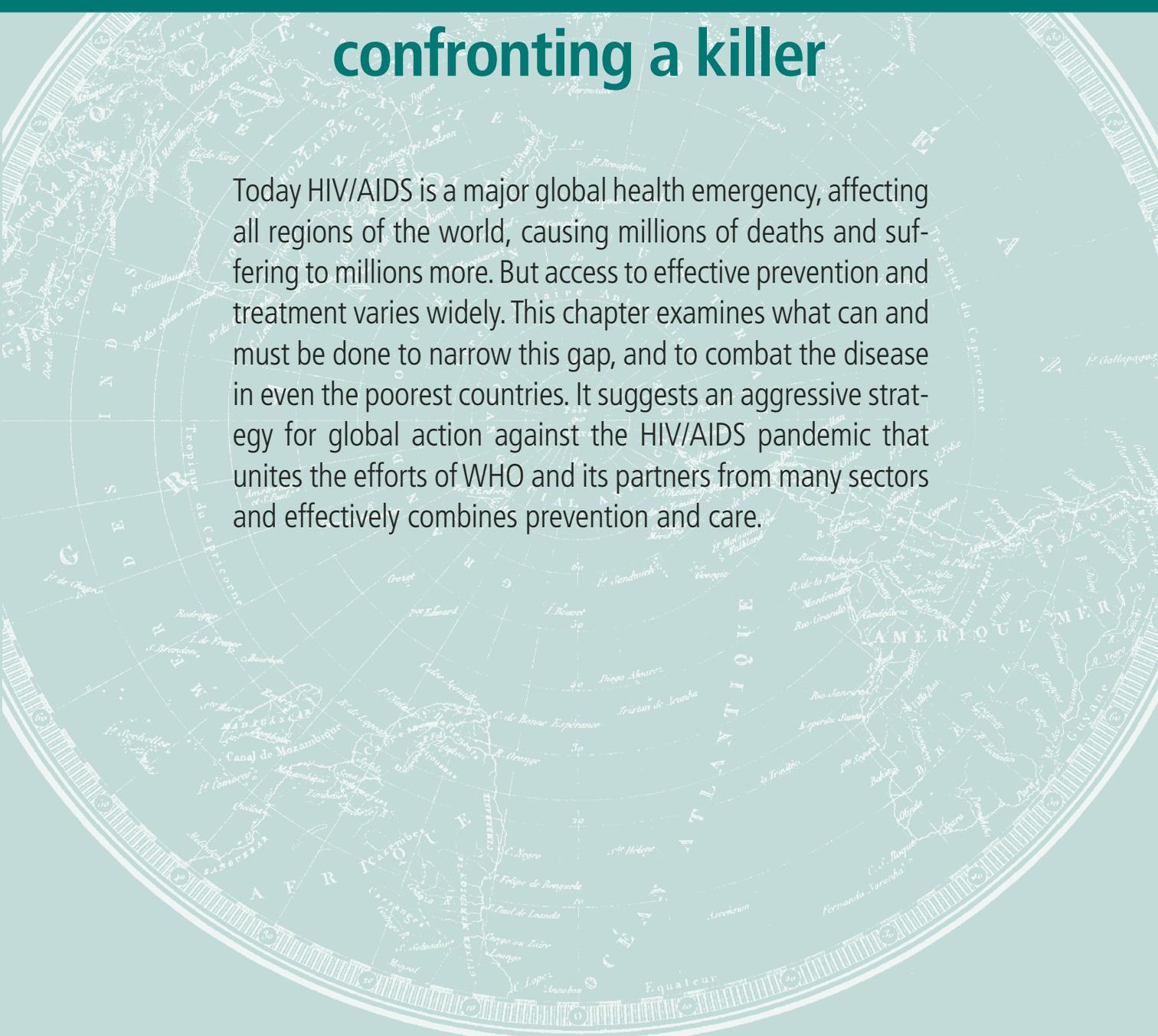


HIV/AIDS:

confronting a killer

Today HIV/AIDS is a major global health emergency, affecting all regions of the world, causing millions of deaths and suffering to millions more. But access to effective prevention and treatment varies widely. This chapter examines what can and must be done to narrow this gap, and to combat the disease in even the poorest countries. It suggests an aggressive strategy for global action against the HIV/AIDS pandemic that unites the efforts of WHO and its partners from many sectors and effectively combines prevention and care.



3

HIV/AIDS: confronting a killer

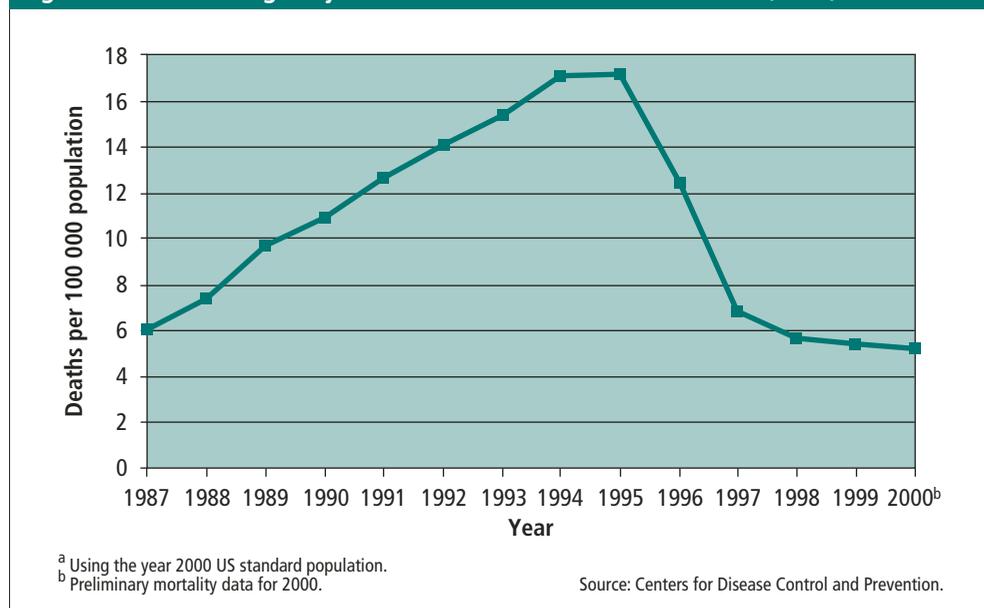
Acquired immunodeficiency syndrome (AIDS) is the leading infectious cause of adult death in the world. Untreated disease caused by the human immunodeficiency virus (HIV) has a case fatality rate that approaches 100%. Not since the bubonic plague of the 14th century has a single pathogen wreaked such havoc. AIDS has torn apart families and caused untold suffering in the most heavily burdened regions. In hard-hit areas, including some of the poorest parts of the world, HIV has reversed gains in life expectancy registered in the last three decades of the 20th century. HIV/AIDS is a major global health emergency.

HIV infection also fuels other epidemics of global concern – most notably tuberculosis, which has become a leading cause of death not only among people living with HIV, but also among their HIV-negative family members and contacts. But AIDS is not the same everywhere. Access to effective prevention and treatment, and consequently the fates suffered by individuals infected with HIV, vary widely. People living with HIV but benefiting from the latest medical developments can hope to lead normal lives in many respects: the use of combination chemotherapy with antiretroviral agents (ARVs) renders AIDS a chronic and treatable disease more like diabetes than other serious viral diseases for which there are no effective therapies (see Figure 3.1). In Australia, Europe, Japan and the United States of America, many people with advanced AIDS have resumed their normal lives. In poorer countries, however, and among the poor living in wealthy societies, HIV remains a death sentence. Over the past decade, the “outcome gap” – the different fates of rich and poor – has widened considerably (1).

Why has there been a failure to contain HIV/AIDS? Why have the fruits of modern medicine, including ARVs, not been delivered to those most in need? The answer to these two questions is essentially the same: AIDS is a disease whose impact is much greater where there is poverty and social inequality, including gender inequality. It is not easily managed in settings in which weakened health systems fail to perform, especially for minorities and those living in poverty. HIV/AIDS thus raises urgent human rights issues, especially concerning the right to health care (see Table 3.1).

For all these reasons, HIV/AIDS serves as a report card on current global health status: rising incidence and a growing death toll are rebukes to optimism. It is vital that the global health community makes a bold effort against HIV/AIDS, guided by a commitment to equity in prevention and care.

This chapter reviews important trends in the HIV epidemic and the ways in which effective partnerships can attack both the pandemic and its root causes. It examines successes and failures in the struggle against the world’s most devastating infectious disease, before

Figure 3.1 Trends in age-adjusted^a rate of death from HIV infection, USA, 1987–2000

discussing goals for the coming years. These include narrowing the AIDS outcome gap by providing three million people in developing countries with combination ARV therapy by the end of 2005 (known as the “3 by 5” target). Throughout this discussion, HIV/AIDS care is understood to include treatment with ARVs. Although robust HIV prevention and care constitute a complex health intervention, such interventions are not only feasible in resource-poor settings, but are precisely what is needed.

The HIV/AIDS epidemic: a brief overview

A new disease emerges

AIDS was first described in 1981, when previously healthy young adults – mainly men living in urban areas of the United States – began falling ill with opportunistic infections previously unknown among this age group. Similar infections were soon described in Africa, the Caribbean and Europe; AIDS was clearly an epidemic disease. Most of these young people died, and a host of discrepant hypotheses emerged, but a bloodborne viral pathogen was suspected early on. In 1983, this suspicion was confirmed when Professor Luc Montagnier and others discovered a novel pathogen: a retrovirus tropic for the CD4 cells that orchestrate cell-mediated immunity and protect humans from a broad range of viral, mycobacterial, and fungal pathogens.

Where effective screening was available, transfusion-associated transmission was eliminated, but HIV was not easily stopped. Condoms were shown to be effective in preventing sexual transmission of HIV, but it was not long before those who studied AIDS concluded that male condoms alone would not be enough in settings in which poverty and gender inequality rendered poor women especially vulnerable to HIV infection (2). Women in turn transmitted HIV to their unborn children or to breastfeeding infants. Injecting drug use introduced HIV to previously untouched regions of the former Soviet Union and to parts of Asia. Poor-quality health care – including the reuse of syringes, needles, and other medical paraphernalia – also contributed to the entrenchment of this new epidemic.

The current situation

How well has the international community coped with this new threat to global health? In spite of remarkable scientific achievements – the development of inexpensive diagnostics by the mid-1980s, the sequencing of the entire HIV genome less than 15 years later, and the development of effective antiretroviral therapy by 1995 – the virus has continued to spread (see Figure 3.2). It is estimated that during the course of 2002 some 5 million people became infected with HIV, and almost 3 million people died of AIDS.

Everywhere in the world, HIV is transmitted through a fairly limited number of mechanisms. HIV is a bloodborne retrovirus and is transmitted through sexual contact, contaminated blood transfusions, injecting drug use, failure to observe what are now termed in medical circles “universal precautions”, and from mother to infant during pregnancy, delivery and breastfeeding.

The most heavily burdened continent is Africa, where the spread of the pandemic has been accelerated by a variety of factors, including widespread poverty, gender inequality, and health systems weakened by pressures such as the large external debt loads of states. Africa is home to more than 70% of those currently infected with HIV. Of all AIDS deaths worldwide – 28 million at the end of 2002 – the majority have also occurred on this continent (3). HIV infection has fanned epidemics of TB in some African countries, increasing the risks to the whole population, regardless of serostatus. Across sub-Saharan Africa, rates of TB have more than trebled, and many conclude that the disease cannot be controlled without aggressive treatment of AIDS (4).

Debates about the relative importance of different modes of HIV transmission in sub-Saharan Africa persist, but the evidence indicates that HIV in this region is primarily a sexually transmitted pathogen (5). Nonetheless, the difficulties involved in following universal precautions in overburdened and under-resourced health care facilities may lie at the root of many AIDS deaths in Africa (6). In many regions, unsafe blood transfusions continue, underscoring the importance of blood safety as a component of effective HIV/AIDS control.

The immensity and rapidity of the spread of HIV have reversed gains in life expectancy in many African countries (see Chapter 1). But the worst may be yet to come. The poorer regions of Asia, including densely populated southern Asia, are the latest areas to be affected by the emerging AIDS epidemic. There has been an alarming rise in HIV/AIDS cases in Asia over the past two decades; the burden of disease and death in the region will be enormous if current epidemiological trends are not slowed or reversed.

Developed countries are also afflicted. The Russian Federation and Ukraine, along with other countries in eastern Europe and countries in central Asia, have the most rapidly expanding HIV epidemics. Here the disease is more closely tied to injecting drug use, which itself is linked to a rapid rise in indices of social inequality (3). Although the absolute number of AIDS cases in the former Soviet Union remains relatively small, the epidemic is expanding rapidly in the Russian Federation and other countries in the region (see Box 3.1). Prison-seated epidemics of TB, including drug-resistant strains, will be further fanned by the rapid rise in HIV incidence already documented among Russian prisoners. Only aggressive

Table 3.1 Coverage of adults in developing countries with antiretroviral therapy, by WHO region, December 2002

Region	Number of people	Estimated need	Coverage
Africa	50 000	4 100 000	1%
Americas	196 000	370 000	53%
Europe	7 000	80 000	9%
Eastern Mediterranean	3 000	9 000	29%
South-East Asia and Western Pacific	43 000	1 000 000	4%
All WHO regions	300 000	5 500 000	5%

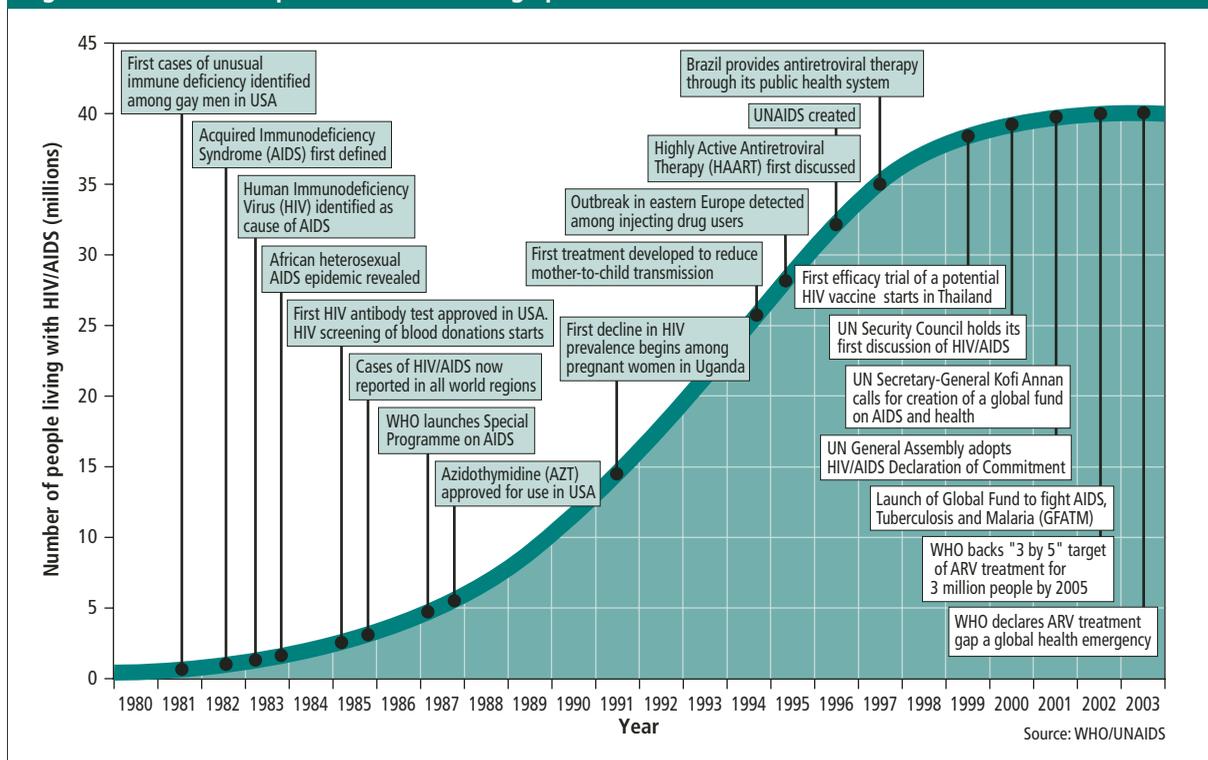
harm-reduction efforts and improved therapy for TB can stem what is a peculiarly modern epidemic of two linked diseases that are now colliding within countries reaching from western Europe to the Pacific Ocean (7).

The true toll of HIV/AIDS

The epidemiology of HIV, including the dynamics of risk, is instructive. But epidemiology tells only part of the story. A disease that has so adversely affected life expectancy will also take a great toll on the social fabric of heavily burdened societies, above and beyond its terrible cost in immediate human suffering. To take two examples, AIDS has orphaned an estimated 14 million African children and will decimate the corps of teachers, health care workers and civil servants in the hardest-hit countries (8).

These social disruptions are manifest in direct economic effects. A recent World Bank study predicts that South Africa will face “complete economic collapse ... within three generations” if the country does not take effective measures to combat AIDS (9). But there is much more to the story than can be measured by economists. Other social scientists are broadening the analysis to look at the impact of the disease on an array of events and processes. What, for example, are the social consequences of having millions of AIDS orphans? How does the disappearance of so many parents contribute to the spread of armed conflict and the social pathologies that accompany urban migration and attendant unemployment? What is the cost of the “burnout” registered among health professionals across Africa and in other settings where AIDS therapy is not available to those who need it most (10)? Science is only beginning to understand the social and economic toll of HIV/AIDS, which is heaviest in precisely those settings least prepared for a new threat to health and well-being.

Figure 3.2 HIV/AIDS: episodes in an evolving epidemic



Responding to HIV/AIDS: lessons from the past 20 years

The first two decades of HIV have disclosed a great deal about how best to prevent and attenuate HIV-related suffering. There are large and small successes to report, but also well-documented defeats with important lessons. There are emerging trends. There are important local variations which render broad generalizations about the global AIDS pandemic extremely hazardous. What can be documented now are a series of interconnected “subepidemics”. Each calls for a different set of interventions. Fortunately, the experience gained over the past 20 years offers guidance for those seeking to reverse the trends.

One of the most important lessons of recent years is the need for integrated AIDS prevention and care. Equity in AIDS prevention requires that correct and culturally appropriate information be imparted, along with existing prevention tools, to those most at risk of HIV infection, wherever they live. WHO considers inclusive and equitable prevention a fundamental part of its AIDS work. While there are studies emphasizing the need for constant efforts to promote safer sex and good medical practice, there are no data to support the claim that increased access to AIDS care hampers prevention efforts in the resource-poor settings in which HIV takes its greatest toll. On the contrary, emerging evidence from ARV programmes in resource-poor settings such as central Haiti and Khayelitsha, South Africa, suggests that improving care will serve directly to strengthen prevention in a number of ways. These include: increasing demand for voluntary counselling and testing; reducing stigma and promoting greater openness in discussions of HIV/AIDS in the community; and helping to keep families intact and economically stable, thus slowing the growth of at-risk populations such as orphans and sex workers (11–15).

What accounts for the often stark division between AIDS prevention and care, which in the developing world has meant that, for most people living with HIV, there is simply no decent medical care available at all? That it took 15 years to develop effective antiretroviral therapy for AIDS is regarded as a success by some; for the tens of millions who have died of AIDS, any victory has come too late. But the fact that much was known about HIV and its modes of transmission well before effective therapy became available contributed, in both rich and poor countries, to a separation of HIV prevention and care. In Australia, Europe and the United States, HIV prevention and care are different enterprises conducted by different groups of people (16). HIV prevention does not usually take place in AIDS clinics in wealthy

Box 3.1 HIV/AIDS in the European Region

The European Region is experiencing the fastest growing HIV epidemic in the world, and significant further growth is likely. Between 1995 and 2003, the number of newly reported HIV infections in western Europe doubled to almost 170 000, and in central and eastern Europe grew from 27 000 to 320 000. It is now estimated that at least 1.7 million people in Europe are already infected with HIV.

An epidemic of injecting drug use is fuelling the HIV epidemic. In the former Soviet Union, where two-thirds of all Europeans infected with HIV live, 84% of all HIV cases with a known transmission route are attributable to injecting drug use. In western Europe, sexual transmission is the dominant route, with the largest number of infections among men who have sex with men and among immigrant populations from high prevalence countries.

The HIV/AIDS epidemic has changed dramatically since its onset in the 1980s. Sustainable, long-term, comprehensive and massive response in western Europe, with extensive funding and political support for prevention, treatment and care limited the spread of the epidemic. Widespread prevention measures contributed to stabilizing and decreasing transmission rates, while antiretroviral treatment was also made widely available. In spite of such measures, the HIV/AIDS epidemic remains a serious and ongoing challenge in western Europe. In eastern Europe, limited political commitment and funding, low coverage by prevention services, severely limited access to treatment and care and high levels of stigmatization of groups at risk are the main reasons for a continuously worsening HIV epidemic.

countries. In many poor countries, however, HIV prevention does take place in clinics, although HIV care often does not take place at all.

The results of this separation have been adverse. Although there have been some significant victories, their benefits have been unevenly distributed. Despite striking declines in mortality rates adjusted for age among some people living with AIDS, affluent countries still face ongoing or growing subepidemics. As elsewhere, rates of HIV transmission vary by social standing. In the southern United States, for example, HIV continues disproportionately to affect ethnic minorities in urban conglomerations. Increasingly, poor black people living in rural areas connected by major routes of commerce are also affected. Research conducted in rural North Carolina suggests that the incidence of sexually transmitted infections (STIs) is closely linked to the presence of an interstate highway (17). Similar patterns have also been documented in rural parts of Africa and Asia. Even when local epidemiology differs, social inequalities remain part of the equation for both risk of infection and access to care. In urban areas of the Russian Federation and Ukraine, in contrast to rural southern areas of the United States, a rapidly emerging epidemic is attributable to injecting drug use; among those most affected are the unemployed and, again, members of ethnic minorities.

Integrating HIV prevention and care

Prevention activities need to be designed with the local epidemiology of the disease in mind. In settings in which HIV is largely sexually transmitted, information and education campaigns can save lives. In Thailand, for example, it is estimated that aggressive condom promotion targeting military personnel and sex workers has resulted in significantly fewer new infections than had been predicted (18). In settings in which HIV transmission is linked more closely to injecting drug use, harm-reduction strategies (for example, the provision of clean injecting equipment as well as adequate therapy for drug dependence) have proved to be effective (19). But in every setting studied, the distinction between prevention and care – most marked in the poorest countries, where few of those in need of HIV care ever receive it – has crippled effective response to the disease and also heightened social stigma.

The integration of HIV prevention and care is a recurrent and unifying theme of WHO efforts, in spite of the great diversity of subepidemics. In settings where HIV/AIDS is seen not as a private problem but as a public one, good public policy can prevent new infections, as well as avert death among those already living with HIV. Of course, there is far too much work at hand for there to be no division of labour in prevention and care. Clinicians must ensure that their distinctive skills are used optimally to benefit patients. Activists and community members will make their most important contributions to prevention, support, education and advocacy.

It is difficult categorically to class on-the-ground activities as contributing either to “prevention” or “care” exclusively. For example, most people would class the prevention of mother-to-child transmission (pMTCT) of HIV as a prevention activity. But implementing such programmes has often called for improved prenatal care: “MTCT-Plus” initiatives follow up the initial preventive intervention with ARV treatment for HIV-positive mothers, when clinically indicated, allowing women not only to give birth to healthy babies but also to live to raise them (20). Similarly, improving HIV care helps to destigmatize AIDS. Decreased stigma is associated with increased interest in voluntary counselling and testing, which is a cornerstone of effective HIV prevention and care (13). Some recent studies have begun to catalogue the mechanisms by which increased access to quality HIV care can strengthen prevention efforts (15).

Integrated prevention and care: success stories

Only a few countries have introduced legislation to protect the rights of those living with HIV, including the right to effective therapy. Brazil is one country that has done so successfully. Although social inequalities exist in Brazil, it became one of the first countries in the world to mandate universal and free access to HIV care. In this way, AIDS was transformed from a private problem, one affecting individuals and their families, to a public one. By introducing innovative legislation, Brazil was able to build up Latin America's largest and best-functioning AIDS programme. Widespread access to ARVs may have helped to destigmatize the disease in Brazil and thereby improve demand for voluntary counselling and testing. Although causality is hard to prove, projections made over a decade ago, when it was predicted that Brazil would have a rapidly expanding epidemic, have not come to pass. HIV incidence has declined in recent years now that ARVs are widely available: only 7361 new cases of HIV infection were registered in the first nine months of 2001, compared with 17 504 cases registered in 2000 (21). The Ministry of Health of Brazil estimates that cost savings for reduced hospital admissions and treatment of opportunistic infections between 1997 and 2001 were close to US\$ 2.1 billion. The Brazilian experience is not unique. In 2003, Mexico passed legislation similar to Brazil's and may reasonably hope for similar successes (22). Policy can therefore have an indisputable therapeutic effect on HIV/AIDS.

Countries far poorer than Brazil or Mexico have been forced to focus their efforts elsewhere, but can still achieve positive results. In Haiti, the most impoverished country in the Americas, a public-private partnership has introduced culturally appropriate HIV prevention and state-of-the-art HIV care to a population living in dire poverty. One project in Haiti's Central Plateau is a small but mature integrated prevention and care project that first incorporated community-based ARV use in 1998. Because rural Haiti is a setting in which there are very few physicians or nurses, the "HIV Equity Initiative" relies on community health workers called *accompagnateurs* who pay daily visits to patients in their home villages. The *accompagnateurs* (some of whom are themselves living with HIV) are not so much providing directly observed therapy as taking care of their neighbours (see Box 3.2).

The Haiti project has been notable for its clinical and social success – lowered mortality and decreased stigma – but also for its low costs. With the advent of generic ARVs, the HIV Equity Initiative is now being scaled up throughout the forbidding terrain of central Haiti, which is without electricity or paved roads (23). Seroprevalence studies suggest that the Haitian HIV

Box 3.2 *Accompagnateurs*: an example of AIDS care in resource-poor settings

The existence of effective therapy for AIDS has dramatically altered the outcome of HIV infection in certain parts of the world, but such advances are rarely used in precisely those settings most heavily burdened with AIDS. Most HIV-related deaths in the developing world today occur among those who have never received combination chemotherapy with antiretrovirals (ARVs). Reasons offered for this failure have been many, but two are usually given: the high cost of ARVs and the lack of infrastructure required for their use. The first of these objections is under review as generic ARVs become available and as the price of branded pharmaceuticals drops.

The question of missing infrastructure remains. Experience in Haiti and elsewhere suggests that this may be largely a question of personnel rather than laboratory or medical infrastructure. In settings with few physicians and nurses there often exists a large number of underutilized

community health workers. In some settings, a number of people, including traditional healers, have expressed an interest in being trained to "accompany" their neighbours living with AIDS. The involvement of these and other community-based workers as *accompagnateurs* will be critical if even modest treatment goals are to be met in the coming years. There is an important precedent in the community-based management of a chronic infectious disease. Tuberculosis programmes reporting the highest cure rates are often those relying on *accompagnateurs* or other community-based providers. The amount of training required is minimal; supervision of *accompagnateurs* may be offered by clinic-based nurses and physicians. If the *accompagnateur* model is adopted widely, patients afflicted with other chronic diseases may hope for high-quality medical care even where there is no doctor (23).

epidemic is contracting rather than growing (24), although the precise impact of HIV/AIDS programmes on the spread of the disease remains to be measured.

Uganda is another extremely poor country that has known declining HIV infection rates. Some have claimed that declining prevalence is the result of an aggressive government campaign to advance prevention messages. The “ABC campaign” is a social marketing effort to promote abstinence, monogamy (“be faithful” is the B in the acronym) and condom use (25). However, declining HIV prevalence in Uganda involves far more than high-level political will and forceful condom promotion, important as these factors are. Developments in Uganda reflect a complex biosocial pattern that includes war, death, migration, and many other events and processes (including, in Kampala and beyond, increased access to ARVs) not necessarily included under the rubric “ABC campaign” (see Figure 3.3). The empowerment of women appears to have been a key factor in enabling safer patterns of sexual behaviour. Civil society groups such as The AIDS Service Organization (TASO) have played a major role. It is also important to note that post-war Uganda, with help from the European Community and other funders, has made significant investments in rebuilding its health care infrastructure (26).

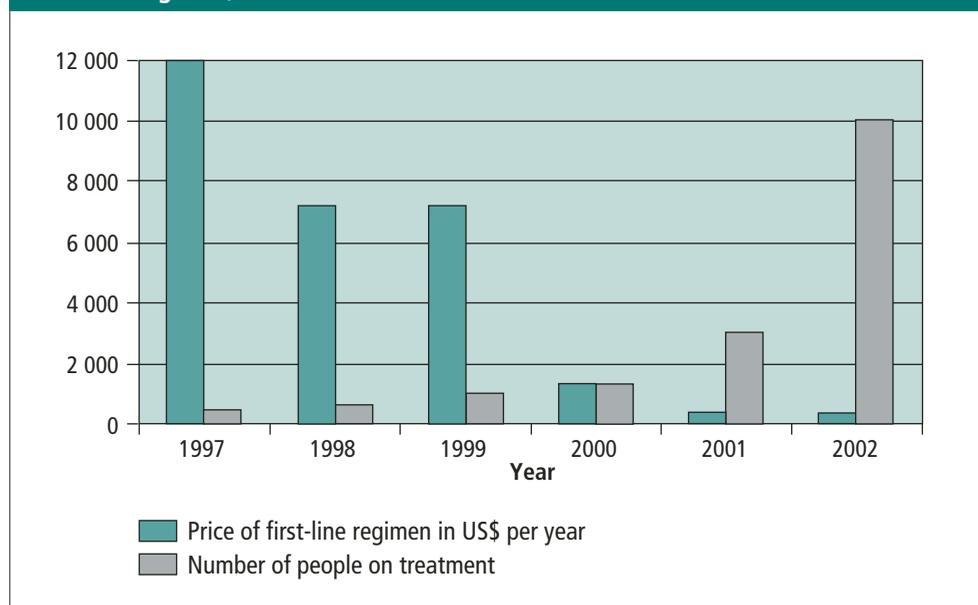
Setting a new agenda

On the basis of the rationale for integrating prevention and care, outlined above, this report suggests an aggressive strategy for global action against the HIV/AIDS pandemic. This agenda will unite the efforts of partners from many sectors.

A human rights approach

Although some people may have become wary of expressions such as “adopting a human rights approach to HIV/AIDS”, highly pragmatic steps can be taken to do just that, and these interventions will have a salutary effect on AIDS prevention and care. Social and economic rights, including the right to health care, are central to a future in which HIV will play a less

Figure 3.3 Trends in the cost of ARV drugs and the number of people on treatment, Uganda, 1997–2002



destructive role in people's lives. Governments should take the lead in promoting a human rights model of AIDS prevention and care.

Promotion of the human rights approach to AIDS cannot remain solely the charge of the nation-state, however, especially as poor and beleaguered governments are exhorted to do more and more with less and less.

Civil society organizations, including groups of people living with HIV/AIDS, will continue to play a crucial role in advancing a human-rights-based HIV/AIDS agenda at global, national and local levels. Such groups have been at the forefront of HIV/AIDS prevention, education, and advocacy – not only in wealthy countries, but also in Brazil, Haiti, South Africa, Thailand, Uganda and elsewhere. It is important to ensure that some of the new funding now flowing to HIV/AIDS work through mechanisms such as the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) and bilateral initiatives is channelled to civil society groups, especially community-based organizations run by and for people living with HIV/AIDS.

Dimensions of good HIV/AIDS control

Although equity is the only acceptable end goal, it is nevertheless true that setting priorities is a key step in the crafting of sound policy. It is possible to identify a number of highly important considerations in implementing projects and national AIDS programmes in resource-poor settings.

Haiti, one of the world's poorest countries, again provides insights. Spiralling, entwined epidemics of TB and HIV and the worst poverty in the Americas did not stop Haiti from putting together a successful application to the GFATM. The proposal submitted to the GFATM called for expanding integrated HIV prevention and care and was linked to the existing national AIDS control plan (27). The Haitian model proposes a stepwise implementation, beginning with improved voluntary counselling and testing and prevention of mother-to-child transmission and then unfolding progressively in several dimensions. The first dimension includes a complete range of prevention services and practices to reduce HIV transmission in all settings. Prevention activities are integrated with improved HIV care for people already infected. Prevention measures include culturally appropriate, community-based HIV education, condom distribution, and voluntary counselling and testing. This component also embraces blood safety and the observance of universal precautions, including safe injection practices.

The second dimension is improved women's health, including access to family planning and safe childbirth. Prevention of HIV transmission from mother to infant will have, as a "wind-fall benefit", the improvement of women's health in a broader sense. Indeed, it will be easier to meet Millennium Development Goals related to maternal mortality by improving capacity to scale up pilot programmes for the prevention of mother-to-child transmission.

The third dimension of integrated HIV prevention and care is improved TB case-finding and care. This is important in communities heavily burdened by both diseases, since in these settings – most of southern Africa is a case in point – TB is the leading serious opportunistic infection among people living with HIV. Finally, the fourth component of this model is the diagnosis and treatment, preferably through algorithms reflecting local epidemiology, of all STIs. Numerous studies have shown that improving care for STIs will diminish the risk of acquiring HIV (28–30).

Local variation has always been a central factor in the HIV/AIDS story, so the relevance of any pilot projects should be scrutinized. Can such programmes be scaled up district-wide or nationally? Can they be replicated in other heavily burdened and resource-constrained areas?

For example, where injecting drug use is the primary mode of transmission, harm reduction will be central to prevention efforts. There is also a need for greater focus on nutrition as a fundamental component of any approach to caring for people living with HIV/AIDS. But ARVs are, without question, required in all settings. There is very little evidence that different clades of HIV respond differently to combination chemotherapy with ARVs. Preliminary evidence from small pilot projects across Africa, the Americas and Asia suggest that patients with advanced HIV infection will respond well to ARVs, regardless of whether clinical or laboratory criteria are used to assess efficacy.

WHO's work in the HIV/AIDS fight

Attacking inequalities of both risk and access to care is central to WHO's agenda in the HIV/AIDS domain. WHO's expanded role is far larger than that of merely setting standards for effective HIV prevention and care. WHO is working actively with countries and partners towards meeting bold goals in prevention equity and equitable access to care. WHO is unique among these partners in being charged with ensuring equitable access to treatment, and on 22 September 2003, WHO formally declared inadequate access to ARV therapy to be a global health emergency.

Currently, WHO, UNAIDS and their key partners – governments of affected countries, other United Nations agencies, the GFATM, nongovernmental organizations, the private sector and people living with HIV/AIDS – are mobilizing to respond to this treatment emergency. Together, these groups are pledged to deliver antiretroviral treatment to three million people living with HIV/AIDS in developing countries by the end of 2005.

This ambitious “3 by 5” target, first proposed in 2001 (31), will present numerous challenges, but with united action it can be achieved. WHO's HIV/AIDS team, in consultation with other experts, has crafted a global strategy to meet the objective. In declaring lack of access to ARV treatment to be a global health emergency, WHO is fully committed to providing accelerated, intensified support to countries to tackle critical barriers to scale-up. Consistent with the emergency response approach, WHO's HIV/AIDS action agenda includes the following:

- **Emergency response teams** will be provided, if governments request them, to countries with a high burden of HIV/AIDS where the treatment gap most urgently needs to be filled. These teams, with the support and involvement of partners in the United Nations system and nongovernmental organizations, will work with treatment implementers and will conduct a rapid assessment of the barriers and opportunities to achieving the “3 by 5” target.
- **An AIDS drugs and diagnostics facility** will be established to expand patients' access to high-quality, low-cost drugs and commodities. It will assist countries and implementers to navigate drug purchasing and financing while considering best prices and quality. This will help overcome one of the most significant barriers faced by countries and should save time and effort.
- **Simplified treatment guidelines**, published in December 2003, are aimed at making ARVs easier to administer. Achieving the “3 by 5” target requires global standard first-line and second-line treatment regimens.
- **Uniform standards and simplified tools** will be published at the same time to track the progress and full impact of ARV treatment programmes, including surveillance of drug resistance.

- **Emergency expansion of training and capacity development for health professionals** will begin. Health professionals will learn how to deliver simplified, standardized ARV treatment. WHO will support those partners already involved in training, and work with countries to help build a critical mass of highly competent and skilled trainers to expand national capacity for ARV delivery.
- **Advocacy for funding** will involve WHO working with UNAIDS and other partners. Achieving the “3 by 5” target requires not only funding for drugs but a massive investment in training and for strengthening health services in countries. Health systems strengthening will benefit both ARV delivery and the delivery of other health services.

Investing in good HIV prevention and care

In many settings in which HIV/AIDS takes its greatest toll, already lean public programmes have become severely weakened. WHO will provide leadership for the shaping of a very different future, in which social standing is not the chief determinant of access to high-quality AIDS prevention and care. By linking AIDS treatment and prevention, and by linking HIV/AIDS efforts with those designed to deal with other chronic and complex health problems, WHO hopes to document a “multiplier effect”: the investments required to implement and scale up integrated AIDS prevention and care will prove to have a salutary impact on many other endeavours in public health and even education. Proper scale-up of pilot treatment efforts will reduce deficits and make up for decades of neglect and, at the same time, strengthen health systems. This windfall benefit of embracing integrated HIV prevention and care will serve the global health community well as it takes on old problems, including the neglected diseases of the poor, and confronts new ones.

An emergency response to a global emergency

The persistence of eradicable diseases, from polio to measles, is a reminder that the global community has failed to bring existing tools to bear on remediable problems. New diseases and challenges, from AIDS and SARS to drug-resistant malaria and TB, show that neglecting public health infrastructure puts all countries and communities at risk. Each of these diseases needs to be reframed as a public problem, in which tackling the causes of individual suffering will generate wider collective benefits.

Simply reconceptualizing AIDS prevention and care will not solve the crisis. Current rates of progress are not adequate to meet objectives such as the “3 by 5” target. Unless the global health community responds now to the need for AIDS treatment in the same way it responds to other emergencies, with exceptional action, the fight against this most powerful enemy will not be won. WHO has committed itself to confronting this global health emergency with urgent measures. The days of a “business as usual” approach to AIDS are over.

Significantly increased resources are needed to tackle pressing public health problems, including HIV/AIDS. Confronting AIDS more boldly will enable a strengthening of primary health care, based on the principles laid out at Alma-Ata in 1978. But achieving this objective will demand greater investment in health from international donors and from countries themselves. Sufficient knowledge and resources exist to prevent the majority of new HIV infections and deaths now occurring. Through better use of existing resources and by bringing new resources to bear on a novel and growing problem, WHO will work in emergency mode in support of countries to redress inequalities of access to proven therapies.

If conducted properly, this emergency response can generate sustained advances. Investing in prevention equity and improved access to care will bring multiple benefits, including a narrowing of the inequalities, both social and medical, that threaten the fragile peace and stability of the global community.

Chapter 3 has shown that although it may be too soon to have a vision of an AIDS-free world, it is not too soon to work towards that future, nor to seek inspiration from the bold initiatives of the past. Fifty years ago, who could have imagined a polio-free world? Yet that reality now seems to be only a few years away. The Global Polio Eradication Initiative is the subject of Chapter 4.

References

1. Farmer P, Walton DA, Furin JJ. The changing face of AIDS: implications for policy and practice. In: Mayer K, Pizer H, eds. *The emergence of AIDS: the impact on immunology, microbiology, and public health*. Washington, DC, American Public Health Association, 2000.
2. *Workshop summary: scientific evidence on condom effectiveness for sexually transmitted disease (STD) prevention, 20 July 2001, Herndon, VA, USA*. Atlanta, GA, US National Institutes of Health and the Centers for Disease Control and Prevention, 2001 (<http://www.niaid.nih.gov/dmid/stds/condomreport.pdf>, accessed 25 September 2003).
3. *AIDS epidemic update: December 2002*. Geneva, UNAIDS/World Health Organization, 2002.
4. Williams BG, Dye C. Antiretroviral drugs for tuberculosis control in the era of HIV/AIDS. *Science* [online], 14 August 2003 (http://aidscience.org/Science/Williams_and_Dye_10_1126-science_1086845.htm, accessed 25 September 2003).
5. *Expert group stresses that unsafe sex is primary mode of transmission of HIV in Africa. WHO and UNAIDS Expert Group Statement, 14 March 2003*. Geneva, World Health Organization, 2003 (<http://www.who.int/mediacentre/statements/2003/statement5/en/>, accessed 26 September 2003).
6. Brewer D et al. Mounting anomalies in the epidemiology of HIV in Africa: cry the beloved paradigm. *International Journal of STD and AIDS*, 2003, 14:144–147.
7. Program in Infectious Disease and Social Change. *The global impact of drug-resistant tuberculosis*. Boston, MA, Harvard Medical School and the Open Society Institute, 1999.
8. *Report on the global HIV/AIDS epidemic 2002*. Geneva, UNAIDS/World Health Organization, 2002.
9. Bell C, Devarajan S, Gersbach H. *The long-run economic costs of AIDS: theory and an application to South Africa*. Washington, DC, World Bank, 2003 (http://www1.worldbank.org/hiv_aids/docs/BeDeGe_BP_total2.pdf, accessed 26 September 2003).
10. Raviola G et al. HIV, disease plague, demoralization, and “burnout”: resident experience of the medical profession in Nairobi, Kenya. *Culture, Medicine and Psychiatry*, 2002, 26:55–86.
11. Médecins Sans Frontières South Africa, Department of Public Health at the University of Cape Town, the Provincial Administration of the Western Cape, South Africa. *Antiretroviral therapy in primary health care: experience of the Khayelitsha programme in South Africa*. Geneva, World Health Organization, 2003.
12. Farmer P et al. Community-based treatment of advanced HIV disease: introducing DOT-HAART (directly observed therapy with highly active antiretroviral therapy). *Bulletin of the World Health Organization*, 2001, 79:1145–1151.
13. Farmer P et al. Community-based approaches to HIV treatment in resource-poor settings. *Lancet*, 2001, 358:404–409.
14. Egger M et al. Promotion of condom use in a high-risk setting in Nicaragua: a randomised controlled trial. *Lancet*, 2000, 355:2101–2105.
15. Blower S, Farmer P. Predicting the public health impact of antiretrovirals: preventing HIV in developing countries. *AIDScience* [online], 2003, 3 (<http://aidscience.org/Articles/AIDScience033.asp>, accessed 25 September 2003).
16. Katz MH et al. Impact of highly active antiretroviral treatment on HIV seroincidence among men who have sex with men: San Francisco. *American Journal of Public Health*, 2002, 92:388–394.
17. Cook RL et al. What’s driving an epidemic? The spread of syphilis along an interstate highway in rural North Carolina. *American Journal of Public Health*, 1999, 89:369–373.

18. Ainsworth M et al. AIDS and public policy: the lessons and challenges of “success” in Thailand. *Health Policy*, 2003, 64:13–37.
19. *Harm reduction approaches to injecting drug use*. Geneva, World Health Organization (<http://www.who.int/hiv/topics/harm/reduction/en/>, accessed 25 September 2003).
20. *MTCT plus: expanding HIV/AIDS care in resource-limited settings*. Mailman School of Public Health, Columbia University (<http://www.mtctplus.org/>, accessed 25 September 2003).
21. *Boletim Epidemiológico – AIDS*. Ministry of Health, Government of Brazil, 2001 (http://www.aids.gov.br/final/biblioteca/bol_set_2001/tab1.htm, accessed 25 September 2003).
22. Mexico: Fox vows AIDS patient subsidies. *AIDScience* [online], 6 August 2003 (<http://aids-science.org/Newsarticle.asp?Article=3101>, accessed 29 September 2003).
23. Mukherjee J et al. *Access to treatment and care: Haiti experience*. Geneva, World Health Organization, 2003.
24. *Epidemiological fact sheets on HIV/AIDS and sexually transmitted infections: Haiti. 2002 update*. Geneva, UNAIDS/World Health Organization (<http://www.unaids.org>, accessed 25 September 2003).
25. Green T. ABC or A through Z? *AIDSLink* [online] 81, 1 September 2003 (<http://www.globalhealth.org/publications/article.php3?id=1032>, accessed 25 September 2003).
26. Hogle J et al. *What happened in Uganda? Declining HIV prevalence, behavior change, and the national response*. Washington, DC, Center for Population, Health and Nutrition, USAID Bureau for Global Programs, Field Support and Research, 2002 (<http://www.eldis.org/static/DOC10759.htm>, accessed 25 September 2003).
27. *The Global Fund to Fight AIDS, Tuberculosis and Malaria: fact sheet*. Geneva, Global Fund to Fight AIDS, Tuberculosis and Malaria (<http://www.globalfundatm.org/proposals/round1/fsheets/haiti.html>, accessed 25 September 2003).
28. Behets FM, Desormeaux J, Joseph D. Control of sexually transmitted diseases in Haiti: results and implications of a baseline study among pregnant women living in Cité Soleil shantytowns. *Journal of Infectious Diseases*, 1995, 72:764–771.
29. Smith-Fawzi MC et al. Prevalence and risk factors of STDs in rural Haiti: implications for policy and programming in resource-poor settings. *International Journal of STDs and AIDS*, 2003 (in press).
30. Grosskurth H et al. Impact of improved treatment of sexually transmitted diseases on HIV infection in rural Tanzania: randomised controlled trial. *Lancet*, 1995, 346:530–536.
31. Schwartlander B et al. Resource needs for HIV/AIDS. *Science*, 2001, 292:2434–2436.

