

should be favoured over clinical monitoring alone.

Regarding the methodological issues that Bélec and colleagues raise, inclusion criteria should be similar in both trial groups to enable unbiased conclusions to be made from the data about the value of laboratory monitoring; selecting participants in the laboratory group (but not in the clinical group) on the basis of CD4 cell count would probably have favoured the inclusion of laboratory participants with a more pronounced immunodeficiency. Also, the delay in diagnosis of therapeutic failure and switching (based on viral loads in the laboratory group and on clinical events in the clinical group) seems to be too closely associated with the monitoring strategies to be used as primary outcome. Conversely, we confirm that our conclusions cannot be extrapolated to dissimilar contexts (post-conflict countries) or populations (children).

Overall, our findings support the use of laboratory monitoring in accordance with the Development of AntiRetroviral Therapy in Africa (DART) trial² and the Home-Based AIDS Care (HBAC) trial.³ However, all three trials showed limited clinical benefits of laboratory monitoring in the first 2–5 years of treatment compared with that of ART delivery. Long-term simulation models extended this finding in terms of survival (the ultimate goal of ART) despite higher rates of new drug-resistant HIV infections without laboratory monitoring.⁴ Cost-effectiveness studies provided unclear evidence on whether laboratory monitoring should be prioritised over ART expansion.⁵ 53% of the 14.2 million patients eligible for ART were not yet being treated as of December, 2010, new HIV infections each year are twice as frequent as treatment initiations, and restricted funding means that continued delivery of ART is even under threat for those who have already started treatment.

Altogether, the available data suggest that the immediate top priority should be to provide ART to the millions of patients in need (already being or not yet treated). Nevertheless, laboratory tests that are affordable and easy to use even outside the major city laboratories are urgently needed to improve the quality of HIV care especially as patients accumulate years on ART and to preserve the use of the present, low-cost, effective first-line regimens. In the meantime, the absence of laboratory monitoring should not be used as a pretext to inhibit increased use of ART.

We declare that we have no conflicts of interest.

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Preventing AIDS deaths: cryptococcal antigen screening and treatment

We applaud the study by Rosalind Parkes-Ratanshi and colleagues,¹ which showed the development of cryptococcal disease among patients with HIV/AIDS who were initially cryptococcal antigen (CrAg) negative, and the benefit of primary fluconazole prophylaxis in this population. Our group and others in South Africa have supported efforts to increase screening and treatment of severely immunocompromised HIV-infected people for CrAg by reflexive testing with a new rapid and simple US Food and Drug Administration cleared lateral flow assay (LFA) among patients with a CD4 count of less than 100 cells per μL .^{2,3} In our opinion, the additional benefit of prophylaxis in those who screen CrAg negative might not be cost effective, given the large number of patients who will need to be prophylactically treated. We encourage public-health officials to consider that a CrAg screening and treatment programme alone, without an additional prophylaxis component, might be sufficient to substantially reduce cryptococcal-related morbidity and mortality.

In the study by Parkes-Ratanshi and colleagues,¹ 18 of 759 patients in the placebo group compared with one of 760 in the treatment group developed cryptococcal disease a mean of 7 weeks after testing CrAg negative; most were awaiting antiretroviral therapy. We suggest two actions to reduce this somewhat high incidence before adding a prophylaxis programme to already-strained public-health systems.

First, improved access and adherence to antiretroviral therapy is of paramount importance. Increased efforts to shorten the time to initiation of antiretroviral therapy might be a better means to prevent the continued risk for cryptococcal disease among

those screening negative. Second, improvement of the sensitivity of the screening test can reduce the frequency of false-negative screening tests. Some of the patients in this study who later developed cryptococcal disease might have had low levels of circulating antigen, and a more sensitive screening test could have identified them. The LFA detects lower levels of antigen than latex agglutination tests;⁴ the potential of this new assay to improve sensitivity of a screening programme merits further study.

Although the public-health benefit of various strategies probably varies by factors such as CD4 count, CrAg prevalence, and time to initiation of antiretroviral therapy, there is an urgent need to identify the most cost-effective policy to reduce the high burden of cryptococcal disease and death in patients with HIV/AIDS. A combined strategy (pre-emptive treatment of antigen-positive patients and prophylaxis of antigen-negative patients), as suggested by Parkes-Ratanshi and colleagues,¹ might be promising in theory, but will probably be less cost effective and more operationally challenging than maximising the effectiveness of a single strategy of targeted screening and treatment of those most at risk.

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Poliovirus eradication

Your Editorial in the October, 2011, issue covers the theme of polio eradication. Everyone that has a scientific or humanitarian interest in achieving the noble task of eliminating poliomyelitis remains confident that it is an attainable public-health goal in the near future. There is also an agreement that eradication should be a global effort that requires increased financial and political support. However, polio eradication efforts may be at risk of losing political and financial momentum in view of the persistent failures of the Global Polio Eradication Initiative (GPEI) and its inability to consistently reach target dates. More importantly, these events cripple the global credibility and historical legacy of successes in the control of infectious diseases led by WHO, such as the eradication of smallpox.

Wild-poliovirus type 3 (WPV3) transmission reappeared in Pakistan in June, 2011, and so far more than 50 cases have been reported in this country. Before these cases, the Asian continent was on the verge of elimination, with the last case occurring in November, 2010. Continued transmission of WPV3 in tribal areas of Pakistan has important implications for the global effort to eradicate WPV3. The risk of onward spread of WPV3 is deemed as high by WHO, especially in view of large-scale population movements within Pakistan, between Pakistan and Afghanistan, and associated with

Umrah and the Hajj. The detection of WPV3 in Pakistan represents a risk that it could spread from this transmission focus to other WPV3-free areas of Asia and beyond. Globally, WPV3 transmission was at historically low levels in 2011, with circulation of this strain restricted to parts of west Africa (Côte d'Ivoire, Guinea, Mali, and Niger), Nigeria, and Chad.

Indeed, the re-emergence of WPV3 in Pakistan in 2011 represents a setback in achieving the established goal for 2012 of interrupting wild poliovirus transmission in Asia and brings Asia back on to the polio map. The vaccination policy decision in 2006 to begin administering monovalent oral polio vaccine type 1 has been a major pitfall in the elimination effort. Ecological replacement of other serotypes has ensued: many children have been crippled by this decision raising substantial ethical concerns.

Vaccination strategies to control the circulation of polioviruses have policy and governance, biological, and operational dimensions. Much emphasis continues to be paid to the low immunogenicity and protection of oral poliovirus vaccine among populations of children with rampant intestinal parasitic infections in the remaining hotspots. Some evidence supports these concerns.² However, incontestable evidence shows that circulation of the three serotypes of polioviruses was interrupted more than 15-years ago in areas plagued with extreme poverty and widespread health inequities in Central America and South America where undernourishment and intestinal parasites are also common.

In the case of polio, whereas the challenges are formidable, the steps to achieve elimination are simple. Operational issues surrounding oral polio vaccine need to be dealt with in the affected and susceptible populations. Reassessing the basic steps of the polio eradication effort includes addressing structures and