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Scaling up priority HIV/AIDS interventions
in the health sector

Progress Report **2010**



UNAIDS
JOINT UNITED NATIONS PROGRAMME ON HIV/AIDS

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FOREWORD

This year's report on HIV/AIDS interventions in the health sector presents strong evidence of progress in the global effort to fight HIV/AIDS, but it also makes clear how much work remains to be done.

In 2009, countries, partners and communities succeeded in scaling up access to HIV prevention, treatment and care.

Important gains have been made towards the goal of eliminating mother-to-child transmission of HIV by 2015. Over half of all pregnant women living with HIV in low- and middle-income countries received antiretrovirals to prevent HIV from being transmitted to their babies, and more children living with HIV are benefiting from treatment and care programmes. Community-driven, rights-based prevention programmes have contributed to lowering the number of HIV infections. WHO's revised guidelines for antiretroviral therapy now recommend initiation of therapy at an earlier stage of disease and, once fully implemented, these changes will help to further reduce the morbidity and mortality due to HIV.

These advances are all cause for encouragement. Nevertheless, this report also demonstrates that, on a global scale, targets for universal access to HIV prevention, treatment and care will not be met by 2010.

Only one third of people in need have access to antiretroviral therapy, coverage of prevention interventions is still insufficient, and most people living with HIV remain unaware of their serostatus. Stigma, discrimination and social marginalization continue to be experienced daily by people who are the most affected by HIV and hardest to reach in many countries, including people living with HIV, sex workers, injecting drug users, men who have sex with men, transgender people, prisoners and migrants.

At the same time, the financial crisis and resulting economic recession have prompted some countries to reassess their commitments to HIV programmes. Reduced funding for HIV services not only risks undoing the gains of the past years, but also greatly jeopardizes the achievement of other Millennium Development Goals, especially those related to maternal and child health.

While the global HIV response may have exposed the shortcomings of current health systems, it has also driven more concerted action towards addressing broader systemic issues, including human resource capacity, physical infrastructure, supply chains, health financing and information systems.

As many countries have shown, the ongoing scale-up of HIV programmes can be successfully leveraged to tackle long-standing systemic bottlenecks that have prevented other health outcomes from being achieved. We must also strategically integrate HIV/AIDS interventions into national health services, strategies and plans, including those for sexual, reproductive, maternal and child health, tuberculosis, sexually transmitted infections and harm reduction.

Special approaches remain necessary to address the particular circumstances and needs of those populations at greater risk for HIV infection. Rights-based national strategies must include special efforts to reach the poorest and those who are socially excluded. Programmes must be designed and delivered in ways that ensure equity in access, including for children and women. Only such a combined commitment to programme planning and delivery, built upon a solid primary health-

care framework, can fully capture synergies between interventions, ensure programmatic sustainability, and maximize coverage and impact.

Although there is considerable room for improvement, HIV programmes have had a positive impact on other disease outcomes and on social and economic development more broadly. The implication for public policy is clear: while the response to other global health priorities must be further strengthened, this must happen in addition to, not instead of, a continued and increasing commitment to HIV. Only by working together can we turn the tide of the epidemic.

We have the knowledge and ability to achieve universal access and reverse the epidemic. Let us turn the challenges faced by the global HIV response into an opportunity to renew our efforts and deliver on our collective commitments.



Margaret Chan
Director-General
World Health Organization



Michel Sidibe
Executive Director
UNAIDS



Anthony Lake
Executive Director
UNICEF

EXECUTIVE SUMMARY

The HIV epidemic remains a major global public health challenge, with a total of 33.4 million people living with HIV worldwide. In 2008 alone, 2.7 million people were newly infected with HIV.

Since 2006, when United Nations Member States committed to scaling up services and interventions towards the goal of universal access to HIV prevention, treatment, care and support by 2010, the WHO, UNICEF and UNAIDS Secretariat has sought to monitor key components of the health sector response to the HIV epidemic worldwide. This report, the fourth annual progress report published since 2006, assesses the situation at the end of 2009, one year before the universal access target. It compiles information from 183 of the 192 United Nations Member States, comprising 144 low- and middle-income countries and 39 high-income countries, on the status of the global health sector response to HIV, progress made and remaining challenges to achieving universal access.

The year 2009 saw continuing progress in expanding access to HIV testing, prevention, treatment and care in low- and middle-income countries. Some countries have already attained universal access (defined as coverage of at least 80% of the population in need) to antiretroviral therapy and/or interventions to prevent mother-to-child transmission. For a good number of countries, universal access is within clear reach by the end of 2010. Despite these encouraging findings, global targets for HIV prevention, treatment, care and support are unlikely to be achieved in 2010. This has important implications for a range of Millennium Development Goals (MDGs) beyond those specifically related to HIV (MDG 6), such as MDGs 4 and 5, with targets related to child and maternal health.

After years of considerable increases in international assistance, funding remained essentially flat over the current period. In the context of a global financial crisis, this report underscores the urgency of continuing to mobilize support by countries, donors and global agencies in order to respond to the HIV epidemic and contribute to achieving the MDGs.

HIV testing and counselling

In 2009, more countries adopted policies on provider-initiated testing and counselling, and the number of facilities providing HIV testing and counselling continued to increase. As of December 2009, over two thirds of countries in sub-Saharan Africa and Latin America and the Caribbean had introduced policies supporting provider-initiated testing and counselling.

There was also an increase in the number of HIV tests performed globally. One hundred countries reported a total of 67 million people tested in 2009. In the 82 countries for which comparable data are available for 2008 and 2009, the median number of tests performed per 1000 population increased from 41 to 50 respectively.

However, knowledge of HIV status remained inadequate. According to 10 recent national population-based surveys in sub-Saharan Africa, the median percentage of people living with HIV who know their HIV status is below 40%. In addition, testing and counselling programmes are not always tailored to local contexts, and considerable gaps remain between testing and counselling needs and existing practices.

Key indicators of progress in low- and middle-income countries in 2008 and 2009^a

	December 2008	December 2009
Number of adults and children receiving antiretroviral therapy	4 053 000	5 254 000
Antiretroviral therapy coverage among adults and children:		
Based on 2010 WHO guidelines (treatment initiation at CD4 cell count <350 cells/mm ³)	28% [26-31%]	36% [33-39%]
Based on 2006 WHO guidelines (treatment initiation at CD4 cell count <200 cells/mm ³)	42% [38-48%]	52% [47-58%]
Antiretroviral therapy coverage among children less than 15 years of age	22% [16-34%]	28% [21-43%]
Percentage of pregnant women living with HIV receiving antiretroviral drugs to prevent mother-to-child transmission	45% [37-57%]	53% [40-79%]

^a See box on Updated guidance on antiretroviral therapy and its implications for needs estimates.

Health sector interventions for HIV prevention

More low- and middle-income countries reported conducting surveillance for HIV among selected population groups at higher risk for HIV infection, such as injecting drug users, sex workers and men who have sex with men. Nevertheless, most countries were still unable to provide data on the coverage of HIV prevention programmes¹ among these population groups, and the quality and representativeness of the reported data are sometimes limited.

In 2009, among 27 low- and middle-income reporting countries, the median percentage of injecting drug users reached with HIV prevention programmes in the 12 months preceding the surveys was 32%. Of 92 countries that reported information on harm reduction policies for injecting drug users, 36 reported having needle and syringe programmes, and 33 offered opioid substitution therapy. In all the reporting countries, the number of syringes distributed per injecting drug user per year is below the internationally recommended target of 200 syringes per injecting drug user per year.

Among 21 reporting countries, the median percentage of men who have sex with men reached with HIV prevention programmes in the 12 months preceding the surveys was 57%. In the case of sex workers, the median percentage was 58% among 38 reporting countries.

¹ Based on UNGASS indicators; see Tables 3.4 p. (injecting drug users), 3.6 p. (men who have sex with men), 3.7 p. (sex workers)

Updated guidance on antiretroviral therapy and its implications for needs estimates

In 2009 and 2010, WHO issued revised guidelines and recommendations on (i) antiretroviral therapy for adults and adolescents, including pregnant women, (ii) antiretroviral drugs for treating pregnant women and preventing HIV infection in infants, (iii) antiretroviral therapy for HIV infection in infants and children, and (iv) HIV and infant-feeding.

WHO's updated guidelines on antiretroviral therapy for adults and adolescents, including pregnant women, now recommend that antiretroviral therapy be initiated when CD4 cell counts reach or drop below 350 cells/mm³, regardless of whether or not patients have clinical symptoms (see boxes 4.1 and 4.2). Although this change has increased the number of people estimated to be in need of antiretroviral therapy at the end of 2009 from 10.1 million to 14.6 million [13.5-15.8 million], it is expected that, in the medium term, the higher initial investments required to conform to these guidelines will be fully compensated for by fewer hospitalizations and lower morbidity and mortality rates. As of December 2009, 29 countries had already incorporated the new WHO recommendations on eligibility criterion for initiating antiretroviral therapy into their national treatment guidelines.

Multiple legal and sociocultural barriers continue to prevent or discourage injecting drug users, men who have sex with men, transgender people and sex workers from accessing and using health-care services. Addressing these issues requires removing punitive laws that criminalize their behaviours, and creating enabling environments to reduce stigma and discrimination and protect human rights.

Some progress was made in developing and implementing additional prevention tools and technologies. As of January 2010, over 133 000 male circumcisions had been performed in six Sub-Saharan countries reporting on service delivery.

The availability and safety of blood and blood products for transfusion remains an area of concern in low- and middle-income countries. Only 48% of blood donations in low-income countries were screened in a quality-assured manner, compared to 99% and 85% in high- and middle-income countries, respectively.

Treatment and care for people living with HIV

At the end of 2009, 5.25 million people were reported to be receiving antiretroviral therapy in low- and middle-income countries. This represents an increase of over 1.2 million people from December 2008, the largest increase in one year. Sub-Saharan Africa had the greatest increase in the absolute number of people receiving treatment in 2009, from 2 950 000 in December 2008 to 3 911 000 a year later.

Based on the new criterion for treatment initiation (CD4 cell count of or below 350 cells/mm³), antiretroviral therapy coverage increased from 28% [26-31%] in December 2008 to 36% [33-39%] at the end of 2009. Under the previous criterion for treatment initiation (CD4 count of or below 200 cells/mm³), global coverage would have reached 52% [47-58%] in 2009.

Eight low- and middle-income countries (Botswana, Cambodia, Croatia, Cuba, Guyana, Oman, Romania and Rwanda) had already achieved universal access to antiretroviral treatment by December 2009 (treatment coverage of at least 80% of patients in need).

At 39%, antiretroviral therapy coverage was higher among women, compared with 31% among men.

Available country cohort data on the proportion of patients retained on antiretroviral therapy over time show that most patient attrition occurs within the first year of treatment initiation and that retention rates tend to stabilize thereafter. In 2009, the average retention rate at 12 months across low- and middle-income countries was 82%, and was approximately the same among men and women. Reported

retention trends in 2009 were similar to those observed in 2008. However, many programmes were still technically and operationally unable to provide data on patient retention, especially over longer periods. It is essential that partners and countries step up efforts to strengthen patient and cohort monitoring systems to capture, process and use longitudinal retention data.

As of mid-2010, 28 countries had implemented surveys to classify transmitted HIV drug resistance. Among 15 WHO quality-assured surveys, transmitted HIV drug resistance was classified as low (<5%) by 13 countries, and moderate (between 5% and 15%) by two.

HIV-related tuberculosis (TB) remains a serious challenge for the health sector's response to HIV. In 2008, of the 9.4 million incident TB cases worldwide, an estimated 1.4 million were among people living with HIV. Although the rate of HIV testing and counselling for TB patients is increasing, it remains inadequate. Almost 22% of people with notified TB knew their HIV status in 2008, up from 16% in 2007 and 3.2% in 2004. Antiretroviral therapy coverage among people living with HIV and TB was low, and implementation of the *Three I's for HIV/TB* – intensified TB case finding among HIV patients, isoniazid preventive therapy and TB infection control – remained insufficient.

Updated guidance on prevention of mother-to-child-transmission and paediatric treatment

The 2010 revised guidelines on prevention of mother-to-child transmission of HIV propose major changes to more effective antiretroviral drug interventions. This includes earlier antiretroviral therapy (ART) for a larger group of HIV-positive pregnant women (CD4 \leq 350 or stage 3 or 4 disease) to benefit both the health of the mother and prevent HIV transmission to her child during pregnancy and breastfeeding. For women who do not require ART the guidelines recommend two options for antiretroviral prophylaxis, to be chosen at country level taking into account feasibility and implementation issues (see Box 5.3). In addition, the revised guidelines now recommend the provision of antiretroviral drugs to the mother or child to reduce the risk of HIV transmission during breastfeeding in settings where it is judged to be the safest infant-feeding option (see Box 5.3 and Box 5.4). Updated paediatric antiretroviral therapy guidelines now advise that all HIV-positive children less than 24 months of age be started on antiretroviral therapy, and that children more than 24 months of age be initiated on treatment depending on age-specific CD4 cell count thresholds (see Box 5.6). These revisions should significantly lower vertical transmission rates, increase HIV-free survival, and improve the quality of life and survival of infants and children living with HIV. Additional technical and financial support is needed, however, to enable countries to fully implement the revised recommendations in a timely and effective manner.

HIV services for women and children

Access to services for preventing mother-to-child transmission of HIV expanded further in 2009. An estimated 26% of all pregnant women in low- and middle-income countries received an HIV test in 2009, up from 21% in 2008. However, this figure is still low, largely due to inadequate coverage of HIV testing in East, South and South-East Asia (17%) where 55% of pregnant women live.

An estimated 53% [40–79%] of pregnant women living with HIV received antiretroviral drugs to reduce the risk of transmitting HIV to their infants, up from 45% [37–57%] in 2008. In sub-Saharan Africa, which has around 91% of the 1.4 million pregnant women in need of antiretroviral drugs for preventing mother-to-child transmission, the coverage is 54% [40–84%] in 2009.

The efficacy of antiretroviral drugs in preventing mother-to-child transmission of HIV varies with the type of drug combination used and the duration of the regimen. Among pregnant women who have access to antiretroviral drugs for preventing mother-to-child transmission, the proportion receiving single-dose nevirapine decreased from 49% to 30% between 2007 and 2009, whereas the percentage of women receiving more efficacious regimens increased from 33% to 54% during the same time period.

Approximately 51% of pregnant women who tested positive for HIV were assessed for their eligibility to receive antiretroviral therapy for their own health, up from 34% in 2008.

About 356 400 children less than 15 years of age were receiving antiretroviral therapy at the end of 2009, up from 275 300 at the end of 2008, an increase of 29% in one year. These children represented an estimated 28% [21–43%] of all children less than 15 years estimated to need antiretroviral therapy in low- and middle-income countries, up from 22% [16–34%] in 2008 and 7% [5–11%] in 2005. Overall antiretroviral therapy coverage among children in low- and middle-income countries was lower than that among adults (37% [35–41%]). Moreover, in 54 reporting countries, only 15% [10–28%] of children born to HIV-positive mothers received an HIV test within the two first months of life.

Greater efforts are needed to scale up early testing of HIV-exposed infants, reduce the rate of loss to follow up among them in the postnatal period, and further integrate HIV interventions with services for maternal, newborn and child health.

Despite the limitations of the available information, there has never been so much evidence of the positive and growing impact of HIV-related investments in reducing

new infections, averting deaths and ensuring that people living with HIV enjoy healthy lives. Yet, this evidence becomes available at a time when the global economic crisis of 2008-2009 has put the sustainability of many HIV programmes at risk. It is clear that without continued and strengthened financial and programmatic commitments, there is considerable danger that these achievements could be undone.

Addressing the challenges posed by the MDGs pertaining to HIV requires action along four main strategic directions: (i) expanding and optimizing the global HIV response, (ii) catalysing the impact of HIV programmes on other health outcomes, (iii) strengthening health systems for a sustainable and comprehensive response, and (iv) tackling the structural determinants of the response, including human rights violations. 🌐

1. INTRODUCTION

This report reviews the progress made in 2009 in scaling up access to selected health sector interventions for HIV prevention, treatment and care in low- and middle-income countries. It is the fourth in a series of annual progress reports published since 2006 by the World Health Organization (WHO), United Nations Children's Fund (UNICEF) and Joint United Nations Programme on HIV/AIDS (UNAIDS) in collaboration with international and national partners to monitor key components of the health sector response to the HIV epidemic worldwide.¹

2010 is a landmark year for the global HIV response. At the 2006 United Nations General Assembly High-Level Meeting on AIDS, world leaders committed to scaling up services and interventions towards the goal of providing universal access to HIV prevention, treatment, care and support by the end of this year (1). Now, as countries and partners prepare to review universal access goals and targets in the months ahead, assessing progress is critical to identify areas where intensified action is needed to increase coverage and impact. This report will support this process in two ways. First, the accurate and up-to-date strategic information in the report will help countries to take stock of their achievements and identify programmatic bottlenecks, service delivery gaps and challenges. Second, the update of the global response will assist the international community in setting policy priorities, defining targets and designing relevant strategies to better support and enhance country responses.

The proximity of 2010 has served to rally and galvanize partners involved in the HIV response at all levels. Encouragingly, 2009 witnessed renewed commitment and resolve towards attainment of universal access and the Millennium Development Goals (MDGs). The launch of UNAIDS' Outcome Framework has helped focus attention on ten programmatic areas and a range of cross-cutting strategies in which progress must be rapidly accelerated (2). At the same time, the international community has also moved decisively towards agreeing to virtual elimination of mother-to-child transmission of HIV by 2015 (3). A new global health initiative, spearheaded by the United States Government, will support low- and middle-income countries to improve health outcomes and strengthen health systems,

including HIV services. New financial allocations have been agreed to by the Global Fund to Fight AIDS, Tuberculosis and Malaria. WHO's guidelines on antiretroviral therapy for adults and adolescents as well as children, now recommend initiation of therapy at an earlier stage of the disease, which should further reduce HIV-related mortality and morbidity as well as HIV transmission.

At the same time, the global HIV response has been buffeted by both the global financial crisis and changing public health and development priorities at national and international levels. These events have highlighted the need to enhance the impact of current investments by improving the efficiency, effectiveness and quality of programmes, strengthening linkages between programmes and building systems for a sustainable response.

This report shows that, among 144 low- and middle-income countries reporting programme data this year, eight had already achieved universal access to antiretroviral therapy at the end of 2009, providing treatment to at least 80% of patients in need. Furthermore, 15 countries had achieved the 80% target for coverage with antiretroviral prophylaxis to prevent mother to child transmission of HIV.

Although more countries may reach universal access goals by the end of 2010 as a result of ongoing efforts, global targets for HIV prevention, treatment, care and support are unlikely to be achieved. Importantly, this has implications not only for the HIV response, but also for all other MDGs, particularly MDGs 4 and 5, on child and maternal health. Indeed, as documented by recent research, a lower burden of HIV/AIDS has been associated with considerably greater progress towards the achievement of child mortality and tuberculosis (TB) goals than economic growth itself (4). In the absence of HIV, maternal mortality worldwide would have been lower by about 6% in 2008 (5) and a recent academic study (6) has estimated that up to 18% of pregnancy-related deaths may be due to HIV.

In spite of all the challenges and constraints, this report demonstrates that, with intensified and accelerated efforts, countries can achieve universal access. Health-care workers have been trained, critical infrastructure has been upgraded, and health systems are gradually being strengthened. Although much remains to be done and improved, millions of new HIV infections have already been averted and millions of people are alive today as a result of investments in HIV over the past few years.

¹ Two other important joint publications, to be released later in 2010, will complement the health sector-related information presented and discussed herein. *The Aids Today: 2010 UNAIDS Global Report* will discuss the current status of the epidemic and the multisectoral response at the global and national levels, and the *Stocktaking report on children and AIDS* will present additional critical data on the progress made and challenges in scaling up services for women, children and young people affected by the epidemic.