

Brazil: the epidemic that was allowed to happen

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Bloor,¹ recently described Latin America as the forgotten continent in terms of HIV infection. After the United States, the country with the greatest number of reported cases of AIDS is not in Africa, Europe or Asia but is in fact Brazil. From when records began in 1980 until August 1995, 62 314 cases of AIDS had been reported in Brazil; this with an estimated 50% of cases going unnotified in some states. Transmission by intravenous drug use (IVDU) accounted for 22% of cumulative cases and 19.3% of those reported in 1994/95. Until August 1995, the cumulative number of AIDS cases in which IVDU was the main risk factor was 13 752 (22 times the UK figure, for a country with a population only three times as large).

The WHO co-ordinated multicentre study showed that the prevalence of HIV among intravenous cocaine users from in and out of treatment samples in the cities of Rio de Janeiro and Santos was 40% and 60%, respectively.² An opportunistic, community-based study of a network of 119 cocaine injectors (21 of whom had become infected with malaria) from the city of Bauru in the state of São Paulo showed an HIV prevalence of 58%.^{3,4}

Apart from the high prevalence of HIV among IVDUs, the other aspect of the Brazilian HIV epidemic that most distinguishes it from that of the United Kingdom's is that a heterosexual epidemic has occurred. For the period 1980/87, when figures started to be collected, the male to female ratio of reported AIDS cases was 12:1, by 1990 it had fallen to 7:1 and in 1994/95 to 3.6:1. Spread to the general population occurred via three main routes: from IVDUs to their non-drug-using sexual partners, from infected female drug users (or the partners of users) to their newborn children and from bisexual men to their female sexual partners. Heterosexual transmission is now the most common risk factor among patients with AIDS, accounting for 27.8% of cases in 1994/95.

Within this bleak picture lies an important message for the United Kingdom. In Brazil, like Europe and the United States, AIDS is caused almost exclusively by HIV-1. Like the United States, and Europe, Brazil started off as a so-called "Pattern I" country with HIV primarily

affecting male homosexuals, haemophiliacs and recipients of blood transfusions. This was soon followed by an epidemic among IVDUs and we are currently witnessing an epidemic among the non-drug-using heterosexual population; laying the myth that such epidemics only occur in "Pattern II" countries, like Africa, where HIV-2 predominates. Brazil both represents what could have happened in the United Kingdom and what might happen in the future, if preventive measures are abandoned. Therefore, it is important to examine the differences in the public health responses between these two countries, to try to understand why the HIV epidemic among IVDUs was averted in the United Kingdom but not in Brazil and why in the latter it was allowed to spread to the heterosexual population.

One of the first differences is in the provision of health. Public health services in Brazil are precarious, underfunded and understaffed. Most care is provided in hospitals and not the community; therefore, the health system was not ideally placed to start identifying cases of HIV before patients began to die of HIV-related disease. Once identified, there was no network of primary health care services in place to develop and implement preventive measures. Although there have been several education and prevention campaigns on television, these were largely aimed at the general population. Campaigns targeted at high risk groups and direct action have been limited, for example, to the distribution of condoms at the annual Carnival.

Treatment services for drug users were, and still are, few and far between and are usually located in centres of excellence, often many miles away from where most drug users actually live. Services tended to offer mainly psychodynamic psychotherapy and family therapy and were thus ill-equipped to deal with new approaches such as harm-minimization and outreach work. There are several non-governmental organizations actively working with HIV-positive patients and drug users, but they are fairly recent arrivals and have not yet acquired the lobbying tactics and political clout of their UK equivalents.

These problems are well illustrated by protracted bureaucratic struggle to introduce a system of needle-exchanges. In the United Kingdom, the first needle-exchange was opened in 1986, 2 years before the first ACMD *Report on AIDS and Drug Misuse* was published, and by

1989 120 exchanges were up and running in England alone.⁵ In Brazil attempts were first made to introduce a needle exchange in the port city of Santos in 1989, but the doctor in charge of the scheme and the local authority were threatened with prosecution and the centre closed down. The Brazilian Federal Government only sanctioned the introduction of needle exchanges in 1994, and in 1995 the first official exchange was opened (but subsequently closed down). On the eve of the 1995 International Fight Against AIDS Day, the local police in Santos seized the complete stock of needles and syringes, on the order of the Public Prosecutor, from a new exchange that was due to open. Many politicians and law-enforcement agencies are actively against needle-exchanges and are fixated on the fear that they will lead to an increase in drug use, despite the fact that this has not happened in other countries.

Professor Stimson suggests that the HIV epidemic among IVDUs was averted in the United Kingdom by the introduction of preventive measures and that these worked because they were introduced early when prevalence was still low. In Brazil such an opportunity has been missed and public health agencies are at least two steps behind the epidemic. Indeed, measures such as needle exchanges may have little impact on prevalence now that the principal mode of transmission is by heterosexual contact. Stimson's note of caution that the low prevalence of HIV among IVDUs should not act as a signal for the government to withdraw and re-direct financial resources away from prevention, should be heeded. The case of Brazil illustrates the reason why only too well—epidemic spread can happen and with disastrous consequences for the whole population.

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Averting a global epidemic

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The epidemic spread of HIV infection among injecting drug users (IDUs) can be prevented, stopped and even reversed. There is a growing body of evidence that this is the case in different cities and countries around the world. Both a comparative study of drug-injecting behaviour and HIV infection involving 12 cities in 10 countries (Ball *et al.*, 1994) and a review of prevention activities and risk behaviour in five cities with a stable low HIV seroprevalence among IDUs (Des Jarlais *et al.*, 1995) concluded that three prevention components were associated with containment of the epidemic. These three components included: a rapid and concerted response while seroprevalence was low; community outreach to IDUs; and widespread availability of sterile injection equipment. In addition, education and public awareness were considered important elements. Stimson's editorial, and a further paper of his (Stimson, 1995), supports these conclusions.

While the international evidence is becoming more convincing, the above authors recommend caution in the interpretation of findings, further research to better understand risk behaviour and the context of drug injecting, and more thorough evaluation of specific interventions. Such caution recognizes the truly complex nature of the issue and helps to remind us that the three components referred to above do not stand alone.

Whereas we are seeing a maturation of the HIV epidemic among IDUs in most of the developed world, the situation for many developing countries is quite different. Within the past 5 years injecting drug use (IDU), and with it HIV infection, have rapidly spread to every global