## **Perspectives**

# Scaling up HIV prevention: why routine or mandatory testing is not feasible for sub-Saharan Africa

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### Introduction

Global HIV incidence may have peaked<sup>1</sup> but calls for scaling up prevention have not diminished. The number of new infections worldwide remains high (4.1 million in 2005) with some regions previously unscathed experiencing rising incidences of HIV.2 The number of patients presenting late at health facilities with advanced HIV/AIDS is also a cause of concern. In general, there is a growing sense of frustration that global efforts to prevent HIV/AIDS are being outpaced by the spread of the pandemic.3 Consequently, calls have been made for a more pragmatic approach to containing the disease, with routine and mandatory testing gaining increasing attention. The US Centers for Disease Control and Prevention (CDC) recently proposed a new approach for HIV testing in adults, adolescents and pregnant women under which testing will be routinely offered in all health-care settings. No signed consent from patients would be required under this new proposal; the general consent for medical care would be considered sufficient to encompass consent for HIV testing.4,5 Former US President Bill Clinton has also lent support for mandatory HIV testing in countries where the prevalence rate is 5% or higher.<sup>6</sup> Political support for mandatory testing has been seen in countries like India, where the state government of Goa has proposed mandatory premarital testing, and in China, which plans to test all workers in the tourism industry.<sup>7</sup> But would routine or mandatory testing make any difference in preventing HIV/ AIDS in sub-Saharan Africa?

#### Access to treatment

HIV testing and treatment are inextricably linked; access to treatment and medical care is as essential to encouraging testing as testing is essential to expanding treatment. While recent debate about scaling up HIV/AIDS prevention has passionately focused on expanding testing, especially in sub-Saharan Africa, calls for scaling up access to treatment on the continent have been less vigorously heeded. This is not to say that no progress has been made in expanding access to treatment. There have been significant improvements following the "3 by 5" initiative, but even with those improvements, only 18 out of the 53 countries in Africa had 25% or more antiretroviral (ARV) coverage in June 2006.3 The "3 by 5" initiative, albeit laudable, appears to have suffered a fate similar to other impressive but unrealistic ideas of the WHO, including the health for all philosophy. Fig. 1 shows estimated access to antiretroviral therapy by geographical region in 2005.

The unmet ARV needs of sub-Saharan Africa remain disproportionately high. About 4.2 million people in need of treatment were without access to ARV therapy in June 2005. In countries such as the Democratic Republic of the Congo, Ghana and the United Republic of Tanzania, ARV therapy coverage was below 5%. In contrast, about 70% of the estimated 15 310 people living with HIV in Australia in 2005 were receiving antiretroviral treatment. 9

There is no denial that even without treatment, testing and knowledge of one's HIV status are important because a positive HIV test could activate behaviour modifications that may reduce the risk of onward transmission of the virus. However, while some individuals even without access to treatment may have incentives to know their HIV serostatus, the logic of undergoing testing when there is clear evidence of no access to treatment may seem perverted at best to many people. Whether routine or mandatory, the rationale behind avoiding HIV testing where there is no hope for treatment, if needed, is not hard to digest. Scaling up access to treatment therefore is a vital step towards encouraging testing in sub-Saharan Africa and dispelling the misconception that HIV/AIDS is a "death sentence" – a misconception that increases fear and obstructs testing.<sup>10</sup>

### Weak health systems

African health systems are abysmally weak; inadequate health workforces, poor management, and inefficient resource allocation and utilization have severely weakened the capacity of most health systems on the continent.11 It is widely believed that even if sufficient antiretroviral drugs were to be available, distribution to all those in need of treatment would still be a problem in most countries. Inadequate health workforces are perhaps the most serious of all the challenges. Poor working conditions and low salaries have triggered a wave of migration of health professionals from sub-Saharan Africa to western countries. In Ghana, for example, about 61% of doctors trained locally between 1984 and 1995 have left the country;12 the public-sector medical vacancy rate was 47% in 2002 and even higher (57%) for registered nurses. Data from Zambia and Zimbabwe show a similar picture of attrition from public-sector health employment, with losses of 15-40% per annum. Of the 1200 physicians trained in Zimbabwe during the 1990s, only 360 were still practising in the country by 2001.13

Given the weakness of health systems in sub-Saharan Africa, in particular the acute shortage of health personnel, it is incomprehensible that routine or

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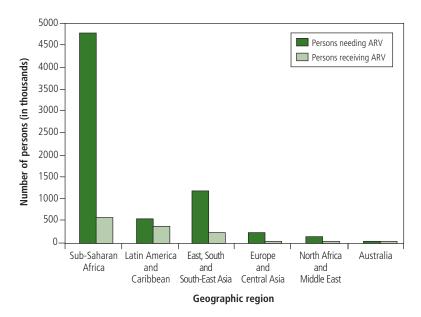
mandatory testing per se would lead to any drastic improvements in HIV/AIDS prevention or treatment and care on the continent. Rather than calling for routine or mandatory testing, the limited access to health professionals which is seriously undermining HIV prevention, treatment and care in sub-Saharan Africa should be addressed. Chen and colleagues observed that sub-Saharan African countries must nearly triple their current number of health workers by adding the equivalent of one million workers through retention, recruitment and training if they are to come close to approaching the Millennium Development Goals (MDGs) for health.14 Sub-Saharan African countries surely cannot do this alone; they would need support from the countries who recruit health workers from the continent. A comprehensive approach that includes immediate measures to stop the migration of health workers is paramount. In addition, substantial investments are required in training more health professionals to make up the current shortfalls. This may seem a long-term solution but 25 years down the track in the battle against AIDS, nothing should be discarded on the basis of being long-term.

## The culture of health service utilization

The culture of health service utilization in Africa raises concerns about the feasibility of routine or mandatory HIV testing. Africans in general, and particularly the poor, do not use health services unless they are very sick or there is a specific need.<sup>15</sup> The concepts of preventive health care and health promotion do not appear to have caught up with most of the population. Even in times of infirmity, studies have shown that self-medication and the use of traditional medicine are usually the first line of action. 16,17 This culture of poor health service utilization has been sustained by the high level of poverty in Africa and the limited access to health facilities often culminating in long and arduous hours of travel to see a doctor. 18 A key consequence of this is the high incidence of late HIV/AIDS diagnosis across Africa and among African immigrants overseas.

Routinely testing people presenting at health facilities for HIV with or without their consent, in an environment of poor health service utilization, would have limited impact on prevent-

Fig. 1. Estimated number of persons needing antiretroviral therapy and those receiving it by geographic region, 2005



**Source:** Data from the Joint United Nations Programme on HIV/AIDS (UNAIDS), *Progress on global access to HIV anti*retroviral therapy, 2005, and Australian National Centre in HIV Epidemiology and Clinical Research, *Annual Surveillance* Report, 2006. Note that the Australia data represents the total number of people living with HIV in 2005, not only those in need of treatment.

ing HIV/AIDS as significant numbers of non-regular users of health services will be missed. This is not to say that testing people routinely at health facilities may not have any positive effects; it could lead to an increase in the number of people tested for HIV on the African continent. However, for routine or mandatory testing or any other policy that focuses on health-care settings to have the maximum impact in Africa, a massive educational effort on health-care use is as essential as the removal of financial and other barriers to accessing health care.

### Stigma and discrimination

HIV-related stigma and discrimination remain widespread in Africa.<sup>19</sup> Despite having the highest number of HIV cases and AIDS-related deaths, people identified as living with HIV/AIDS still face serious discrimination from and together with their families. AIDSrelated discrimination can manifest in different ways - from inappropriate comments to breaches of patients' confidentiality, delay and refusal of treatment and social isolation.<sup>20</sup> Stigma and discrimination obstruct the uptake of HIV/AIDS interventions. A study done in Botswana and Zambia found that stigma against HIV-positive persons and fear of discrimination were the key

reasons for the low uptake of voluntary counselling and testing to prevent mother-to-child transmission of the virus.<sup>21</sup> It has been argued that routinely testing for HIV as part of health delivery would normalize testing<sup>22</sup> and make AIDS less stigmatized. However, it is hard to imagine how this will happen given the issues of confidentiality surrounding HIV testing and the low rate of disclosure by those testing positive. Unless the current stigma and discrimination associated with HIV/ AIDS is seriously addressed, any policy of routine or mandatory testing could even be counter-productive by driving people away from health facilities if they know they will be tested.

### **Conclusion**

Sub-Saharan Africa is contextually unique. The social, economic and cultural contexts within which HIV infects people and spreads across the continent differ considerably from those in other parts of the world. It is important that appropriate caution is exercised when prescribing policies that seem to have worked in other settings for use in Africa. Although HIV testing is crucial for effective prevention, making it routine or mandatory in sub-Saharan Africa may not be feasible in the short

to medium term. What is important is the removal of the key barriers to HIV testing. In particular, the lack of access to ARV therapy, the inadequate health workforce that has incapacitated many health systems in Africa, the culture of poor use of health services and the widespread stigma and discrimination associated with HIV/AIDS must be tackled. HIV/AIDS, to a large extent, is a behaviour-induced epidemic, and like all such epidemics the object of prevention lies in individual behaviour changes which cannot be brought about by a policy of routine or mandatory testing alone.

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### References

- Shelton JD, Halperin DT, Wilson D. Has global HIV incidence peaked? Lancet 2006;367:1120-2.
- 2006 report on the global AIDS epidemic. Geneva: Joint United Nations Programme on HIV/AIDS (UNAIDS); 2006. Available at: http://www.unaids. org/en/hiv\_data/2006globalreport/default.asp
- 3. Steinbrook R. Message from Toronto Deliver AIDS treatment and prevention. *N Engl J Med* 2006;355:11.
- Bayer R, Fairchild AL. Changing the paradigm for HIV testing the end of exceptionalism. N Engl J Med 2006;355:7.
- Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. Atlanta: US Centers for Disease Control and Prevention; 2006; 55 (RR14); 1-7. Available at: http://www.cdc. gov/mmwr/preview/mmwrhtml/rr5514a1.htm
- 6. HIV: compulsory testing and falling incidence? *Lancet* 2006;367:1118-1118.
- AIDS conference: drive for HIV testing must respect rights. New York: Human Rights Watch; 2006. Available at: http://hrw.org/english/doc/2006/08/09/ canada13944htm
- 8. Progress on global access to HIV antiretroviral therapy: an update on "3 by 5". Geneva: WHO; 2005.
- Annual Surveillance Report: HIV/AIDS, Viral Hepatitis and Sexually Transmitted Infections in Australia 2006. Sydney: National Centre in HIV Epidemiology and Clinical Research (NCHECR), University of New South Wales; 2006.
- Schoeph BG. Uganda: lessons for AIDS control in Africa. Rev Afr Polit Econ 2003;98:553-72.
- World health report 2000. Health systems: improving performance. Geneva: WHO; 2000.
- Dovlo D. The brain drain and retention of health professionals in Africa.
   Case studies prepared for regional training conference: Improving tertiary education in sub-Saharan Africa: things that work! Accra, 23-25 September 2003. Available at: http://www.worldbank.org/afr/teia/conf\_0903/dela\_dovlo.pdf

- Friedman E. Action plan to prevent brain drain: building equitable health systems in Africa. Boston: Physicians for Human Rights; 2004. Available at: www.phrusa.org/campaigns/aids/pdf.braindrain.pdf
- 14. Chen L, Evans T, Anand S, Boufford JI, Brown H, Chowdhury M, et al. Human resources for health: overcoming the crisis. *Lancet* 2004;364:1984-90.
- Criel B. District-based health insurance in Sub-Saharan Africa. In: Studies in Health Services Organisation and Policy. Antwerp: Institute of Tropical Medicine 1998:10.
- Cocks M, Dold A. The role of 'African Chemists' in the health care system of Eastern Cape province of South Africa. Soc Sci Med 2000;51:1505-15.
- 17. Promoting the role of traditional medicine in health systems: a strategy for African region 2001-2010. Harare: WHO; 2000.
- 18. Buor D. Determinants of utilisation of health services by women in rural and urban areas in Ghana. *GeoJournal* 2004;61:89-102.
- Glick P. Scaling up HIV voluntary counselling and testing in Africa: what can evaluation studies tell us about potential prevention impacts. Eval Rev 2005;29:331-57.
- Foreman M, Lyra P, Breinbauer C. Understanding and responding to HIVrelated stigma and discrimination in the health sector. Washington: Pan American Health Organization; 2003.
- Nyblade L, Field ML. Women, communities and the prevention of mother-tochild transmission of HIV: issues and findings from community research in Botswana and Zambia. 2002. Available at: http://www.icrw.org/publications\_ hivaids.htm
- Beckwith CG, Flanigan TP, del Rio C, Simmons E, Wing EJ, Carpenter CCJ, et al. It is time to implement routine, not risk-based, HIV testing. *Clin Infect Dis* 2005;40:1037-40.