



PERSONAL VIEW

Is it time to change our HIV testing policy in health care facilities?

L-G Bekker, R Wood

The annual number of AIDS deaths declined substantially in the USA following introduction of highly active antiretroviral therapy (HAART) in 1995, but has remained stable from 1999 to 2004.¹ There are approximately 1.0 - 1.2 million persons estimated to be living with HIV, of whom 25% are unaware of their infection and likely to have transmitted their infection unknowingly.^{1,2} Despite considerable survival benefits if treatment is initiated early before symptoms develop, 40% of patients receive their HIV diagnosis less than 12 months before developing AIDS.¹ Early HIV diagnosis may therefore be of both public health and individual survival benefit. On 22 September 2006 the United States National Center for HIV / AIDS published revised recommendations for HIV testing of adults, adolescents and pregnant women to facilitate HIV testing as a normal part of medical practice similar to screening for other treatable conditions.³ HIV screening for all patients in US health care settings is now recommended unless the patient declines (i.e. 'opt-out' screening). Separate written consent for HIV testing is no longer required and general consent for medical care will be considered sufficient to encompass consent for HIV testing. Prevention counselling will not be required with HIV diagnostic testing or as part of HIV screening programmes in health care settings. The objective of the revised policy is to increase HIV screening of patients and pregnant women in health care settings to foster earlier detection of HIV infection, identify and counsel individuals with unrecognised HIV infection and link them to clinical and prevention services.

Four types of HIV testing

In sub-Saharan Africa 24.5 million individuals are living with HIV,⁴ although studies have consistently shown that less than 10% are aware of their HIV status.⁵ However, knowledge of HIV serostatus has been demonstrated to be associated with a decrease in sexual risk behaviour.⁵ The World Health Organization (WHO) and United Nations AIDS Organization

(UNAIDS) encourage expansion of HIV testing and counselling as an important strategy in addressing the HIV / AIDS epidemic and as a means to attain fulfilment of the right to the highest possible level of health.⁶ The WHO and UNAIDS recognise four types of HIV testing, viz. client-initiated voluntary counselling and testing (VCT); diagnostic HIV testing of those with symptoms and signs of HIV-related disease; routine health care provider-initiated testing; and mandatory screening of blood destined for transfusion or manufacture of blood products. Substantial increases in HIV testing were observed in Botswana following introduction of routine health care provider-initiated 'opt-out' screening in prenatal and other health care settings during 2004.⁷ A population-based study 11 months after introduction of the 'opt-out' strategy showed the policy to be widely supported, however concerns that the policy could decrease health-seeking behaviour were not demonstrated.⁸ In Zimbabwe, a country with high antenatal prevalence, 45% of women attending 2 rural postnatal services had not been tested for HIV during pregnancy; of these, 80% would have accepted testing if an 'opt-out' policy had been instituted.⁹ The introduction of a routine health care provider-initiated 'opt-out' strategy for HIV testing may therefore have far-reaching public health and individual benefits, particularly in high prevalence settings.

The risk/benefit ratio of HIV testing

An estimated 5.5 million individuals live with HIV / AIDS in South Africa and national antenatal HIV seroprevalence continues to rise. Despite increasing HIV prevalence, access to HIV testing services continues to be poorly utilised. National surveys have reported low uptake of VCT services, with only a modest increase in utilisation from 20% to 30% between 2002 and 2005.^{10,11} In addition, those individuals not seeking VCT in high-prevalence populations in South Africa may have equally high sexual risk behaviour as those seeking testing.¹² Health care provider-initiated HIV testing in South Africa is considered distinct from all other routine medical testing. An HIV test is considered 'a *prima facie* interference with a person's right to freedom and security of the person and his/her privacy', and is to be performed after pre-test counselling is done and specific written consent is given.¹³ Health care-initiated testing has not been available at all primary care facilities in South Africa,¹⁴ the majority of medical staff have not been trained in pre-test counselling, and time constraints result in many missed HIV-

L-G Bekker and Robin Wood are HIV physicians and researchers in the Desmond Tutu HIV Centre at the Institute of Infectious Diseases and Molecular Medicine, UCT. They have been involved in HIV care and management in South Africa since the early 1990s.

Corresponding author: L-G Bekker (Linda-Gail.Bekker@hiv-research.org.za)



testing opportunities. The 'exceptionalisation' of HIV testing developed during an earlier period of therapeutic nihilism when the disadvantages of testing were thought to exceed the benefits of testing. A positive HIV diagnosis was known to impact negatively on quality of life¹⁵ but the therapeutic benefits accruing from knowledge of HIV status were limited and the preventive epidemiological benefits were undefined. The risk/benefit ratio of HIV testing began to change with increasing access to the benefits of co-trimoxazole prophylaxis¹⁶ and prevention-of-mother-to-child transmission (PMTCT) services. Access to antiretroviral therapy further increases the survival benefits conferred by knowledge of HIV-positive status.¹⁷ The benefit of increased population HIV testing by decreasing sexual risk behaviour has been demonstrated in the USA² and other countries⁵ but has yet to be clearly shown within South Africa. Normalising HIV testing as part of routine medical care may also serve to reduce the stigma of HIV infection.

As the benefits of HIV testing increase at an individual and population level, so HIV testing strategies need to evolve. The challenge we face is to maximise the benefit dividend of effective HIV treatment while maintaining confidentiality and protecting human rights. Introduction of universal 'opt-out' HIV testing in all South African health care facilities may allow an opportunity to fulfil the individual right to the highest level of health and have public health benefit by impacting on prevention at a population level.

1. Centers for Disease Control. Cases of HIV infection and AIDS in the United States, 2004. *HIV/AIDS Surveillance Report* 2005; **16**: 16-45.
2. Marks G, Crepaz N, Senterfitt JW, Janssen RS. Meta-analysis of high-risk sexual behaviour in persons aware and unaware they are infected with HIV in the United States: implications for HIV prevention programs. *J Acquir Immune Defic Syndr* 2005; **39**: 446-453.
3. Revised recommendations for HIV testing of adults, adolescents and pregnant women in health-care settings. *Morb Mortal Wkly Rep* 2006; **55**(RR14): 1-17.
4. UNAIDS Fact sheet. Sub-Saharan Africa. http://www.who.int/hiv/mediacentre/200605-FS_SubSaharanAfrica_en.pdf (accessed 6 September 2006).
5. Roth DL, Stewart KE, Clay OJ, et al. Sexual practices of HIV discordant and concordant couples in Rwanda: effects of a testing and counselling programme for men. *Int J STD AIDS* 2001; **12**: 181-188.
6. WHO and UNAIDS Secretariat Statement on HIV testing and counselling. 14 August 2006. http://www.who.int/hiv/toronto2006/who-unaidsstatement_TC_081406_dh.pdf (accessed 6 September 2006).
7. Introduction of routine HIV testing in prenatal care-Botswana, 2004. *Morb Mortal Wkly Rep* 2004; **53**: 1083-1086.
8. Weiser SD, Heisler M, Leiter K, et al. Routine HIV testing in Botswana: A population-based study on attitudes, practices and human rights concerns. *PLoS Med* 2006; **3**: e216 [Epub ahead of print].
9. Perez F, Zvandzava C, Engelsmann B, Dabis F. Acceptability of routine HIV testing ('opt-out') in antenatal services in two rural districts of Zimbabwe. *J Acquir Immune Defic Syndr* 2006; **41**: 514-520.
10. Shisana O, Simbayi I. *Nelson Mandela/HSRC Study of HIV/AIDS. South African National HIV Prevalence, Behavioural Risks and Mass Media, Household Survey 2002*. Cape Town: Human Sciences Research Council, 2002.
11. Shisana O, Rehle T, Simbayi I, et al. *South African National HIV Prevalence, HIV Incidence, Behaviour and Communication Survey, 2005*. Cape Town: Human Sciences Research Council, 2005.
12. Kalichman SC, Simbayi LC. HIV testing attitudes, AIDS stigma and voluntary HIV counselling and testing in a black township in Cape Town, South Africa. *Sex Transm Infect* 2003; **79**: 442-447.
13. South African Medical Association. *Human Rights and Ethical Guidelines on HIV. A Manual for Medical Practitioners 2001*. Pretoria: SAMA, 2001.
14. Health Systems Trust. Percent of Primary Health Care facilities offering voluntary counselling and testing. Health Statistics. <http://www.hst.org.za/healthstats/67/data> (accessed 6 September 2006).
15. O'Keefe EA, Wood R. The impact of HIV on quality of life in a multiracial South African population. *Qual Life Res* 1996; **5**: 275-280.
16. Badri M, Ehrlich R, Wood R, Maartens G. Initiating co-trimoxazole prophylaxis in HIV-infected patients in Africa: an evaluation of the provisional WHO/UNAIDS recommendations. *AIDS* 2001; **15**: 1143-1148.
17. Bekker L-G, Myer L, Orrell C, Wood R. A South African community-based antiretroviral program: Outcomes during 3 years of scale-up. *S Afr Med J* 2006; **96**: 315-320.