HIV, Drug Use, Crime and the Penal System – competing priorities in a developing county, the case of Brazil

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Introduction

Geographically speaking, Brazil is the fifth largest country in the world and has an estimated population of over 146 million. Although a developing country, it is rich in natural resources and has a strong agricultural industry. Three quarters of the population live in cities, the largest of which is São Paulo with a population of around 15 million.

The Portuguese colonized the country in the fifteenth century and Brazil finally achieved independence in 1822. From 1964 to 1985 the country was run as a military dictatorship and after a transitional government became a democratic republic in 1989. The first elected president to take office was impeached following allegations of corruption but a degree of both political and economic stability have been established under the following two presidents. Despite political and economic reforms, massive social inequalities persist and over one third of the population live below the poverty line. Striking inequalities can often be seen side by side, with luxury apartments and mansions rubbing shoulders with

favelas or shanty towns, where the houses are made of wood and cardboard, there is no sanitation and children run semi-naked in the litter strewn streets.

Crime

Statistics suggest that there is a high level of crime in Brazil, but published figures do not fully represent the true picture. It is believed that many crimes, particularly theft and robbery, go unreported because the victims have little confidence in the police. A recent survey undertaken by the Latin American Institute of the United Nations for the Prevention of Crime and the Treatment of Delinquency (ILANUD) suggested that only one third of crimes such as theft, assault and robbery were reported to the police.

Figures released by the Secretary for Public Security for São Paulo estimated that in São Paulo alone there are 325 thefts, 275 robberies, 288 car thefts and 21 homicides per day. Most homicides are a result of gunshot wounds; gun possession being widespread, although a recent law has been introduced to reduce the facility with which guns can be purchased.

Law Enforcement and the Penal System

There are two main divisions of the police: the civil and military, the former are mainly responsible for investigating criminal and civil offences and the latter for policing the streets and repressive actions. Policing is undertaken on a sectorized basis, linked to population size and local crime levels. The police are poorly paid and allegations of corruption are common. Police officers themselves complain about lack of resources, saying that criminals are often better equiped than they are, with more powerful firearms and faster cars. Each police station has a cell where offenders can be locked up whilst

awaiting charging or transfer to prison. Because of overcrowding in the prison system, police stations often end up having to accommodate offenders for considerable periods of time with the result that they too become subject to overcrowding.

Prisons in Brazil are the responsibility of the individual State Governments. Federal input to the prison system being limited to issuing guidelines, overall monitoring and financing. Consequently, there can be considerable variation between States in the custodial models used, for example, in terms of prison sizes and the ratio of open to closed regimes. In open regimes prisoners undertake work in the community during the day and only return to prison in the evening.

It is common for 10 to 12 prisoners to share a cell designed for just two people. Due to this high level of overcrowding, the limited facilities available in prisons and the appalling conditions found in many of them, there has been increasing political pressure to reform the penal system and develop alternatives to custodial sentences, for example, community service, particularly for less serious offences. Several problems have been identified in the penal system apart from overcrowding, these include: an insufficient number of prisons, a need for smaller prison units, insufficient prison wardens (on average around five prisoners to one warden), lack of training and an inefficient administrative structure. In recent years there have been numerous rebellions in prisons throughout Brazil, often with prison staff and relatives being held hostage and large-scale breakouts.

As a consequence of overcrowding, many offenders are completing their sentences in police cells. Apart from the obvious lack of space and amenities, such as toilets and bathrooms, police cells have no facilities for rehabiliation, education or even basic exercise. Since levels of security are lower, breakouts and rioting are not uncommon.

The need for a reform of the penal system is well recognised but whether there is the political will to undertake one is debateable. Improving the infrastructure of the prison system is not a vote winner and is just one of many competing priorities in a country beset by serious social problems and inequalities.

Prison Population

A survey of the prison population in 1995 showed that there were 148 760 people incarcerated in Brazilian prisons, but there was considerable variation in the prison population between states (http://www.mj.gov.br). The highest figure was for São Paulo with 174.4 prisoners per 100 000 population compared to 17.8 per 100 000 in the northeastern state of Alagoas. Over 95% of prisoners were men. The majority was being held in closed regimes with just over 11% in open or semi-open prisons. The commonest reasons for having being imprisoned were as follows: robbery (32%), theft (16%), homicide (15%) and drug trafficking (11%).

Criminal Behaviour among Drug Users

We have recently completed a survey of 294 cocaine users who were in contact with a wide range of treatment services in São Paulo, including outpatient clinics, detoxification centres, rehabilitation units, counselling agencies and non-governmental organizations (Dunn and Laranjeira, unpublished). The study aimed to provide details of patient characteristics, drug history, HIV risk behaviour and other associated behaviours, including criminal history. Patients were asked how they financed their drug use and a variety of activities were reported including: selling one's own belongings (65%), especially training shoes, sound systems and compact discs, selling objects belonging to other family members

(39%), theft of objects belonging to non-family members (38%) and armed robbery (21%). Trafficking of drugs was not uncommon with 18% having sold cannabis, 16% cocaine powder and 12% crack. Thirteen percent of the sample said that they had prostituted themselves in order to obtain money to buy drugs (12% of men and 24% of women).

Drug Users' Experience of Prisons

Fifty-six percent of the above sample of 294 cocaine users from treatment agencies in São Paulo had been arrested at some stage in their life, with 42% having spent time locked up in police cells and 16% in prison. Thirty-two percent of cocaine users who had been incarcerated, either in police cells or prisons, reported having had used drugs whilst there. Only 3% had injected drugs whilst in prison and just 2% said that they had shared injecting equipment.

Two percent of cocaine users had had sex with another prisoner whilst incarcerated but only 1.4% said that they had had penetrative sex without a condom. This compares with 10% of prisoners who reported having had sex with another inmate in a study of 917 prisoners from a large prison in Sorocaba, São Paulo (Marins, 1996).

HIV and AIDS in Brazil

The Global AIDS Programme of the WHO puts Brazil in the top four countries in the world in terms of cummualtive numbers of AIDS cases. Since 1980 when the fist case of AIDS was reported, over 110 872 cases have been notified to the Ministry of Health (http://www.aids.gov.br). However, the Ministry itself works on an estimated level of under reporting of 30%. For the combined years 1996/97, the primary exposure categories for reported AIDS cases (n=20 123) were as follows: homosexual 16%, bisexual 8%,

heterosexual 31%, intravenous drug use 19%, haemophilia 0.3%, blood transfusion 3%, perinatal transmission 3% and unknown 20%. Heterosexual transmission has shown a steady increase over the last decade, as illustrated by the falling male to female ratio. In 1987 there were 9 male patients with AIDS for every female, by 1990 the figure had fallen to 6 to 1 and in 1996/97 to 2.5 to 1. Data from females with AIDS shows that the main risk factor for infection was having had a sexual relationship with a drug users.

There have been no HIV prevalence studies undertaken of the general population in Brazil, but a study of blood donors in the city of Santos showed the prevalence of HIV to be 0%, whilst that for hepatitis C was 2% and hepatitis B 23% (Carvalho et al, 1996).

The WHO multi-city study of HIV prevalence among intravenous drug users, included two Brazilian cities, the port town of Santos and Rio de Janeiro (WHO Collaborative Study Group, 1993). In this study roughly half the sample came from drug treatment agencies and the other half were recruited directly from the community. The prevalence of HIV among drug users in Santos was 60% and in Rio de Janeiro 40%. In a more recent study, Carvalho et al (1996) used a snowball sample to investigate the prevalence of various infectious agents among of intravenous drug users in Santos. They found the following figures: HIV 62%, hepatitis B 75%, hepatitis C 75% and syphilis 34%. A multi-city study of the prevalence of HIV among intravenous drug users in five Brazilian cities, with a sample size of 701, has recently been completed with blood samples having been collected between August 1995 and December 1996 (Mesquita, 1997). The prevalence of HIV varied considerably between cities, ranging from 28% in Rio de Janeiro to 71% in Itajaí in the State of Santa Catarina.

These seroprevalence studies suggest that intravenous drug users are involved in high levels of HIV risk behaviour. This question was investigated in the above mentioned

study of 294 cocaine/crack users from 15 different treatment services in São Paulo (Dunn and Laranjeira, unpublished). In this study we investigated injecting history, in particular the sharing of injecting equipment. Thirty-two percent (n=95) of the sample had injected a drug at least once in their life and 25% (n=74) had been regular injectors. Cocaine was the drug most commonly injected. Sixty-eight percent of injectors described having borrowed a previously used syringe, 64% had lent their used syringe to someone else and 72% said that they usually shared injecting equipment. Apart from syringes, other injecting "works" were frequently shared, including spoons (78%) and rinse water (88%). Eighty-two percent of injectors said that they usually washed their syringe prior to use, but the majority used ineffective disinfecting agents, like cold tap water (71%).

HIV/AIDS and Hepatitis among Prisoners

A governmental research organization recently reviewed the liturature on the prevalence of HIV and other sexually transmitted diseases among prisoners in Brazil (NUPAIDS, 1996). They gathered together all published studies, including theses and conference abstracts that had been published between 1986 and 1996. Most of these studies were performed in single prisons, although one study used a statewide sample of prisoners from Rio de Janeiro (Matida et al, 1992). Many of the studies do not clearly specify how the samples were obtained but most used either volunteers or high-risk groups, such as known intravenous drug users. Few studies used random samples or systematic samples of all prisoners. Lorenço et al (1992) studied the prevalence of HIV in São Paulo's largest prison using a systematic sample of all new prisoners detained between 1990 and 1991. Among the 1 692 prisoners tested, 16.5% were already infected on entry into prison. In this study, prisoners were prospectively followed up and re-tested at the end of the study period.

He found a new infection rate among initially HIV negative prisoners of 0.6% per annum. The usual risk factors were associated with HIV seropositivity in all studies that investigated this question, namely intravenous drug use, homosexual or bisexual activity and a previous history of sexually transmitted diseases.

The prevalence of syphilis among prisoners has been reported as between 7 and 25%, depending on the type of sample used. Only two studies have measured the prevalence of hepatitis C, neither of which used random or systematic samples (Rozman et al, 1996; Soares et al, 1995). Soares et al (1995) found a prevalence of 6% among 63 volunteers from a prison with a total population of 70 in the State of Minas Gerais, whilst Rozman et al (1996) found a prevalence of 34% among 631 prisoners from a total prison population of 4 677. Likewise, the prevalence of hepatitis B varied widely depending on the type of sample used and whether HBsAg or anti-HBs were being measured. Souza et al (1989) measured both in a systematic sample of prisoners in the city of Bauru, São Paulo and found a prevalence of HbsAg of 4% and anti-HBs of 15% among 52 prisoners.

Recently, Ferreira et al (1996) used a prospective cohort design to measure the prevalence of tuberculosis and HIV among 350 female inmates of a prison in São Paulo and also looked at the incidence of new tuberculosis cases during a 12-month follow-up period. The prevalence of HIV was 25% and tuberculosis 5.7%. The incidence of new tuberculosis cases was 9.9 per 100 person-years for HIV-positive inmates and 0.7% per 100 person-years for HIV-negative inmates, a relative risk of over 14.

Drug Use in Brazil

There have been no epidemiological studies of the prevalence of illicit drug misuse in the general population, although two are currently being developed. The most methodologically rigorous studies of drug use have been undertaken in specific populations, in particular among primary and secondary school pupils (Galduróz et al, 1994; Carlini-Cotrim and Carlini, 1993) and among homeless street children (Armando et al, 1990). In the study of primary and secondary school children aged between 10 and 18 years, the most commonly used illicit drugs were solvents (15.4%), anxiolytics (5.5%) and cannabis (5.0%). Among treatment populations cocaine, either in the form of cocaine powder or crack, is the most commonly reported drug of misuse (Bastos et al, 1988; Castel and Malbergier, 1989). There is evidence that the number of patients using crack has been increasing since the start of the 1990s (Dunn et al, 1996). Heroin and other opiates are virtually unknown in most of Brazil, but there have been sporadic reports of heroin use in São Paulo in recent years (Laranjeira et al, 1997).

In the study of primary and secondary school children, the prevalence of cocaine use was found to be increasing. The first time the survey was undertaken in 1987 with a sample of over 16 000 pupils from ten Brazilian cities, the lifetime prevalence of cocaine use was 0.9% among boys and 0.3% among girls (Carlini-Cotrim and Carlini, 1993). The study was repeated again in 1989 and 1993 and the corresponding figures for boys and girls were 1.4% and 0.3% in 1989 and 2.0% and 0.6% in 1993 (Galduróz et al, 1994). Among homeless street children cocaine use was much higher. Two studies have been undertaken of drug use among street children using samples from five Brazilian cities (Armando et al, 1990). The first study was first performed in 1989 using a sample of 284 children and showed a lifetime prevalence of cocaine use of 12%. It was repeated in 1983 with a sample of 564 children and the lifetime prevalence of cocaine use had risen to 21%.

Drug Use Among Prisoners

There is remarkable little data available on illicit drug use among prisoners in Brazil, only three studies have investigated this question in any detail (Marins, 1995; Kallás, 1996; Lorenço, 1992). Lorenço (1992), using a systematic sample of 557 new admission to the largest prison in São Paulo and reported that 56% of prisoners had used illicit drugs prior to incarceration but only 18% had injected drugs in the past. Once incarcerated 51% continued to use some from of illicit substance, but only 1.5% continued injecting drugs. Kallás (1996) reported that 18% of prisoners had used intravenous drugs prior to imprisonment but only 1.5% continued using them in prison. Marins (1995) found a lifetime prevalence of illicit drug use of 78% among 917 inmates from a prison in Sorocaba, São Paulo, 28% of whom had injected drugs. Only 2% (n=19) continued injecting after incarceration, but the majority of these shared their injecting equipment with other prisoners. The prevalence of HIV among those prisoners who had ever injected drugs was 35% compared to 4.5% of those who had never used any illicit substance, a relative risk of 7.8.

HIV Prevention Campaigns

HIV educational and prevention campaigns have been running for many years in Brazil. They are mainly financed and coordenated by the Ministry of Health through a committee known as the Coordenação Nacional de DST/AIDS. There are usually two main campaigns per year, one that starts on the 1 December (the International Fight Against AIDS Day) and the second in the run up to the annual Carnival in February/March. All major media are used including television, radio, cinema, newspapers, magazines,

billboards and pamphlets. The prevention themes are also discussed in the popular soap operas, programmes that have the highest national audience ratings.

Carnival, a national public holiday, is a festivity traditionally associated with heavy alcohol consumption, drug use and freer sexual activity (Dunn, 1994). The campaign prior to Carnival tends to be more humorous than the December one. For example, the 1997 campaign used turkeys dressed up in carnival costumes (in portuguese the word turkey is *peru*, which is also the slang word for penis), with the suggestion that one's peru should always be dressed up in its costume (condom) during Carnival.

Non-governmental organizations are also actively involved in educational and prevention campaigns, often doing outreach work with so-called "high risk" groups, such as prostitutes and intravenous drug users. The most famous non-governmental organization to act in this area is GAPA (Grupo de Apoio à Prevençvão à AIDS), which works primarily with drug users but also distributes condoms free of charge to the general population during Carnival.

Although educational campaigns have been running for many years, the Government has had much more difficulty implementing direct action such as the introduction of needle exchanges for intravenous drug users. Despite the prevalence of HIV among intravenous drug users, various attempts to introduce needle exchanges in cities with the highest prevalence have been thwarted by legal interventions, usually instigated by the local Justice Departments. In the port city of Santos, where studies suggest that 60% of intravenous drug users are HIV positive, various unsuccessful attempts have been made to introduce a needle exchange (Dunn and Laranjeira, 1995). Only as late as 1997 did the State Legislator of São Paulo authorize needle exchanges and there are two currently functioning in the City of São Paulo.

Prevention Campaigns among Prisoners

In 1995 the Ministry of Health, through its AIDS coordinating committee (Coordenação Nacional de DST/AIDS), began to directly finance and support HIV prevention and educational campaigns in prisons. Contracts for the development of such campaigns were signed with 10 state governments in 1996 and further contracts are planned for 1998.

The main aim has been to increase the general level of HIV awareness and knowledge among both prison staff (wardens, administrators, nurses, doctors, teachers etc) and the prisoners themselves. Some of these interventions have been quite innovative, for example, in the State of São Paulo comic strips have been distributed to prisoners featuring a character known as *Vira Lata* (Street Dog), to educate prisoners about AIDS. *Vira Lata*, an ex-con, is seen in a series of explicit sexual adventures but is always seen using a condom. A comic book character was chosed to get the HIV message across because it is primarily visual and does not neccessitate much in the way of literacy skills on behalf of the prisoner.

Although needles and syringes are not distributed to intravenous drug users in Brazilan prisons, in the State of Rio Grande do Sul a programme has been developed whereby prisoners have access to disinfecting agents, such as bleach, so that clandestine injecting equipment can at least be sterilised.

A feature, perhaps unique to Brazilian prisons, is the *visita íntima* (intimacy visits). These were introduced as a specific measure to try to reduce the incidence of new HIV infections occurring in prisons caused by prisoners having sex with other inmates. The intimacy visits are aimed at male prisoners who have a stable relationship with a female

outside the prison. A room is set aside where the prisoner and his partner are able to have sexual relations on a regular basis. Condoms are usually available in these rooms. Intimacy visits are not permitted for female prisoners on the perhaps sexist grounds that they would increase the risk of female prisoners becoming pregnant and having babies in prison, where conditions are inadequate for their care and protection.

Conclusion

As this brief review shows, Brazil is a country with a serious crime problem, a growing cocaine/crack problem and one of the highest prevalences of AIDS in the world. The prevalence of HIV among intravenous drug users is between 28 and 71% and HIV positive drug users have acted as a channel through which HIV has spread into the general population, as evidenced by the current heterosexual epidemic. Many drug users become involved in criminal activity such as theft, robbery and drug trafficking and at some stage are likely to come into contact with the juducial system and spend time either in police cells or prison. Prisons are unsanitary, dilapidated and seriously overcrowded. This combination of factors would suggest that prisons are high-risk environments in which the spread of HIV and other infectious diseases, such as hepatitis and tuberculosis, are facilitated. Clearly action is needed on several fronts if the current situation is not to worsen. Education and prevention campaigns for the general population must continue but priority should be given to more active approaches, such as outreach work with high-risk groups. The systematic introduction of a country-wide network of needle exchanges and expansion of the HIV prevention programmes in prisons are two measures that could have a significant impact. In addition urgent consideration should be given to the introduction of some form of prison diversion scheme, to redirect drug-using offenders away from the custodial system into treatment agencies and/or community service.

As has already been mentioned, although HIV, drug use and crime are serious problems in Brazil, they are just three of the many equally if not more grave social problems that the country faces. The Government is under pressure from all sides to spend more money on social programmes. Reform priorities include, the redistribution of agricultural land, improving the quality of and access to public health services, better primary and secondary education to combat the relatively high levels of illiteracy and school evasion and investment to improve the basic infrastucture (sanitation, water supply, electicity and roads) of the many large shanty towns. To maintain economic stability and prevent a return to runaway inflation (40% per month in 1993), public spending is under tight Governemental control and many worthy schemes have had to be put on hold. Despite this, several innovative schemes have already been introduced to try to combat the rising prevalences of HIV, drug misuse and crime, but clearly much more needs to be done.

References

- Armando, R et al. Uso de psicotrópicos por meninos de rua: comparação entre os dados coletados em 1987 e 1989. In: *Abuso de drogas entre meninos e meninas de rua do Brasil*.CEBRID, São Paulo, 1990. pp 1-28.
- Bastos, F.I.M., et al. Perfil de usuários de drogas I estudo de características de pacientes do NEPAD/UFRJ 1986/87. *Revista ABP-APAL*, **10**: 47-52, 1988.
- Carlini-Cotrim, B. and Carlini, E.A. Illicit use of psychotropic substances among Brazilian students: 1987 and 1989 surveys. In: *Brazil United States Binational Research*.Ed. Monteiro, M.G. and Inciardi, J.A. CEBRID, São Paulo, 1993. pp 151-163.
- Castel, S. and Malbergier, A. Farmacodependência estudo comparativo de uma população atendida em serviço especializado: 1984-1988. *Revista ABP-APAL*, **11**: 126-132, 1989.
- Carvalho, H.B. et al. HIV and infections of similar transmission pattern in a drug injectors community of Santos, Brazil. *Journal of the Acquired Immune Deficiency Syndrome and Human Retrovirology*, **12**: 84-92, 1996.
- Dunn, J. Carnival and condoms. *Psychiatric Bulletin*, **18**: 575-76, 1994.
- Dunn, J et al. Crack cocaine: an increase in use among patients attending clinics in São Paulo: 1990 1993. *Substance Use and Misuse*, **31**: 519-27, 1996.
- Dunn, J and Laranjeira, R. News from Latin America. Addiction, 90: 295-299, 1995.
- Ferreira, M.M. et al. Tuberculosis and HIV infection among inmates in São Paulo, Brazil: a prospective cohort study. *Journal of the Acquired Immune Deficiency Syndrome and Human Retrovirology*, **13**: 177-83, 1996.
- Galduróz, J.C. et al. *III levantamento sobre o uso de drogas entre estudantes de 1º e 2º graus em 10 capitais Brasileiras, 1993*. CEBRID, São Paulo, 1994.

- Kallás, E.G. Prevalência e identificação dos fatores de risco para infecção pelo vírus da imunodeficiência humana na Casa de Detenção de São Paulo. Masters Thesis.
 Department of Infectious Diseases and Parasitoses, Escola Paulista de Medicina,
 São Paulo, 1996.
- Laranjeira, R. et al. Heroína: a próxima epidemia de drogas no Brasil? *Journal brasileiro* de Psiquiatria, **46**: 5-7, 1997.
- Lorenço, R. Epidemiologia da infecção pelo VIH-1 nas instituições carcerária masculinas do complexo penitenciário do Carandiru São Paulo. Masters Thesis. Department of Infectious Diseases and Parasitoses, Escola Paulista de Medicina, São Paulo, 1992.
- Marins, J.R.P. *Soroprevalência da infecção pelo HIV em população carcerária*. Masters Thesis. Faculdade de Ciências Médicas, UNICAMP, São Paulo, 1996.
- Matida, A.H. et al. Prevalência de soropositividade para o vírus HTLV-III/LAV em populações carcerárias masculinas do estado do Rio de Janeiro resultados preliminares. In: *Inventário de recursos de pesquisa em SIDA América Latina e o Caribe 1983-91*. Brazil, OPS, 1992. p 117.
- Mesquita, F. Projeto Brasil aumento do consumo de heroína no Brasil. *Encarte do Boletim Epidemioógico AIDS, Ano IX,* **No. 6**: 3-4, 1997.
- NUPAIDS. Pesquisa para diagnóstico rápido (PDR) a partir de fontes secundárias sobre a situação do HIV/AIDS e outras DSTs do sistema prisional. Núcleo de Pesuqisa Epiedmilógicas em AIDS, Universidade de São Paulo, 1996.
- Rozman, M.A. *AIDS e tuberculose na Casa de Detenção de São Paulo*. Masters Thesis. Faculdade de Medicina, Universidade de São Paulo, 1995.
- Soares, B.C.C. et al. Soropreval6encia de HIV-1, HTLV-I/II, hepatites B e C, sífilis e

- chagas em população de Manhuçu, M.G. *Congresso Brasileiro de Epidemiologia* [1035], 1995. p 270.
- Souza, P. et al. SIDA/AIDS prevention for risk behaviour individuals: a health promotion programme under way in Brazil. *International Conference on AIDS*, San Fransisco, USA, 23-24 June, 1990. Poster S.C. 682.
- WHO Collaborative Study Group. An international comparative study of HIV prevalence and risk behaviour among drug injectors in 13 cities. *Bulletin of Narcotics*, **45**: 19-46, 1993..