

Special Theme – HIV/AIDS

the population (e.g. HIV-infected pregnant women) are another way to advance public health without overburdening fragile health care systems. Their experience will show the way forward to the scale-up of AIDS care in the coming years.

Farmer et al. draw on the lessons and infrastructure of the directly observed treatment short course for TB (DOTS) to plan for AIDS care (4). TB programmes, however, cannot be taken for granted, nor did they evolve overnight (5–7). The DOTS strategy, for example, calls for passive case finding, targeting smear-positive cases, and supervised outpatient treatment. These controversial parameters were set through clinical epidemiology and operational research, enlightened leadership and management, and unrelenting advocacy and training. We are not there yet in AIDS care, though we are not short of ideas to test.

Until recently, AIDS care research in Africa and its rationale had been neglected (8). Most non-experts had assumed that we knew how to treat AIDS from what had been done in the OECD countries (9). In fact, we are today with AIDS treatment where we were in 1970 with anti-tuberculosis treatment: there were many drugs developed a decade earlier, which were life-saving in the hands of experts. It took over two decades of sound research to develop a standardized TB programme (DOTS) that could be implemented in developing countries (later it was adopted in OECD countries too (10)). Africa cannot afford to wait two decades to tackle AIDS. Yet, the required research has been scant, owing to reservations about the feasibility of HAART, clinical overconfidence and ethical paralysis.

Scientific research must be marshalled to “fast track” the scaling-up of AIDS care beyond pilot projects. Research can bridge the gap between increasingly cheaper ARVs and the limited infrastructure to deliver them in Africa. Research need not hold back care. We should learn by doing. Better action can be informed by research, just as research priorities should be driven by the imperatives of action. Competing needs in the fight against AIDS and poverty demand that we go into comprehensive care armed with the right weapons. The seeds are sown. ■

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2. **Perez-Casas C et al.** *Accessing ARVs: untangling the web of price reductions for developing countries*. Special Report by Médecins sans Frontières, Geneva, 10 October 2001. [<http://www.accessmed-msf.org/prod/publications.asp?scntid=9112001121506&contenttype=PARA&>]
3. **Dye C et al. for the WHO Global Surveillance and Monitoring Project.** Global Burden of Tuberculosis. Estimated incidence, prevalence, and mortality by country. *JAMA*, 1999, **282**: 677–686.
4. **Farmer P et al.** Community-based treatment of advanced HIV disease: introducing DOT-HAART. *Bulletin of the World Health Organization*, 2001, **79**: 1145–1151.

5. **Styblo K et al.** Epidemiological and clinical study of tuberculosis in the district of Kolin, Czechoslovakia: report for the first 4 years of the study, 1961–64. *Bulletin of the World Health Organization*, 1967, **37**: 819–874.
6. **Kochi A.** The global tuberculosis situation and the new control strategy of the World Health Organization. *Tubercle*, 1991, **72**:1–6.
7. **Fox W, Ellard GA, Mitchison DA.** Studies on the treatment of tuberculosis undertaken by the British Medical Research Council tuberculosis units, 1946–1986, with relevant subsequent publications. *International Journal of Tuberculosis and Lung Disease*, 1999, **3** (10, Suppl 2): S231–S279.
8. **Fauci A.** The promise of research in accelerating AIDS care in Africa. Meeting on AIDS care research in Africa. Convened by the Rockefeller Foundation and hosted by Uganda’s Joint Clinical Research Centre and Makerere University. Kampala, 18–20, April 2001.
9. *Guidelines for the use of antiretroviral agents in HIV-infected adults and adolescents*. Washington DC, US Department of Health and Human Services (DHHS) and Henry J. Kaiser Family Foundation. Issued 5 February, 2001.
10. **Kaye K, Frieden TR.** Tuberculosis control: the relevance of classic principles in an era of acquired immunodeficiency syndrome and multidrug resistance. *Epidemiological Review*, 1996, **18**: 52–63.

HAART in Haiti — evidence needed

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Farmer et al. present a remarkable achievement: the establishment of a care service for people with HIV/AIDS in a community of poor displaced people living in a remote rural area of Haiti (1). The conditions under which this has been accomplished are particularly difficult, yet the service has included the provision of antiretroviral therapy (ART) to 60–100 people. This has been possible, they argue, by learning from the history of tuberculosis control and using a model they have called DOT-HAART (directly observed therapy with highly active antiretroviral therapy), implemented through a team of community-health workers called “accompagna-teurs” to supervise therapy.

If the claims of the authors are substantiated, such a model would have enormous potential for replication in other resource-poor settings. If, on the other hand, the authors’ claims are exaggerated, the potential for doing more harm than good would be great (and the authors’ dismissal of the “spectre of

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acquired drug resistance” is alarming). In the end, the scientific soundness of the evidence must be the decisive factor. It is unfortunate, therefore, that the paper reads more like a statement of positive self-evaluation than a careful presentation and analysis of the facts. The paper is instructive not so much for what it presents as for what it does not reveal. It makes no serious attempt to consider what really are the lessons for Haiti, and other countries, if they want to scale up efforts to provide care to those infected with HIV/AIDS.

The authors’ main contention is that the concerns voiced about treating HIV-positive people with HAART — namely high cost of drugs, lack of health system capacity to deliver them effectively, possibility of non-compliance, and risk of drug resistance — are ill-founded. If we are to be convinced that this is so, we need better evidence than that provided in this paper. Let us look briefly at some important issues the authors did not mention.

First, logistics: what clinical input and staff time was required to set up and then run this intervention? Apart from the “*accompagnateurs*”, how many physician hours were involved? In the real world, any broadly accessible initiative will have to be clinical-officer or nurse-practitioner led — there just are not enough physicians to go around. With rapidly falling prices, capacity, not cost, will be the big issue. The human resources and capacities needed to implement the model intervention need to be very carefully listed for a real evaluation of their programme to be made.

Second, entry criteria: ad hoc criteria are used to start individuals on treatment. What are “recurrent opportunistic infections difficult to manage with antibacterials or antifungals”? What is “otherwise unexplained and significant weight loss” compared to “chronic enteropathy with wasting”? The severe neurological complications include peripheral neuropathy which may be more present in the earlier stages of disease than other problems. The reliance on haematological indices including low platelet counts and “severe leukopenia” (not defined) suggests access to automated haematology analysers, which are not available outside research projects or capital cities. Also, why have patients with active TB been excluded?

Third, unforeseen benefits: what is the evidence that the intervention has improved staff morale? What observations have been made for the group to form an “impression” that AIDS-related stigma has been reduced? And how do they relate the increase in voluntary counselling and testing to this intervention rather than other changes (there is no control group and many things have changed over the three years)? We would all want these benefits to be forthcoming, but public health physicians need evidence rather than impressions.

Fourth, costs: how much did it cost to deliver the drugs? Reference is made to 75–80% of the costs being for medication — but this is for drugs purchased in which market and at what price? Eighty per cent of current US prices for triple drug (perhaps US\$ 8000–10 000) is a lot more than 80% of the current best (cheapest) prices quoted by Médecins Sans Frontières and other nongovernmental organizations — around US\$ 350 per patient per year. This incomplete presentation of the facts the group may well have at hand suggests that the costs are high, which would then put the intervention in a very different light. Of course any research initiative will have additional costs which will be shed if other nongovernmental organizations start to deliver the model. But if very costly, how can this intervention ever be scaled up and replicated, and sustained?

By any evaluation criteria — whether cost-effectiveness, sustainability, feasibility, or absence of unintended negative consequences — this success story must be classified as non-proven. Yes, we know with exceptional circumstances, motivation, resources and generous research funding positive outcomes can be achieved, but replication is something else entirely. Yes, it is true that with huge inputs the miracle of ART will produce stunning successes. And certainly, acting when others have failed to do so is noble. However, for lack of appropriate design and scientific evaluation, important lessons that might have been applied in other settings simply cannot be drawn from this study. ■

1. **Farmer P et al.** Community-based treatment of advanced HIV disease: introducing DOT-HAART. *Bulletin of the World Health Organization*, 2001, **79**: 1145–1151.