gisenyi. Eighty-six (42%) were aware of their status at the start of TB treatment (76% were HIV positive). Of the 120 who did not know their status, 106 (88%) consented to HIV testing, and 34 (32%) were HIV positive. Overall, the percentage of registered TB patients

with known TB status rose from 61% in 2004 to 92% during the pilot study period ($p < 0.0001$). Conversely, the HIV clinic screened and referred a number of potential TB cases, 38 of who were diagnosed with confirmed TB.

Next, Rwanda plans to roll out this model to the rest of the country.

A similar pilot TB/HIV integration programme was set up in Beira, a city of 600,000 people in Mozambique. HIV testing and counselling was offered on an opt-out basis at six TB clinics. Over the first seven months (September 2005 through March 2006, of 1290 registered TB patients, 60% agreed to be tested, 20% already knew their status, and 20% opted out. 71% of those who tested were HIV positive. This represented a dramatic increase in testing at the TB sites. Before the programme, about 20 TB patients in Beira were tested each month, compared to an average of 184 per month since the opt-out programme began.

Routine testing of children

Given that 39% of HIV-infected children die by one year of age, and over 50% by the age of two, it is crucial for children to be prioritised. But testing all the children who need to be tested poses substantial logistical challenges.

Testing of children remains difficult because the technology needed to test children below 18 months is expensive. Children below 18 months may still have maternal HIV antibodies even if they are uninfected with HIV, so the only way to diagnose them is to use DNA PCR testing which looks directly for the genetic material of HIV, rather than antibodies to HIV.

But most treatment programmes cannot afford to carry out DNA PCR, which requires the same laboratory equipment as viral load testing. Even where viral load testing is possible, the laboratory capacity to carry out DNA PCR is limited. In South Africa, for example, clinicians need to test 300,000 children per year born to HIV-positive mothers. At best, in Gauteng province, they have been able to test about 30% of the children (Sherman).

Although South African research presented at the meeting suggested that it may be possible to use a combination of two different rapid antibody tests at around 9 months to determine a child's HIV status, this finding needs to be replicated in a larger group of patients before international guidelines might change (for a full report on this research follow this link:

<http://www.aidsmap.com/en/news/DAEE0A6A-109A-4D04-81C8-D88E111E0991.asp>

Many treatment programmes reporting at the PEPFAR Implementers meeting reported difficulties in reaching their targets for enrolling children with HIV in care and treatment. Researchers from Zambia and Columbia University reported on the feasibility and acceptability of introducing routine testing of all children admitted to the University Teaching Hospital in Lusaka.

Over a six-month period from September 2005, 4500 children were hospitalised, and 52% of caretakers received HIV pre-test counselling. Of these, 86% agreed to have their child tested. Forty per cent of children tested were HIV-positive, of which 55% were below 18 months of age (Kankasa).

To implement the program in Zambia, four counsellors from the Family Support Unit offer C&T from 8 am to 16:00 each day. Counsellors conduct both group and individual counselling. All inpatient ward and multidisciplinary team staffs (counsellors, nurses, clinical officers, physicians, nutritionist and social workers) are involved in the counselling and testing process.

The programme's thinking emphasises the need for a consistent emphasis on HIV. "All team members have the responsibility to address HIV in their routine care of the patient. This allows the family to receive the same message and approach from multiple points of contact." This strategy also has helped overcome the problem of limited capacity (too few dedicated counsellors), since everyone is pitching in.

The majority of children and caretakers agree to counselling and testing with two major exceptions: where the caretaker defers decision until she receives consent from her husband and/or other caretaker, or where the child is too ill or the caretaker too distracted to carry out appropriate counselling.

Although the majority (63%) of children who have tested positive in the Zambian programme are less than 18 months of age, 29% are between the ages of 18 months and 5 years, and 8% are over 5 years of age.

In Uganda a similar study at Mbarara Hospital looked at the implementation of an opt-out testing programme for children. Ninety-five per cent of caregivers consented to HIV testing after their child was admitted to the hospital, but children were tested only if the biological mother was known to be HIV-positive. Caregivers were offered testing prior to the children; 99% had never tested before, and 29% of mothers were HIV-positive, while 19% of children were HIV-positive. The hospital tested 3178 children in a nine-month period (Nawavvu).

The majority of caregivers 95% (3017) consented to have children tested. Eighty four per cent (1649) of the caregivers also consented to be tested.

But routine testing of infants and children is a considerably more complex ethical issue than routine testing of adults, many argue. An HIV-positive diagnosis in a child almost invariably indicates the HIV status of the mother (which is why the Ugandan study mentioned above offered caregivers an HIV test before testing the child). Obtaining consent is also problematic. At what age do children become able to consent to testing themselves, and when should the result of an HIV test be disclosed to a child?

These questions remain contentious, and discussion at the meeting made clear the extent to which practitioners feel they need guidance and examples of models of good practice in HIV testing of children.

Operational issues

The MSH research in South Africa also found that mentoring and coaching of facility staff on a monthly basis was key to successful integration of testing into primary health care services. Identifying a "champion" for integration of HIV and AIDS services within facilities was also crucial.

Kenyan researchers working with the Ministry of Health observed that lack of knowledge of national guidelines and lack of training were key obstacles to offering the HIV test. Around one-third of health care workers questioned in 245 health facilities throughout Kenya said they did not feel "highly competent" in offering and recommending an HIV test or counselling an HIV-positive person after diagnosis (Tanui).

The same survey also found that health care workers who had undergone HIV testing themselves felt more confident about offering the test to patients and explaining the procedure. Although health care workers were worried about confidentiality, 77% of those who had never tested indicated a willingness to self-test if a rapid test kit was available, and focus group discussion revealed that the practice of private self-testing by health care workers was

already widespread, with two-thirds of all health workers questioned in the national survey saying that they had tested for HIV (Mwangi).

Although routine testing and counselling in medical facilities will clearly play a large role in identifying people who are likely to need treatment soon (due to the fact that medical facilities see sick people), large numbers of people do not go near a medical facility from one year to the next, especially if they live in rural areas poorly served by the health care system, or if they are mobile workers such as truck drivers.

Several presentations at the PEPFAR Implementers meeting focused on the potential of mobile testing programmes and the acceptability of door-to-door testing programmes.

Mobile programmes targeting truck drivers in Kenya showed that innovative methods are necessary to take testing and health care to high-risk populations. Truckers do not drive at night on African roads if they are at all sane, so truckers head for truck stops during the hours of darkness that provide food and entertainment – including sex. Hope Worldwide carried out a pilot project on the Nairobi-Mombasa highway that offered voluntary counselling and testing between 6pm and 2am six nights a week at truck stops, using tents or lorry containers to provide a drop-in centre. But having taken HIV testing to the truck stops, Hope Worldwide found substantial difficulty in referring people onto care services that were also open at night, indicating the need for any prevention programme that includes a testing element to plan how it will make appropriate linkages to care for anyone diagnosed HIV-positive (Akuno).

In Uganda TASO carried out a pilot programme looking at the acceptability of home-based counselling and testing in Mbale, offering the test to the households of people already enrolled onto TASO's ART programme.

Out of 6,234 family members, 95% accepted testing, of whom 91% had never tested before (Okiria). A CDC research programme found a similar rate of acceptance in Uganda (Bunnell).

Conclusion

Opt out counselling and testing is behind adopted widely, but as the research summarised in this article shows, a number of big unanswered questions remain.

- To what extent do people still experience counselling and testing as voluntary, and how will a shift away from voluntariness affect responses to prevention messages?
- Are more marginalised populations particularly vulnerable to human rights abuses if testing becomes routinised? Where does routine voluntary testing turn into compulsory testing?
- How do expanded testing programmes provide the right degree of information to people during the testing process when human resources are so stretched?
- What is needed in order to solve the poor supply chain issues that appear to be affecting many testing programmes?
- Why did South African research find a better uptake of testing among TB patients who had already embarked on TB treatment? How can HIV diagnosis among TB patients be improved, given the extremely high rates of HIV infection seen in this group?
- At what age do children become able to consent to testing themselves, and when should the result of an HIV test be disclosed to a child? To what extent is the ability to scale up treatment for children currently being restricted by a testing gap rather than a lack of appropriate medicines?

- How can mobile, door-to-door and workplace testing programmes increase uptake of testing?

References

- Akuno J et al. *Moonlight VCT: reaching high-risk populations with VCT along the highway*. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 138.
- Andia I et al. *Evolving clinical picture secondary to routine HIV testing and early linkage to care at the HIV clinic at Mbarara regional referral hospital*. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 195.
- Bunnell R et al. *Changes in sexual behaviour and risk of HIV transmission after two years of antiretroviral therapy and prevention interventions in rural Uganda*. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 87.
- Gasana M et al. *Integrating tuberculosis and HIV care in Rwanda*. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 150.
- Kyuvu A et al. *Universal offer of HIV testing to medical patients increases access to AIDS treatment: the experience of a district hospital in Kenya*. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 161.
- Kankasa C et al. *Routine and universal counselling and testing among hospitalised children at University Teaching Hospital, Lusaka, Zambia*. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 215.
- Kombe G et al. *Rising to the challenges of human resources for health in Kenya: Developing empirical evidence for policy making*. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, Abstract 36.
- Mukabarasi T et al. *The effect of VCT on primary and secondary prevention of HIV/AIDS: presentation of data from Rwanda*. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 169.
- Montoya T et al. *Integrated programming for HIV/AIDS and tuberculosis in central Mozambique: Addressing lost opportunities*. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 167.
- Mwangi M et al. *HIV testing among Kenyan health providers: lessons learned from the 2005 Kenya health worker survey*. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 444.
- Nawavvu C et al. *Routine HIV testing for children: challenges and lessons learned*. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 223.
- Nawavvu C et al. *Routine HIV testing for children: challenges and lessons learned*. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 223.
- Okiria G et al. *Acceptability of home-based HIV counselling and testing among family members: the TASO experience*. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 451.
- Onyango A et al. *Expansion of diagnostic counseling and testing (DTC) in tuberculosis (TB) clinics, Nyanza Province, Kenya*. The 2006

HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 137.

Sallet J et al. *Integrating HIV counselling and testing into primary health care services*. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 186.

Sherman G et al. *Scaling up early diagnosis of HIV-infected infants in the clinic and the laboratory*. The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 230.

Tanui I et al. *HIV counselling and testing in clinical settings in Kenya: are providers a barrier?* The 2006 HIV/AIDS Implementers Meeting of the President's Emergency Plan for AIDS Relief, Durban, South Africa, abstract 188

Weiser SD et al. *Routine HIV testing in Botswana: a population-based study on attitudes, practices, and human rights concerns*. PLoS Medicine 3 (7): e261, 2006.

about HATiP

A regular electronic newsletter for health care workers and community-based organisations on HIV treatment in resource-limited settings.

The newsletter is edited by Theo Smart (Cape Town) and Keith Alcorn, NAM's Senior Editor (London).

For further information please visit the HATIP section of aidsmap.com