The Brazilian Experience in Providing Universal Access to Antiretroviral Therapy

Paulo R. Teixeira, Marco Antônio Vitória, Jhoney Barcarolo

KEY WORDS: Brazil; HIV/AIDS care; health system.

Abstract

Brazil is the first developing country to have implemented a large-scale universal antiretroviral distribution program. Initiated in the early 90s with the distribution of AZT, it now provides free antiretroviral medication to about 125,000 patients, which reflects a coverage of virtually all people living with HIV/AIDS with some form of treatment indication. The results achieved are telling: from 1996 to 2002, more than 60,000 AIDS cases, 90,000 deaths and 358,000 AIDS-related hospital admissions were averted. Financially, the balance is also positive: the savings in out-patient and hospital costs outrun the costs of implementation by more than US$ 200 million. These results demonstrate that it is feasible to extend the availability of ARV treatment to the millions of people in need, even in a resource-poor setting where the ideal infrastructure might not be in place. It is clear that the broad political and sociological context in which the Brazilian response evolved cannot be underestimated, but it is fair to say that the Brazilian experience is based on a concerted early government response, the strong and effective participation of civil society, a multisectoral mobilization, a balanced prevention and treatment approach and the advocacy of human rights in all strategies and actions.
Résumé

Le Brésil est le premier pays en développement à avoir mis en œuvre un programme de distribution d’antirétroviraux universel sur une large échelle. Initié au début des années 90, avec la distribution d’AZT, ce programme procure aujourd’hui des traitements antirétroviraux gratuits à environ 125 000 patients, c’est-à-dire à tous les individus vivant avec le VIH qui ont besoin de traitement. Entre 1996 et 2002, plus de 60 000 cas de sida, 90 000 décès et 358 000 admissions hospitalières liées au sida, ont été évitées. Au plan financier, le bilan est également positif : les économies en termes de coût hospitalier et ambulatoire dépassent le coût du programme de plus de 200 millions de dollars US. Ces résultats démontrent qu’il est possible d’élargir l’accès aux traitements antirétroviraux aux millions de personnes qui en ont besoin, même dans les lieux les plus démunis où l’infrastructure idéale n’est pas disponible. À l’évidence, le contexte sociologique et politique global dans lequel s’est organisée la réponse brésilienne, ne peut être sous-estimé ; il est important de rappeler que l’expérience brésilienne repose sur une réponse gouvernementale concertée précoce, sur une participation forte et effective de la société civile, sur une mobilisation multisectorielle, sur une approche équilibrée en termes de prévention et de traitement, et sur un plaidoyer en matière de droits de l’homme dans toutes les stratégies et les actions.

Introduction

Scaling up the fight against the HIV/AIDS epidemic has gained unprecedented momentum. It is now possible, finally, to say that an agreed minimum body of policies exists among scientists, activists and policymakers on how to intervene effectively to curb the spread of the epidemic. In few areas such a consensus is more impressive than in the field of access to life-saving medicines, particularly regarding the need – as well as the feasibility – to expand dramatically the availability of antiretroviral drugs (ARVs) to the millions of HIV/AIDS patients living in the developing world who are currently unable to purchase them. The year 2002 witnessed the launch of several related initiatives, including the Global Fund to Fight AIDS, Tuberculosis and Malaria, and the International HIV Treatment Access Coalition.

Brazil is the first developing country to have implemented a large-scale universal ARV distribution program. About 125,000 patients receive ARVs freely through the official Public Health System. This number means that more than a third of the estimated total number of ARV treated patients in the entire
developing world at the end of 2002 live in Brazil. This context has attracted growing attention to the successes and challenges experienced in Brazil, and this paper intends to describe and discuss them in brief, notably in the field of treatment and care. As a conclusion, a few recommendations to other countries and to the international community in general will be explored.

I

THE BRAZILIAN SOCIAL AND EPIDEMIOLOGICAL CONTEXT

Brazil is a federal republic with approximately 172 million inhabitants, making it the fifth most populous country on the planet. At the end of the year 2002, it had an estimated Gross Domestic Product per capita of roughly US$3,000. Such numbers, however, hide the persistence of huge income inequalities as well as the deep regional disparities that exist within Brazil. Nevertheless, such an outlook did not prevent the Brazilian Government from adopting a pro-active and aggressive stance against the epidemic, a collective response that gradually involved various sectors of the Brazilian society such as the government, universities, churches and civil society in general.

Of course, the evolution of the Brazilian response was strongly influenced by its broad political and sociological context, particularly the structure and role of its public health system. Actually, this public health system, developed throughout the last decades but consolidated as free and universal under the new Constitution of 1988, took its current form following a movement for reform that was initiated in the late 60s and was called the sanitarist movement (from “movimento sanitarista”). Conducted under the strong leadership of public health activists, it already established as a cornerstone feature of public policy-making a constant dialogue with communities and civil society, especially as a means to enhance social control over governmental policies. This would later on be particularly important to shape the current care and treatment policies toward HIV/AIDS. In the mid 80s, the emergence of the AIDS epidemic in Brazil coincided with profound changes in the sociopolitical arena, with the end of military government, return to democracy, and concomitant reforms in the roles and responsibilities of the State, including in the health sector. The advent of the 8th National Health Conference in 1986 involved a wide range of social representatives and was fundamental in the establishment of the current Public Health System.

This public and universal health model, launched in 1988 as a constitutional right, is therefore the final outcome of fundamental changes in the national
socio-political scenario, and it can be considered the structural “backbone” around which the Brazilian AIDS policy emerged. The fight against the disease set the stage for a new kind of interaction between the state and civil society, one that has contributed to substantially strengthen the new democratic institutions, to greater recognition of all Brazilians as citizens and to open the debate on the ethics of national healthcare, a consideration that spilled over to other public health concerns as well. On the face of scarce financial resources, a vocal and active civil society, coupled with a professional community committed to ensuring access to integral public health care, were instrumental in moving the State machinery to appropriately confront the AIDS epidemic.

As of March 2002, close to 240,000 AIDS cases (Table 1) have been reported to the Ministry of Health (MOH) since the beginning of the epidemic, with approximately 107,000 cumulative deaths. Brazil’s epidemic profile has been changing fast in recent years. Despite a clear temporal trend of deceleration in all regions (Figure 1), HIV infection has spread in smaller towns, among heterosexual men and women and among low-income individuals. Moreover, evidence indicates that the AIDS epidemic has basically remained an urban disease in Brazil, with limited spread in rural areas.

Table 1: Brazil epidemic profile

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative AIDS cases (March 2002)</td>
<td>237,588</td>
</tr>
<tr>
<td>Cumulative AIDS deaths (March 2002)</td>
<td>110,651</td>
</tr>
<tr>
<td>Estimated number of HIV+ individuals (2000)</td>
<td>597,000</td>
</tr>
<tr>
<td>Incidence rate of AIDS (2000)</td>
<td>12.4 / 100,000</td>
</tr>
<tr>
<td>Prevalence rate of HIV (2000)</td>
<td>0.6%</td>
</tr>
</tbody>
</table>
The numbers in Table 1 may seem quite low from the epidemiological point of view, but the World Bank anticipated in 1992 that Brazil would reach the year 2000 with much worse numbers. According to this earlier estimate, approximately 1.2 million people would have been infected by the year 2000 in Brazil. However, recent estimates have in fact placed that figure close to 600,000 people living with HIV/AIDS (PLWAs) or, in other words, half the number predicted.

II
MAKING IT POSSIBLE

The Brazilian response is based on a concerted early government response, a strong and effective participation of the civil society, a multisectoral mobilization, a balanced approach between prevention and treatment and a systematic advocacy of human rights in all strategies and actions. It is worth mentioning that these principles are an integral part of the Declaration of Commitment on HIV/AIDS adopted in July 2001 at the Special Session on AIDS promoted by the United Nations General Assembly (UNGASS).

In particular, guidelines for prevention policies have emphasized the need to:
– direct special attention to more vulnerable populations, such as men who have sex with men, injecting drug users and commercial sex workers;
– ensure access to prevention supplies, especially condoms, syringes and needles;
– introduce preventive actions in health care services.

As a result of this strategy, the consistent use of condoms has been brought to new grounds. Research undertaken in 1999 in the general adult population showed that from a low 4% in 1986 at the beginning of the epidemic, we have managed to boost this number to 48% in 1999, a ten-fold increase [1, 2]. This increase has brought Brazil to the same level of condom use as significantly wealthier developed countries. For example, the rate of condom use at first sexual intercourse in those segments with higher education (71%) is very similar to that observed in France or even in the United Kingdom [2]. Using combined strategies, the Ministry of Health (MOH) is planning to promote an additional 100% increase in condom use by the general population together with a 45% price reduction in the next five years.

Another important intervention was the implementation of syringe and needle exchange programs as a public health policy. Between 1994 and 2002, 160 harm reduction projects were implemented with a population coverage of approximately
65,000 injecting drug users (IDU). As examples of the impact of this policy, an analysis of two major Brazilian cities covered by this kind of program has shown a sharp reduction in the incidence of HIV among IDUs, from 63% to 42% in one city in 7 years, and from 50% to 7% in the other over a period of 4 years [3]. These findings have stimulated the MOH to increase the number of cities covered by this type of intervention.

As already mentioned above, the number of new AIDS cases has also been dramatically lowered. Down from its peak of nearly 25,000 cases in 1998, we expect the year 2003 to close with a number between 10,000 to 15,000 new cases.

Figure 1: AIDS cases (notified and estimated) and incidence rate by year of diagnosis

Considerable results have also been achieved in strategic segments of the population, especially among the most vulnerable groups. Sentinel studies conducted with thousands of parturients between 1997 and late 2000 indicate that the estimated prevalence rate among 13 to 49 years-old has nearly halved in this period, coming down from 1.2 to 0.6%. Brazil has also managed to achieve a significant reduction in the rate of incidence among men who have sex with men, sex workers and, as previously mentioned, IDUs.
Table 2: Estimates (%) of HIV infection in selected populations

<table>
<thead>
<tr>
<th>Population</th>
<th>1996</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant Women</td>
<td>1.2 (1997)</td>
<td>0.6 (2001)</td>
</tr>
<tr>
<td>Injecting Drug Users (Rio de Janeiro)</td>
<td>25.0 (1996)</td>
<td>8.0 (2000)</td>
</tr>
<tr>
<td>Men Who Have Sex With Men</td>
<td>10.8 (1999)</td>
<td>4.7 (2001)</td>
</tr>
</tbody>
</table>


The mortality rate and number of deaths from AIDS have also fallen dramatically, especially since 1996, with the free and universal distribution of Highly Active Antiretroviral Therapy (HAART) through the Brazilian public health system.

Figure 2: Annual rate and mortality trend of AIDS Brazil 1990-2000

Source: Mortality Information System – National Health Foundation.
In order to improve quality of life for people living with HIV and AIDS, the Brazilian MOH has implemented a policy of free and universal access to antiretroviral therapy and drugs for opportunistic infections since 1991. This effort was initiated with the distribution of zidovudine (ZDV) capsules, and was institutionalized by a 1996 presidential decree that guaranteed that all patients would have free access to essential medications to combat HIV, including protease inhibitors, whose distribution began at the end of that same year.

The criteria for dispensing HIV treatment is established by the MOH, which now has three technical groups working on the problem, one focusing on HIV therapy for adults and adolescents, one for children and one for pregnant women. These technical groups come together at least once a year to review the medical criteria for eligibility and to discuss changes made necessary by medical breakthroughs and the availability of new treatments.

**Table 3: Initial therapy – protocol of the Brazilian Ministry of Health, 2002-2003**

<table>
<thead>
<tr>
<th>SYMPTOMATIC OR ASYMPTOMATIC with CD4 &lt; 200/mm³</th>
<th>2 NRTI* + NNRTI** or 2 NRTI + PI***</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASYMPTOMATIC with CD4 between 200 and 350/mm³</td>
<td>2 NRTI + NNRTI or 3 NRTI</td>
</tr>
<tr>
<td>ASYMPTOMATIC with CD4 &gt; 350/mm³</td>
<td>NO TREATMENT</td>
</tr>
</tbody>
</table>

* Nucleoside Analogue Reverse Transcriptase Inhibitors.
** Non-nucleoside Reverse Transcriptase Inhibitors.
*** Protease Inhibitors.

**Table 4: ARV class; 1st and 2nd choice**

<table>
<thead>
<tr>
<th>ARV CLASS</th>
<th>1st CHOICE</th>
<th>2nd CHOICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 NRTI</td>
<td>ZDV + 3TC or d4T + 3TC</td>
<td>AZT + ddi or ddi + 3TC or ddi + d4T</td>
</tr>
<tr>
<td>NNRTI</td>
<td>EFZ</td>
<td>NVP</td>
</tr>
<tr>
<td>PI</td>
<td>NFV or LPV/R</td>
<td>SQV/R or IDV/R</td>
</tr>
</tbody>
</table>
Additionally, a network of more than 1,000 public alternative care and HIV testing services has been established to provide the necessary infrastructure to support this policy. Spread on a regional and administrative basis according to the complexities associated with care services, it is aimed at improving the diagnosis and monitoring of HIV infection, as well as diagnosis and medical observation of opportunistic diseases. Such an extensive network builds, wherever possible, on the organizational and functional structure of the Public Health System, where both responsibilities and costs are split among the Federal Government, the States and the Municipalities. Since the Federal Government structurally possesses the largest financial capacity among the different associated entities, it is entrusted with complex and costly interventions, and is therefore expected to cover the lion’s share of the budget allocated to AIDS. Nevertheless, as previously mentioned, the national response to the AIDS threat was responsible for creating positive externalities which impacted several other health areas, including the infrastructure provided for by the Public Health System itself.

In order to adequately monitor the patients, the Brazilian Ministry of Health has established a National Network of Viral Load Laboratories and a network of CD4 + CD8 + lymphocyte counting laboratories, with 80 and 65 units, respectively. Moreover, considering the overall impact and probabilities involved in ARV delivery, the MOH decided to establish a national genotyping network (named RENAGENO), able to perform and interpret the results of HIV-1 resistance tests using adequate and rational criteria. At this first phase, 14 laboratories have been accredited and 60 reference genotyping expert physicians from different parts of the country have been trained to assist the demand on a regional basis. The process of building such an elaborate infrastructure was long, especially in the poorest parts of the country. However, vital to its success was the political decision to offer treatment and start related activities even before the ideal structure was in place.

The Brazilian MOH has also put in place a specific computer-based system for logistic management of ARVs (named SICLOM) in order to ensure rational supply and consumption throughout all 480 dispensary units. The major objectives of this logistic control system are:

1) to control drug stocks at national, state and municipality levels;
2) to ensure efficiency and safety of drug supply;
3) to adequately plan for drug purchases;
4) to assure optimal drug management.

At this moment, more than 125,000 people receive free antiretroviral treatment.
A study presented at the xivth International AIDS Conference [4] has shown that the survival rate has increased substantially with ARV therapy in Brazil. In this study, the average survival time before availability of combined therapy was less than 6 months and now is close to 5 years. This 12-fold increase is not only quantitatively important: quality of life has also improved significantly. Patients go on working normally and interacting with their friends and families, which in the long run represents the most powerful weapon against the very foundations of stigma and discrimination. It is also an active anti-poverty and development policy. As the latest UNAIDS Epidemiological Update recognizes, “by robbing communities and nations of their greatest asset – their people – AIDS drains the human and institutional capacities that drive sustainable development. This, in turn, distorts labor markets, disrupts production and consumption, erodes productive and public sectors and ultimately diminishes national wealth. As HIV prevalence rises, poverty deepens, and in combination with other setbacks, AIDS can trigger social crises. Some of the countries worst affected by AIDS face the prospect of ‘un-developing’ – seeing their development achievements dissolve in the wake of the epidemic [5].”
As a result, the occurrence of common HIV-related opportunistic infections has declined by 60 to 80%. The number of tuberculosis cases, for instance, has dropped by 75% in the last four years in the State of Sao Paulo, which carries roughly fifty per cent of all AIDS cases reported in Brazil. Moreover, a change in the profile of HIV health care services has been observed, with a significant increase in the demand for outpatient services, home care and day-hospital services.

Figure 5: Tuberculosis in PLWAs CRT* - DST/AIDS, São Paulo, Brazil (1994-2002)

Source: Epidemiological Surveillance of the Training and Reference Centers in STD/AIDS (V.E. CRT DST/AIDS) (Data until 31/12/2002).

* Centro de Referencio e tremento DST/AIDS.
It is clear, therefore, that providing treatment to the millions in need is a basic feature of intervening effectively against the global destabilizing power of the AIDS epidemic. Though costly, it is by any comparison a relatively low amount when compared to the potential loss of national stability caused by underdevelopment and poverty.

Moreover, we have learned that waging war against HIV/AIDS is good business. Millions spent in the short term can save billions in the long run. After six years, an evaluation of the results of the Brazilian AIDS policy shows pretty impressive numbers. Since 1996 until now we have observed a striking reduction in mortality (40-70%), morbidity (60-80%) and hospitalization rates of HIV + patients, with more than 90,000 avoided deaths. Near 60,000 AIDS cases were prevented. At the same time, we have observed a significant reduction in the number of hospitalizations of AIDS patients during this time. In the last five years, a seven-fold reduction has been observed, with more than 358,000 AIDS-related hospital admissions avoided. This resulted in savings to the Government of more than US$1.1 billion from 1997 to 2001. However, when we take into consideration the additional US$1.2 billion saved on ambulatory care, including drugs for opportunistic infections, the total amount rises to approximately US$2 billion. In the meanwhile, US$1.8 billion were invested in carrying out this policy, suggesting total net savings of circa US$ 200 million. It should be noted, however, that such figures underestimate the total net social benefit of providing treatment and care for people living with HIV/AIDS, given that they do not take into account elements that are more complex to quantify (e.g. associated cost savings with tutors who continue to teach, children who remain with their families, etc).

Furthermore, a study soon to be published demonstrates that the relative number of permanent public pensions requested in Brazil due to AIDS-related disabilities has fallen consistently since 1996, while the number of temporary illness-related benefits has increased, suggesting that AIDS is slowly becoming a chronic and controllable disease.

The actions of the Ministry of Health have resulted in important changes in the epidemic evolution in Brazil. Striking reductions in the occurrence of new AIDS cases and AIDS deaths, a 70 % drop in big cities like Sao Paulo and Rio de Janeiro, are evident five years after introduction of universal access to HAART. All these aspects are consequences of a reduction in the number, in the time of duration and in the complexity of the treatment in hospital admission episodes, suggesting a significant welfare profit for these patients after a more disseminated use of combined antiretroviral therapy.
In 2002, the Brazilian MOH distributed 15 antiretroviral drugs of 3 different pharmacological classes to all HIV-infected patients that meet the criteria spelled out in national guidelines. Of these, seven are locally produced formulations, with pharmacological specifications for generic versions.

Table 5: ARVs distributed by MOH (2002)

- Zidovudine (ZDV)*
- Didanosine (ddI) *
- Zalcitabine (ddC) *
- Lamivudine (3Tc) *
- Stavudine (d4T) *
- Abacavir
- Indinavir *
- Ritonavir
- Saquinavir
- Nelfinavir
- Amprenavir
- Nevirapine *
- Delavirdine
- Efavirenz
- Lopinavir/r

* generic version available.

Public policymakers cannot lose sight, however, of the relevance of adopting strong strategies to lower the prices of these drugs as a prerequisite for the long-term sustainability of any ARV delivery program. In Brazil, the average cost per ARV-treated patient per year has decreased by more than half in the last few years (Figure 6), in spite of the proportional increase in the number of patients needing more expensive and complex treatments. Also worthy to say that these expenditures with antiretrovirals represents only 1.6% of the total budget of Ministry of Health and less than 0.05% of Brazilian GDP in 2001. This reduction in costs of care occurred due to a combination of two concomitant strategies.
Figure 6: Median cost (US$) of ARV therapy by patient/year. Brazil 1996 to 2001

1997 to 2001: 54% reduction


Table 6: Antiretroviral drugs: MOH expenditures (1996-2002)

<table>
<thead>
<tr>
<th>Year</th>
<th>US$ Millions</th>
<th>Average number of Patients</th>
<th>% MOH Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>34</td>
<td>-</td>
<td>0.2</td>
</tr>
<tr>
<td>1997</td>
<td>224</td>
<td>35,900</td>
<td>1.2</td>
</tr>
<tr>
<td>1998</td>
<td>305</td>
<td>55,600</td>
<td>1.8</td>
</tr>
<tr>
<td>1999</td>
<td>336</td>
<td>73,000</td>
<td>3.2</td>
</tr>
<tr>
<td>2000</td>
<td>303</td>
<td>87,500</td>
<td>2.9</td>
</tr>
<tr>
<td>2001</td>
<td>235</td>
<td>105,150</td>
<td>1.6</td>
</tr>
<tr>
<td>2002*</td>
<td>167</td>
<td>119,500</td>
<td>1.8</td>
</tr>
</tbody>
</table>

First, investments were made by the MOH to set up domestic national laboratories with the capacity to manufacture large quantities of ARV drugs. Local production has worked remarkably well to regulate the market and to favor a decreasing trend in the average prices of drugs paid by the MOH. Interestingly, the prices of ARVs produced within Brazil fell on average by 82% between 1996 and 2001, while the decrease was only 40% for imported ARVs during the same period. Second, effective negotiation of drug prices was carried out with those pharmaceutical drug companies that are exclusive producers. The Brazilian MOH has used a negotiation strategy with some exclusive producers based on tiered prices. As a consequence, deals were made with Abbott, Merck and Roche, cutting the prices of 4 drugs by more than 50%. Although desirable, these recent decreases must be taken only as an initial step towards much greater cuts.

Table 7: Brazilian MOH & Merck, Roche and Abbott agreements on ARV price reduction (2001/2002)

<table>
<thead>
<tr>
<th>Price Reduction on ARV</th>
<th>Original Price</th>
<th>Reduced Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indinavir</td>
<td>US$1.33/capsule</td>
<td>US$0.47/capsule</td>
</tr>
<tr>
<td>Efavirenz</td>
<td>US$2.05/capsule</td>
<td>US$0.84/capsule</td>
</tr>
<tr>
<td>Nelfinavir</td>
<td>US$1.075/capsule</td>
<td>US$0.64/capsule</td>
</tr>
<tr>
<td>Lopinavir/r</td>
<td>US$2.97/capsule</td>
<td>US$1.60/capsule</td>
</tr>
</tbody>
</table>

Experience suggests, however, that the efficacy of this strategy rests upon the possibility of credibly using the mechanism of compulsory licensing. Thus, domestic production capacity is a crucial element that strengthens the bargaining power of government agencies.

Until this moment, the prevalence and profile of drug resistance mutations in Brazilian patients under HAART has been very similar to what have been found in other international studies [2, 8]. However, the prevalence of primary resistance in drug naive patients is significantly lower than what we have seen in Western Europe and the US [9, 10]. This reinforces the quality, safety and
efficacy of generic antiretroviral drugs and the policy of universal access to ARV therapy adopted by the Brazilian Ministry of Health in the last decade.

One of the most interesting lessons from our experience with treatment and care is that the adherence rate of patients to ARV therapy in developing countries can be exactly the same as in developed countries. Studies carried out in Brazil have shown that the main factor linked to adherence is the quality of medical service, regardless of the mode of transmission [5]. Therefore, IDUs, for instance, when properly reached, adopt all measures recommended 1.

Finally, the role of a solid and constructive partnership with civil society as a powerful force towards greater social control and participation must be emphasized. NGOs play a major role in advocating the rights of people living with HIV/AIDS, speeding up government processes, and providing vital additional efforts to official agencies so as to strengthen implementation capacity and outreach. In Brazil, from 1994 until 2002, more than US$ 40 million have been invested in 2,300 projects implemented by civil society organizations, including communities and NGOs of people living with HIV/AIDS.

This is, in rather brief and general terms, the Brazilian experience in scaling up a program of continental proportions. It provides fruitful ground from where important lessons can be learned. What follows is an agenda, based on this ongoing experience, for future consideration at both national and international levels.

V

MOVING FORWARD:
NATIONAL AND INTERNATIONAL LEVEL

At the national level, countries must do more to mobilize the necessary political commitment to put together national financial resources and to decisively confront cultural, religious and legal barriers to prevention. Despite the low costs involved, minority groups are still discriminated against and excluded from national responses, as is the case of homosexuals, commercial sex workers and injecting drug users. The latter have even been repeatedly denied access to treatment. In this regard, openness and courage to speak out and break the silence are equally cornerstone features of any successful program.

1. For example, consistent condom use within this population has risen to 65% [3].
No time can be spent with ambiguous prevention messages. HIV transmission happens primarily through sexual contact, and prevention is made through condom use. Other alternatives, such as postponement and abstinence are indubitably incompatible with our global reality, particularly eroticized and based on sex promotion. The alleged ethical character of such initiatives is today one of the main enemies of effective prevention.

In what concerns treatment availability, countries must be more resolute. It is quite emblematic to see so many people debating how to solve the dilemma caused by the death of teachers due to AIDS and ways to train others to replace them. This is a false dilemma. Although training may be an adequate measure, the first step obviously needs to be a decision to treat the teachers already infected to avoid their death.

The importance of community participation, of transparency and multisectoral mobilization in the elaboration and implementation of national responses goes without saying. Governments cannot exclude or choose the organizations they intend to work with.

At the international level, the current level of international funding directed to fight AIDS in the developing world is simply not sufficient to face the various needs of these countries, particularly when we take into account the efforts that will have to be made towards strengthening and capacity building of health systems. Revised figures from the Joint United Nations Program on HIV/AIDS indicate that by the year 2005 an annual 10.5 billion dollars will be needed for prevention, care and support programs in low- and middle-income countries. The current level, although growing, remains at less than a fourth of this amount.

What the world is facing is a catastrophe of the proportions seen at the end of World War II. Back then it was absolutely unthinkable to suppose that countries in Western Europe would ever recover from the massive economic and social destruction inflicted upon them and that their peoples would ever rise up to enjoy, fifty years later, the highest levels of social development and quality of life known to human kind. Crucial to such accomplishment was the mobilization of hundreds of billions of dollars in today’s terms by the United States under what came to be known as the Marshall Plan. Today we need a new “Marshall Plan” to scale up national responses in poor countries. Developed societies, such as the United States, Japan and Western Europe, finally need to assume their responsibility in changing this dramatic situation. After all, the vast majority of infected people worldwide, especially in Sub-Saharan Africa...
and in the Caribbean, simply lack the minimum financial resources necessary to intervene in the field. No matter how much the prices of antiretrovirals are reduced, for instance, they will still be out of reach to these peoples.

United Nations Agencies and Programs have no other choice but to enormously scale up their programs of international assistance. They have various areas of expertise as is the case with the WHO and UNAIDS regarding treatment and care, and the World Bank and UNDP in the areas of development and technical capacity building. We cannot ignore the fact that the international community unanimously agreed at the Millennium Assembly in September 2000 to halt and begin to reverse the spread of HIV/AIDS by 2015. Clearly, this is not the best that we can do; on the contrary, it is simply the minimum we must do.

At the same time, this agenda must be equally pushed forward in international forums. Although the Doha Declaration on TRIPS and Public Health re-established the preeminence of health over profit, attempts have been made at nullifying recent advances. It is imperative that countries lacking sufficient manufacturing capacity be able to make use of all possible means, particularly compulsory licenses, to procure drugs internationally for the public health problems they deem appropriate. Equally, developed countries must also commit themselves to improve access to pharmaceutical products in the developing world, drastically supporting aggressive differential pricing strategies, and allowing, when needed, the production of medicines by third parties for export purposes.

Successful experiences based on interventions linking prevention and treatment, as implemented in Brazil and Thailand, prove that it will be impossible to control the epidemic in the long run without an effective vaccine. Here, once again, the commitment of the developed world is paramount, since the development of a vaccine is a costly endeavor. In this aspect results are rather disappointing. In the last two years, more vaccine candidates have entered human trials around the world, but the pipeline of promising vaccines is still woefully inadequate.

Winning the fight against HIV/AIDS is not easy, cheap or quick. However, much more difficult, expensive and longer will be to redeem our world from the scourge of poverty, instability and war that comes with the epidemic. We have the knowledge; we know the proven strategies, the right policies. Time has come to act.
REFERENCES


RELATED SOURCES

   Available at http://image.thelancet.com/extras/01art9038web.pdf

   Available at www.aids.gov.br/final/biblioteca/politica_94_02.pdf

   Available at www.aids.gov.br/final/biblioteca/bol_marco_2002/index.htm


   Available at www.mapnetwork.org/docs/barcreport.doc