

HIV and injection drug use in Latin America

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Objective: This paper presents HIV/AIDS-related data on injection drug use (IDU) and drug use trends in Latin America, and policy issues and strategies developed to face the HIV epidemic.

Methods: Serosurveillance data on HIV/AIDS and IDU in Latin America were compiled. Key experts were consulted in Argentina, Brazil, Colombia and Mexico. Published and grey literature was reviewed. An overview and information on selected countries is discussed in order to analyse different responses.

Results: IDU AIDS cases are driving the epidemiological trend in the Southern Cone at 34.3%, followed by Brazil at 20.2%, Latin Caribbean 2.8%, Central America 0.9%, Mexico 0.6%, and the Andean area 0.2%. Available prevalence data are absent or scarce with the exception of Argentina and Brazil. Even with evidence of HIV transmission occurring in IDU, there is a notorious lack of studies in most other countries. In 1984–2000 only four out of 21 Latin American countries had reported prevalence studies.

Conclusion: For countries that have already initiated harm-reduction programmes (HRP) the great challenge is to ensure that these activities are sustained. In other countries, IDU as a high-risk factor is currently of less importance. However, an increase in the frequency of IDU has been detected, and HIV prevalence is expected to increase. It is therefore necessary to implement HRP to encourage and help drug users to adopt safer methods, such as access to equipment and sterile materials, cleaning materials and information about safe sex, as well as counselling, support groups and medical assistance.

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Introduction

The spread of the AIDS epidemic is an important public health problem in Latin America. We have used the classification of Latin American countries and subregions used by the Pan American Health Organization: Andean region (Bolivia, Colombia, Ecuador, Peru and Venezuela); Southern Cone (Argentina, Chile, Paraguay and Uruguay); Brazil; Central America (Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama); Mexico; and Latin Caribbean (Cuba, Haiti, Puerto Rico and Dominican Republic).

Although there are large differences in trends in the epidemic throughout the region, injection drug use (IDU) represents a significant method of transmission in several countries. Successful prevention efforts are being developed, and the implementation of harm reduction strategies is increasing. Nevertheless, there are still gaps between research and intervention, and there is a need to improve institutional support.

This paper will present IDU-related HIV/AIDS-relevant data and drug use trends in the region, policy issues and preventative strategies produced by a review

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of databases, National AIDS Programme (NAP) reports and published and grey literature sources. Key experts with access to unpublished national data were consulted for Argentina, Brazil, Colombia and Mexico. A regional overview and information on selected countries will be discussed.

HIV/AIDS and drug use trends

According to UNAIDS, IDU is now a major form of HIV transmission worldwide. A total of 134 countries reported documented cases of IDU in 1999, and 114 of them reported HIV infection associated with IDU [1].

As several studies conducted in Latin America have found, unprotected sex and drug use, with a risk of HIV transmission, is not confined to IDU [2,3]. The extent to which injection drug users and crack users, their sexual partners and offspring are affected by the epidemic in Latin America varies in the different regions and within each country. Infection by IDU makes up almost a third of the cases recorded in Argentina, Chile, Paraguay and Uruguay [4]. In countries such as Paraguay and Bolivia, and in most of the Caribbean countries, the role of IDU is limited [2]. In countries where injected drugs are widely used, such as in Argentina and Brazil, there are different patterns of the epidemic.

There are two superimposed trends in Latin America and the Caribbean: (i) The late 1990s explosion of crack use plays a key role in the regional HIV/AIDS epidemic, this can be observed in southeastern Brazil [5,6]; (ii) The recent increased availability of opium derivatives such as heroin, and the extent of its spread in Latin America, has been the subject of debate, because its cultivation and sale is still a relatively recent development. Preliminary data show increased consumption in different parts of Brazil [7]. In the Andean area and in Mexico its availability has increased as a result of new plantings, but for now its effect on local consumption has been limited [8,9].

IDU AIDS cases are driving the current epidemiological trend in the Southern Cone countries at 34.3%, followed by Brazil at 20.2%. Meanwhile, in the Latin Caribbean they represent 2.8%, Central America 0.9%, Mexico 0.6%, and the Andean area 0.2% [10]. Available data on IDU HIV prevalence are absent or scarce, with the exception of some studies in Argentina and Brazil. Even with evidence of transmission marked by IDU AIDS cases, there is a notorious lack of studies in most other countries. In 1984–1998, only four out of 21 Latin American countries reported prevalence in the HIV/AIDS Surveillance International Database [11], or on the UNAIDS EPI Fact Sheets [12] (see Table 1).

Table 1. Injection drug use proportion of total AIDS cases.

Country	% of IDU AIDS cases
Argentina	41.9
Belize	0
Brazil	21.7
Bolivia	3.5
Chile	5
Colombia	0.05
Costa Rica	1.3
Cuba	0
Ecuador	0.6
El Salvador	1.3
Guatemala	SD
Haiti	SD
Honduras	0.1
Mexico	0.6
Nicaragua	7.0
Panama	2.5
Paraguay	11
Peru	0.1
Dominican Republic	3.5
Uruguay	26.3
Venezuela	1.0

IDU, Injection drug use.

Sources: UNAIDS EPI Fact Sheets; HIV/AIDS Surveillance Database, June 2000.

With regard to drug consumption, there is a growing and worrisome problem in all countries, although the extent of the problem varies in each one. In southern Latin America, for example, Chile and Paraguay have less IDU than Argentina, Brazil, and Uruguay. Nevertheless, all five countries are part of the South American drug trafficking route, a fact that might contribute to the spread of illicit drug use and an increased risk of association between injected drugs and HIV.

The geographical position of the five countries, which share long borders with heavy movement of people, is another factor contributing to the spread of HIV [13]. Cocaine is the main injected drug used in these countries. Other injected substances include amphetamines, codeine-based cough syrups and alcohol [14].

Argentina

Cocaine use has been increasing in Argentina during the past 15 years. Inhalation is the most popular form of self-administration. There is also evidence of the increasing use of coca paste and crack cocaine in Buenos Aires [15].

A national study in 1999 established that 2.9% of the population between 16 and 64 years of age had used illegal drugs in the previous month; 3.6% had a lifelong use of cocaine, and 9.6% of cocaine users injected it [16]. On the basis of these data, the number of cocaine injectors has been estimated at 50,000 men and 14,500 women [17].

In 1985, the first IDU AIDS case was reported. The proportion of IDU AIDS cases makes up 41.9% of the

total, 44.6% among men and 30.7% among women. The average age among male IDU AIDS cases is 29 years and in the rest it is 34 years. Among women, it is 28 and 30 years, respectively. Only 17% have completed high school, whereas the percentage reaches 44% in other AIDS cases [18]. A total of 94% reported AIDS cases among injection drug users is heavily concentrated in metropolitan centres. In 2001, different surveys found seroprevalences between 44.3 and 64% in Buenos Aires [19], and 61% in Rosario [20]. Because IDU leads to so many cases of HIV in the country, Argentina's AIDS epidemic is unique in the region.

Brazil

In Brazil 21.3% of AIDS cases are connected with IDU. Among women, 38% of AIDS cases are the result of sexual infection from IDU partners or drugs use themselves. AIDS cases have reached 210,452, with an estimated 620,000 infections [21]. The average incidence rate has, however, remained stable at approximately 14.3 per 100,000 inhabitants, although it is increasing in the south because of cocaine injecting [22].

Approximately one million people in Brazil inject some kind of psychoactive substance, principally cocaine. Most live in the south eastern and south central states. The HIV/AIDS epidemic has been related to IDU, following the drug trafficking routes bordering producer countries that link western Brazil to the exporting ports in the south east [23]. Recently, the increase in cocaine trafficking and consumption and the spread of HIV have contributed to the main HIV sub-epidemics among injection drug users on the coast and in states in the far south [7].

HIV seroprevalence is high but has tended to decline in the past few years [24]. There are, however, a number of sub-epidemics, mostly caused by the size and the social and cultural heterogeneity of the country [6,25,26]. IDU plays an important role in the south and south east. Multi-centre survey figures gathered from five harm-reduction programmes (HRP) in southern cities [27] vary between 18 and 64% in cities in the state of Sao Paulo, to between 48.5 and 78% recorded in cities in the far south.

In Santos, a 1990–1992 survey showed a seroprevalence of 62% [28]. The city now appears to have registered a significant decline; this suggests that saturation, prevention programmes, and changes in the drug scenario, with a decline in needle-sharing appear to be effective.

Despite the fact that crack users have a lower rate of HIV contagion than injection drug users [29], the percentage of HIV-infected crack users is significantly higher than in general population [30].

Another likely correlation relates to new cases of HIV and malaria among injection drug users caused by the expansion towards malariagenic areas in the west-central and north of Brazil, with IDU networks apparently playing a core role, and the possibility of new outbreaks of secondary malaria in urban settings in which HIV/AIDS is expanding, through the sharing of needles and syringes [31].

Chile

In Chile, the 1998 National Study on Drug Use showed that the principal drugs used in the country are cannabis, cocaine, and coca paste. Lifetime use of injected drugs increased from 0.5 to 0.84% between 1994 and 1998. IDU contributed to 5% of all AIDS cases in Chile [32].

Colombia

Colombia has a significant risk from injection practices. Countries with similar characteristics have experienced a brisk increase in IDU [33]. Heroin is new in Colombia, but a drug-using population looking for new substances in association with foreigners visiting for drugs creates opportunities for the expansion of IDU [34]. In recent years, Colombia has acquired a particular relevance, as a result of the changes in illicit crops. The country is currently considered to be one of the most important producers of opium by-products. It ranks in fourth place after Myanmar, Laos and Afghanistan.

From 1983 to December 2000 the number of registered cases of HIV/AIDS increased to 22,441. Of these cases, 15,170 were non-symptomatic and 7,271 had AIDS. There were six cases of AIDS among injection drug users and five cases of HIV, with a registered number of 11 cases since 1994. This is equivalent to 0.05% of the cases in the country and to 6.3% of total of infections caused by blood transmission [35].

As part of phase II of the WHO Multi-City Study on Drug Injection, a rapid assessment of HIV and hepatitis B/C risks among injection drug users was undertaken in Bogota in 2001. A total of 51 (39 current and 12 former) injection drug users were interviewed. The description of the drug use patterns in the city shows a wide and diverse experimentation with every type of substance, such as alcohol, benzodiazepines and other blends. Although heroin, opium and morphine are available, the supply is more reduced and access of drug users to these substances is limited. Data suggest that IDU has been present in some groups for more than two decades, but a pattern of expansion is believed to have occurred during the past 3 years. This matches the perception of an increase in heroin availability on city streets, the practice of injection in several cities, and a perception of an increase in heroin use among participants who are drug users [36].

Mexico

In 1983, AIDS mainly appeared among men who have sex with men (MSM), with some cases of MSM who were also injection drug users. The first case of AIDS in an injection drug user was recorded in 1986. The number of IDU AIDS cases is increasing slowly [37].

The first National Addictions Survey (NAS-88) [38] found that 0.1% of the population reported using heroin; of whom 17,000 claimed to have been active users in the previous year. By NAS-93, 30,000 individuals reported having been active users in the previous year. A regional comparison showed that the highest consumption of illegal drugs took place in northwest Mexico. The life prevalence heroin consumption in NAS-98 was 0.09%, which revealed no increase in the past 10 years, whereas for cocaine use it was 0.33% in 1988 and increased to 1.45% in 1998 [39].

A study among prisoners [40] concluded that between 90 and 95% of IDU cases in Mexico started in cities in which drug availability was significant, either because it was produced there or there was local traffic. Both situations prevailed in northern Mexico.

A study among groups of MSM, prisoners, sex workers and injection drug users in Baja California [41] found that HIV prevalence among homosexuals was 1.92% compared with 11.6% among bisexuals, 0.5% among prisoners, and 2% among sex workers. Sentinel surveillance showed a 6% HIV prevalence among injection drug users in 1998 [42]. Surveillance showed that 40.9% shared syringes and only 35% cleaned them [43].

Paraguay

Paraguay has very few epidemiological data about drug use. Research organized in 1991 by Marandú, a non-governmental organization (NGO), showed that alcohol and prescription drugs were more widely used.

IDU is responsible for 11% of all AIDS cases in Paraguay, with cocaine reported as the most frequently injected drug. The male-to-female ratio of infected injection drug users is 4.5:1 [44].

Uruguay

Comparing the National Prevalence Surveys in 1994 and 1998, Uruguay shows a decrease in alcohol and tobacco use, an increase in the use of tranquilizers without medical prescription, and stable rates of illegal drug use. In 1998, 19% of the drug users in rehabilitation had injected drugs during their life, and 36% of them had shared syringes. Most of the injection drug users reported injecting cocaine [45]. In Uruguay, IDU contributes to 26% of all AIDS cases. Furthermore, in a 1999 national study [46], 22.3% of reported HIV-positive cases were injection drug users, with a male-to-female ratio of 3.3:1.

Policy and programmes: responses to the epidemic

Policies in Latin America reflect a low tolerance of drug users. Authorities use legal sanctions to deal with the problem, employing tactics of repression, primary prevention, and obligatory abstinence-based treatment. Most of the countries have specific drug acts and complementary legislation.

Until recently, harm-reduction strategies were totally haphazard and unsystematic, and needle-exchange programmes (NEP) were uncommon [47]. Apart from their attempt to encourage abstinence, very few NGOs were involved in prevention activities aimed at injection drug users. Even now, harm-reduction activities are basically restricted to Brazil and Argentina [2].

In Brazil, infection control policy related to the use of psychoactive substances is firmly backed up by the Ministry of Health [48]. In the Southern Cone, research and interventions related to HIV in IDU began in 1997. In Buenos Aires, the NGO INTER-CAMBIOS developed a rapid assessment and response study, and defined community interventions that began with the first NEP in Argentina [49]. In Uruguay, the NGO IDES developed a study to determine sex and drug use knowledge, attitudes and practices (KAP) in Montevideo [50], and a study on HIV/AIDS risk practices among commercial sex workers (CSW) [47]. In Paraguay, the NGO PREVER contacted injection drug users who reported injecting 1–10 times a day. Fifteen per cent were HIV positive and reported engaging in high-risk practices [51].

In 2000, the regional project 'HIV Prevention among Injecting Drug Users in the Southern Cone' began with the participation of NAP and NGO from each country. Its objective is the adoption of legal instruments that can facilitate prevention activities. It hopes to sensitize journalists and policy-makers, promote access to healthcare networks for injection drug users, promote research and intervention projects, and involve communities in interventions, particularly drug users and their networks. Argentina implemented preventative interventions that included syringe and condom distribution. In addition, it developed a seroprevalence study for HIV and hepatitis B and C. Chile developed a rapid assessment and response study and educational activities for communities and injection drug users. Paraguay worked to plan interventions in prisons. Uruguay began an ethnographic study of IDU, and surveyed the healthcare services available to drug users and HIV-positive individuals. All projects trained healthcare professionals [52]. In 2002, the United Nations Office for Drug Control and Crime Prevention (UNDCP) and UNAIDS are

supporting the second phase, integrating Brazil into its activities.

Networking is a key instrument for harm-reduction development in Latin America. The Latin American Harm-Reduction Network (RELARD) founded in 1998 disseminates research findings, literature and best practices. Its activities seek to consolidate regional cooperation to increase the capacity for communities to respond. Cooperation and coordination with national and international organizations are helping to share experiences, circulate information, and mobilize harm-reduction efforts [13].

Argentina

HIV prevention policy in Argentina relies upon the Lusida Project, created with national funds and a loan from the World Bank. Thirty million dollars were allocated for a 4 year period (1998–2001). The project supports preventative projects developed by civic organizations. Fifteen drug-using population projects were approved during 2001. Four NEP were established. A communication campaign focused on injection drug users was also developed in 2001. Nine communication projects were supported with US\$130,000 [53].

The Secretary for the Prevention of Drug Abuse and Fight Against Illicit Traffic signed resolution no. 351/2000, which recommends that the National Ministry of Health adopt programmes and measures to reduce health risks for drug users. Lobbying also promotes laws that protect harm reduction. Two projects were voted by the House of Representatives in December 2001 and wait for senatorial approval. In order to intervene adequately in the AIDS epidemic, NGOs have advocated incorporating harm reduction as a national public health policy [14].

Brazil

Policy is based upon improving technical and managerial skills related to HRP. It embraces efforts to treat chemical dependency and promote the human rights of those affected [48]. A further strategic feature is the existence of a powerful lobby to foster laws to bring the 'safe use' of psychoactive substances under control. Advocacy activities are a key tool to change the mentality of opinion-formers and strategically placed professionals in public service.

There are 14 State Harm-Reduction Associations and two associations at the national level. They all have in common the understanding of the right to be protected by the law, to receive services and to be able to access risk and harm-prevention activities. The two national associations – the Brazilian Harm-Reduction Association (ABORDA) and the Brazilian Harm-Reduction Network (REDUC)–work in close cooperation with countries bordering Brazil. These associations depend

on the Health Ministry for funding. Other sources of funds are linked to local programmes and those originating from their associates. According to the Health Ministry, US\$841,293 was granted for prevention activities during 2000. No figures are available for the funds disbursed by other government departments, but a significant contribution continues to be made locally, principally to those programmes linked to public institutions. In September 2001, the following activities were undertaken: 56 HRP, including NEP, nine intervention projects in prisons and four counselling services on harm reduction. In total, approximately 65,000 individuals are direct beneficiaries of these programmes. The Health Ministry is expected to support 125 HRP in 2002.

The Health Ministry estimates that in 2000 there were approximately 300,000 needle exchanges in Brazil. In addition, condoms are systematically made available, as well as sterile water for diluting substances, spare needles, cotton wool for cleaning the injection place and educational materials. Female condoms are being tested for acceptability among drug-using women, who also participate in HRP, and the sexual partners of injection drug user men. Thirty-nine projects provided condoms in 2001. Sex workers also receive free female condoms.

Studies conducted in five HRP reported a behaviour change related to sharing equipment during common cocaine use. Injection drug users who attended the programmes for 6 months have been using their own syringes consistently in up to 60% of cases [27]. However, condom use was infrequent, demonstrating that for injection drug users it is difficult to adopt this preventative procedure.

The number of HRP has been rising significantly; from 1999 to September 2001 it increased from 14 to 56 programmes. Advocacy activities and lobbying have produced specific laws favouring needle-exchange activities and other educational interventions. Four of the six most affected states for injection cocaine use count on specific laws that allow needle-exchange activities in their territories.

Mexico

In 1997, the NAP started the first project among injection drug users. It identified a high consumption of injected heroin, cocaine, crack, and crystal. Over 65% of the participants were used to sharing needles and syringes; 50% of the subjects showed some risk perception and 64% had an acceptable knowledge about AIDS [54].

A probability study with male prisoners found 37% IDU; 60% of these prisoners shared syringes, 28% cleaned them with chlorine; a 2.53% HIV prevalence

was detected. Following that study, the local health personnel were provided with information and training and a pilot NEP began. A second study in a different city [55] found a 24% prevalence of IDU; 40% shared syringes, and 47% cleaned them with chlorine, with 1.8% HIV prevalence. In 2000, in the same jail a new study indicated a 100% hepatitis prevalence among injection drug users [56].

In 1999, a study was carried out in the prison of a third city. IDU was 45%, 83% shared syringes, and only 18% cleaned them with chlorine; HIV prevalence was 3.38% and 100% had hepatitis C. This area of Mexico had not been identified as a region with a high drug consumption index. These results provoked great concern among health authorities, who subsequently took measures to vaccinate against hepatitis B in state prisons and conducted workshops about HRP with prison health personnel. There is only one documented NEP in all Mexico operated by an NGO [57].

Lessons learned

Drug-related problems in the LAC region are increasing, and prevailing policies frequently encourage prejudice and misinformation instead of promoting scientific approaches.

A network of individuals and organizations working directly in the field is essential for any success. Moreover, decisive government support is essential: it must include administrative, political, financial and technical support for the network of people and organizations working in the field.

Networking is a key instrument for developing HRP in the region. Researchers, outreach workers, practitioners, and in some cases drug users' associations collaborate to achieve common goals that have a synergistic effect. Networking gives greater national, regional and international impact and broadens the understanding of drug-related issues.

Conditions are being created to develop prevention interventions in IDU. Simultaneous projects allow for a better acceptance of interventions. Nevertheless, it is necessary to extend similar studies in the region, to continue with the articulation between research and intervention.

Conclusion

For countries such as Argentina and Brazil, which have already initiated HRP in order to control the

epidemic, the great challenge is to ensure that activities are sustained by local initiatives after the funding made available from external sources ends. The involvement of people most severely affected by the epidemic must be encouraged, and policy action initiatives must be inserted into other official programmes, aimed at children and adolescents, women, MSM, as well as those aimed at users of psychoactive substances.

In other countries, IDU is of less importance than other HIV transmission categories. However, an increase in the frequency of IDU has been detected, and HIV prevalence is expected to increase in these groups. It is therefore necessary to implement HRP to encourage and help drug users to adopt safer methods, such as access to equipment and sterile materials, cleaning materials and information about safe sex, as well as counselling, support groups and medical assistance.

Although actions to prevent HIV and other sexually transmitted infections among injection drug users have been isolated, the commitment of civic associations opens a window to more effective and efficient preventative actions.

There are a number of good practices being developed in the region, with the involvement of local expertise. The programme managers help to foster approaches that reflect regional cultural characteristics, thus strengthening regional responses to the epidemic. These could be shared more systematically. UNAIDS should identify the best practices and convene meetings at which experiences could be shared among relevant organizations and practitioners. Staff placements in areas where good practices (either services or actions) exist would improve the quality of local responses, and could be reinforced by specific in-loco consultations in order to enhance local organization.

Latin America has extensive experience in cocaine-related problems that could be of great help to other regions of the world where this issue is more recent. In contrast, there is little local expertise available to deal with heroin. Consideration should be given to promoting courses and specific training in fighting opiate use and addiction. These efforts should target programme managers in government and civic associations that deal with psychoactive substances.

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