

The World Health Report 2004

changing history



World Health Organization



The world has reached a crucial moment in the history of HIV/AIDS, and now has an unprecedented opportunity to alter its course. The most important message of the latest *World Health Report* is that, today, the international community has the chance to change the history of health for generations to come and open the door to better health for all. Tackling HIV/AIDS is the world's most urgent public health challenge. Unknown barely a quarter of a century ago, it is now the leading cause of death for young adults worldwide. More than 20 million people have died from it and an estimated 34–46 million others are now infected with the virus. There is as yet no vaccine and no cure.

The World Health Report 2004 – Changing History, published by the World Health Organization, calls for a comprehensive HIV/AIDS strategy that links prevention, treatment, care and long-term support. Until now, treatment has been the most neglected element in most developing countries: almost 6 million people in these countries will die in the near future if they do not receive treatment – but only about 400 000 of them were receiving it in 2003.

WHO and its partners have declared the treatment gap a global emergency and have launched a drive to provide 3 million people in developing countries with antiretroviral therapy by the end of 2005 – one of the most ambitious public health projects ever conceived. This report shows how it can be done. It goes further, looking beyond 2005 to explain how international organizations, national governments, the private sector and communities can combine their strengths and simultaneously fortify health systems for the enduring benefit of all.

Illustrated with photographs of people whose lives have been deeply affected by the global pandemic, *The World Health Report 2004* makes essential reading for everyone with a political, professional or personal interest in health.



© World Health Organization 2004

All rights reserved. Publications of the World Health Organization can be obtained from Marketing and Dissemination, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel: +41 22 791 2476; fax: +41 22 791 4857; e-mail: bookorders@who.int). Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to Publications, at the above address (fax: +41 22 791 4806; e-mail: permissions@who.int).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The World Health Organization does not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

Information concerning this publication can be obtained from:
World Health Report
World Health Organization
1211 Geneva 27, Switzerland
E-mail: whr@who.int

Copies of this publication can be ordered from: bookorders@who.int

The full report was produced under the overall direction of Tim Evans (Assistant Director-General), Robert Beaglehole (Editor-in-Chief), Jim Kim (Special Adviser to the Director-General) and Paulo Teixeira (Director, HIV/AIDS). The principal authors were Robert Beaglehole, Alec Irwin and Thomson Prentice.

The other main contributors to chapters were: *Chapter One:* Ties Boerma, Jean-Paul Moatti, Alex de Waal and Tony Waddell. *Chapter Two:* Jhoney Barcarolo, Alex Capron, Charles Gilks, Alaka Singh and Marco Vitoria. *Chapter Three:* Hedwig Goede, Ian Grubb and Stephanie Nixon. *Chapter Four:* David Evans, Neelam Sekhri, Phyllida Travis and Mark Wheeler. *Chapter Five:* Don Berwick, Michel Kazatchkine and Yves Souteyrand.

Other contributors to the report were: Christopher Bailey, Michel Beusenbergh, Boakye Boatman, Andrew Boule, Guy Carrin, David Coetzee, François Dabis, Betina Durovni, Dominique Egger, Paula Fujiwara, Claudia Garcia-Moreno, Eric Goemaere, Peter Graaf, Raj Gupta, Kate Hankins, Kei Kawabata, Wayne Koff, Michael Lederman, Ying-Ru Lo, Naisiadet Mason, Kedar Mate, J.P. Narain, Carla Obermeyer, Amolo Okeru, Catherine Orrell, Andreas Reis, Peter Reiss, Alan Stone, Tessa Tantorres, Kate Taylor, Roger Teck and David Walton.

Contributors to statistical tables were: Carla Abou-Zahr, Prerna Banati, Steve Begg, Christina Bernard, Ana Betran, Maureen Birmingham, Daniel Bleed, Monika Blössner, Anthony Burton, Laurent Chenet, Christopher Dye, Charu Garg, Peter Ghys, Patricia Hernández, Mehran Hosseini, Jose Hueb, Chandika Indikadahena, Mie Inoue, Peter Jackson, Doris Ma Fat, Colin Mathers, Sumi Mehta, John Miller, Bernard Nahlen, Mercedes de Onis, Richard Poe, Leonel Pontes, Jean-Pierre Poulhier, Nathalie Proust, Eva Rehfuess, Kenji Shibuya, Karen Stannecki, Michel Thieren, Niels Tomijima, Nathalie Van de Maele, Catherine Watt and Hongyi Xu.

Valuable input was received from Assistant Directors-General, policy advisers to the Director-General at WHO headquarters, and many technical staff. Additional help and advice were kindly provided by Regional Directors and members of their staff.

The report was edited by Barbara Campanini and Leo Vita-Finzi. Translation coordination and other administrative and production support was provided by Shelagh Probst. The web site version and other electronic media were provided by Gael Kernen. The photographs and media kit were coordinated by Gary Walker. Proofreading was by Marie Fitzsimmons. The index was prepared by Kathleen Lyle.

Design: Reda Sadki
Layout: Steve Ewart, Sue Hobbs and Reda Sadki
Printing coordination: Keith Wynn
Printed in France
2004/15763 – Sadag

message from the director-general



We are living in a time of unprecedented opportunities for health. In spite of many difficulties, technology has made important advances and international investment in health has at last begun to flow. Most of the increased funding is for the fight against HIV/AIDS. It brings a welcome and long overdue improvement in the prospects for controlling the worst global epidemic in several centuries. The responsibility of WHO and its partners in this effort is to ensure that the increased funding is used in such a way as to enable countries to fight HIV/AIDS and at the same time strengthen their health systems. HIV/AIDS control involves the full spectrum of economic, social and technical activities. A key role of WHO within this spectrum is to work with countries to build up the systems needed to provide treatment. Expanding the use of antiretroviral therapy will allow countries to support effective systems for delivering chronic care, thus extending their capacity to meet the long-term health needs of the population.

The initiative to make antiretroviral therapy available to 3 million people by the end of 2005 (known as “3 by 5”) is aimed at accelerating this process. It provides new ways to pursue the objectives for which WHO has been working since it was founded 56 years ago. However, the stakes are high: rapid expansion of antiretroviral treatment is a large, complex and difficult undertaking. It certainly cannot be done by one agency working on its own. Partnerships are indispensable for a task of this magnitude. Making them work requires great commitment, goodwill and talent on all sides. The initiative draws its strength from many partners with large amounts of all these ingredients, and we expect much more. But I am well aware that we and our partners took a risk in embracing 3 by 5. What I strongly felt we needed was a time-limited, difficult goal that would change the way we work. This is the best way to challenge ourselves to make the contribution that we as WHO should be making to the global effort against HIV/AIDS. Future generations will judge our era in large part by our response to the AIDS pandemic. By tackling it decisively we will also be building health systems that can meet the health needs of today and tomorrow, and continue the advance to Health for All. This is an historic opportunity we cannot afford to miss.

LEE Jong-wook
Director-General
World Health Organization
Geneva, May 2004



overview



David Walton/Partners In Health

The two photographs on the opposite page show how the history of HIV/AIDS is changing. They are snapshots of the past and the present, a vivid example of how, today, innovative treatment programmes are not only saving lives but also helping to strengthen health systems on which to build a brighter future.

Joseph Jeune is a 26-year-old peasant farmer in Lascahobas, a small town in central Haiti. When the first picture was taken in March 2003, his parents had already bought his coffin. Suffering from the advanced stages of AIDS, Joseph Jeune probably had only weeks to live. The second picture, taken six months later, shows him 20 kg heavier and transformed after receiving treatment for HIV/AIDS and tuberculosis (TB) coinfection.

There are millions of people like Joseph Jeune around the world. For most of them, HIV/AIDS treatment is still beyond reach, but Joseph shows what can be achieved. He receives care at the small clinic in his home town. The clinic's HIV/AIDS and TB treatment programmes are part of a wider initiative to strengthen the health service infrastructure across much of Haiti's central plateau. The effort involves nongovernmental organizations, the public sector and communities, with major support from the Global Fund to Fight AIDS, Tuberculosis and Malaria. Using antiretroviral therapy as an entry point, the programme is building up primary health care in communities, for a total population of about 260 000 people. It does so through improved drug procurement and management, the expansion of HIV counselling and testing, increased salaries for local health care personnel, and the training of numerous community health care workers. Primary care clinics have been refurbished, restocked with essential medicines, and provided with new staff. They are receiving up to 10 times more patients for general medical care daily than before the project began.

The World Health Report 2004 shows how projects like this can bring the medical treatment that saved Joseph Jeune to millions of other people in poor and middle-income countries and how, crucially, such efforts can drive improvements in health systems.

Effectively tackling HIV/AIDS is the world's most urgent public health challenge. Already, the disease has killed more than 20 million people. Today, an estimated 34–46 million others are living with HIV/AIDS. In 2003, 3 million people died and 5 million others became infected. Unknown a quarter of a century ago, HIV/AIDS is now the leading cause of death and lost years of productive life for adults aged 15–59 years worldwide.

A comprehensive HIV/AIDS strategy links prevention, treatment, care and support for people living with the virus. Until now, treatment has been the most neglected element in most developing countries. Yet among all possible HIV-related interventions it is treatment that can most effectively drive health systems strengthening, enabling poor countries to protect their people from a wide range of health threats. This report shows how international organizations, national governments, the private sector and communities can combine their strengths to expand access to HIV/AIDS treatment, reinforce HIV prevention and strengthen health systems in some of the countries where they are currently weakest, for the long-term benefit of all.

Almost 6 million people in developing countries will die in the near future if they do not receive treatment – but only about 400 000 of them were receiving it in 2003. In September 2003, WHO, the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the Global Fund declared lack of access to AIDS treatment with antiretroviral medicines a global health emergency. In response, these organizations and their partners launched an effort to provide 3 million people in developing countries with antiretroviral therapy by the end of 2005 – the 3 by 5 initiative, one of the most ambitious public health projects ever conceived.

A CHANCE TO CHANGE HISTORY

Advocacy by WHO and its partners for more global investment in health has begun to bear fruit. Official development assistance and other forms of global health investment are on the rise. Most of the increased spending is for HIV/AIDS. Along with the urgent need to tackle the pandemic, this fact now makes HIV/AIDS the key battleground for global public health. It also gives countries the chance to derive extra public health benefits from the new funds. The opportunity exists to invest these resources so as to save millions of threatened lives through treatment, reinforce comprehensive HIV/AIDS control and strengthen some of the world's most fragile health systems.

The objective of treating 3 million people in developing countries with antiretroviral drugs by the end of 2005 is a step on the way to the goal of universal access to antiretroviral therapy and HIV/AIDS care for all who need it. This goal far outreaches the capacities of any single organization. Through collaboration linking the skills of many partners, however, these aims can be achieved. The treatment initiative is important not only to tackle a grave health crisis, but also because it is building innovative mechanisms of collaboration in health, linking national governments, international organizations, the private sector, civil society groups and communities. Success in partnership on the initiative will accelerate other areas of global health work.

The initiative adapts lessons from HIV/AIDS programmes in developed countries and builds on the achievements of developing countries such as Botswana, Brazil, Senegal and Thailand in scaling up antiretroviral treatment. An increasing number of effective partnerships will mean that no country has to face the HIV/AIDS treatment challenge alone. UNAIDS has, for nearly a decade, kept HIV/AIDS at the forefront of global consciousness and spurred recognition that only an exceptional response can meet the challenge. Under its leadership, the entire United Nations system has embraced its responsibilities. The creation of the Global Fund has fostered partnership between governments, civil society, the private sector and affected communities. The World Bank has brought innovation, and is joined now by the European Union, bilateral initiatives such as the United States President's Emergency Plan for AIDS Relief, and the major contributions of individual governments and private foundations, including the Bill and Melinda Gates Foundation and the William J. Clinton Foundation. There have also been inventive new approaches to technical cooperation, such as hospital twinnings through the Ensemble pour une Solidarité

Thérapeutique Hospitalière en Réseau (ESTHER), initiated by the French government and now supported by Italy, Luxembourg, Spain and other partners.

Success in expanding HIV/AIDS treatment depends on the engagement of civil society. Without the mobilization of activist organizations and communities, the toll of HIV/AIDS over the past quarter-century would have been far heavier. The momentum for antiretroviral scale-up owes much to the sustained advocacy of treatment activists at local, national and global levels and to nongovernmental organizations such as Médecins Sans Frontières and Partners In Health-Zanmi Lasante, which demonstrated to the world the feasibility of delivering antiretroviral treatment in the poorest settings. This report shows WHO's commitment to work closely with national health authorities, the private sector, community-based organizations and others in delivering comprehensive HIV/AIDS programmes on the ground.

WHY TREATMENT MUST BE SCALED UP

The long-term economic and social costs of HIV/AIDS have been seriously underestimated in many countries. More accurate projections now suggest that some countries in sub-Saharan Africa will face economic collapse unless they can bring their epidemics under control, mainly because HIV/AIDS weakens and kills adults like Joseph Jeune in their prime. Data in this report and the forthcoming UNAIDS/WHO *Global report* confirm that the social devastation of the epidemic continues to grow. Reinforced prevention is vital to safeguard future generations but, at the same time, antiretroviral treatment expansion is essential to protect the stability and security of communities, countries and regions and to strengthen the foundations of future development.

The fact that effective treatment exists but has not been made accessible to millions of people in urgent need is something that WHO must tackle, given its special responsibility within the UNAIDS family of cosponsors. WHO's Constitution charges the Organization to pursue the universal realization of the right to health: "the attainment by all peoples of the highest possible level of health". In the case of HIV/AIDS, for those in clinical need of treatment the realization of this right requires access to antiretrovirals.

EXPANDING TREATMENT ACCESS

The report explains that the treatment initiative draws on the specific comparative strengths of multilateral, national and local actors and capitalizes on the motivating effect of a time-bound target.

Between the declaration of the global treatment emergency in September 2003 and the end of February 2004, more than 40 of the countries with the highest burden of HIV/AIDS expressed commitment to rapid treatment expansion and requested technical cooperation in designing and implementing scale-up programmes. WHO and its partners have worked closely with country health officials, treatment providers, community organizations and other stakeholders to revise treatment targets, design national treatment scale-up plans and launch implementation. In countries such as Kenya, the United Republic of Tanzania, and Zambia, WHO is linking with key bilateral partners to develop a target-focused, streamlined approach that will maximize efficiency under clear national leadership. Political commitment and national ownership of programmes are essential. The streamlined funding mechanisms developed by the Global Fund are enabling many countries to access funding and expand programmes more quickly.

As new funding flows in, technical and human resource capacities must be ready to ensure its effective use. Countries need technical cooperation to support implementation on the ground and have requested clear guidance on treatment delivery and programme management. WHO makes a fundamental contribution by providing such guidance.

An important task is to expand as rapidly as possible from small pilot projects to treatment programmes with national coverage, while maintaining quality of care in the face of serious resource constraints. For rapid expansion, noticing gaps in resources is the starting point for a plan to redesign care so that it is, from the outset, “scalable”. The initiative takes a practical “engineering” or “system design” approach. The key is not to require that countries simply accumulate the usual resources for care – enough doctors, nurses, clinics, and so on – to reach the entire population; in many poor countries, that will just not work at present. Instead, the WHO strategy begins with clearly defined objectives, and then works to develop innovative system designs that can be expanded even when the usual medical resources are in very short supply. Such solutions will vary from country to country, but many factors are relatively constant, and many lessons can be shared. The strategy draws on solid evidence of the success of pioneering projects and some existing national programmes. Knowledge gained, systematically measured and reflected upon can be quickly reapplied and shared widely.

To help accelerate the initiative, WHO has developed a simplified set of antiretroviral drug regimens, testing and treatment guidelines that are consistent with the highest standards of quality of care. They have the added advantage of enabling much more effective use of nurses, clinical officers and community health workers to support treatment. While physicians supervise the clinical teams, day-to-day patient management and adherence support tasks can be safely and effectively delegated to other workers, including appropriately trained community health workers. In this way there is a better chance of delivering care quickly despite shortages of physicians, laboratories and other facilities. These simplified regimens are the critical element in ensuring that expansion of treatment in poor countries can be carried out equitably. WHO has also designed streamlined guidelines for training health workers in a wide range of skills related to the use of antiretroviral drugs, from HIV counselling and testing and recruitment of patients to treatment delivery, clinical management of patients and the monitoring of drug resistance.

WHO is now working on the ground with health officials, treatment providers and communities to overcome technical challenges; it is also serving as a coordination, communications and information-sharing hub to gather, analyse and disseminate data, and is feeding back the information so that it can be used rapidly to improve programme performance. This intensified collaboration on antiretroviral treatment scale-up is part of WHO’s broad commitment to working closely with countries to meet their major health goals.

WHO, in partnership with UNICEF and the World Bank, has established the AIDS Medicines and Diagnostics Service as an operational arm to ensure that developing countries have access to quality antiretrovirals and diagnostic tools at the best prices. The service aims to help countries to buy, forecast and manage the supply and delivery of products necessary for the treatment and monitoring of HIV/AIDS.

As policy and technical support work at country level intensifies, WHO, UNAIDS and their partners will continue their global advocacy work to ensure that adequate resources flow to support countries. New resources available through the Global Fund and other partners will be critical to success. On request, WHO is providing countries with technical assistance in the preparation of applications to the Global Fund and other potential funders.

TOWARDS HEALTH FOR ALL

The global HIV/AIDS treatment gap reflects wider patterns of inequality in health and is a test of the international community’s commitment to tackle these inequalities. Beyond working to save millions of lives under immediate threat, WHO and its partners are confronting a broad range of health problems that afflict poor communities and keep them

poor, viewing HIV/AIDS treatment expansion and the Millennium Development Goals as steps on the road to Health for All.

The treatment initiative will not end in 2005. Ahead lie the challenges of extending treatment to many more millions of people and maintaining it for the rest of their lives, while simultaneously building and sustaining the health infrastructures to make that huge task possible. The ultimate aim is nothing less than to reduce health inequalities by building up effective, equitable health systems for all.

CHAPTER SUMMARIES

Chapter 1. A global emergency: a combined response

This chapter describes the current epidemiological state of HIV/AIDS epidemics around the world and examines the daunting challenges that lie ahead. It shows that the world is far from ready for what is to come: it provides evidence that the social and economic consequences of unchecked HIV/AIDS epidemics will be catastrophic for many communities and countries.

Although it has seemed a familiar enemy for much of the last 20 years, the global HIV/AIDS pandemic is only now beginning to be seen for what it is: a unique threat to human society, whose impact will be felt by future generations. The most explosive growth of the pandemic occurred during the middle of the 1990s, especially in sub-Saharan Africa. Today, an estimated 34–46 million people are living with HIV/AIDS. Two-thirds of the total live in Africa, where about one in 12 adults is infected, and one-fifth in Asia. Globally, unprotected sexual intercourse between men and women is the predominant mode of transmission of the virus.

The chapter explains why WHO, along with its partners, believes an emergency global and comprehensive response is essential and must embrace prevention, treatment and long-term care. Prevention is essential to protect the many millions of young adults and children who are most at risk but who are not yet affected. Treatment is the difference between life and death for the millions of people who are HIV-positive but are currently denied access to antiretroviral medications. Long-term care is also essential. Almost 6 million people need treatment now – only about 400 000 received it in 2003. The chapter argues that a treatment gap of such dimensions is indefensible, and that narrowing it is a public health necessity.

Together, prevention, treatment and long-term care and support can reverse the seemingly inexorable progress of the HIV/AIDS epidemics, offering the worst-affected countries and populations their best hope of survival.

Chapter 2. The treatment initiative

This chapter stresses the need for a comprehensive strategy that links prevention, treatment, research, and long-term care and support for people living with HIV/AIDS. But it points out that until now, treatment has been the most neglected component of this approach in much of the developing world. To accelerate prevention while limiting the social devastation now unfolding, rapid expansion of HIV/AIDS treatment with antiretroviral medicines in the countries hardest hit by the pandemic is needed immediately.

Despite mounting evidence that this treatment works in resource-poor settings, by late 2003 less than 7% of people in developing countries in urgent need were receiving it. The chapter examines public health arguments and economic and social arguments for scaling up antiretroviral therapy. It then presents WHO’s strategy for working with countries and partners to reach the treatment target and provides an estimate of the global

investment required. It explains the five pillars that support the strategy. These are: global leadership, strong partnership and advocacy; urgent, sustained country support; simplified, standardized tools for delivering antiretroviral therapy; effective, reliable supply of medicines and diagnostics; and rapid identification and reapplication of new knowledge and successes.

The opportunities and challenges facing selected countries are explored, highlighting the need to ensure that treatment scale-up reaches the poorest people. Finally, the chapter considers the wider importance of expanded treatment as a new way of working across the global health community for improved health outcomes and equity.

Chapter 3. Community participation: advocacy and action

The participation of communities and civil society groups, particularly groups of people living with HIV/AIDS, is crucial to treatment scale-up and comprehensive HIV/AIDS control. This participation will include both advocacy and the involvement of community members in delivering services and support to patients. Community involvement is essential to prevention, treatment, care, support and research.

This chapter describes the background of community participation as a dimension of public health work and recalls key achievements of civil society HIV/AIDS activism. It then considers the roles that civil society groups and community members will play in scaling up antiretroviral therapy in resource-poor settings.

State leadership will be indispensable to successful scale-up, and civil society cannot replace the public sector. But a key task of effective government leadership will be creating partnerships with civil society organizations and mechanisms to make use of the skills available within communities. The commitment to community participation links the treatment strategy with the Health-for-All vision and an equity-based agenda in global public health. The values of human rights, health equity and social justice embraced by many civil society AIDS activist groups are closely related to WHO's constitutional objective: "the attainment by all peoples of the highest possible level of health". This chapter shows that these values provide a basis for ongoing collaboration and partnerships between communities, civil society groups, national governments and international organizations, including WHO.

Such collaboration will be crucial to future health progress. The role of the 3 by 5 initiative in catalysing innovative partnerships is part of how it is changing ways of thinking and working in global health. For example, communities educated and mobilized around HIV/AIDS control will be better able to take part in health promotion, disease control and treatment efforts regarding health problems related to other Millennium Development Goals: to combat malaria and other diseases, maternal and child mortality, and the growing burden of chronic adult diseases in low-income and middle-income countries.

Chapter 4. Health systems: finding new strength

Health sector interventions against HIV/AIDS – especially the treatment initiative – are dependent on well-functioning health systems. In countries with a high burden of HIV/AIDS, systems are often degraded and dysfunctional because of a combination of underfunding and weak governance. HIV/AIDS places additional burdens on these weakened health systems.

The 3 by 5 initiative has the potential to strengthen health systems in a number of ways, by, for example, attracting resources to the health system in addition to those required for HIV/AIDS, stimulating investment in physical infrastructure, developing procurement and

distribution systems of generic application, and fostering interaction with communities which can benefit a wide range of health interventions. It is important that any potentially adverse effects on the wider health system are anticipated and minimized.

The chapter continues with a consideration of the health systems context in resource-poor settings, taking note of the participation of both public and private providers. It then considers how health systems can be strengthened, so that they can implement the expanded treatment initiative while continuing to improve and expand many other health interventions. The conceptual framework of the four main functions of health systems is used: leadership, service delivery, resource provision, and financing. In the medium term, the financing gap will have to be closed mainly by external donors, because national governments and economies are incapable of generating much more than they do already, whereas donors, aware of their past pledges, can be encouraged to do more.

Chapter 5. Sharing research and knowledge

This chapter records that, since scientists first identified the human immunodeficiency virus as the cause of AIDS in 1983, there have been many remarkable research achievements related to the disease and many people have benefited. Twenty years ago there was little effective treatment; today there is a range of antiretroviral drugs that dramatically improve patients' quality of life and chances of survival.

Despite significant advances, however, including the design and testing of more than 30 candidate HIV vaccines, it will be several more years at least before a safe and effective vaccine becomes widely available. In examining that continuing quest, the chapter also reviews research into other important areas of HIV/AIDS prevention, treatment and care.

There are four broad categories of challenges facing researchers.

- Prevention research – slowing down the growth and geographical expansion of the epidemic: a challenge for epidemiology and sociobehavioural aspects of prevention.
- Vaccine research – designing a safe and effective preventive vaccine, the best hope for the long-term prevention and control of HIV/AIDS.
- Treatment research – generating new antiretroviral drugs and designing new therapeutic strategies that would be active on "wild" and resistant strains of viruses, easy to take and better tolerated than currently available drugs: a challenge for basic and clinical research.
- Delivery system (operational) research – making care and antiretroviral treatment available to all of those who need it worldwide: a multidisciplinary undertaking.

The chapter examines important matters such as the prevention of HIV transmission from mother to child; the development and use of microbicides; the need to sustain long-term adherence to treatment; toxicities; drug resistance; joint approaches to HIV/AIDS and tuberculosis; economic issues; health policy analysis; equity issues; and international collaboration. The chapter leads on to the report's brief concluding section, which contains an optimistic view of the future. It emphasizes that a crucial moment has been reached in the history of HIV/AIDS, and that there is now an unprecedented opportunity to alter its course. Ahead lies the challenge of extending lifelong treatment to many more millions of people, while simultaneously building and sustaining the health infrastructures to make that huge task possible. The outcome can be better health for generations to come.



conclusion

This report began with the story of Joseph Jeune, a 26-year-old peasant farmer in Haiti. It is a story of how hope can triumph over despair, and it also is an example of how people can fight back successfully against HIV/AIDS.

This is a crucial moment in the history of HIV/AIDS, and an unprecedented opportunity to alter its course. The most important message of this report is that, today, the international community has the chance to change the history of health for generations to come and to open the door to better health for all.

The World Health Report 2004 has chronicled the global spread of HIV/AIDS over the last quarter of a century. It has also traced the efforts of advocacy groups, civil society organizations, community health care workers, researchers and many others to control it and to combat its many side-effects, including stigma and discrimination. Despite those often heroic efforts, more than 20 million people have died from HIV/AIDS and an estimated 34–46 million others are now infected with the causative virus, for which there is as yet no vaccine and no cure.

But there is treatment. Joseph Jeune owes his life to it, as do many others. The pictures of Joseph before and after treatment illustrate what can be done. Antiretroviral therapy saved him from an early grave and enabled him to return to work in his fields and care for his family.

Effectively tackling HIV/AIDS is the world's most urgent public health challenge. In advocating a comprehensive strategy which links prevention, treatment, care and support, this report makes a special case for treatment, which has been the most neglected element in most developing countries.

Treatment is the key to change. It is now possible to save the lives of millions of people who need that treatment but do not yet have access to it. Almost 6 million people now need antiretroviral drugs but only about 400 000 received them in 2003. This knowledge underpins the commitment of WHO and its partners to help provide 3 million people in developing countries with antiretroviral therapy by the end of 2005 – and not to stop there.

The treatment expansion initiative far outreaches the capacities of any single organization. It is one of the most ambitious

public health projects in history, and is fraught with difficulties. But within the multiple partnerships of the international community, the knowledge that this *can* be done is leading to the recognition that it *must* be done.

The moral imperative needs no reinforcement, yet there are other excellent reasons to support the treatment initiative. As this report has shown, the long-term economic and social costs of HIV/AIDS in many countries have been seriously underestimated, and some countries in sub-Saharan Africa may be brought to the brink of economic collapse. Treatment expansion is vital to protect their stability and security and to strengthen the foundations of their future development. Furthermore, and of inestimable importance, treatment can be the accelerator that drives efforts to strengthen health systems in all developing countries.

Building up health systems is essential, not just in the fight against HIV/AIDS but also in generally improving access to better health care for those most in need. This report has demonstrated how international organizations, national governments, the private sector and communities can combine their strengths to achieve this objective.

Advocacy by WHO and its partners for increased international investment in health is beginning to bear fruit. Countries should get the maximum public health benefit from new funds that are now becoming available. Although largely intended for HIV/AIDS, these resources can simultaneously strengthen some of the world's most fragile health systems.

Beyond 2005 lies the challenge of extending treatment to many more millions of people, and of maintaining it for the rest of their lives, while simultaneously building and sustaining the health infrastructures to make that huge task possible. The success of this action cannot be guaranteed. But inaction will not be forgiven. It will be judged by those who suffer and die needlessly today, and by the historians of tomorrow. They will have a right to ask why, if we let the chance of changing history slip through our fingers, we did not act in time.