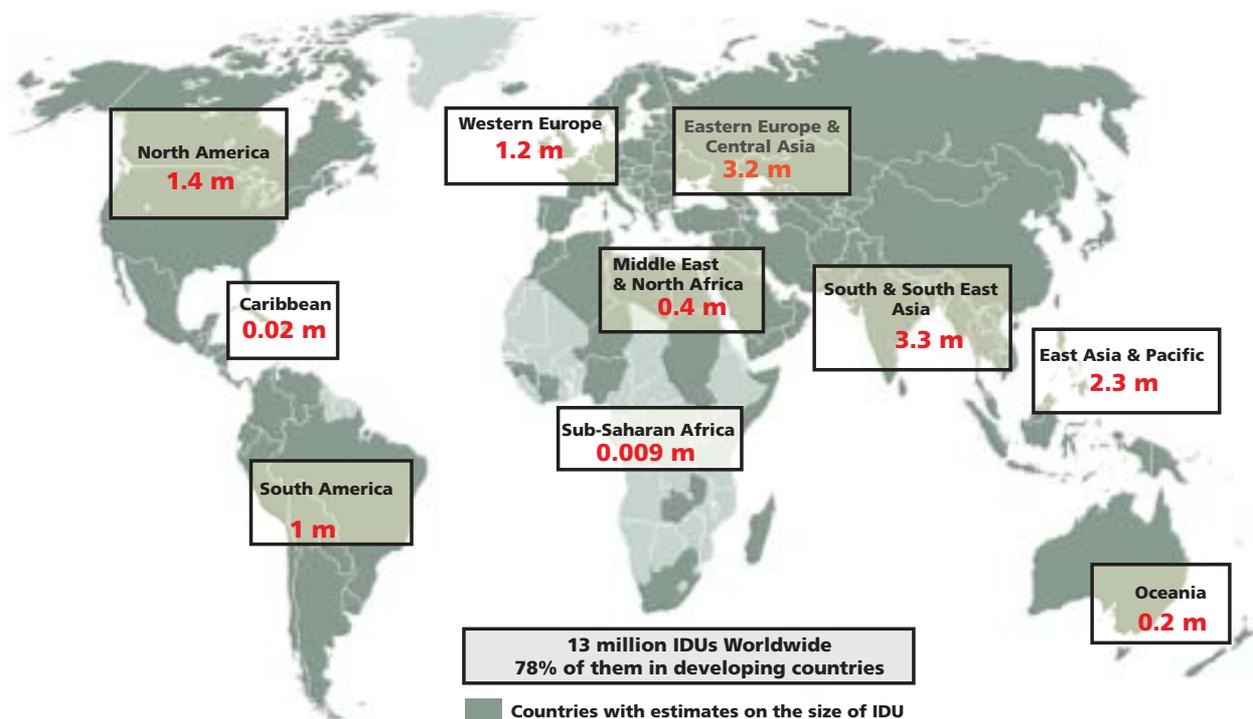


1.3 INJECTING DRUG USE AND HIV/AIDS

Global estimates, provided by UNAIDS and WHO, indicate that by the end of 2003 between 34 and 46 million people were living with HIV/AIDS. Between 4.2 and 5.8 million people were infected in 2003 alone. In the same year, between 2.5 and 3.5 million people died of AIDS. While the bulk of new infections are due to unsafe sexual behaviour, the use of contaminated injection equipment among injecting drug users continues to fuel the pandemic, particularly in Eastern Europe, Central, South and South-East Asia and Latin America.

Map 2: Estimates on the size of the IDU populations available in 130 countries and territories (1998 - 2003)



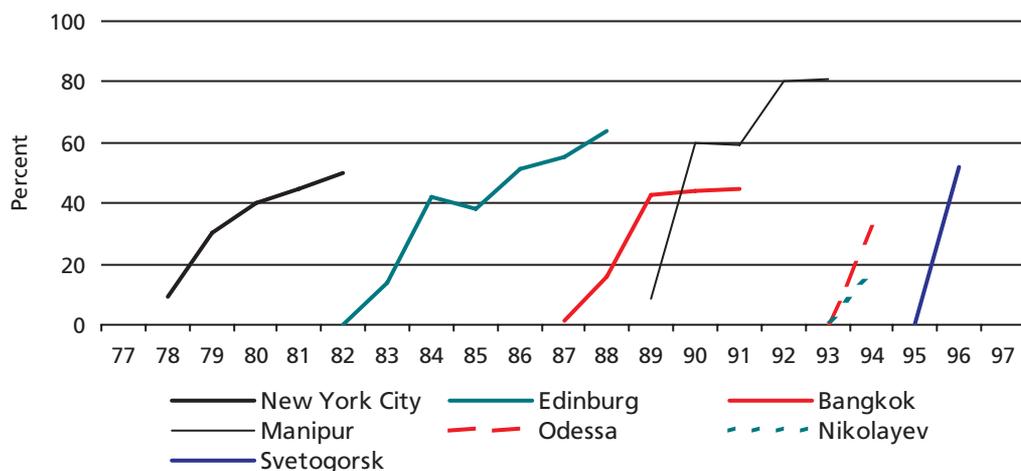
Source: Reference Group on the Prevention and Care of HIV/AIDS Among Injecting Drug Users, 2002.

1.3.1 Extent and characteristics of HIV/AIDS epidemics among injecting drug users

According to a review of the Reference Group on the Prevention and Care of HIV/AIDS Among Injecting Drug Users in 2003, information on the size of the injecting drug users population is available for 130 countries and territories, and data on the association of HIV infection with injecting drug use for 78. The group estimated that there are approximately 13 million injecting drug users worldwide, of which 8.8 million are in Eastern Europe, Central, South and South-East Asia, 1.4 million in North America, and 1 million in Latin America.

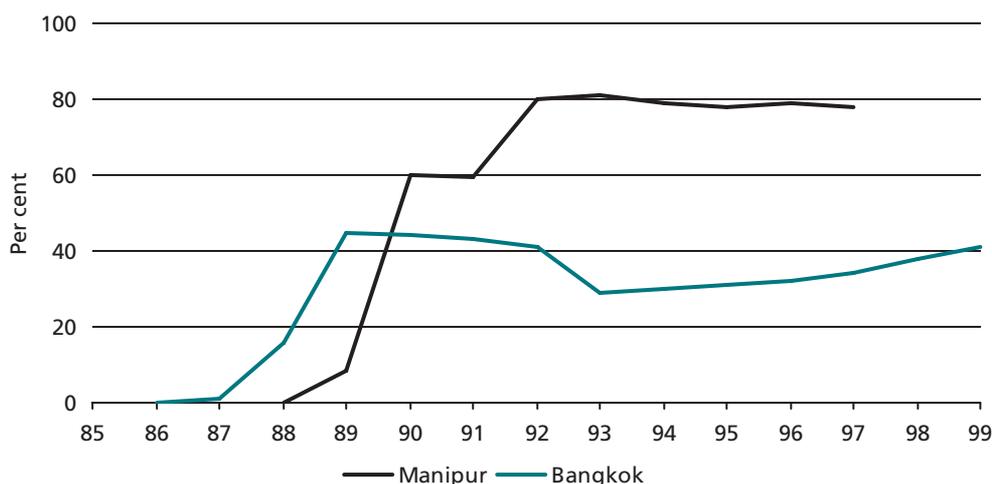
HIV/AIDS epidemics among injecting drug users are characterised by significant regional and in-country variations, but prevalence figures for HIV/AIDS among injecting drug users easily reach more than 50% and in some cases up to 90% of the injecting drug use population in a very short period of time, often less than six months. Examples for such epidemic explosions include various cities in North America, some countries of the former Soviet Union, and countries and localities in South and South-East Asia. Experience also shows that if resolute action is not taken quickly, prevalence remains at very high levels for a long time.

Fig. 31: Outbreaks of HIV/AIDS epidemics among injecting drug users, selected cities



Source: Ball, AL, Rana S, Dehene, KL, HIV Prevention among Injecting Drug Users: Responses in Developing and Transitional Countries, Public Health Reports 113, Supplement 1, 170-181, 1998; and Stimson GV, Adelekan M, Rhodes T, The diffusion of drug injection in developing countries, Paper presented at the Sixth International Conference on the Reduction of Drug Related Harm, Florence, Italy, 1995

Fig. 32: HIV/AIDS prevalence among injecting drug users in Manipur (India) and Bangkok (Thailand) 1988-1997

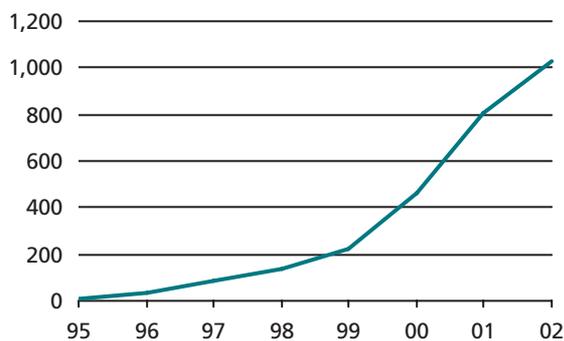


Sources: U.S. Census Bureau, Population Division, International Programs Center, Health Studies Branch, May 2003, and Weniger BG, Limpakarnjanarat K, Ungchisak K, Thanprasertsuk S, Choopanya K, Vanichseni S, Uneklabh T, Thongcharoen P, Wasi C. *The epidemiology of HIV infection and AIDS in Thailand*, AIDS 1991; 5(suppl 2): S71-S85

The recently evolving HIV/AIDS epidemics in countries of the former Soviet Union are of particular concern. Though heroin is the most frequently injected drug, a significant number of users also inject the so-called 'home produced' drugs, including 'jeff' and 'vint' (ephedrine-based stimulants extracted from cough syrups or tablets), and 'hanka' (a liquid derivative of opium poppy). The sharing of injection equipment, particularly needles and syringes, is widespread with many injecting drug users also reporting practices whereby a drug solution is squirted from a donor syringe into another, either by removing the plunger ('back loading') or needle ('front loading') from the receiving syringe. Drug users often share filters and rinse water, and draw up their drug solution from a common pot.

Various explanations have been offered for the HIV/AIDS epidemic in these countries. The most frequently cited ones concern the collapse of institutions, particularly for health and drug control, which followed the break-up of the Soviet Union. This, combined with

Fig. 33: Registered HIV infections per million in countries of former USSR, cumulative



Source: European Centre for the Epidemiological Monitoring of AIDS, HIV/AIDS surveillance in Europe, Report 69, Midyear Report 2003

expanding production in Afghanistan, created a huge influx and increased availability of drugs. Drug treatment and health care facilities could not cope with the rapidly increasing number of injecting drug users and the health and social consequences of drug use. One of the most disturbing dimensions of the epidemic is the fact that young people below the age of 24 constitute the majority in the drug injecting population and are those mostly affected by HIV/AIDS^q.

Serious HIV/AIDS epidemics among injecting drug users have also been observed in countries of South, South-East and East Asia. Many of these countries have a tradition of opium smoking for health reasons (to ease the symptoms of lung and bowel diseases). With changing illicit drug market patterns, however, many users switched from smoking opium to injecting heroin, thereby significantly increasing the risk of blood-borne infections. Except for Cambodia, all HIV/AIDS epidemics in that region started in injecting drug use populations in the late 1980s and early 1990s, and later moved into the general population. Injecting drug use still remains the most frequent route of HIV transmission in these countries and continues to fuel the epidemics^r.

In countries of Latin America, cocaine is the most frequently injected drug. Cocaine users inject more frequently than opiate users, thereby increasing significantly the risk of HIV transmission. As in other countries, drug consumption behaviour depends on illegal drug market patterns, and particularly in Latin American countries crack cocaine, which is not injected, sometimes replaces cocaine use. Evidence suggests that the use of crack is strongly associated with high-risk sexual behaviour, thus contributing to the spread of HIV^s.

- q) Tim Rhodes, Catherine Lowndes, Ali Judd, Larissa A. Mikhailova, Anya Sarang, Andrey Rylkov, Mikhail Tichonov, Kim Lewis, Nina Ulyanova, Tatiana Alpatova, Victor Karavashkin, Mikhail Khutorskoy, Matthew Hickman, John V. Parry and Adrian Renton: *Explosive spread and high prevalence of HIV infection among injecting drug users in Togliatti City, Russia*; AIDS 2002, 16:F25-F31
- r) Reid, G and Costigan, G. *Revisiting The Hidden Epidemic; A situation assessment of drug use in Asia in the context of HIV/AIDS*. The Centre for Harm Reduction, Australia, January 2002; The World Bank, Social Monitor Thailand, *Building on Success, Confronting the future*, Bangkok, November 2000
- s) Rossi D, Goltzman P, Cymerman P, Touze G, Weissenbacher M. *Human immunodeficiency virus/acquired immunodeficiency syndrome prevention in injection drug users and their partners and children: lessons learned in Latin America—the Argentinean case*. Clin Infect Dis. 2003 Dec 15;37 Suppl 5:S362-5; Touze G. *Obstacles to the development of prevention and public health policies in Argentina*. Clin Infect Dis. 2003 Dec 15;37 Suppl 5:S372-5; Calleja JM, Walker N, Cuchi P, Lazzari S, Ghys PD, Zacarias F. *Status of the HIV/AIDS epidemic and methods to monitor it in the Latin America and Caribbean region*. AIDS. 2002 Dec;16 Suppl 3:S3-12.

The rise in HIV infections among injecting drug users in the Middle East and North Africa is also a cause for concern. In some countries, more than half of all known HIV infections are among injecting drug users. Prison settings seem to be particularly high-risk environments: HIV prevalence among injecting drug users in 10 prisons in Iran has reached as high as 63 per cent. It has been estimated that Iran could be home to as many as 200,000 injecting drug users^t.

1.3.2 HIV transmission among injecting drug users

The shared use of syringes and needles has been associated with HIV transmission among injecting drug users since the beginning of the HIV/AIDS pandemic in the 1980s. Commonly referred to as "syringe or needle sharing," this represents a situation in which two or more drug users sequentially use the same injecting equipment to inject a dose of liquefied drugs, such as heroin, other opiates, cocaine or amphetamines. Factors that lead to needle and syringe sharing include borrowing and lending, selling, buying and renting, or even picking up a syringe discarded by a previous user. Sharing of needles and syringes is often a consequence of a lack of perceived risk for HIV infection, group norms and rituals, inaccessibility of clean injecting equipment, and / or the inability to carry injecting equipment due to familial, social or legal environments.

In situations where injecting drug users prepare and use drugs together, a variety of additional avenues for HIV transmission exist. For example, injecting drug users often share items while preparing the drug for consumption, including cookers, water cups, filters, spoons and swabs, ampoules and other containers used for drug preparation, storage and transport, among others. Within the networks of drug consumers, use of drugs is rarely an individual act and the sharing of drugs is an

important and frequent communal activity, associated with economic and social incentives. One situation, strongly associated with HIV infection, is the use of so called "shooting galleries", particularly when renting injection equipment at these venues is included. Another context is the use of professional injectors, where those selling the drugs also do the injecting, using the same syringe and needle for many clients.

There are indications that individual risk behaviour is influenced by the context in which drugs are purchased and used, including drug paraphernalia laws, which govern the accessibility and availability of clean injecting equipment, drug policing and law enforcement practices, gender, ethnic and health inequalities, and general public policies oriented to health and drug use more broadly.

There is evidence that individual injecting risk behaviour and HIV infection among injecting drug users is associated with the length of the drug taking career^u, injecting frequency^v, the types of drug used^w, unstable living conditions^x, imprisonment^y as well as the availability of clean injection equipment^z. The length of the injecting career is positively associated with the likelihood of being infected with HIV. Some studies^{aa} suggest, however, that younger, less experienced injectors are at an increased risk for HIV infection, because they seem more likely to engage in risk behaviours, while their older, more experienced counterparts may be more competent in managing risk situations.

HIV is not only transmitted through the sharing of injection equipment among injecting drug users, but also through sexual transmission to partners. High-risk sexual behaviour, i.e., having sex without using a condom, is often linked with drug use. Female drug users who are also sex workers and do not use condoms regularly are particularly at risk of acquiring and trans-

t) UNAIDS, WHO. AIDS Epidemic Update, December 2003.

u) Estebanez P, Russell NK, et al. Determinants of HIV prevalence amongst female IDU in Madrid. *Euro J Epidemiol* 2001;17(6):573-580.

v) Bruneau J, Lamothe F, et al. Sex-specific determinants of HIV infection among injection drug users in Montreal. *Canadian Med Assoc J* 2001;164(6):767-773; Strathdee SA, Galai N, Safaiean M, Celentano DD, Vlahov D, Johnson L, Nelson KE. Sex differences in risk factors for HIV seroconversion among injection drug users: a 10-year perspective. *Arch Int Med* 2001;161:1281-1288.

w) Chaisson RE, Bacchetti P, Osmond D, Brodie B, Sande MA, Moss AR. Cocaine use and HIV infection in intravenous drug users in San Francisco. *JAMA* 1989;261:561-565.

x) Patrick DM, Strathdee SA, et al. Determinants of HIV seroconversion in injection drug users during a period of rising prevalence in Vancouver. *Int J STD AIDS* 1997;8(7):437-45.

y) Muller R, Stark K, Guggenmoos-Holzmann I et al. Imprisonment: a risk factor for HIV infection counteracting education and prevention programmes for intravenous drug users. *AIDS* 1995;9:183-90.

z) Grund J-PC, Friedman SR, Stern LS, Jose B, Neaigus A, Curtis R, Des Jarlais DC. Drug sharing among injecting drug users: patterns, social context, and implications for transmission of blood-borne pathogens. *Soc Sci Med* 1996;42(5):691-703.

aa) For example, Fennema JSA, van Ameijden EJC, van den Hoek A, et al. Young and recent-onset injecting drug users are at higher risk for HIV. *Addiction* 1997;92:1457-1465.

mitting HIV. In several countries, such as the United States, Spain and Italy, sexual transmission of HIV from injecting drug users to non-drug injecting sexual partners has long been the dominant pattern of heterosexual transmission.

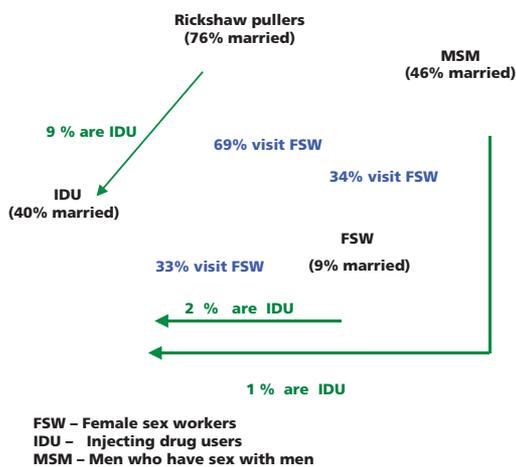
One of the reasons why HIV spreads from injecting drug users to other populations is the fact that a considerable number of drug users enter into sex work to finance their drug dependence. In fact, among drug users, sex work is often seen as an alternative to criminal behaviour to obtain cash or drugs. It has often been observed that sex workers inject stimulants to be able to cope with the stress of their profession^{ab}. Hard data on the problem are scant, but the little available information indicates that there are significant numbers of drug injecting sex workers and sex working injecting drug users^{ac} in Eastern and Western Europe, Central Asia, South and South-East Asia and the Americas. For example, a study of street sex workers in an Eastern European

country indicated that 24.6% of them were also injecting drug users. Another study examining female injecting drug users in North America found that 70% of them also exchanged sex for money or drugs^{ad}. In the same study, 56% of male injectors had also exchanged sex for money or drugs^{ae}.

A study carried out in Dhaka, Bangladesh indicates that in a sample of male sex workers, 11% had injected drugs. Among male injecting drug users in the same city who had injected for two years or less, 16% had exchanged sex for cash or drugs.

Another reason for the diffusion of the virus from injecting drug users to the general population is the fact that injecting drug users are frequently incarcerated. The sharing of injecting equipment and sexual intercourse, mostly between men, is widespread in prison settings of most countries of the world, and the likelihood of being infected with HIV is very high. As a consequence, HIV infection rates in prison settings are generally higher than the national average^{af}. After the prisoner's release, the virus is spread via sexual transmission to sexual partners, and via needle sharing to other injecting drug users. There are approximately 10 million people imprisoned across the world at any given time. This is a shifting population, with large numbers of people entering prisons and/or being released. A total figure of about 30 million prisoners worldwide annually is therefore not far fetched. These prison populations constitute a significant risk factor for the diffusion of HIV.

Fig. 34: Mixing patterns of different subpopulations, Bangladesh



Sources: Government of Bangladesh. Report on the Second Expanded HIV Surveillance, 1999-2000, Bangladesh, Dhaka, GoB/UNAIDS, 2000; Based on data of FHI Bangladesh and the MAP group, 2001

1.3.3 Measures to respond

Twenty years of research in various aspects of HIV/AIDS among injecting drug users and the experience from numerous programmes and projects indicate that HIV/AIDS epidemics among injecting drug users can be prevented, stabilized and even reversed. One important lesson learned is that effective responses have to be based on sound assessment of the drug use and

ab) Alegria M, Vera M, Freeman DH et al. HIV infection, risk behaviors, and depressive symptoms among Puerto Rican sex workers. *Am J Public Health* 1994;84:2000-2

ac) Chaplinskas S & Mårdh P. Characteristics of Vilnius prostitutes. *Int J STD & AIDS*, 2001, 12:176-180.

ad) Rothenberg R, Long D, Sterk C, Pach A, Potterat J, Muth S, Baldwin J, Trotter R. The Atlanta Urban Networks Study: a blueprint for endemic transmission. *AIDS* 2000;14:2191-2200.

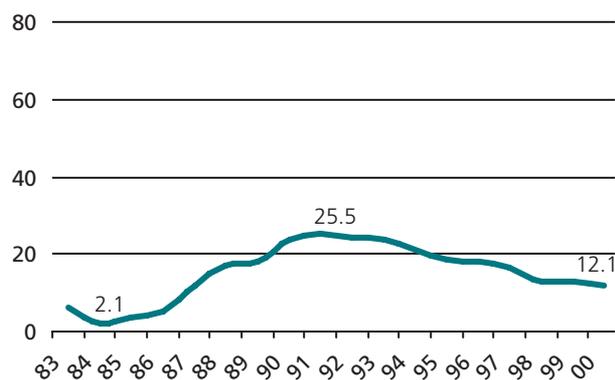
ae) Government of Bangladesh. Report on the Second Expanded HIV Surveillance, 1999-2000, Bangladesh, Dhaka, GoB/UNAIDS, 2000.

af) Jürgens, R, HIV/AIDS prevention for drug dependent persons within the criminal justice system, Presentation at the Commission on Narcotic Drugs Ministerial Segment: Ancillary Meeting on HIV/AIDS and Drug Abuse, Vienna 2003

HIV situation, and the socio-cultural and political context. Policies governing HIV/AIDS prevention have to adopt pragmatic approaches taking into account that drug dependence is a chronically relapsing condition and therefore provide for addressing high-risk behaviour.

There is some evidence to suggest that the availability and regular use of clean injecting equipment can prevent, halt and perhaps even reverse HIV/AIDS epidemics among injecting drug users. Examples include cities such as Sydney, Glasgow and Toronto. In Brazil, extensive outreach to injecting drug users reduced the percentage of injecting drug users in newly detected HIV infections from a high of 25.5% in 1991 to 12.1% in the year 2000. If clean injecting equipment becomes scarce, as happened for example in Edinburgh in the early 1980s (see the figure on selected cities above), a serious HIV/AIDS epidemic could be provoked^{ag}.

Fig. 35: Percentage of injecting drug users among newly detected HIV infections in Brazil



Source: UNODC, Country Office Brazil.

Effective programmes could typically include a wide variety of measures ranging from drug dependence treatment, including substitution treatment, outreach to injecting drug users to provide them with information on safer sex and injecting practices, clean needles and

syringes, and condoms, voluntary counselling and testing, treatment of sexually transmitted infections, and interventions for special populations-at-risk such as prisoners and sex workers who inject drugs. Such prophylactic measures are desirable, but, as the International Narcotics Control Board has noted, should not promote and/or facilitate drug abuse^{ah}.

Both scientific evidence and the experience with such programmes would seem to indicate that such a package would be effective in reducing the risk of HIV transmission among injecting drug users and the risk of HIV diffusion from drug users to the general population. Over the past two decades effective programmes have moved through a significant paradigm shift, away from waiting for drug users to enter institutional services, to offering services to drug users where they are: in their communities and where they use drugs.

1.4. CONCEPTUAL ADVANCES IN DRUG CONTROL

The preceding sections of this chapter have presented the terms of the difficult equation that must be solved by the international community. On one side, clear policy objectives and a long established consensus on the need to address the drug problem through a multi-lateral approach has generated one of the most developed systems of international cooperation ever created in the realm of social policy. Decades of experience accumulated by drug control agencies at national, regional and global levels have helped to progressively identify virtually every possible dimension of the drug problem and to evolve an array of corresponding interventions. Drug control programmes now span many domains of traditional public policy, from justice and police, to economics and finance, and to education and health. On the other side of the equation, despite the favourable comparison with the public health disaster created by the largely uncontrolled tobacco industry, it is undeniable that results have so far not been commensurate with the ambitions enshrined in the UN drug conventions and consistently reaffirmed by policy makers and public opinion thereafter.

ag) Brettle RP. Epidemic of AIDS related virus infection among intravenous drug abusers. *BMJ* 1986;292:1671.

ah) *Report of the International Narcotics Control Board for 2003*, p.36. New York, March 2004