

# 3

## Defying Globalization: Effective Self-Reliance in Brazil

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Brazil has played a pivotal role in debates concerning the public policy of HIV/AIDS. Its National HIV/AIDS Program was praised as the best of its kind in the developing world by the United Nations and has served as a model for thirty-one other developing countries as well as for the global HIV/AIDS policy adopted by the World Health Organization since 2003.<sup>1</sup> This chapter focuses particularly on the origins, sustainability, and outcomes of Brazil's antiretroviral treatment program, as it has been the most groundbreaking, controversial, and consequential aspect of the country's response to HIV/AIDS. Brazil was the first nation to provide anti-AIDS therapies at no cost to all patients for whom they were prescribed. I endeavor to show that while the outstanding results of the Brazilian overall HIV/AIDS strategy should be largely attributed to this program, its implementation has overcome profound challenges posed by the conventional wisdom regarding health policy as well as by higher global standards of intellectual property protection. Significantly, such challenges have often impeded the adoption of similar programs by other countries confronting the epidemic.

Brazil's AIDS treatment policy has been shaped by the political interplay of key local, foreign, and transnational actors. In the first section of the chapter I argue that an extensive movement for health reform and democracy opened the way for the development of this policy by incorporating into the country's 1988 constitution a conception of health as a right of citizenship and by establishing a new health system based on the principles of integrality<sup>2</sup> and community participation. Brazil's constitutional health rights and integral approach to health services, which combined treatment and prevention efforts, were clearly at odds with the neoliberal policy prescriptions prevalent at the time. I further argue that the country's antiretroviral treatment program originated from the confluence of efforts of local AIDS NGOs, which emerged in

the context of Brazil's democratization, and of government officials who took up the demands of such NGOs.

In the second section I show how AIDS treatment in Brazil has relied heavily on the local production of generic ARVs as a strategy to contain treatment costs. This strategy has not only reduced the importation of anti-AIDS drugs but also forced brand-name pharmaceutical companies to concede large discounts in their prices in order to avoid having their patents' monopoly rights overrun by compulsory licensing. The US government, however, has generally acted at these companies' behest and in response has pressured Brazil on bilateral, regional, and multilateral venues to enforce stricter patent rules. The full mobilization of Brazil's government, both in its relations with the United States and in international forums, as well as the support this government received from transnational advocacy networks were critical in enabling it to resist such pressures.

In the third section I discuss how Brazil's response to HIV/AIDS defied established health policy beliefs upheld by authoritative and politically influential international organizations, funding agencies, and health research centers, according to which antiretroviral treatment is unfeasible in developing countries and should give way to prevention efforts. I also provide evidence that Brazil's AIDS treatment policy has nevertheless been highly cost-effective.

I conclude the chapter with an overall assessment of the Brazilian AIDS treatment policy, its future prospects, and its significance for efforts to control the epidemic in other developing countries.

### **The Struggle for Health Rights**

The Brazilian HIV/AIDS treatment program was made possible by the previous achievements of a movement of health-care professionals, bureaucrats, intellectuals, and civil society organizations, known as the "sanitary movement." This movement originated in the late 1960s and early 1970s but grew and gained momentum in the 1980s as part of a broader movement for democracy in Brazil.<sup>3</sup> It launched a severe critique of the highly centralized, hierarchical, and fragmented health system established by the authoritarian military regime. Within this system, prevention and treatment policies were elaborated and implemented independently,<sup>4</sup> and only patients who had paid their latest social security dues were eligible to receive medical treatment.

The sanitary movement called for a radical reformation of the Brazilian health system. In particular, the movement defended the unification and decentralization of this system as well as its democratization through the involvement of civil society in the elaboration and implementation of health policies. In accordance with the guiding principle of integrality, it also proposed the integration of prevention and treatment efforts. Most important, the movement

embraced a conception of health as a right of citizenship and aspired to ensure the provision of free, universal, and equal access to public health services.<sup>5</sup> It benefited from the eagerness to rebuild citizenship rights and practices in a country that was in transition from more than twenty years of military dictatorship as well as from the discrediting of policies and institutions associated with the previous regime.

Critically, the Brazilian Federal Constitution of 1988 espoused the principles championed by the sanitary movement. In particular, Article 196 of the constitution recognizes health as “a right of all and a duty of the state, guaranteed through . . . the universal and equal access to actions and services for its promotion, protection and recovery” (my translation).<sup>6</sup> For the purposes of reaching this latter goal, the constitution establishes in Article 198 the Sistema Único de Saúde (SUS; Unified Health System), an integrated and publicly financed health system based on three directives: decentralization, integral assistance (consisting of both prevention and health care), and community participation.<sup>7</sup>

Remarkably, these constitutional provisions were upheld in Brazil at the same time that other countries, influenced by overriding neoliberal policy recommendations, were following market-oriented agendas and carrying out significant cuts in welfare and social spending. As one of the leading proponents of such recommendations, the World Bank contended that treating health care as a right of the citizen and trying to provide free services for all was a misguided approach.<sup>8</sup> Accordingly, it contested the SUS’s principles of integrality and universality, predicting an “explosive growth” in the demand for free health services in Brazil.<sup>9</sup>

The 1988 constitution created the key conditions for the development of Brazil’s HIV/AIDS policies. Even though constitutional rights and health directives apply across the entire health system, however, the excellence of such policies contrasts sharply with the precariousness of the ones carried out for other infections of equal or greater impact in the country, such as hepatitis C and tuberculosis. This observation underscores the accomplishments of organized civil society groups and especially AIDS NGOs.

Initially, gays were the foremost group impacted by AIDS in Brazil. Being relatively affluent and influential citizens, they were capable of organizing the earliest civil society responses to the epidemic.<sup>10</sup> Local AIDS NGOs were first created in the mid-1980s and multiplied in urban centers throughout the country during the 1990s. By 2001, there were about 600 such organizations.<sup>11</sup> Despite their immense diversity,<sup>12</sup> AIDS NGOs shared common goals of promoting the human rights of HIV-positive people by fighting against discriminatory treatment and lack of health assistance.<sup>13</sup> These NGOs promoted campaigns to mobilize public opinion, organized demonstrations, disseminated information, gained extensive coverage in the media, sponsored lawsuits, and lobbied the state and federal governments.<sup>14</sup> Because such governments were

ultimately responsive and sensitive to NGO demands—and often developed an almost symbiotic relationship with them<sup>15</sup>—AIDS advocacy in Brazil did not need to adopt more extreme strategies such as civil disobedience or highly disruptive protests, as was the case in the United States and South Africa.

As result of the early association in Brazil of HIV/AIDS with the cosmopolitan and glamorous lifestyle of the American upper class<sup>16</sup> as well as of the Brazilian *sui generis* and relatively liberal sexual culture,<sup>17</sup> the epidemic in the country carried less of the stigma and taboo that have elsewhere led governments to deny its gravity and inhibited the mobilization of civil society.<sup>18</sup> The first national HIV/AIDS program was created in 1985, when more than ten states had already begun addressing the epidemic through their own programs.<sup>19</sup> Largely in response to the demands of NGOs, in 1988 the SUS began distributing medicines for the treatment of opportunistic infections, and in 1991 it began to offer the earliest antiretroviral, zidovudine.<sup>20</sup> However, the government's supply of drugs for AIDS patients was often interrupted,<sup>21</sup> and it was only after 1992, when cooperation between the governmental and non-governmental sectors increased considerably, that controlling the pandemic became a top governmental priority.<sup>22</sup>

In July 1996, shortly after triple therapies were announced as a more effective treatment option for AIDS at the 11th International AIDS Conference held in Vancouver, British Columbia, AIDS NGOs began to sponsor lawsuits in local courts against Brazilian state and federal governments, demanding the supply of antiretroviral drugs.<sup>23</sup> Despite the difficulty of assuring favorable verdicts in a country with weak constitutional roots and no tradition in human rights advocacy, these lawsuits succeeded by resorting to the 1988 constitution and to human rights treaties signed by Brazil, thereby creating jurisprudence on the matter.<sup>24</sup>

Strikingly, government officials declared that they had been preparing to offer antiretroviral drugs even before the court cases began,<sup>25</sup> and by July a few municipalities took the initiative of purchasing and distributing such drugs with their own resources.<sup>26</sup> Many of these officials were influenced by and committed to the ideals of the sanitary movement; others saw the offering of anti-AIDS cocktails as a highly visible initiative from which they could benefit politically.

In November a new law was sanctioned that obligates the government to provide anti-AIDS drugs at no cost to all patients who need them.<sup>27</sup> The Ministry of Health began distributing these drugs by the end of that month. Nonetheless, NGO-sponsored lawsuits and demonstrations continued and served the purpose of ensuring uninterrupted and state-of-the-art treatment for AIDS patients, especially in periods of national financial crisis.<sup>28</sup> The SUS's decentralized structure was critical in allowing the full-scale distribution of ARVs,<sup>29</sup> which were administered to more than 100,000 AIDS patients by 2001 and more than 160,000 by 2005 in several hundred sites throughout Brazil.<sup>30</sup>

### **David Versus Goliath: The Quest for Cheap Anti-AIDS Drugs**

Although zidovudine had been locally produced since 1993, the importation of other high priced antiretroviral drugs used in Brazil's HIV/AIDS program drained the Health Ministry's resources and by 1997 accounted for almost half of this program's total expenditures.<sup>31</sup> In response, the Brazilian government began making it possible for public pharmaceutical labs to provide cheaper generic versions of these drugs.<sup>32</sup>

Largely in reaction to pressures from the US government,<sup>33</sup> Brazil passed a new industrial property law on May 14, 1996, recognizing pharmaceutical patents.<sup>34</sup> However, all products that had been commercialized anywhere in the world before May 14, 1997, when this new law was put into effect, became ineligible for patent protection in the country. As result, ten anti-AIDS drugs remained unpatented in Brazil and could be legally copied.<sup>35</sup>

Employing reverse engineering techniques, government pharmaceutical labs discovered the formulas of most of these unpatented ARVs and began to produce them<sup>36</sup> using active ingredients imported mostly from India and China.<sup>37</sup> Zalcitabine and stavudine became available at the end of 1997, didanosine the following year, lamivudine and its combination with zidovudine in 1999, and indinavir and nevirapine in 2000.<sup>38</sup> Thus far eight of the fifteen existing anti-AIDS drugs offered by the SUS are locally supplied.<sup>39</sup>

Crucially, since the Health Ministry began replacing expensive imports with local generic equivalents, the prices of unpatented antiretroviral drugs have fallen by an average of 80.9 percent in Brazil (see Figure 3.1). Domestic producers have been able to cheapen these drugs by setting profit margins much lower than those of pharmaceutical multinationals and breaking their monopolies. In addition, bulk orders from Brazil have caused a considerable decrease in the world prices of the active ingredients of antiretroviral drugs, which account on average for 66 percent of the cost of these drugs<sup>40</sup> (see Figure 3.2).

Nevertheless, the costs of importing patented anti-AIDS drugs still represented a substantial burden on the Brazilian health budget. On October 6, 1999, the president sanctioned a decree empowering ministries to issue compulsory licenses on the grounds of national emergencies.<sup>41</sup> In February 2001, the Health Ministry threatened to license the drugs efavirenz and nelfinavir, which together accounted for about 36 percent of its total expenditures with ARVs<sup>42</sup> and were exclusively licensed in Brazil to US and Swiss pharmaceutical multinationals Merck Sharp and Dohme and Hoffman-La Roche.

As soon as the Brazilian federal lab Far-Manguinhos proved its capacity to import active ingredients from Asia, to use the legal instruments afforded by the new presidential decree, and, ultimately, to produce and sell these ARVs for prices far below the ones charged by the multinationals, the threat

Figure 3.1 Costs of Unpatented Antiretroviral Drugs in Brazil (1996-2001)

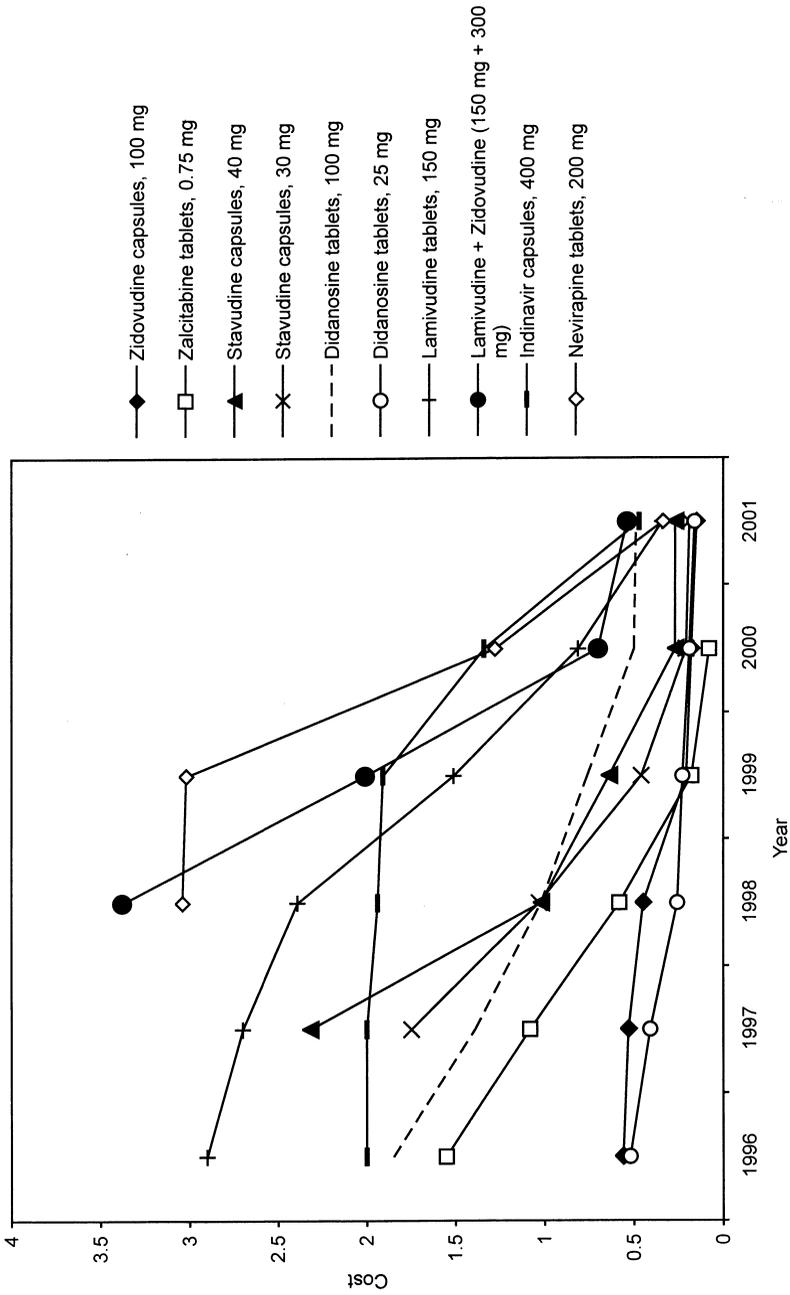
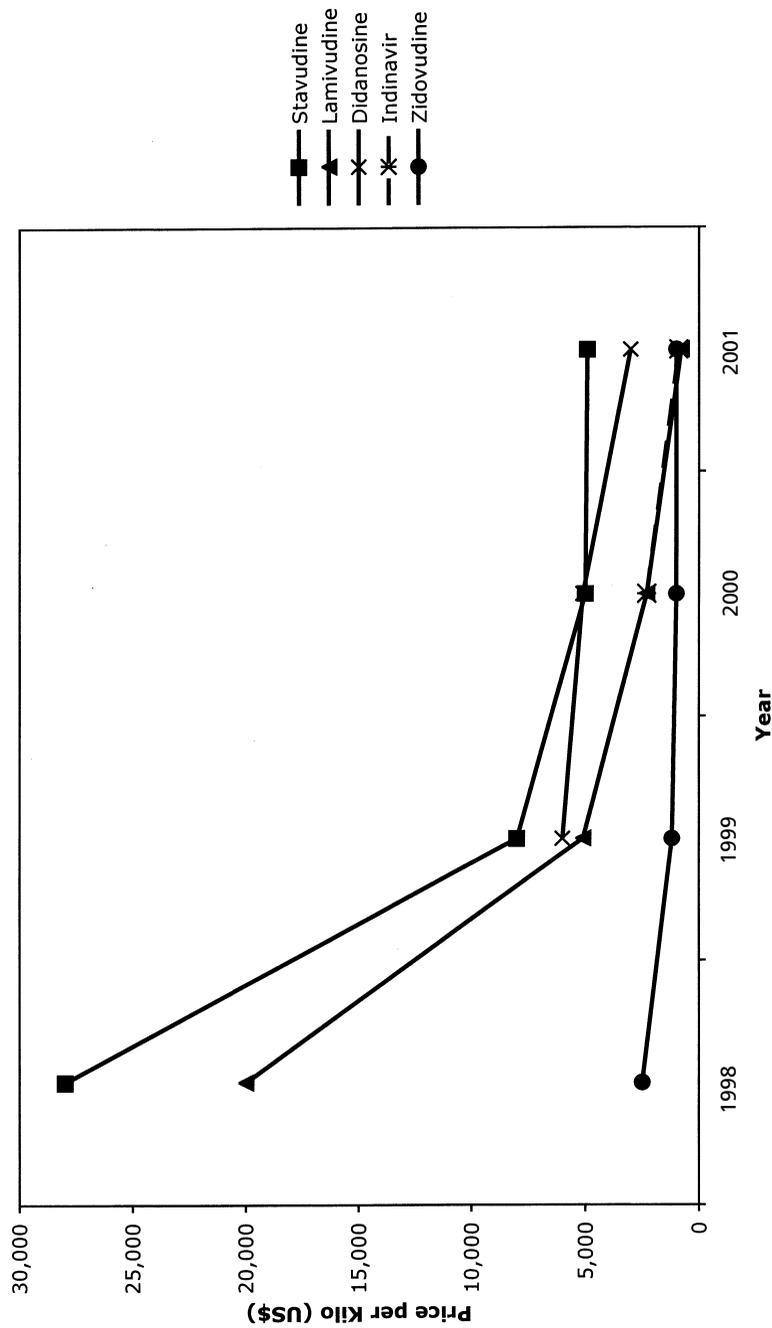


Figure 3.2 Costs of Antiretroviral Active Ingredients Purchased by Brazil, 1998-2001

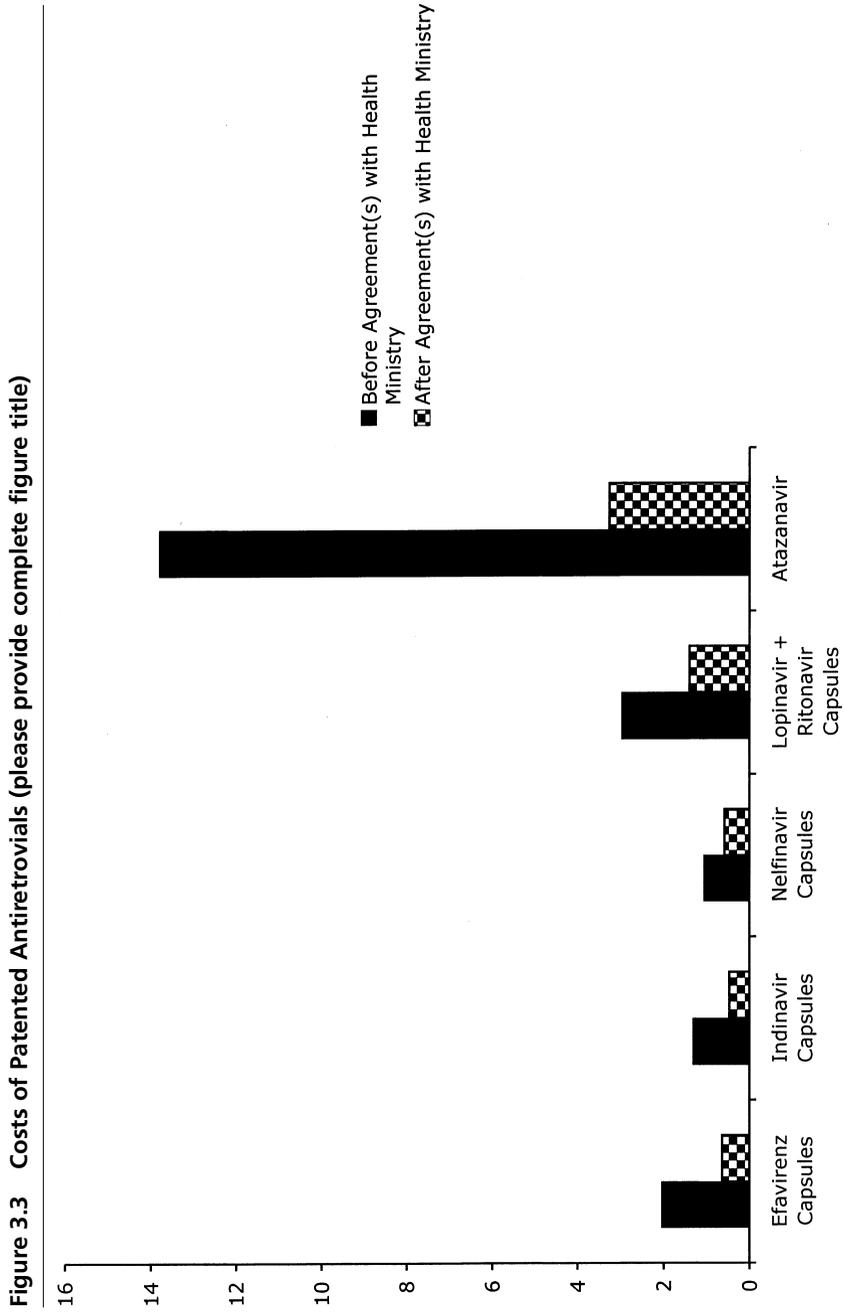


of compulsory licensing became credible.<sup>43</sup> Since Merck and Roche refused to grant voluntary licenses for efavirenz and nelfinavir, they needed to beat the price offered by Far-Manguinhos in order to preserve their share of the Brazilian market for anti-AIDS medicines,<sup>44</sup> which is the largest in the developing world. Local generic production thus became a crucial element of empowerment of the Brazilian government with relation to the brand-name pharmaceutical sector, because it not only provided the former with a cheaper alternative supply of needed antiretroviral drugs but also provided information concerning the production costs of these drugs, which allowed the government to negotiate price discounts for them more effectively.

On March 30, Merck agreed to cut the prices of efavirenz by 59 percent and of indinavir by 64.8 percent<sup>45</sup> (see Figure 3.3). These price reductions represented yearly savings of about US\$40 million for the Brazilian Health Ministry.<sup>46</sup> In a similar move, early in September Roche accepted a 40 percent decrease in the price of nelfinavir. As a result, it was predicted that the Health Ministry would save approximately US\$35 million per year.<sup>47</sup> Concurrently, the US-based drug company Abbott reached a similar agreement with this ministry, offering a 46 percent discount for its patented combination of lopinavir and ritonavir.<sup>48</sup>

Negotiations over the prices of brand-name ARVs resumed in 2003. On September 5 a new presidential decree on compulsory licensing modified the previous one in crucial ways: it allows the importation of generic versions of compulsory licensed goods whenever local production is impractical and obliges the patentee to disclose all information needed for such production.<sup>49</sup> This decree further increased the Brazilian government's leverage to negotiate with pharmaceutical multinationals. By means of an agreement reached with the US-based company Bristol-Myers Squibb in November, the Health Ministry achieved a 76.4 percent reduction in the market price of the new antiretroviral atazanavir, saving US\$66 million<sup>50</sup> (see Figure 3.3). In response to additional threats of compulsory licensing from the Health Ministry, a week later Merck agreed to further reduce the price of efavirenz by 25 percent.<sup>51</sup> Similarly, in January 15, 2004, it was announced that Roche and Abbott would cut the prices of nelfinavir and the lopinavir/ritonavir compound by an additional 10 percent and 13.3 percent, respectively.<sup>52</sup> Figure 3.3 displays the overall decrease in the costs of these three drugs, reflecting both the 2001 and 2003 bargains between their brand-name producers and the Health Ministry. Finally, US-based biopharmaceutical company Gilead reduced the prices of the new antiretroviral tenofovir by 43.35 percent. Combined, these five latest discounts were expected to represent savings of US\$107 million for the Brazilian Health Ministry in 2004.<sup>53</sup>

As a result of antiretroviral price cuts, the Health Ministry's expenditures for anti-AIDS therapies declined from 1999 to 2002 even as the number of patients treated continued to increase substantially (see Table 3.1). Local



**Table 3.1 Costs of Treating AIDS in Brazil (1996–2004)**

Year	Average Yearly Cost of Antiretroviral Therapies per Patient in Brazil (in US\$)	Average Yearly Number of Patients Receiving Antiretroviral Therapies in Brazil	Brazilian Health Ministry's Expenditures with Antiretrovirals (in US\$ millions)
1996	3,810	8,924	34
1997	4,860	46,091	224
1998	4,540	67,181	305
1999	4,240	79,245	336
2000	3,320	91,265	303
2001	2,223	104,364	232
2002	1,397	119,500	167
2003	1,512	128,000	194
2004	1,374	147,500	203
2005	2,346	161,000	378

*Sources:* Data for 1996–1998: Ministério da Saúde; data for 1999–2001: Coordenação Nacional de DST/AIDS, *A Experiência do Programa Brasileiro de AIDS* [The Experience of the Brazilian AIDS Program] (Brasília: Coordenação Nacional de DST/AIDS, 2002), 267–14, 39; data for 2002: Coordenação Nacional de DST/AIDS, “Políticas de Tratamento: Medicamentos” [Treatment Policies: Medicines]. Available at <http://www.aids.gov.br/>; data for 2003: Coordenação Nacional de DST/AIDS, “Saúde Fecha Acordo com Laboratórios de Anti-Retrovirais” [Health Concludes Agreement with Antiretroviral Laboratories], Press Release, January 15, 2004. Available at <http://www.aids.gov.br/imprensa/>; data for 2004–2005: Table 1, Alexandre Grangeiro et al., “Sustentabilidade da Política de Acesso a Medicamentos Anti-Retrovirais no Brasil” [Sustainability of Brazilian Policy for Access to Antiretroviral Drugs], *Revista de Saúde Pública* 40 (São Paulo), April 2006, Table 1, 64. Available at <http://www.scielo.br/pdf/rsp/v40s0/09.pdf>.

generic competition for ARVs enabled this ministry to save approximately US\$490 million up to 2000.<sup>54</sup> In addition, bargains with pharmaceutical multinationals have generated comparable savings.

Despite the impressive reductions in AIDS treatment costs obtained by the Brazilian Health Ministry up to 2002, the financial sustainability of its AIDS treatment program was threatened in the next three years. More recent negotiations between the ministry and the pharmaceutical multinationals produced less satisfactory results, revealing that the former's bargaining power had been undermined as its threats of compulsory licensing had become less credible, mostly as a result of the lack of investments in the Brazilian generic pharmaceutical industry.

Most notably, after canceling an agreement reached with Abbott in June 2005 that had been endorsed by a previous minister but was denounced as being highly unfavorable to the Health Ministry, the ministry signed another agreement with the company in October of that year that has been similarly criticized by activists and analysts. This new agreement reduced from US\$1.17 to US\$0.63 the unit price charged by Abbott for the lopinavir/ritonavir com-

pound, and the company pledged to donate US\$3 million worth in medicines of several different kinds to the ministry in 2006. According to official estimates, the deal would generate savings of about US\$339.5 million to the ministry, which in return agreed not to license the antiretroviral until 2011. Since the price of lopinavir/ritonavir is expected to fall by about US\$0.50 a unit by 2009 owing to the competition of new drugs, the ministry will end up paying more than its market price from 2009 to 2011.<sup>55</sup> Moreover, lopinavir/ritonavir will by that time be a relatively obsolete drug, and its patent will expire shortly thereafter in 2012.<sup>56</sup> Though activists had been pressing for the compulsory licensing of antiretrovirals in Brazil since 2001, largely because this measure would set an important legal and political precedent that has the potential to increase the global availability of affordable essential medicines, they were once more frustrated.

The increase in the share of patented drugs in the antiretroviral cocktails provided by the Health Ministry and its incapacity to continue obtaining sufficient price cuts for these drugs from the pharmaceutical multinationals have resulted in significant increases in the costs of treating AIDS in Brazil since 2003. From 2004 to 2005, the ministry's expenditures for the purchase of ARVs increased 66 percent—even though the number of patients treated increased only 9.2 percent (see Table 3.1). In 2004 the yearly treatment expenditures per patient reversed its trend and increased significantly (52.1 percent). As of early 2006, patented ARVs accounted for 80 percent of the Health Ministry expenditures with medicines. It has been estimated that Brazil would need to increase its gross domestic product by 6 percent yearly in order to sustain the AIDS treatment program without reducing expenditures in other areas.<sup>57</sup>

Additional challenges to the Brazilian AIDS treatment program emerged in the context of the country's relations with the United States and in international forums. In reaction to the Health Ministry's interference with the production and pricing of highly profitable antiretroviral drugs patented by or exclusively licensed to US companies, the US government requested the opening of a panel in the WTO against Brazil on February 1, 2001. The alleged reason was Article 68, Section-I of the Brazilian Industrial Property Law, which has generated much controversy. This article determines that compulsory licenses may be issued for patented goods that are not produced locally after three years of the granting of their patents.<sup>58</sup> US representatives claimed it violated Article 27.1 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Conversely, Brazil called attention to Article 2.1 of TRIPS<sup>59</sup> and insisted that Article 68 of its law does not render the lack of domestic production a sufficient condition for compulsory licensing.<sup>60</sup> That same day, Brazilian authorities also started consultation procedures that could lead to a panel against the United States, maintaining that Articles 204 and 209 of the US Patent Act are similar to Article 68 of Brazil's Industrial Property Law.<sup>61</sup> Although such panel was never in fact established,

Brazil threatened to defend in the WTO a legal interpretation according to which both Brazilian and US patent laws had local production requirements. Regardless of whether these requirements were considered a violation of TRIPS, if the Brazilian interpretation were accepted neither of the two countries could entirely win the dispute, as a favorable outcome in one panel would represent an unfavorable one in the other. In addition, it became clear that if the WTO decided in favor of Brazil it would create jurisprudence and set an important precedent for many developing countries that had yet to adopt new patent laws in accordance with TRIPS.<sup>62</sup>

Moreover, Brazil had mobilized the support of the media, of NGOs, and of public opinion worldwide. Letters were written to US officials and to the press, and demonstrations were held in front of US consulates and embassies.<sup>63</sup> In June the Brazilian Health Ministry began publishing paid advertisements in major US newspapers that stated that “AIDS is not a business” and explained that the local production of ARVs was not “an act of war” on the drug industry but rather “an act of life.”<sup>64</sup> The WTO Secretariat also received countless phone calls, faxes, and email messages backing Brazil.<sup>65</sup> The WTO dispute increasingly became a public relations disaster for the United States. After consulting with the US pharmaceutical industry association, the US government finally announced the withdrawal of its case against Brazil on June 25, 2001, in return for assurances that it would be notified before any products patented by or licensed to US companies were subjected to compulsory licensing in the country.<sup>66</sup>

Brazil has also defended the developing world’s right to affordable essential drugs in multilateral forums. On April 24, 2001, the 57th session of the UN Human Rights Commission approved a resolution proposed by Brazilian representatives according to which the access to essential medicines is to be considered a human right.<sup>67</sup> In May 2001, the World Health Assembly organized by the WHO approved a resolution that incorporated Brazilian proposals to ensure global access to cheap ARVs. In the United Nations General Assembly in June of the same year, Brazil defended the implementation of an integrated HIV/AIDS prevention and treatment strategy and stressed the need to promote the human rights of HIV-positive people. Brazil also played a decisive role in the creation of the Global Fund to Fight AIDS, Tuberculosis, and Malaria, ensuring that its resources would be equally administered by representatives of both developed and developing countries and would be used to expand antiretroviral treatment worldwide.<sup>68</sup>

At the TRIPS Council meeting also held in June, the delegation from Brazil highlighted the importance of generics for the country’s successful AIDS treatment program.<sup>69</sup> During and leading up to the WTO’s Ministerial Conference held in Doha in November, Brazil led developing countries in negotiations to ensure the approval of the Declaration on the TRIPS Agreement and Public Health,<sup>70</sup> which states in paragraph 4 that the agreement

“does not and should not prevent members from taking measures to protect public health.”<sup>71</sup> On August 30, 2003, shortly before the WTO Ministerial Meeting in Cancun, Brazil was one of four developing countries that built an agreement “on legal changes that will make it easier for poorer countries to import cheaper generics made under compulsory licensing if they are unable to manufacture the medicines themselves.”<sup>72</sup> These changes settled a key issue left unresolved by the Doha Declaration, and on December 6, 2005, WTO members agreed to make them permanent in the first-ever amendment of TRIPS.<sup>73</sup> Finally, during the Ministerial Conference of the Free Trade Area of the Americas (FTAA) held in Miami in November 2003, Brazil also successfully opposed US proposals to include intellectual property provisions in the draft treaty of the regional agreement that could, if adopted, hinder access to essential medicines in the Western Hemisphere.<sup>74</sup>

### **An Unexpected Success Story**

Initially, Brazil’s antiretroviral treatment policy was much criticized, as it represented exactly the opposite of what renowned organizations such as the WHO, the Joint United Nations Program on HIV/AIDS (UNAIDS), the Pan-American Health Organization, the World Bank, the United States Agency for International Development (USAID), the Gates Foundation, and several health research centers recommended that developing countries endeavor in terms of HIV/AIDS policies.<sup>75</sup> Critics argued that these countries lacked the financial, material, and human resources required to purchase expensive ARVs and to provide treatment monitoring and that their patients were too poor and uneducated to comply with rigorous and complicated drug intake schedules. It followed that the provision of antiretroviral therapies in developing countries would ultimately become unsustainable and risked increasing HIV resistance to these therapies. Instead of attempting to supply AIDS treatment, these countries were urged to pursue purportedly more cost-effective prevention strategies.<sup>76</sup>

Brazil has proved the claims of disbelievers in its AIDS treatment policy to be unfounded, however. First, the available evidence suggests that patients in the country are no more likely to fail in complying with antiretroviral treatment schedules and to create viral resistance than those in resource-rich countries. Indeed, a 1999 study conducted in São Paulo found that 69 percent of sampled AIDS patients complied with at least 80 percent of prescribed pills, a result similar to the ones obtained in Baltimore, San Francisco, London, and Madrid (see Table 3.2). According to the former head of the Brazilian National AIDS Program, Paulo Roberto Teixeira, adherence to treatment is more a function of the quality of the services provided than of income or education.<sup>77</sup> In addition, a survey conducted in April 2003 reported a 6.6 percent rate of viral resistance among newly diagnosed HIV cases in Brazil, which is

**Table 3.2 Adherence to Antiretroviral Therapies, Selected Cities**

City	Number of Patients	Compliance (in percentages)	Adherence Rates
São Paulo, Brazil	1,141	80	69
Baltimore, USA	202	80	60
San Francisco, USA	388	80	78
London, UK	114	80	75
Madrid, Spain	366	90	57.6

*Source:* Coordenação Nacional de DST/AIDS, *National AIDS Drug Policy* (Brasília: Coordenação Nacional de DST/AIDS, 2001) Available at <http://www.aids.gov.br/final/biblioteca/drug/drug8.htm>.

considerably below similar figures for the United States (15–26 percent), Britain (14 percent), and Spain (23–26 percent).<sup>78</sup>

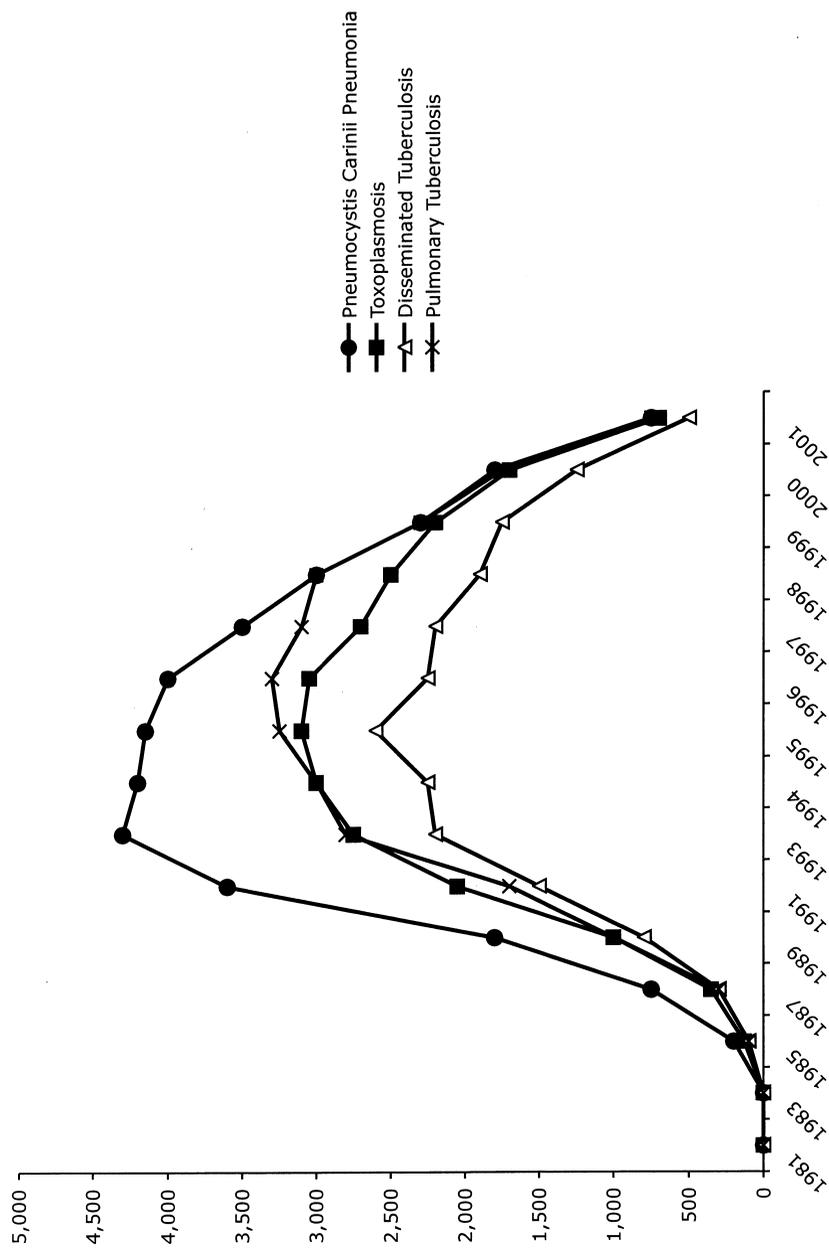
Second, in Brazil the emergence of a political consensus on AIDS treatment allowed the rapid improvement of the health-care system where needed for the delivery of antiretroviral regimens. Indeed, since 1996 there has been a significant expansion of clinical services, specialized ambulatories, domiciliary therapeutic assistance, and hospitals with capacity to administer anti-AIDS cocktails.<sup>79</sup>

Third, though the incidence of opportunistic infections in Brazil rose steeply from 1984 to 1995, it fell by 80 percent after triple therapies began to be distributed in 1996 (see Figure 3.4). As result, approximately 358,000 cases of AIDS-related hospitalizations were avoided in the country. Remarkably, the actual number of such hospitalizations decreased despite the substantial increase in the number of AIDS patients (see Table 3.3), causing the Ministry of Health to save over US\$1.2 billion up to 2002.<sup>80</sup>

Moreover, anti-AIDS cocktails have prolonged and sensibly improved the life of people living with AIDS in Brazil. A study conducted throughout the country found a twelvefold increase in the median survival time of AIDS patients from the 1980s to 2000, a result similar to those observed in high-income countries. The study also showed that antiretroviral therapies allowed these patients to continue to work and interact with their families and friends.<sup>81</sup> Accordingly, after following a steady upward curve, AIDS mortality rates fell by 50 percent in Brazil after 1996 in spite of the aforementioned rise in the number of AIDS patients (see Figure 3.5). From 1994 to 2002, estimates indicated that almost 91,000 deaths from AIDS were avoided in the country.<sup>82</sup> Antiretroviral treatment has thereby also significantly reduced the economic costs generated by the loss of productivity of individuals deceased or incapacitated by AIDS.<sup>83</sup>

Fourth, Brazil has demonstrated that a strategy that combines AIDS treatment and prevention is by far more effective than one that focuses on preven-

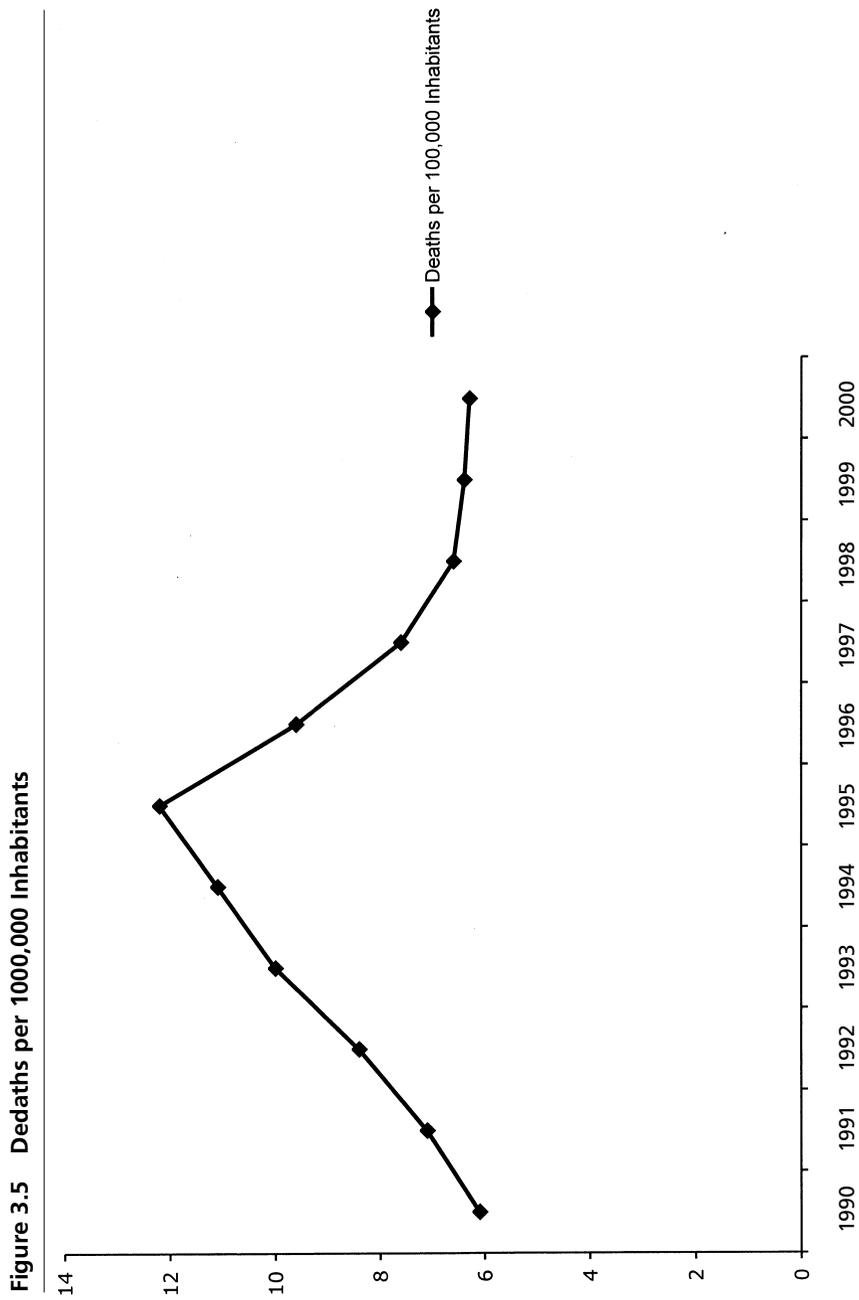
Figure 3.4 Incidence of Opportunistic Infections in Brazil (1981-2001)



**Table 3.3 AIDS-Related Hospitalizations in Brazil (1996–2001)**

	Number of AIDS-related Hospitalizations	Number of AIDS Patients	Hospitalizations/ AIDS Patients Ratio	Estimated Number of Hospitalizations If 1996 Average Were Maintained	Estimated Number of Avoided Hospitalizations	Estimated Savings from Avoided Hospitalizations (in US\$)
1996	25,458	15,390	1.65	N/A	N/A	N/A
1997	25,157	31,140	0.81	51,511	26,354	76,271,085
1998	24,700	43,823	0.56	72,491	47,791	138,314,513
1999	25,027	57,604	0.43	96,542	71,544	207,057,103
2000	26,655	69,446	0.38	114,876	88,221	255,321,305
2001	25,274	105,150	0.24	138,952	113,678	328,998,910

Source: Brazilian Health Ministry.



tion alone. The provision of antiretroviral therapies has constituted a strong incentive for people to undergo HIV testing and to report contagion by the virus. In 1996, when the distribution of triple therapies by the SUS was first announced, the number of new AIDS cases reported in Brazil exceeded predictions by about 40 percent.<sup>84</sup> Expanded testing and reporting permitted the government to provide more HIV-positive individuals with prevention counseling as well as to more accurately estimate the impact and evolution of AIDS and consequently improve the targeting of educational campaigns.<sup>85</sup>

In addition, the provision of antiretroviral therapies may constitute an important prevention strategy in itself. Indeed, as these therapies suppress the HIV viral load, they also reduce the risk of HIV transmission.<sup>86</sup> Moreover, estimates indicate that the use of anti-AIDS drugs prevented about 3,371 cases of HIV mother-to-child transmission in Brazil from 1994 to 2002.<sup>87</sup>

The bolstering of prevention efforts is corroborated by growing gaps between earlier estimates of HIV/AIDS cases in the country and actual figures. Whereas in 1992 the World Bank projected that by 2000 Brazil would have 1.2 million HIV-positive people, it had in fact only half as many, about 600,000.<sup>88</sup> It has been estimated that from 1994 to 2000, Brazil's treatment policy avoided more than 58,000 AIDS cases.<sup>89</sup>

Finally, the very concept of "risk groups" used to defend the priority of prevention over treatment programs has become highly questionable given AIDS trends observed in Brazil and elsewhere, which include a sharp growth in the infection of women, heterosexuals, inhabitants of rural areas, and lower social classes.<sup>90</sup> These trends underscore the increasing difficulty of singling out particular "risk groups."

## Conclusion

Brazil's antiretroviral treatment policy has succeeded in preventing the spread of HIV infection and in prolonging and improving the lives of AIDS patients. In addition, this policy has spared a considerable portion of the Health Ministry's resources, proving to be highly cost-effective. It has therefore represented a most effectual national response to the ethical and economic challenges posed by HIV/AIDS.

Brazil has shown tremendous self-reliance in treating AIDS. First, the country had no precedent to guide its antiretroviral treatment policy and had to invest in previously nonexistent health-care infrastructure and pharmaceutical production capabilities to uphold this policy. Furthermore, in spite of facing intense criticism from distinguished health experts and pressures from much more powerful actors, namely the pharmaceutical multinationals and the US government, Brazil has not wavered in its commitment to treat AIDS. The country's government as well as organized local and transnational civil

society groups have played a critical role in the making and maintenance of this commitment.

Yet Brazil still needs to overcome global challenges to the sustainability of its AIDS treatment policy. Indeed, this policy is endangered by stringent intellectual property rules the United States may still attempt to promote in the ongoing negotiations over the FTAA treaty.<sup>91</sup> In addition, antiretroviral treatment in Brazil may be jeopardized by the country's lack of competency in the production of active ingredients, given that the importation of generic active ingredients of new patented drugs is no longer possible since foreign suppliers complied with the TRIPS agreement by the 2005 deadline.<sup>92</sup> Even more worrisome is the lack of investments in local public labs, which is undermining the credibility of compulsory licensing threats and, consequently, also the bargaining power of the Health Ministry, thereby causing a significant increase in the costs of treating AIDS in Brazil.<sup>93</sup>

Does the Brazilian experience in treating AIDS offer policy guidelines that are transferable to other developing countries? At first, it may seem that Brazil's antiretroviral treatment program has benefited from unique conditions that are difficult to replicate elsewhere. First, while it profited from the constitutional legacy of the sanitary movement, many other developing countries have cut health budgets and programs in accordance with dominant neoliberal policy prescriptions. Second, whereas HIV/AIDS has gained extensive visibility, been openly debated, and become a politically salient issue in Brazil, the epidemic still carries much stigma and remains a taboo in nations that are culturally more conservative on sexual matters, leading their governments to deny its severity and impeding the mobilization of civil society. Third, though in Brazil HIV/AIDS initially spread among relatively well off gay groups, in sub-Saharan Africa the epidemic has shown highest incidence among the disenfranchised poor. Fourth, unlike Brazil, many other developing countries lack health infrastructure and qualified health-care professionals needed for effective drug delivery and treatment monitoring. Fifth, most of these countries also lack local pharmaceutical production capabilities, which in Brazil have played a crucial role in reducing the costs of ARVs. Finally, in contrast to Brazil, least developed countries often cannot count on a relatively efficient team of diplomats and international law experts, and they have less political weight in international affairs. As result, these countries are more likely to be bullied by pharmaceutical companies and the US government, despite the assistance provided by international NGOs.

Nevertheless, Brazil's experience in treating AIDS has extraordinary international significance. Crucially, the country challenged widely accepted beliefs and demonstrated that antiretroviral treatment is feasible in resource-poor settings, paving the way for a new health policy consensus. As a result, such treatment has begun to be promoted in the developing world by previously skeptical organizations, including the WHO, UNAIDS, USAID, the

Gates Foundation, and even the World Bank.<sup>94</sup> The assistance of these organizations is critical for overcoming the obstacles to health care that result from the paucity of financial, material, and human resources, especially in least developed countries. Moreover, Brazil itself has been transferring technology and logistical know-how on the production and distribution of antiretroviral drugs to several countries in sub-Saharan Africa, Latin America, and the Caribbean.<sup>95</sup> Brazil's bulk purchases have also drastically reduced the prices of antiretroviral active ingredients on world markets. Backed by the results of its own HIV/AIDS strategy, the country has exercised leadership in negotiations in the WTO as well as in other multilateral institutions advocating global access to essential medicines. In addition, the dramatic success of antiretroviral therapies in Brazil has brought increased pressure over the governments of other middle-income nations such as South Africa to similarly implement comprehensive AIDS treatment programs.<sup>96</sup> Finally, the Brazilian response to the epidemic has underscored the importance of having both governmental resolve to adopt effective health policies and organized domestic and transnational civil society groups capable of demanding, assessing, monitoring, and supporting these policies. Indeed, the Brazilian response has suggested that decisions on whether to provide antiretroviral therapies in resource-poor settings depend primarily on political rather than technical considerations. Brazil has thus helped to create more favorable conditions for other resolute developing countries to follow its lead in implementing AIDS treatment policies.

## Notes

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2. Since it has incorporated the objectives, demands, struggles, aspirations, and values of various social actors, the principle of integrality assumes several particular meanings in Brazil. In general, this principle defends a holistic view of health care and rejects fragmented, one-dimensional health policies such as the ones prevailing in the country during the military regime. Integral assistance calls for a comprehensive

approach to the health needs of the population, which must be addressed in their totality and with an adequate appreciation of their scope and complex interconnections. Accordingly, in one of its meanings the principle of integrality expresses the conviction that both prevention and health-care practices are the responsibility of the government and must not be dissociated. Ruben Araujo de Mattos, "Os Sentidos da Integralidade: Algumas Reflexões Acerca de Valores que Merecem Ser Defendidos" [The Meanings of Integrality: Some Reflections About Values Which Deserve to Be Defended], in *Os Sentidos da Integralidade na Atenção e no Cuidado à Saúde* [The Meanings of Integrality in Health Care and Attention], ed. Roseni Pinheiro and Ruben Araujo de Mattos, 54, 59–60 (Rio de Janeiro: UERJ, IMS, ABRASCO, 2001).

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4. *Ibid.*, 52–63; Mattos, "Os Sentidos da Integralidade," 52–54.

5. Mattos, "Os Sentidos da Integralidade," 41–43, 54, 59–60.

6. *Constituição da República Federativa do Brasil: Texto Constitucional Promulgado em 5 de Outubro de 1988 com Alterações Adotadas pelas Emendas Constitucionais nos 1 a 6/94* [Constitution of the Federative Republic of Brazil: Constitutional Text Promulgated in October 5, 1988 with Alterations Adopted by the Constitutional Amendments n. 1 to 6/94] (Brasília: Senado Federal, 2001).

7. *Ibid.*

8. World Bank, *Financing Health Services in Developing Countries: An Agenda for Reform* (Washington, DC: World Bank, 1987), 3.

9. World Bank, *Adult Health in Brazil: Adjusting to New Challenges* (Washington, DC: World Bank, 1989), xviii; Mattos, "Os Sentidos da Integralidade," 40.

10. Jane Galvão, "AIDS: A 'Doença' e os 'Doentes'" [AIDS: The 'Disease' and the 'Sick'], *Comunicações do ISER* 17 (Rio de Janeiro), December 1985, 42–47; and Jane Galvão, *AIDS no Brasil: A Agenda de Construção de uma Epidemia* [AIDS in Brazil: The Agenda of Construction of an Epidemic] (São Paulo: Editora 34, ABIA, 2000), 56–59.

11. This estimate was made by Pedro Chequer, former coordinator of the Brazilian National AIDS/STD Program; see Tina Rosenberg "Look at Brazil," *New York Times Magazine*, January 28, 2001, 29. See also Cristiana Bastos, "Transnational Responses to AIDS and the Global Production of Science: A Case-Study from Rio de Janeiro" (PhD diss., City University of New York, 1996), 184.

12. Jane Galvão, "AIDS e Ativismo: O Surgimento e a Construção de Novas Formas de Solidariedade" [AIDS and Activism: The Emergence and Construction of New Forms of Solidarity], in *AIDS no Brasil (1982–1992)* [AIDS in Brazil (1982–1992)], ed. Richard Parker, Cristiana Bastos, and Jane Galvão, 343 (Rio de Janeiro: ABIA, IMS-UERJ, Relume Dumará, 1994); Bastos, "Transnational Responses to AIDS," 186–187.

13. Miriam Ventura, "Direitos Humanos e AIDS: O Cenário Brasileiro" [Human Rights and AIDS: The Brazilian Scenario], in *Saúde, Desenvolvimento e Política: Respostas Frente à AIDS no Brasil* [Health, Development, and Politics: Responses to AIDS in Brazil], ed. Richard Parker, Jane Galvão, and Marcelo Secron Bessa, 286–296 (São Paulo: Editora 34, ABIA, 1999).

14. *Ibid.*, 284–293; Ézio Santos-Filho, vice-president of the AIDS NGO Grupo Pela VIDA of Rio de Janeiro, interview by author, Rio de Janeiro, June 15, 2002.

15. Wilza Vieira Villela, "Das Interfaces entre os Níveis Governamentais e a Sociedade Civil" [Of the Interfaces Between the Governmental and Civil Society Levels], in *Saúde, Desenvolvimento e Política: Respostas Frente à AIDS no Brasil*, ed.

Richard Parker, Jane Galvão, and Marcelo Secron Bessa, 184, 219 (São Paulo: Editora 34, ABIA, 1999); Galvão, *AIDS no Brasil*, 101.

16. This association was only reinforced by the death from AIDS of several Brazilian celebrities. Sérgio Carrara and Claudia Moraes, "Um Mal de Folhetim" [A Vice of Feuilleton], *Comunicações ISER* 17, December 1995, 20–31; Bastos, "Transnational Responses to AIDS," 171–177; Villela, "Das Interfaces," 182–183.

17. Richard Parker, *Bodies, Passions, and Pleasures: Sexual Culture in Contemporary Brazil* (Boston: Beacon Press, 1991).

18. See, for instance, Philippe Rivière, "In Denial About a Deadly Future: South Africa's AIDS Apartheid," *Le Monde Diplomatique*, August 2002; David Gonzalez, "Governments in Denial as AIDS Ravages Caribbean," *New York Times*, May 18, 2003.

19. Paulo Roberto Teixeira, "Políticas Públicas em AIDS" [Public Policies on AIDS], in *Políticas, Instituições e AIDS: Enfrentando a Epidemia no Brasil* [Policies, Institutions, and AIDS: Confronting the Epidemic in Brazil], ed. Richard Parker, 55–56 (Rio de Janeiro: Jorge Zahar Editor, ABIA, 1997).

20. Carlos André Passarelli, "As Patentes e os Remédios contra a AIDS: Uma Cronologia" [Patents and Medicines Against AIDS: A Chronology], *Boletim ABIA* 46 (Rio de Janeiro), 2001, 8.

21. Santos-Filho, interview.

22. Villela, "Das Interfaces entre os Níveis Governamentais e a Sociedade Civil," 197–198.

23. Heliana Nogueira, "Crescem Ações na Justiça por Drogas Anti-Aids" [Court Cases for Anti-AIDS Drugs Grow], *O Estado de São Paulo* (São Paulo), July 25, 1996.

24. Ventura, "Direitos Humanos e AIDS," 284–293; Santos-Filho, interview.

25. Lucia Martins, "São Paulo Distribuirá Droga Anti-Aids" [São Paulo Will Distribute Anti-AIDS Drug], *Folha de São Paulo* (São Paulo), July 26, 1996.

26. Fausto Siqueira, "Guarujá Usa AZT Injetável" [Guarujá Uses AZT Injections], *Folha de São Paulo* (São Paulo), July 25, 1996; Clayton Levy, "Valinhos Fornercerá Remédio de Graça para Infectados" [Valinhos Will Provide Medicine Free of Charge to Those Infected], *O Estado de São Paulo* (São Paulo), July 28, 1996.

27. Lei 9.313 [Law 9.313] (November 13, 1996); see Coordenação Nacional de DST/AIDS, *Terapia Anti-Retroviral e Saúde Pública: Um Balanço da Experiência Brasileira* [Antiretroviral Therapy and Public Health: An Assessment of the Brazilian Experience] (Brasília: Coordenação Nacional de DST/AIDS, 1999). Many in Congress and elsewhere have considered this law redundant and unnecessary in view of the health rights ensured by the constitution.

28. L. Paraguassú, "Falta de Verbas Pode Parar Distribuição de Medicamentos contra AIDS" [Lack of Funds May Stop Distribution of Medicines Against AIDS], *Folha de São Paulo* (São Paulo), February 15, 1999, 9; Jane Galvão, "A Política Brasileira de Distribuição e Produção de Medicamentos Anti-Retrovirais: Privilégio ou um Direito?" [The Brazilian Policy of Distribution and Production of Antiretroviral Medicines: Privilege or a Right?], *Cadernos de Saúde Pública* 18, January/February 2002.

29. Galvão, "A Política Brasileira," 214.

30. Data provided by Coordenação Nacional de DST/AIDS.

31. Coordenação Nacional de DST/AIDS.

32. Maurice Cassier and Marilena Correa, "Patents, Innovation, and Public Health: Brazilian Public-Sector Laboratories' Experience in Copying AIDS Drugs," in *Economics of AIDS and Access to HIV/AIDS Care in Developing Countries, Issues and Challenges*, ed. Jean-Paul Moatti et al., 90 (Paris: ANRS Editions, 2003).

33. With the aim of coercing Brazil into observing pharmaceutical patents, in 1988 the United States imposed a 100 percent retaliatory tariff on imports of Brazilian pharmaceuticals, paper, and electronic products. Susan K. Sell, "Intellectual Property Protection and Antitrust in the Developing World: Crisis, Coercion, and Choice," *International Organization* 2 (1995): 327.

34. Lei 9.279 da Propriedade Industrial [Law 9.279 of Industrial Property], *Diário Oficial da União* 93 (Brasília: Imprensa Nacional, 1996).

35. Fabienne Orsi et al., "Intellectual Property Rights, Anti-AIDS Policy, and Generic Drugs: Lessons from the Brazilian Public Health Program," in *Economics of AIDS and Access to HIV/AIDS Care in Developing Countries, Issues and Challenges*, ed. Jean-Paul Moatti et al., 116 (Paris: ANRS Editions, 2003).

36. Cassier and Correa, "Patents, Innovation, and Public Health," 91.

37. Orsi et al., "Intellectual Property Rights," 132.

38. Coordenação Nacional de DST/AIDS, *National AIDS Drug Policy* (Brasília: Coordenação Nacional de DST/AIDS, 2001). Available at <http://www.aids.gov.br/final/biblioteca/drug/drug5.htm>.

39. In addition, Brazilian labs have been working to produce ritonavir and saquinavir. "Governo Produzirá Mais 2 Remédios Anti-AIDS" [Government Will Produce Two More Anti-AIDS Medicines], *Folha de São Paulo* (São Paulo), May 9, 2002.

40. Data provided by Far-Manguinhos.

41. Decreto 3.201 de 6 de Outubro de 1999 [Decree 3.201 of October 6, 1999], *Diário Oficial da União* 193 (Brasília: Imprensa Nacional, 1999), Art. 3.

42. Fátima Sá and Patricia Malavez, "Briga contra Titãs" [Fight Against Titans], *Veja Rio* (Rio de Janeiro), September 5, 2001, 10–11. See also Far-Manguinhos, *Far-Manguinhos—Remédio para o Brasil* [Far-Manguinhos—Medicines for Brazil] (Rio de Janeiro: Ministério da Saúde, Fundação Oswaldo Cruz, Far-Manguinhos, 2002), 79–80.

43. Maria Fernanda G. Macedo, former intellectual property consultant of Far-Manguinhos, interview by author, Rio de Janeiro, June 20, 2002.

44. *Ibid.*

45. Local public labs suspended the production of indinavir owing to problems in the quality of its imported active ingredients. Cristina d'Almeida, former intellectual property consultant of Far-Manguinhos, telephone conversation with author, August 11, 2003.

46. Michael Bailey, *Companhias Farmacêuticas X Brasil: Uma Ameaça à Saúde Pública* [Pharmaceutical Companies Versus Brazil: A Threat to Public Health] (Brasília: Oxfam, 2001), 9.

47. Sá and Malavez, "Briga contra Titãs," 11; "Sida: Le Brésil Fait Plier Roche" [AIDS: Brazil Makes Roche Concede], *Tribune de Genève* (Geneva, Switzerland), September 3, 2001.

48. Paulo Roberto Teixeira, then coordinator of the Brazilian National AIDS/STD Program, interview by author, Brasília, November 14, 2002.

49. Decreto 4.830 de 4 de Setembro de 2003 [Decree 4.830 of September 4, 2003], *Diário Oficial da União* 172 (Brasília: Imprensa Nacional, 2003), Art. 5, II Section 1; Art. 10.

50. Coordenação Nacional de DST/AIDS, "Brazilian Health Ministry Obtains Record Reduction in Price of New Anti-AIDS Drug," email on file with author, November 14, 2003.

51. "New Anti-HIV Drug Deal for Brazil," BBC, November 18, 2003. Available at <http://news.bbc.co.uk/go/pr/ft/-/1/hi/world/americas/3281683.stm>.

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53. Coordenação Nacional de DST/AIDS, "Saúde Fecha Acordo com Laboratórios de Anti-Retrovirais" [Health Concludes Agreement with Antiretroviral Laboratories], press release, January 15, 2004. Available at <http://www.aids.gov.br/imprensa/>.

54. Data from Ministério da Saúde. See also Far-Manguinhos, 78.

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56. "Ministério da Saúde X Abbott"; Intellectual Property Working Group of Rede Brasileira Pela Integração dos Povos (REBRIP), "Agreement of the Brazilian Government with Abbott Frustrates Brazilians," July 13, 2005. Available at [http://www.rebrip.org.br/publique/cgi/public/cgilua.exe/web/templates/htm/\\_template01/printerview.htm?user=reader&editionsectionid=5&infoid=252](http://www.rebrip.org.br/publique/cgi/public/cgilua.exe/web/templates/htm/_template01/printerview.htm?user=reader&editionsectionid=5&infoid=252).

57. Alexandre Grangeiro et al., "Sustentabilidade da Política de Acesso a Medicamentos Anti-retrovirais no Brasil" [Sustainability of Brazilian Policy for Access to Antiretroviral Drugs], *Revista de Saúde Pública* 40, April 2006, 60–69.

58. Lei 9.279 da Propriedade Industrial, Art. 68.

59. José Marcos Nogueira Viana, "Intellectual Property Rights, the World Trade Organization, and Public Health: The Brazilian Perspective," *Connecticut Journal of International Law* 311 (2002): 311–312.

60. José Marcos Nogueira Viana, a diplomat who represented the Brazilian Ministry of Health, interview by author, Brasília, July 18, 2002; Bailey, *Companhias Farmacêuticas X Brasil*, 14.

61. "EUA Reagem no Conflito das Patentes" [USA Reacts in Patent Conflict], *Gazeta Mercantil* (São Paulo), February 2, 2001; Nogueira Viana, "Intellectual Property Rights," 312.

62. Maria Luiza Abbott, "Brasil e EUA Travam 'Guerra das Patentes'" [Brazil and USA Engage in "Patent War"], *Valor Econômico* (São Paulo), February 2, 2001; Nogueira Viana, interview.

63. James Love, director of the US consumer advocacy NGO Consumer Project on Technology, interview by author, Rio de Janeiro, December 4, 2002.

64. "Brasil Defende Política Anti-AIDS nos EUA" [Brazil Defends Anti-AIDS Policy in the USA], *O Globo* (Rio de Janeiro), June 25, 2001; Nogueira Viana, interview.

65. "ONGs Apóiam Brasil" [NGOs Support Brazil], *Gazeta Mercantil* (São Paulo), February 5, 2001; "ONGs Apóiam Iniciativa do Brasil sobre Medicamentos" [NGOs Support Brazil's Initiative Concerning Medicines], *Valor Econômico* (São Paulo), February 5, 2001; Nogueira Viana, "Intellectual Property Rights," 313.

66. David Pilling, Frances Williams, and Geoff Dyer, "U.S. Patent Retreat Deals Fresh Setback to Drugs Groups," *Financial Times*, June 25, 2001; "EUA Recuam na Guerra das Patentes" [USA Retreats in Patent War], *Jornal do Brasil* (Rio de Janeiro), June 26, 2001. Not coincidentally, the US government backed off on the first day of the United Nations General Assembly Special Session on HIV/AIDS.

67. Ana Magdalena Horta, "Comissão da ONU Declara que Acesso a Medicamento É Direito Humano" [UN Commission Declares that Access to Medicine Is Human Right], *Época* 154, April 30, 2001.

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69. Susan Sell, "TRIPS and the Access to Medicines Campaign," *Wisconsin International Law Journal* 3 (Summer 2002): 513.

70. Jennifer L. Rich, "Brazil Welcomes Global Move on Drug Patents," *New York Times*, November 16, 2001; Luís Nassif, "Um Feito Diplomático Histórico" [A Historic Diplomatic Feat], *Folha de São Paulo* (São Paulo), November 16, 2001; "Final Feliz na Conferência da OMC" [Happy Ending in the WTO Conference], *O Estado de São Paulo* (São Paulo), November 16, 2001; "O Sucesso do Brasil em Doha" [The Success of Brazil in Doha], *Correio Braziliense* (Brasília), November 16, 2001.

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74. Paul Blustein, "Free Trade Talks End in Vague Accord; Framework for Americas Less than Had Been Envisioned," *Washington Post*, November 21, 2003; Rubens A. Barbosa, "A Alca depois de Miami" [The FTAA After Miami], *Folha de São Paulo* (São Paulo), December 14, 2003.

75. Teixeira, "Políticas Públicas em AIDS," 64; Richard Parker, *Na Contramão da AIDS: Sexualidade, Intervenção, Política* (In the Wrong Way of AIDS: Sexuality, Intervention, Politics) (São Paulo: Editora 34, ABIA, 2000), 126–133.

76. UNAIDS, *HIV/AIDS Prevention in the Context of New Therapies* (Geneva, Switzerland: UNAIDS, 1998); World Bank, *Confronting AIDS: Public Priorities in a Global Epidemic* (New York: Oxford University Press, 1999), 178–181, 202; Rachel Zimmerman and Mark Schoofs, "World AIDS Experts Debate Treatment vs. Prevention," *Wall Street Journal*, July 3, 2002; Elliot Marseille, Paul B. Hofmann, and James G. Kahn, "HIV Prevention Before HAART in Sub-Saharan Africa," *The Lancet* 359 (2002): 1851. Accordingly, a central condition imposed by the World Bank in the early 1990s for its concession of loans to help finance Brazil's HIV/AIDS prevention campaigns was that no part of these loans would be used to purchase antiretroviral drugs. Teixeira, "Políticas Públicas em AIDS," 64; Parker, *Na Contramão da AIDS*, 132; Galvão, *AIDS no Brasil*, 137.

77. Cited in Rosenberg, "Look at Brazil," 30.

78. d'Adesky, "Brazil's AIDS Model."

79. Ruben Araujo de Mattos, "Sobre os Limites e as Possibilidades dos Estudos Acerca dos Impactos das Políticas Públicas Relativas à Epidemia de HIV/AIDS: Algumas Reflexões Metodológicas Feitas a Partir do Caso Brasileiro" [About the Limits and the Possibilities of Studies on the Impacts of Public Policies Concerning the HIV/AIDS Epidemic: Some Methodological Reflections from the Brazilian Case], in *Saúde, Desenvolvimento e Política: Respostas Frente à AIDS no Brasil* [Health, Development, and Politics: Responses to AIDS in Brazil], ed. Richard Parker, Jane Galvão, and Marcelo Secron Bessa, 76 (São Paulo: Editora 34, 1999).

80. Paulo Teixeira, "Universal Care for Patients with AIDS," in *AIDS—The Epidemic in the Megacities: Networking the Response*, ed. Celia Regina de Souza and Letânia Menezes, 222 (São Paulo: Editora Papagaio, 2002).

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82. Coordenação Nacional de DST/AIDS, *Política Brasileira de AIDS: Principais Resultados e Avanços (1994–2002)* [Brazilian AIDS Policy: Main Results and Advancements (1994–2002)] (Brasília: Coordenação Nacional de DST/AIDS, 2002), 7. Available at [http://www.aids.gov.br/final/biblioteca/politica\\_94\\_02.pdf](http://www.aids.gov.br/final/biblioteca/politica_94_02.pdf).

83. Though these costs are thought to be considerable, they are difficult to measure. Mattos, “Sobre os Limites e as Possibilidades dos Estudos,” 44–46.

84. D. Falcão, “Registros de Casos de AIDS Sobem 39%” [Registers of AIDS Cases Rise 39%], *Folha de São Paulo* (São Paulo), February 6, 1997, p. 1; Jane Galvão, “Public Health; Access to Antiretroviral Drugs in Brazil,” *The Lancet* (December 7, 2002): 1863.

85. It is important not to underestimate this point. As contributors to an international conference on antiretroviral treatment in developing countries in 1999 noted, in many such countries “policymakers remain in the dark in regards to the current and future prevalence of HIV. . . . Figures on people living with HIV and AIDS could be severely over- or under-estimated, which in turn would significantly affect the estimates of costs for providing antiretrovirals.” UNAIDS, *Summary Booklet of Best Practices—Issue 1* (Geneva, Switzerland: UNAIDS, 1999), 20.

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87. Data provided by Coordenação Nacional de DST/AIDS.

88. Coordenação Nacional de DST/AIDS, *Política Brasileira de AIDS*, 3.

89. *Ibid.*

90. Bastos, “Transnational Responses to AIDS,” 209–210; Estella Gutierrez, “AIDS Increasing Among Poor in Latin America,” *InterPress News Service*, June 14, 1998. Available at <http://www.aegis.com/news/ips/1998/IP980603.html>; Mattos, “Sobre os Limites e as Possibilidades dos Estudos,” 40–42; Teixeira, “Universal Care for Patients with AIDS,” 223; “*Mulheres já São 50% dos Infectados por HIV*” [Women Are Already 50% of HIV Infected], *Folha de São Paulo* (São Paulo), November 27, 2002, p. A9; Galvão, “Public Health,” 2.

91. See Andrea Garrafa Gouvea, “FTAA: Brazil’s Poison Pill,” *Brazzil*, July 2003. Available at <http://www.brazzil.com/2003/html/news/articles/jul03/p157jul03.htm>.

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