AIDS: from crisis management to sustained strategic response

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Lancet 2006; 368: 526–30

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Seen from the perspective of a quarter century, it is apparent that some of the most insightful works on AIDS were written in the epidemic's earliest years. Among them is a commentary by the evolutionary biologist Stephen Jay Gould, published on the *New York Times*' op-ed page in April 1987. At a time when AIDS had probably killed less than half a million people and was still regarded as mainly a disease of marginalised minorities in the West, Gould warned that "the AIDS pandemic [is] an issue that may rank with nuclear weaponry as the greatest danger of our era... potentially, the greatest natural tragedy in human history."[1]

How prescient Gould has proved to be. One set of statistics says it all: a disease that emerged as mysterious fatal illnesses in five American men in 1981 was by 2002 the world's leading cause of death among both women and men aged 15 to 59 years, causing one in every seven deaths in this age-group: around twice as many as caused by ischaemic heart disease or tuberculosis.[2]

Although AIDS is firstly a public-health crisis, it has become one of the make-or-break forces of this century, as measured by its actual impact and potential threat to the survival and wellbeing of people worldwide. Indeed, it is difficult to think of many other global problems that are in the same league as AIDS—arguably, only extreme poverty and deprivation as a whole; climate change; and the potential risks posed by nuclear war, chronic armed conflicts, or a sustained breakdown of international finance and trade.

The global impact of AIDS has already been so devastating that the United Nations' *Human Development Report 2005* concluded that "the HIV/AIDS pandemic has inflicted the single greatest reversal in human development."[3]

But quite beyond the devastation that it has set in motion already, the epidemic is exceptional in terms of the scale of future threats it poses. With sustained declines in HIV prevalence having been recorded so far in only a small, although increasing, number of countries, and with national epidemics in several countries in eastern Europe and Asia continuing to grow rapidly, AIDS is likely to persist as a worldwide epidemic for several generations unless a response commensurate with the problem is put in place and sustained. Although it is not possible to predict its probable length, it is prudent to recall that the epidemic has continually outstripped the worst-case global scenarios, that national HIV prevalence has risen far beyond what was ever thought possible, and that we are witnessing multiple waves of HIV spread even in countries where incidence has peaked, especially when HIV prevention programmes do not continue to receive adequate support.[4,5]

From monumental human failures to a momentum of progress

The exceptional characteristics of AIDS mean that only an exceptional response—going far beyond the usual public-health parameters of epidemic control and technological interventions—can succeed in checking the epidemic. For much of the first quarter century of AIDS, the response remained business as usual. However, the narrative of the AIDS response is now increasingly one of momentum and achievement. Almost everywhere, and on almost every front, there is today a qualitative difference in the AIDS response.

The true measure of this progress is the momentum in terms of the on-the-ground effect of HIV treatment and prevention programmes. The sense of determination and optimism that distinguish the AIDS response today has much to do with the hard-won gains on HIV treatment access. Between 2001 and mid-2006, the number of people on antiretroviral therapy in low-income and middle-income countries increased from 240 000 to about 1·5 million. An estimated 250 000 to 350 000 deaths were averted in 2005 as a consequence.[6] By the end of 2005, 21 countries had met the "3 by 5" target of providing treatment to at least half of those who need it.

And in every region but eastern Europe and central Asia, a small but growing number of countries have reduced HIV prevalence through sound prevention efforts. Declines in national HIV prevalence across all ages have recently been documented in the Bahamas, Barbados, Kenya, Rwanda, and Zimbabwe as well as in urban areas of Burkina Faso and Haiti.[4] Additionally, among 11 sub-Saharan African countries that provided data, three reported declines of 25% or more in HIV prevalence among young people (15–24 years) nationally, and another three reported such declines in capital cities, between 2001 and 2005.[4] HIV prevalence has also been declining in four southern states in India.[7] In Cambodia and Thailand, steady ongoing declines in HIV prevalence are continuing. While the exact mix of reasons for the fall in HIV prevalence in these countries varies, in every one there is strong evidence of changes in sexual behaviour: people have increased their use of condoms, are delaying the first time they have sexual intercourse, and are having fewer sexual partners. All this evidence demonstrates—as earlier shown by just Brazil, Senegal, Thailand, and Uganda among low-income and middle-income countries—that AIDS is a problem with a solution, not a hopeless crisis.

Another sign of progress is that AIDS is finally high on the political agenda at the global level as well as nationally in many countries. Even seen with the hindsight of just 5 years, the UN General Assembly Special Session on HIV/AIDS in 2001 marks a historic turning point, with the response to AIDS emerging as a core political issue and

the adoption of time-bound targets on HIV prevention, resource mobilisation, and other aspects of the global AIDS response.[8] The political momentum has not only been sustained since but has grown stronger, with such additional landmarks as the 2006 UN General Assembly High Level Meeting on AIDS, although it is far from strong enough and remains fragile.

Stemming from the political momentum, there is strong momentum in terms of financing the response. Between 1996 and 2005, financing for HIV programmes in low-income and middle-income countries increased 28-fold (figure 1), reaching US$8·3 billion in 2005, squarely in the range of the 2001 Declaration of Commitment's target of mobilising $7–10 billion annually by 2005.[4,9] The rate of increase has been fastest since the 2001 Special Session, with an annual average increase of $1·7 billion between 2001 and 2004, compared with an average annual increase of $266 million between 1996 and 2001. Domestic public expenditure from governments has significantly increased, with about a third of current global spending coming from national budgets and private payments in developing countries themselves.[4]

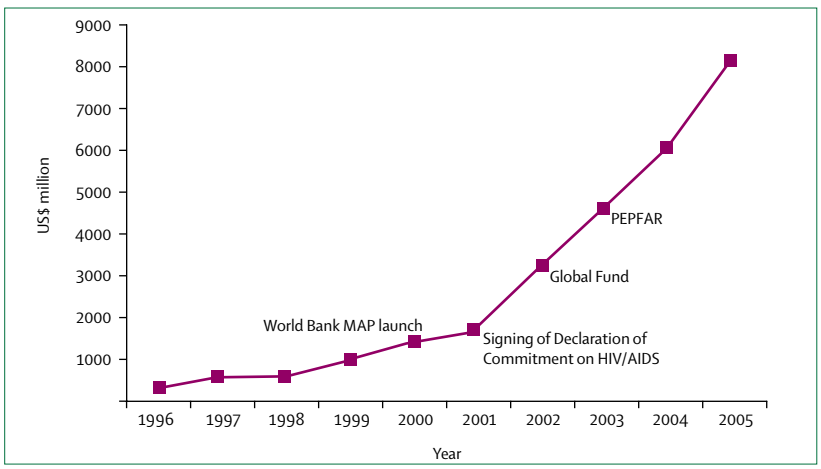

Figure 1: **Estimated total annual resources available for AIDS, 1996–2005**
Adapted from reference 4. Data include international donors and domestic spending (including public spending and out-of-pocket expenditures). International foundations and Global Fund included from 2003 onwards; the President's Emergency Plan for AIDS Relief (PEPFAR) included from 2004 onwards. MAP=Multicountry AIDS Programme.

A comprehensive, full-scale, and sustained response

The fundamental challenge we face is to sustain a full-scale AIDS response over at least another generation. To have real success against this crisis, rather than the piecemeal progress of recent years, requires us to anticipate the future, not just in terms of years, but of decades. It requires us to challenge ourselves to meet not only the needs of today on an emergency footing but to take on additional responsibility for sustaining the response at increasingly high levels.

The linchpin of sustaining such an exceptional response is to maintain AIDS as a top priority for public action at global and national levels. Because the span of public and political attention is generally short, irrespective of the merits of the issue, keeping AIDS high on public agendas over the long term is a matter that warrants the closest attention, and is a top concern in UNAIDS. To maintain the AIDS response as a priority we need to show continual results on the ground—ie, that the major investments made in fighting AIDS are having a commensurate effect in terms of averted infections, illness, and deaths.

We need to keep AIDS high on the agenda of top political fora, including at the UN, G8, and such regional bodies as the African Union, the Association of Southeast Asian Nations (ASEAN), the Caribbean Community and Common Market (CARICOM), and the European Union. We need greater engagement of political leaders, parliamentarians, and elected representatives at every level—as, for instance, in India and the UK with their all-party parliamentary groups on AIDS. We need to build an increasingly broad coalition against AIDS, so that this cause is owned by many sections of society.[10]

We need, additionally, sustained activism. The ability of civil society to hold governments and all other actors accountable should be strengthened, as has been done at UNAIDS and the Global Fund by building in civil society representation on their boards, as well as at the 2006 UN General Assembly High Level Meeting on AIDS through unprecedented levels of civil society participation.[11] In this regard, it is imperative that the efforts of people living with HIV be greatly strengthened in every community, not just at the international level: since at least 1994, when 42 governments adopted the Paris AIDS Summit Declaration, this has been held to be essential, but commitment by governments and donors is still wanting.[12,13] We must also actively support the strengthening of civil society in countries where civil society is still weak.

A second imperative need is full and sustained financing of the AIDS response. Despite the greatly increased funding for AIDS, the financing gap is widening, largely because of increasing needs for HIV treatment for people infected with HIV years ago, the high cost of second-line and third-line antiretrovirals, and the scaling up of programmes. At the 2006 UN General Assembly High Level Meeting on AIDS, UN Member States recognised that US$20–23 billion is needed annually by 2010 for low-income and middle-income countries to scale up towards universal access to antiretrovirals.[14] But existing pledges, commitments, and trends suggest that the rate of increase might be declining and that available funds will be around $9 billion in 2006 and $10 billion in 2007. What is the way forward, so that the sums needed are available in a predictable manner in the near future as well as over the longer term? How will we ensure that, 10 or 20 years from now, people in low-income countries who started antiretroviral therapy still have access to the treatment they need?

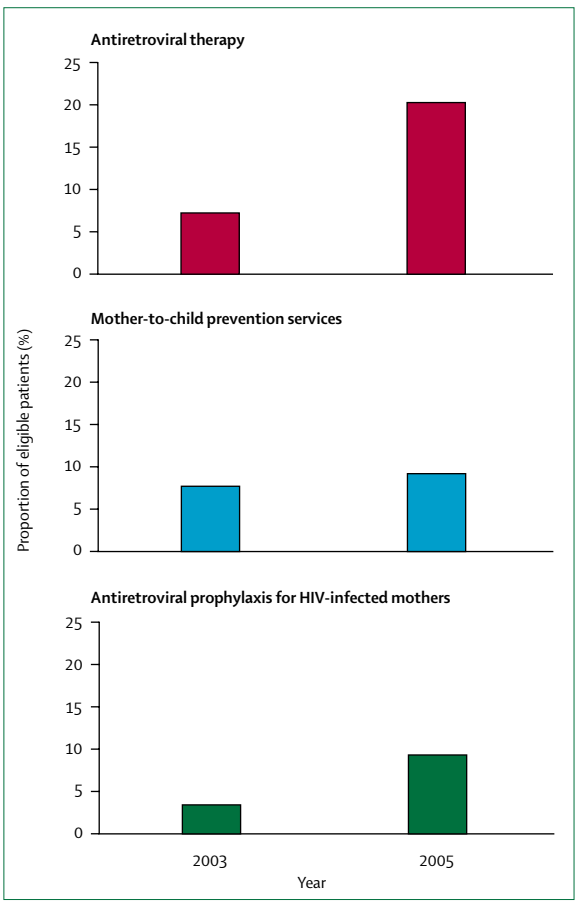

Figure 2: **Comparison of 2003 and 2005 data on coverage of antiretroviral therapy, mother-to-child prevention services, and antiretroviral prophylaxis to prevent vertical transmission among HIV-positive mothers**
Adapted from reference 4. Data are taken from references 6 and 17.

Fundamentally, the need is as much for increasing AIDS funding through existing and new global funding mechanisms as it is for mobilising the political will in both developing and industrialised countries. Developing country governments can spend more on the AIDS response; this is true particularly of the larger low-income and lower-middle-income countries, many of which are benefiting from rapidly growing economies and can well afford to reallocate national revenues to social sectors. For most African countries, though, there is a critical need for rich countries to contribute to the enormous financing needed for the AIDS response, but at the same time AIDS funding should be a core and continuous element of long-term financial planning and medium-term expenditure frameworks of the developing countries. Fulfilling promises on Official Development Assistance, and a continued ring-fencing of AIDS funding by governments, donor agencies, and the World Bank, will be essential for many years to come. The response to AIDS cannot continue to be handled one fiscal year at a time: this is a recipe for failure. The world needs nothing less than fiscal commitments for universal access to HIV prevention and treatment services covering at least 10 years, just as with the UK Government's commitment to enter into 10-year agreements with low-income countries to finance free quality education for children.[15]

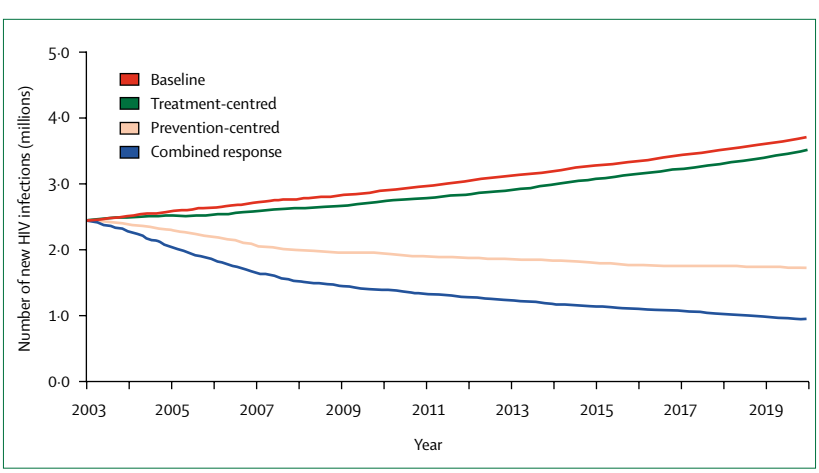

Figure 3: **Effect of three scenarios on HIV infections in sub-Saharan Africa 2003–20**
Adapted from reference 18.

A third imperative is to make the money work more effectively and efficiently. This means, first and foremost, scaling up comprehensive HIV prevention and treatment services towards universal access by 2010. The roadmap towards universal access is clearly laid out in the assessment report prepared by UNAIDS, based on public debates in more than 130 Member States, which forms a cornerstone of the Political Declaration adopted at the 2006 High Level Meeting.[14] The assessment and Political Declaration emphasise the need to intensify HIV prevention programmes within a comprehensive AIDS response. Not only has there been too little progress on HIV prevention in most countries, there are danger signs that HIV prevention is slipping off the agenda, even while many countries make good progress on raising access to antiretroviral therapy.[16] Could this be because HIV prevention confronts us all with deeply existential and difficult issues of sexuality, gender, and drug addiction? A case in point is that even the scientifically proven and non-controversial interventions to prevent mother-to-child transmission have not increased at the same pace as access to antiretroviral therapy (figure 2).[6,17] Evidence-informed HIV prevention and treatment must be scaled up in a balanced way to have the greatest effect on the epidemic and on mortality. HIV prevention will also be key to making the response to AIDS financially sustainable, as will antiretroviral therapy. Thus, Salomon and colleagues estimate that the simultaneous scale-up of both prevention and treatment would avert 29 million new HIV infections in sub-Saharan Africa by the end of 2020, whereas a response focusing solely on treatment would result in only 9 million averted new HIV infections (figure 3).[18]

Making the money work also means that we must work differently. In an increasingly diverse epidemic, we must

adapt our programmes far more closely to the local social and cultural contexts. And in the long run, the money will not have the best effect unless we invest in capacity, chiefly in human resources for health but also in institutional capacity, such as for management and procurement. There is currently an estimated shortage of almost 4·3 million doctors, midwives, nurses, and support staff worldwide.[19] But we would be misleading the world if we claim that capacity building in the health sector will stop this epidemic. It is obviously essential for providing HIV treatment and scaling up access to HIV testing and counseling, but it will not solve the current deficit in HIV prevention. For a comprehensive AIDS response, there must also be strong capacity in education and other social sectors, as well as in terms of overall governance.[20]

Not least, making the money work also means a commitment by all actors to a coherent response behind country-owned and country-led efforts. The roadmap is provided by the "Three Ones" principles (which call for the coordination of a national AIDS response around one agreed AIDS action framework, one inclusive national coordinating authority, and one monitoring and evaluation system), and the recommendations of the Global Task Team on Improving AIDS Coordination Among Multilateral Institutions and International Donors.[4,21] Money will not work effectively unless international development practice improves and we tackle the deadly gap between where the money is and where it is needed on the ground, among communities.

Fourth, an exceptional response hinges on tackling the structural drivers of this epidemic, especially sex inequality, stigma and discrimination around homosexuality and sexuality in general, and poverty and deprivation in all their aspects. This challenge is perhaps the greatest of all those facing the AIDS response, given the pervasiveness of the barriers to providing life-protecting services to women, the socially marginalised, and the poor. No technological solution exists for overcoming them.

To make headway, at a minimum we need to ensure that programmes for both HIV prevention and treatment reach the most vulnerable. If it does not, it is not only an injustice, but greatly reduces the effect of AIDS investments.[22] To combat stigma and discrimination, wide access to antiretroviral therapy and HIV testing and counselling will help, but is not sufficient, as shown in western countries with quasiuniversal access to antiretroviral therapy for a decade. And, as the report *AIDS in Africa: three scenarios to 2025* clearly shows, in the long run a successful response to AIDS is one that is firmly embedded in the advance of the societal norms and values that stop the spread of AIDS instead of fuelling it.[23] As Zackie Achmat eloquently puts it, "We live in a world that must be changed to survive."[24]

Regrettably, all these efforts have been relegated to the bottom of AIDS programmes, together with human rights, and often with no funding attached to them. This neglect needs to be redressed if HIV-related policies and programmes are to have any chance of working for women, the poor, and the socially excluded. We will be unable to make real and lasting headway against AIDS without strong efforts to have violence against women and sexual minorities made not just illegal but socially unacceptable, homosexuality decriminalised, harm reduction accepted as a paramount principle whether it relates to injecting drug users or to sex workers, and trafficking of women and girls confronted. A clear agenda of action to tackle the epidemic's worsening toll on women has been laid out by the Global Coalition on Women and AIDS, including securing women's rights, reviewing existing AIDS strategies to ensure they work for women, and ensuring the full participation of women in national AIDS coordinating bodies.[25] There is an urgent need to translate such areas into practical operational action.

A final imperative for an exceptional response is to speed innovation in developing microbicides and other female-controlled prevention methods, new generations of HIV therapy, and vaccines, while putting in place the agreements and mechanisms needed for wide access to these lifesaving essentials. Several innovative approaches to accelerate such innovation now exist—such as the International AIDS Vaccine Initiative, the International Partnership for Microbicides, and the Global Vaccine Enterprise[26]—but the engagement of the mainstream pharmaceutical industry will be essential. Much greater and longer-term investments are required, and the key need is to strike a good balance between making every technological advance widely available and that of protecting intellectual property, so that there is ongoing, robust research and development for AIDS. This requires a much wider international acceptance of a new type of social contract for the pharmaceutical industry.[27]

However, for the southern African countries with national HIV prevalences of more than 20%, all this will not be enough because of the epidemic's enormous impact. Exceptional financing and policy measures are needed to stave off the development reversals and restore both capacity and human capital. These measures must include financial injections above the regular government budget—as is accepted practice after natural disasters or armed conflict—as well as scaling up HIV treatment and prevention to the highest levels and providing adequate monetary, educational, and other support to survivors and affected households.

Maintaining the exceptionality of AIDS, but at the core of development agendas

An agenda for a response commensurate with the challenges posed by the epidemic cannot be realised if we do not maintain the exceptionality of AIDS. Bringing AIDS into medical practice makes good sense[28] and it is essential to team up much more with the actors on the broader health and development agendas so as to jointly address the structural and operational issues that are obstacles to making headway on AIDS as well as other key elements of social and economic development; the response to AIDS

For the **International AIDS Vaccine Initiative** see http://www.iavi.org/

For the **International Partnership for Microbicides** see http://www.ipm-microbicides.org

cannot succeed if we continue to work on AIDS in isolation from mainstream development. We need to put action on AIDS at the core of social and economic development and leverage mainstream instruments and practice, such as by including AIDS funding in long-term national financial planning, progress on AIDS as a key indicator for national development, and priority consideration of AIDS in poverty reduction strategies and medium-term expenditure frameworks.

However, it does not make good sense to merge AIDS completely into the broader health or development agendas to the point where it becomes just one target or element of these agendas.[29] This would unavoidably lead to a fall in dedicated resources for antiretroviral therapy in resource-poor environments, where competition for funds is so fierce. It would unavoidably lead to even greater neglect of HIV prevention because policy and political leadership on controversial issues would decline. It would unavoidably mean that the key instruments won for the AIDS response—such as the Global Fund, the US President's Emergency Plan for HIV/AIDS, UNAIDS, the World Bank's Multicountry AIDS Programme, the flexibility on TRIPS for antiretrovirals, and the high-level national AIDS commissions—would be rolled back, with no fora left for resolute AIDS action. It would almost certainly mean that the fundamental drivers of the epidemic would not be tackled with any sense of emergency, making a sustainable response an illusion. Such hard-won gains must be protected. If we agree to surrender the exceptionality of AIDS, we will come to regret our decision millions of deaths later.

We must now collectively take the response to AIDS to this exceptional level so that we are indeed planning and acting for eventual success. Faced with an unprecedented crisis, we have no choice but to act in exceptional ways. AIDS has rewritten the rules; to prevail, we must too.

Conflict of interest statement

I declare that I have no conflict of interest.

Acknowledgments

I thank Siddharth Dube for substantial contributions to developing this article, and Regina Castillo, Achmat Dangor, Paul De Lay, Marie-Odile Emond, Peter Ghys, Robert Greener, Cate Hankins, Mike Isbell, Heidi Larson, Purnima Mane, and Susan Timberlake for helpful inputs and advice. Rania al-Haddad is thanked for research assistance.

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