

Brazilian Response to the Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome Epidemic among Injection Drug Users

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The Brazilian response to the human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) epidemic is being observed all over the world because of its success. Understanding the role of injection drug users (IDUs) in the epidemic and the political response thereto is a key factor in the control of the epidemic in Brazil. This paper summarizes some of the most important analyses of the Brazilian response to the HIV/AIDS epidemic among and from IDUs. Key elements of the response include the support of the Brazilian Universal Public Health System, the provision of universal access to highly active antiretroviral therapy, and the creation of harm reduction projects that are politically and financially supported by the federal government. The response among and from IDUs is a key element in overall control of the HIV/AIDS epidemic. The response to the epidemic among and from IDUs has been headed in the correct direction since its beginning and is now being intensively expanded.

HISTORY

The first case of an injection drug user (IDU) affected by AIDS in Brazil was reported in 1982 in the state of São Paulo. Since then, IDUs have played a key role in the spread of the HIV/AIDS epidemic throughout the country [1]. They have had an intensive role in the dissemination of the epidemic and AIDS both among IDUs and from IDUs to the general population, and thus have become a section of the Brazilian population to be strategically targeted for control of the epidemic. Although the epidemic brought suffering to thousands of young Brazilians affected by HIV/AIDS, it also disclosed some very important public health problems never perceived before, such as the use of injectable

drugs in Brazil. By the end of the year 2000, the federal STD/AIDS Control Program estimated that ~25% of the AIDS cases in Brazil were directly or indirectly related to IDUs [2].

In 1989, the City of Santos Health Department organized the first attempt in Brazil to control HIV/AIDS among and from IDUs. Santos is a city on the coast of the state of São Paulo, and at that time it had the reputation as the Brazilian capital of AIDS, on the basis of the number of AIDS cases relative to the city's population. Health authorities on the basis of the international experience being developed at the time decided to launch the first needle exchange program in Brazil in 1989. As a consequence, public attorneys decided to sue the health authorities for their initiative of providing IDUs with sterile needles and syringes, on the basis of their interpretation of the Brazilian Law on Drugs existent at that time. The attorneys argued that the health authorities were facilitating the use of illicit drugs and tried to prosecute them as drug dealers [3]. The

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city of Santos, the state of São Paulo, and the federal government politically supported the needle exchange program initiative and helped the health authorities in the trial.

This episode was the starting point of the intense fight for human and civil rights for IDUs, which has had a long history of delay and, later, success. In 1991, the City of Santos Health Department was the first in Brazil to provide zidovudine on the basis of the universal right to health care stated in the Brazilian Constitution of 1988 and guaranteed by the Brazilian Universal Public Health System since 1990. IDUs were included in the zidovudine treatment program, just like any other patients with AIDS. Later on, the state of São Paulo and the federal government also began providing antiretroviral therapy.

In 1993, the Institute of Studies and Research on AIDS (IEPAS), a health professional-based nongovernmental organization in Santos, initiated the first outreach project in Brazil, supported by the federal government through the National STD/AIDS Control Program [4]. Finally, in 1995, in the city of Salvador, the University of Bahia started the first publicly tolerated needle exchange program in Brazil [5]. After that, many other projects were launched in many cities. In 1996, the city of Santos again introduced the right to universal and free HAART after the AIDS conference in Vancouver. By the end of the same year, former President and current Senator Jose Sarney proposed a law, which was approved, that specifically guaranteed access to HAART for all Brazilians affected by AIDS, under the standards defined by the Ministry of Health [6].

In 1998, during the opening ceremony of the 9th International Conference on Drug-Related Harm in São Paulo, State Governor Mario Covas announced the first harm reduction law in Brazil, which was based on the proposal of State of São Paulo Representative Paulo Teixeira. This legislation authorized the State of São Paulo Health Department to buy and distribute sterile needles and syringes to help control the HIV/AIDS epidemic [5]. This law opened a door for many other laws, culminating with the change in the Brazilian Law on Drugs, in January 2002, which authorizes the Ministry of Health to implement national harm reduction projects. In addition, the law promoted very important input into the organization of the national response to the HIV/AIDS epidemic among and from IDUs, by political help given to the implementation of needle exchange programs in the state of São Paulo and throughout Brazil.

THE POLICY OF UNIVERSAL FREE HEALTH CARE

Universal free access to health care and necessary medication was stated in the Brazilian Constitution of 1988 and was established after the democratization of the country following 20

years of military dictatorship beginning in 1964. In 1990, the Organic Health Law was promulgated by the Brazilian Congress and was the instrument to make feasible the constitutional principles. In 1991, when zidovudine was first provided for an patient with AIDS in Brazil, it was an initiative of the City of Santos Health Department based on 2 legal instruments: the Constitution and the Organic Health Law. Later on, the same arguments were used to provide HAART to patients with AIDS in the beginning of 1996, until a federal law specifically guaranteed public and free care for AIDS patients all over Brazil. Since then, the federal government has been seeking better prices for treatments from the multinational pharmaceutical industry as well as supporting national production of generic drugs to make feasible the provision of HAART to every patient who needs it. This process had some dramatic fights; the most important one was taken before the World Trade Organization, with an express victory for the Brazilian policy. In the World Health Organization (WHO) General Assembly, Brazil supported another victory in this process, one making access to HAART a human right. This policy is being supported both inside and outside the country by most of the people working toward the control of the epidemic, including researchers, health professionals, developing country government staff, activists, and people living with AIDS. By the end of 2001, there were 115,000 Brazilians taking HAART supported by the federal government. Providing access to HAART consumed 2.9% of the total annual amount dedicated to public health by the federal government.

In the beginning, detractors criticized the policy of universal free access. They believed that people from the developing world would not adhere to therapy with such sophisticated medication, and therefore, they feared that the development of a supervirus or resistance was quite possible. During 1999, the School of Medicine of the University of São Paulo conducted a study evaluating adherence to HAART in the Public Health System of the state of São Paulo [7]. The state of São Paulo has almost 50% of the total AIDS cases in the country. The study was conducted in 20 different cities and in 27 public health services specializing in sexually transmitted diseases and AIDS. Also, a literature review was conducted of difficulties of adherence to drugs other than HAART [8–11].

RESULTS OF THE BRAZILIAN STUDY ON ADHERENCE

The sample population included 673 men (64.8%) and 365 women (35.2%). The majority of those interviewed (562 [54.1%]) had <4 years of formal education, 183 (17.6%) had <8 years, and 291 (28%) had ≥8 years of formal education. The mean age of the participants was 35 years. Seventeen per-

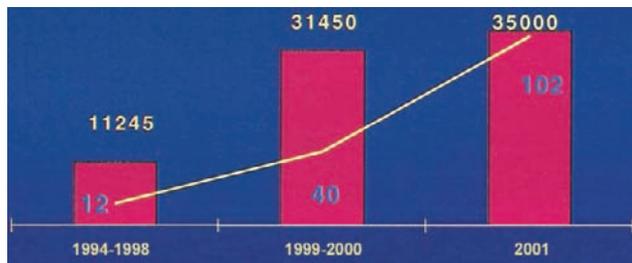


Figure 1. Improvement in the effectiveness of needle exchange programs in Brazil by year. *Columns*, number of injection drug users (IDUs) involved in needle exchange projects; *diagonal line*, number of needle exchange projects.

cent of participants had no income, 39% had an income 0.5–3 times the Brazilian minimum salary (which was equivalent to US\$70.00 at the time of the study), 22% had an income of 3–6 times the minimum salary, and 21.8% had an income of >6 times the minimum salary. Unemployment was reported for 57.4% of the sample population, and the other 42.6% had some relation with the formal market [7].

In multivariate analyses, 4 factors appear as non-adherence predictors: a formal education of ≤ 4 years, no income, current abuse of alcohol, and the quality of health care services available. The current use of drugs (which appeared in the bivariate analysis) did not appear in multivariate analysis as a predictor for lack of adherence to HAART, in contradiction to common sense.

In this study, adherence was defined as compliance with therapy $\geq 80\%$ of the time. In the final results, adherence was found for 69% of the participants [7]. These data are quite similar to those in the international literature at the time of the study: 75% [12], 78% [13], and 60% [14].

Results indicated that we should reinforce the necessity of training of health professionals for the reception of the drug users in health care services to make them more suitable for such population. The classic medical and biological model is not good enough to improve the adherence to a complex medication such as HAART.

RESULTS OF THE HARM REDUCTION PROJECT

The Brazilian Harm Reduction Project had its tentative beginnings in the city of Santos in 1989, with the aborted needle exchange project, and later with the successful implementation of the first outreach work project in the country in 1993 (through IEPAS, supported since then by the National AIDS Control Program). In 1996, an underground needle exchange program was reestablished in Santos. It became formal after the law on harm reduction was passed in March 1998, again through IEPAS. In 1995, the first publicly tolerated and successful needle exchange program in Brazil was launched in

Salvador, Bahia State [3–5]. In Rio de Janeiro, the first needle exchange program was established in 1998, which was the first in the country that also provided hepatitis B vaccination [15]. As of June 2003, there were 279 harm reduction projects in the country (involving 145,000 injection drug users), most of which provide needle and syringe exchange. The Ministry of Health, as part of the federal government, politically supports all of these projects and financially supports the majority as well. Some historical information about the Brazilian needle exchange program can be seen in figure 1.

From 1994 through 1996, the Brazilian government supported national research coordinated through IEPAS in Santos, which was called “Projeto Brasil.” Projeto Brasil was a Brazilian multicity study that involved 8 cities in 4 different regions in the country. It was based on a WHO multicity study developed in Brazil in 1991–1992 (phase I of the WHO multicity study of behavior and seroprevalence for HIV among IDUs) and used a similar questionnaire and methodology. This study was crucial for baseline information about the Brazilian epidemiological situation at that time among IDUs [16]. Later, in 1999–2000, 3 cities that were enrolled in Projeto Brasil in 1995 (Santos, Rio de Janeiro, and Salvador) became part of phase II of the WHO multicity study among IDUs and its health consequences. Figure 2 compares Santos in 1994 and 1999 with Salvador in 1996 and 2000. An impressive reduction in the rates of seroprevalence of HIV was seen among IDUs in both cities. The reasons for this reduction are being analyzed by the research teams of the 2 cities, and there is agreement that a reason for that decline is the impact (directly or indirectly) of the prevention projects based on harm reduction strategies developed in both cities [17].

CONCLUSION

There are some important advances in Brazilian actions to control the HIV/AIDS epidemic among and from IDUs, and these advances were related to the coherence of the actions since the problem was identified; however, much remains to be done to extend the coverage. The discussion established thus far pointed out the necessity of some recommendations to improve the Brazilian response to the HIV/AIDS epidemic



Figure 2. Reductions in seroprevalence of HIV among injection drug users in the cities of Santos and Salvador, Brazil.

among and from IDUs: improvement of the quality of projects and the installation of new projects; inclusion of relevant aspects of a broader harm reduction project, such as overdoses and hepatitis, on harm reduction projects activities (e.g., hepatitis B vaccination); insertion of the harm reduction projects into the Brazilian Universal Public Health System; improvement of the “safe sex” activities for prevention in harm reduction projects; attention to female IDUs targeting their particular vulnerabilities; political support for the Brazilian drug policy movement to make it more pragmatic and humanitarian; and support for the organization of drug users associations and similar movements.

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