At risk and neglected: four key populations 05

Chapter 05

AT RISK AND NEGLECTED: FOUR KEY POPULATIONS

This chapter focuses on four populations: sex workers; men who have sex with men; injecting drug users; and prisoners. In most countries, these populations tend to have a higher prevalence of HIV infection than that of the general population because (i) they engage in behaviours that put them at higher risk of becoming infected and (ii) they are among the most marginalized and discriminated against populations in society. At the same time, the resources devoted to HIV prevention, treatment and care for these populations are not proportional to the HIV prevalence—a serious mismanagement of resources and a failure to respect fundamental human rights.

In countries with low-level and concentrated epidemics, well-designed and adequately funded HIV prevention programmes among these populations have proven decisive in slowing or even stopping the epidemic in its tracks. For example, in the late 1980s, Thailand moved decisively to implement its brothel-based "100% condom use" programme, which provided concentrated HIV prevention services to sex workers and their clients. Had it not done so, adult HIV prevalence today would be an estimated 15%—10 times the current level of about 1.5% (MAP, 2005). Countries with generalized epidemics that place a high priority on HIV programming for these populations, guided by epidemiological surveillance, will ensure the most effective use of resources.

Sex workers, men who have sex with men, injecting drug users and prisoners are largely under-represented and voiceless in the decision-making processes that affect their lives, including those related to HIV. Yet where they have been engaged in responses to the epidemic, they have often been among the most effective actors in those responses. Civil society's involvement in responding to AIDS began with associations of men who have sex with men in industrialized countries, followed by organized groups of sex workers and injecting drug users in various parts of the world (see 'Civil society' chapter).

HIV RISK AND VULNERABILITY

HIV risk can be defined as the probability of an individual becoming infected by HIV either through his or her own actions, knowingly or not, or via another person's actions. For example, injecting drugs using contaminated needles or having unprotected sex with multiple partners increases a person's risk of HIV infection. Vulnerability to HIV reflects an individual's or community's inability to control their risk of HIV infection. Poverty, gender inequality and displacement as a result of conflict or natural disasters are all examples of social and economic factors that can enhance people's vulnerability to HIV infection. Both risk and vulnerability need to be addressed in planning comprehensive responses to the epidemic (UNAIDS, 1998).

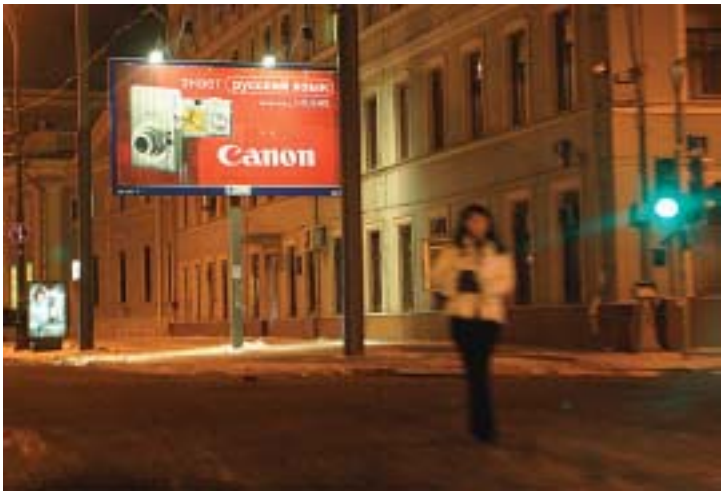
Many other populations are also vulnerable to HIV (e.g. women and girls, young people, people living in poverty, migrant labourers, people in conflict and post-conflict situations, refugees and internally displaced people) and their HIV prevention needs should also be addressed.

Sex workers

While it is not possible to accurately count the number of people selling sex, it is estimated that sex workers may number in the tens of millions worldwide—and their clients in the hundreds of millions.

While sex workers can be of all ages, most are young and the great majority are female; their clients (for both male and female sex workers) are mostly male. In many countries, a high percentage of sex workers are migrants.

Although countries may criminalize sex work and thereby subject the act of buying or selling sex for money to criminal sanction, sex workers have the same human rights as everyone else, particularly rights to education, information, the highest attainable standard of health and freedom from discrimination and violence, including sexual violence.



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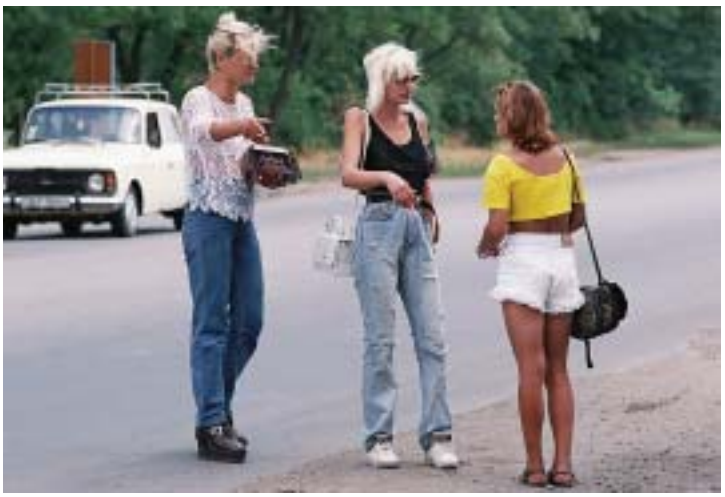

Governments have a responsibility to protect these rights and, in the context of the HIV epidemic, to reach sex workers and their clients with the full panoply of HIV information, commodities and services. Furthermore, ways must be found to empower sex workers to use these HIV services and to actively participate in the design and provision of the health services they need.

HIGH RATES OF HIV INFECTION

In Asia, a high proportion of new HIV infections are contracted during paid sex, and a relatively high HIV prevalence has been found among sex workers in many countries. In Viet Nam, HIV prevalence among female sex workers increased rapidly throughout the 1990s, from 0.06% in 1994 to 6% in 2002. In Indonesia, the rate of HIV infection among female sex workers is 3.1% nationally but varies significantly from region to region. In Jakarta, it reached 6.4% in 2003 (MAP, 2005). In China, it is estimated that sex workers and their clients account for just less than 20% of the total number of people living with HIV (Ministry of Health, People's Republic of China/UNAIDS, 2005a).

High HIV prevalence is also found in the Caribbean and Latin America (Pan Caribbean Partnership on HIV/AIDS, 2002). In Suriname, HIV prevalence among female sex workers was found to be 21% in a 2005 study, while in Guyana, levels of almost 27% were recorded in 2004. Jamaica reported an HIV prevalence of 20% among female sex workers in 2002 (Ministry of Health of Jamaica 2002), while in El Salvador, 16% of street-based sex workers in San Salvador and Puerto de Acajutla tested HIV-positive in the same year (Ministerio de Salud Pública y Asistencia Social de El Salvador, 2003).

While little is known about sex work in the Middle East and North African countries, one exception is Tamanrasset, where HIV prevalence rose from 1.7% in 2000 to 9% in 2004 among sex workers (World Bank, 2005). More is known about Eastern Europe and Central Asia. For example, a study in St Petersburg, Russian Federation, found that 33% of sex workers under 19 years of age tested HIV-positive (Central and Eastern European Harm Reduction Network/OSI, 2005).

In major urban areas of sub-Saharan Africa, various studies over the past eight years have recorded HIV infection among female sex workers at levels as high as 73% in Ethiopia, 68% in Zambia, 50% in Ghana and South Africa, 40% in Benin, 31% in Côte d'Ivoire, 27% in Djibouti and Kenya, and 23% in Mali (UNAIDS, 2003). These data underscore the need for HIV prevention efforts to be scaled up among sex workers, even in countries with generalized epidemics.

SEX WORK AND DRUG USE

In many parts of the world, sex work and injecting drug use are intricately linked: drug users resort to sex work to fund their habit, while sex workers turn to injecting drugs to escape the pressures of their work. Sex workers who also inject drugs are at further risk, not least because the combination of their work and drug taking puts them beyond the protection of the law and so opens them to exploitation and abuse, including sexual violence and harm, and incapacity to negotiate condom use.

High rates of HIV and sexually transmitted infections have been found among sex workers in countries with large populations of injecting drug users. In China, Indonesia, Kazakhstan, Ukraine, Uzbekistan and Viet Nam, the large overlap between injecting drug use and sex work is linked to growing HIV epidemics (UNAIDS, 2005a). In Manipur, India, which has a well-established HIV epidemic driven by injecting drug use, 20% of female sex workers said they injected drugs, according to behavioural surveillance (MAP, 2005). In Ho Chi Minh City, in 2002, 49% of sex workers who reported injecting drugs were found to be HIV-positive, compared to 19% of sex workers who used drugs without injecting them and 8% of those who did not use drugs at all. Research also showed that drug-using sex workers in Viet Nam were about half as likely to use condoms compared with those who did not use drugs (Tran et al., 2004).

YOUNG AND ILL-INFORMED

Most women and men enter sex work in their teens or early 20s. It is estimated that 80% of sex workers in eastern European and central Asian regions are under 25 years of age, and that sex workers who inject drugs may be even younger than those who do not.

MALE AND TRANSGENDER SEX WORKERS

While not as numerous as female sex workers, male and transgender sex workers also sell sex, predominantly to men. Among these populations, HIV prevalence is frequently high. A recent study in Spain found HIV infection rates of over 12% in male sex workers who visited HIV testing clinics in 19 Spanish cities (Belza, 2005). In Indonesia, a study found HIV prevalence of 22% among transgender sex workers and 3.6% among male sex workers. Approximately 60% of the transgender sex workers and 65% of the male sex workers reported recent unprotected anal intercourse with clients. Almost 55% of the male sex workers reported having had sex with female partners in the preceding year (Pisani et al., 2004). A recent survey by municipal health authorities found that 5% of male sex workers in Shenzhen, a city in southern China, were HIV-positive (South China Morning Post, 2005).

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The majority of HIV interventions that address sex work are aimed at the sex workers themselves, with insufficient attention paid to their clients or the contexts in which they work.

Many sex workers lack information about HIV and about services that might help protect them. A 2003 study carried out along major transport routes in Africa found that the average age of sex workers was 22.8 years and the average education level was grade six (upper primary school). Only 33% knew that they were at risk if they had unprotected sex. None reported seeking HIV counselling and testing services (Omondi et al., 2003). Sex workers are frequently less likely than the general population to access public health services, and may not know about or be able to afford treatment for sexually transmitted infections, which can increase physiological vulnerability to HIV. In Dili, one-quarter of sex workers surveyed in 2003 were diagnosed with gonorrhoea or chlamydial infections, and 60% were infected with herpes simplex virus 2 (Pisani and Dili STI survey team, 2004). Among incarcerated sex workers in a juvenile detention facility in the Russian Federation, 58% had at least one bacterial sexually transmitted infection and 4% were HIV-positive (Shakarishvili et al., 2005).

IMPACT OF THE SEX WORK ENVIRONMENT

Sex workers operate in a variety of different environments, ranging from highly organized brothels and massage parlours to the street, markets and vehicles or cinemas, bars, hotels and homes. Each location carries with it its own degree of risk and vulnerability in terms of stigma, discrimination or the potential for violence, as well as the obvious danger of HIV infection. Moreover, the sex trade is not fixed but is evolving in reaction to social and economic conditions. This means HIV prevention programmes must adapt to address these changes. In Thailand, for example, there has been a large increase in the number of non-brothel-based sex service establishments, such as massage parlours. The sex workers in these establishments are largely unaffected by "100% condom use" programming, which concentrates on brothel-based sex work, and must therefore be reached in other ways. Similarly, many cities in India have reported an increase in non-brothel-based sex workers (UNAIDS, 2005a).

CLIENTS OF SEX WORKERS

The majority of HIV interventions that address sex work are aimed at the sex workers themselves, with insufficient attention paid to their clients or the contexts in which they work. In many countries, the fact that there is consistent

SEX WORK, HUMAN TRAFFICKING AND HIV

Every year, an estimated 600 000 to 800 000 people are trafficked across international borders (US Department of State, 2004). When those trafficked within their own countries are added, the annual toll of people trafficked may come to 4 million, including 1.2 million children under 18 years (ILO, 2002). All regions of the world are affected, although there are some well-established routes along which large numbers of people are trafficked. Within the South Asia region, for example, India and Pakistan are the main destinations for trafficked girls aged under 16 years, especially from Bangladesh and Nepal (UNAIDS, 2005b).

There are few data on HIV prevalence among trafficked women and girls. However, even in countries where HIV rates are low, trafficked women and girls are highly vulnerable to infection because they are often placed in situations where they cannot negotiate condom use, are forced to endure multiple sex partners and are subjected to violent sex (Burkhalter, 2003).

Trafficked women and girls come mostly from sectors of society and settings where there is poverty, indebtedness, high unemployment and gender discrimination (ILO, 2004). Efforts to overcome these factors with the objective of preventing human trafficking should be supported. However, until such efforts can show decisive success, interventions which address immediate needs—including HIV prevention and care services for potential and actual victims of human trafficking—are required.

demand for sex work is often ignored by government policies, which focus solely on repressing or regulating supply. The prevalence of purchasing sex varies greatly. For example, a general population study in 24 Peruvian cities found that 44% of men aged 18–29 years said they paid for sex in 2002. Of these, 45% said they did not consistently use condoms with sex workers (Guanira et al., 2004). In some Asian countries, levels as high as 15% of men in the general population and 44% of men in mobile, high-risk populations (e.g. long-distance truckers and men who work in mines or forests far from home) reported buying sex during 2004 (MAP, 2005).

HIV PROGRAMMING

There is substantial evidence that HIV prevention programmes for sex workers are effective and that sex workers can be strong participants in HIV prevention programmes. The Thai "100% condom use" policy has been replicated with success in countries from South-East Asia to the Caribbean, while the lessons learnt from organized sex workers in India (Kolkata), have been a touchstone for sex worker projects around the world (UNAIDS, 2000).

In Santo Domingo, low HIV infection levels of 3–4% among sex workers are thought to partly reflect consistent condom use and other safer behaviours promoted in the city's "100% condom use" programme. A recent survey found that 87% of sex workers reported using a condom the last time they had sold sex and 76% said they always used a condom during paid sex (Secretaria de Estado de

Salud Pública y Asistencia Social de Republica Dominica, 2005).

Many projects seek to provide sex workers with alternative ways of earning income. In Ethiopia, for example, the Sister Self-Help Association was formed by a small group of sex workers to try to provide themselves with a regular income and better health provision. The income-generating activities include a restaurant, a convenience store (a shop with extended opening hours, stocking a limited range of household goods and groceries) and a catering service for local hotels.

Successful HIV programmes use a mix of strategies, taking into account factors such as whether sex workers are brothel-based, if they work in one area or are mobile and the legal status of sex work. Effective strategies include (UNAIDS, 2002):

- promotion of safer sexual behaviour among sex workers, their partners and clients (e.g. promotion of condom use and negotiation skills) and of sex worker solidarity and local organization (in particular, so that clients cannot search for sex workers who are willing to have sex without a condom);
- provision of sexually transmitted infection prevention and care services, and access to commodities such as male and female condoms and lubricants;
- peer education and outreach work, including health, social and legal services;
- care for sex workers living with HIV; and
- policy and law reform, along with efforts to ensure that those in authority, such as police and public health staff, respect and protect sex workers' human rights.

These strategies should be accompanied by programmes to prevent entry into sex work, assistance to help women get out of it and anti-trafficking measures, including protection and assistance to women and girls who have been trafficked into the sex trade. Overall, programming works best if it has the active involvement of sex workers themselves in all phases of projects, from development to evaluation, and aims to decrease their vulnerability by addressing the conditions and context (e.g. economic and gender issues) surrounding sex work.

Men who have sex with men

The term "men who have sex with men" describes a social and behavioural phenomenon rather than a specific group of people. It includes not only self-identified gay and bisexual men, but also men who engage in male–male sex and self-identify as heterosexual or who do not self-identify at all, as well as transgendered males. Men who have sex with men are found in all countries, yet are largely invisible in many places.

Current indicators suggest that globally fewer than one in twenty men who have sex with men have access to the HIV prevention and care services they need (see 'Overview' chapter). Many factors contribute to this situation including denial by society and communities, stigma and discrimination, and human rights abuse.

Complex gender issues, social and legal marginalization and lack of access to HIV information affect how many of these men perceive, or do not perceive, their HIV-related risks. Traditional gender norms of masculinity and femininity

contribute strongly to homophobia and the related stigma and discrimination against men who have sex with men, transgendered and 'third-gender' people. (An example of the latter is the *hijaras* who live in various regions of South Asia and who may define themselves as neither men nor women, but as a third gender.) Homophobia has been identified as one of the primary obstacles to effective HIV responses in the move towards universal access to treatment.

NOT ENOUGH DATA?

In some regions of the world, epidemiological information about male-to-male HIV transmission is relatively scarce. This is partly because of the fact that many of the men involved are married to women and are thus regarded as part of the general population, rather than a distinct subpopulation. Crucially, in many parts of the world, men who have sex with men have no separate social identity (unlike self-identified "gay" men) and sex between men is not commonly talked about or acknowledged, even by the men concerned.

Nevertheless, much useful research has been carried out over the years in many low- and middle-income countries, and the burden of HIV infection in men who have sex with men is becoming increasingly clear. Sex between men is central to the HIV epidemic in nearly all Latin American countries (UNAIDS, 2006). In Bogotá, for example, an HIV prevalence of 20% has been registered among men who have sex with men (Montano et al., 2005). But sex between men also has important implications in many other regions. In Bangkok, and Mumbai, for example, HIV infection levels of 17% have been found in men who have sex with men (UNAIDS, 2005a). Unfortunately, even in the many countries where data indicate that men who have sex with men are severely affected by HIV, their prevention needs have been largely ignored or underfunded (see 'National responses' chapter).

LACK OF HIV INFORMATION AND AWARENESS OF RISK

Many men who have sex with men do not regard themselves as homosexual and therefore rule themselves out of being exposed to HIV. Even among men who readily identify themselves as gay, bisexual or transgender, there is still considerable lack of awareness of HIV

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and what constitutes sexual risk behaviour. A peer-to-peer study among men who have sex with men in south-eastern Europe discovered misconceptions about modes of HIV transmission, with some men reporting sexual risk behaviours (Longfield et al., 2004). In Beijing, only 15% of a sample of 482 men who have sex with men understood that they were at risk of HIV infection, and many had misconceptions about HIV transmission routes and limited knowledge about condoms. Some 49% of the participants reported unprotected anal intercourse with men during the previous six months. Less than one-quarter obtained free condoms and condom lubricants in the previous two years (Gibson et al., 2004).

SEX WITH BOTH MEN AND WOMEN

Many men who have sex with men also have sex with women. In the study in Beijing just described, 28% of the men surveyed reported having sex with both men and women during the previous six months and 11% had unprotected intercourse with both men and women (Gibson et al., 2004). A large study, conducted in Andhra Pradesh, found that 42% of men in the sample who have sex with men are married, that 50% had had sexual relations with a woman within the past three months and that just under half had not used a condom (Dandona et al., 2005).

CRIMINALIZED AND MARGINALIZED

Vulnerability to HIV infection is dramatically increased where sex between men is criminalized. In Jamaica, men having sex with men can be convicted of a crime and sentenced to jail. Same-sex relations between men in Malawi attract a 14-year penal sentence (Goyer, 2003). Criminalization and homophobia severely limit the ability of many men who have sex with men to access HIV prevention information, commodities and treatment and care (USAID, 2004). Faced with legal or social sanctions, men having sex with men are either excluded from, or exclude themselves from, sexual health and welfare agencies because they fear being identified as homosexual.

PREVENTION EFFORTS LOSING GROUND?

In some countries, self-identified homosexual men have taken their places within mainstream society through a process of activism, legal reform and changes in social attitudes. They have been at the

forefront of HIV prevention since the early years of the epidemic, and continue to be so. A five-city survey of men who have sex with men in India recently found that use of peers to distribute and promote condoms resulted in significant increases in condom use, especially in Mumbai, where peer educators distributed more than two-thirds of the condoms used by the survey population (MAP, 2005).

Yet some of the success against HIV achieved by men who have sex with men is apparently being eroded. For example, sexual risk-taking among men who have sex with men is increasing in many countries, some of it closely linked with alcohol or drug use. For example, the United States has witnessed a rapid growth in recent years in the use of the stimulant crystal methamphetamine. Research indicates that in Los Angeles, men who use this drug and have sex with men have an HIV infection rate more than three times higher than non-methamphetamine-using men who have sex with men (Peck et al., 2005). In San Francisco, approximately one in five men who have sex with men have recently reported that they use the drug, while in New York City, the figure was one in seven, and in Chicago and Los Angeles it was one in ten (Chicago Department of Public Health, 2005; de Herrera et al., 2005).

The resurgence of sexual risk behaviours has a number of possible explanations. One may be the erroneous belief that with widespread access to antiretroviral therapy, AIDS is more or less curable and protected sex is therefore optional. At the same time, public health authorities in most countries are devoting fewer resources to men who have sex with men than epidemiological evidence suggests is necessary. Rising HIV prevalence among this population in many countries confirms this is a short-sighted and irresponsible public policy.

A RANGE OF RESPONSES

A range of responses aimed at reducing the risk behaviours and vulnerability to HIV of men who have sex with men has proved successful in a variety of settings (UNAIDS, 2000b). These include:

- general and targeted promotion of high-quality condoms and water-based lubricants, and ensuring their continuing availability;
- safer-sex campaigns and skills training, focusing mainly on reducing the number of partners, increasing condom use and alternatives to penetrative sex;
- peer education among men who have sex with men, along with outreach programmes by volunteers or professional social or health workers;
- provision of education and outreach to female partners of men who have sex with men; and
- programmes tailored to particular subpopulations such as the police and military personnel, prisoners and male sex workers.

In addition to these prevention measures, a number of activities must be encouraged among managers of health systems and governments. First, it is important to support organizations of self-identified gay men, enabling them to promote HIV prevention and care programmes. Alliances should be built between epidemiologists, social scientists, politicians, human rights groups, lawyers, clinicians, journalists, organized groups of men who have sex with men and other civil society organizations. Laws that

SEXUAL PARTNERS (MALE AND FEMALE) OF MEN WHO HAVE SEX WITH MEN

Ignoring the risks of unprotected anal sex not only makes men who have sex with men vulnerable to HIV infection, but also puts their female sexual partners at risk. In high-income countries, a relatively high incidence of HIV continues among men who have sex with men. Recent research indicates that many either do not disclose their HIV serostatus to their sexual partners or may be becoming complacent about sexual risk behaviour. HIV-positive men who have sex with men surveyed recently in Los Angeles and Seattle in the United States were found to be unlikely to disclose their HIV serostatus to sexual partners because they consider it "nobody's business" or because they are in denial, have a low viral load or fear rejection (Gorbach et al., 2004).

criminalize same-sex acts between consenting adults in private need to be reviewed, and antidiscrimination or protective laws enacted to reduce human rights violations based on sexual orientation. Finally, but crucially, public commitment is needed from governments, national AIDS commissions, community organizations and donors to include men who have sex with men in their HIV programming and funding priorities. National AIDS action frameworks should have specific prevention, treatment and care plans for men who have sex with men.

Injecting drug users

Injecting drug use is estimated to account for just less than one-third of new infections outside sub-Saharan Africa. Once HIV enters a community of injecting drug users, progress of the infection into the rest of the population can be very rapid if appropriate measures are not taken early. Yet in spite of the importance of injecting drug users in the response to HIV, coverage of HIV prevention for this population is at best 5% across the globe (USAID et al., 2004).

There are approximately 13 million injecting drug users worldwide, of whom 8.8 million live in eastern Europe and Central, South and South-East Asia. There are around 1.4 million injecting drug users in North America and 1 million in Latin America (UNODC, 2004). Use of contaminated injection equipment during drug use is the major route of HIV transmission in eastern Europe and Central Asia, where it accounts for more than 80% of all HIV cases. It is also the entry point for HIV epidemics in a wide range of countries in the Middle East, North Africa, South and South-East Asia and Latin America. Alarmingly, new epidemics of injecting drug use are being witnessed in countries of sub-Saharan Africa (UNAIDS, 2005c).

RISK AND VULNERABILITY

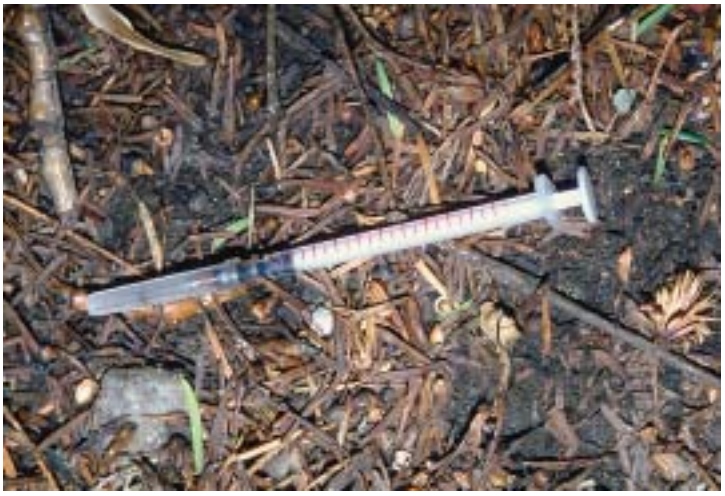
Certain drug-use practices contribute significantly to HIV infection among drug users, with the biggest risk being use of contaminated needles and syringes; sexual risk practices also contribute, but to a lesser extent. For instance, sex workers in Ho Chi Minh City who inject drugs were about half as likely to use condoms as those who did not use drugs (MAP, 2004). A high prevalence of sexually transmitted infections among

drug users reflects their unsafe sexual practices.

Beyond the physical risks associated with drug injection, drug users are vulnerable to HIV because of their social and legal status. Ironically, in many countries this means that HIV interventions are not available to drug users, or that drug users are unable or unwilling to access them for fear of recrimination. For example, about 80% of Russians living with HIV became infected through using contaminated needles and syringes, and it is estimated that between 1.5% and 8% of all Russian men younger than 30 years have injected drugs at some time in their lives (Molotilov et al., 2003). Despite the proven efficacy of HIV prevention measures for injecting drug users such as needle and syringe exchanges and drug substitution treatment, the Russian Federation has been slow to take advantage of such measures. A recent survey found that funding for needle and syringe exchange programmes had actually fallen by 29% between 2002 and 2004. Although some regional legislators have contributed funds to needle and syringe exchange projects and to AIDS centres offering HIV treatment, this support was neither universal nor sufficiently widespread to approach the levels of coverage needed to contain HIV epidemics driven by injecting drug use. However, new funding may help to begin to redress the balance. The first grant to the Russian Federation from the Global Fund to Fight AIDS, Tuberculosis and Malaria supported 23 exchange projects in 10 regions, and its funding of treatment for people living with HIV explicitly included injecting drug users among those targeted (Wolfe, 2005).

HARM REDUCTION: A HIGH PRIORITY

Some 20 years of research and experience confirm that HIV epidemics among injecting drug users can be prevented, stabilized and even reversed using a comprehensive package of HIV prevention and care activities. This package was recently summarized in a UNAIDS position paper on HIV prevention as "a comprehensive, integrated and effective system of measures that consists of the full range of treatment options, (notably drug substitution treatment) and the implementation of harm reduction measures (through, among others, peer outreach to injecting drug users, and sterile needle and syringe programmes), voluntary confi-



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dential HIV counselling and testing, prevention of sexual transmission of HIV among drug users (including condoms and prevention and treatment for sexually transmitted infections), access to primary health care and access to antiretroviral therapy. Such an approach must be based on promoting, protecting and respecting the human rights of drug users" (UNAIDS, 2005d).

Numerous studies in diverse epidemiological settings have demonstrated that harm reduction strategies are cost effective in preventing the spread of HIV (Sullivan et al., 2005). Since the 1990s, maintenance programmes using methadone have reported success in helping to contain HIV epidemics in areas as diverse as Australia, China, Hong Kong Special Administrative Region, Sweden, Thailand and the United States (Mattick et al., 2003). Such maintenance programmes provide an opportunity for stabilizing the health and social situations of drug users and enhancing antiretroviral treatment compliance. Despite the evidence, however, certain aspects of harm reduction remain controversial in some parts of the world (Beckley Foundation, 2005). For example, counterproductive laws and policies in some countries prohibit substitution therapy using methadone or buprenorphine.

WHO added methadone and buprenorphine to the *WHO Model List of Essential Medicines* in 2005, and has been advocating for their introduction into drug programmes in countries where use of opioids (e.g. opium and heroin) is prevalent, as an essential component of both HIV prevention and treatment. This has included supporting the development of national guidelines for methadone substitution therapy and the scaling up of harm reduction programmes in countries such as China, Myanmar and Ukraine.

The lessons of comprehensive HIV prevention are being applied in an increasing number of countries. Despite a strong commitment to compulsory treatment for drug dependence and abstinence-based programmes, Malaysia has recently decided to introduce harm reduction programmes. In 2004, the country had an estimated 117 000 to 240 000 injecting drug users, and approximately 52 000 people who were living with HIV, the vast majority of them young men aged 20–29 years (Ministry of Health Malaysia

EVIDENCE FOR HARM REDUCTION

HIV transmission and HIV/AIDS impact associated with injecting drug use can best be contained by implementing a core package of interventions ... There is strong and consistent evidence that this package of harm reduction interventions significantly reduces injecting drug use and associated risk behaviours and hence prevents, halts and reverses HIV epidemics associated with injecting drug use. Conversely, there is no convincing evidence of major negative consequences of such interventions, such as initiation of injecting drug use among people who have previously not injected or an increase in the duration of frequency of illicit drug use or drug injection (UNAIDS, 2005c).

and WHO, 2004; Huang and Hussein, 2004). After sustained advocacy by nongovernmental organizations and the health community, pilot methadone maintenance programmes have been established, and pilot needle and syringe exchange programmes are planned to start in 2006. In addition, antiretroviral therapy is now being provided to injecting drug users resident in drug-dependence treatment facilities. In 2005, a judicial order in the Islamic Republic of Iran stipulated that individuals who use illegal drugs would no longer be targets of criminal repression but would instead be treated as patients by the public health system (Asian Harm Reduction Network, 2005).

In Central Asia, the Kyrgyz Government supports needle and syringe exchange programmes in three cities and in prisons in the country, and was the first member of the Commonwealth of Independent States to offer methadone maintenance therapy. Although such programmes have yet to be implemented on a wide scale, early evidence suggests that the country has benefited from its active search for technical assistance and its strong engagement of nongovernmental organizations in formulating and implementing national HIV prevention efforts (Wolfe, 2005).

China has also embraced comprehensive HIV prevention among injecting drug users, having established 91 needle and syringe exchange programmes in various parts of the country (Ministry of Health, People's Republic of China/UNAIDS, 2005) It is currently in the process of establishing 1500 methadone maintenance programmes to cover 300 000 opioid users over a period of three years, and linking these services to sites delivering antiretroviral drugs.

HIV TREATMENT FOR INJECTING DRUG USERS

The International Treatment Preparedness Coalition recommends that global and national treatment goals specify targets for key at-risk populations. This is in response to evidence that in many countries injecting drug users, prisoners, men who have sex with men, sex workers and certain mobile populations face acute barriers to proper HIV care and treatment (International Treatment Preparedness Coalition, 2005).

This is especially true in the case of injecting drug users. The reasons for this are complex. Because of the illegality of drug use and the stigma associated with it, injecting drug users are often estranged from the health-care system and perceive little reason to seek medical services. In

The tension between law enforcement objectives and public health concerns may never be fully resolved with regard to injecting drug use.

the Russian Federation, for example, a drug user will be officially registered with government authorities if he or she seeks treatment for addiction or otherwise accesses various health or social services.

While injecting drug users on antiretroviral drugs can achieve clinical outcomes comparable to those of patients on antiretroviral therapy who do not inject drugs, they require experienced clinicians with the ability to address the many serious and potentially life-threatening conditions that must be managed in tandem with HIV infection. Injecting drug users who are infected with HIV are especially prone to severe bacterial infections, such as infective endocarditis and pulmonary tuberculosis (Gordon and Lowy, 2005).

In hospital settings, providing care and treatment to injecting drug users frequently presents special challenges. Those who have had chaotic lifestyles frequently try to continue injecting drugs when in hospital, find it difficult to adjust to hospital rules and sometimes feel stigmatized by hospital staff. Some innovative approaches have been developed to deal with these challenges. Clinicians in Vancouver have long been concerned with the fact that injecting drug-using patients frequently leave hospital before treatment for bacterial infections has been completed, leading to long-term health problems and repeated hospital stays. In response, the public health authority has recently piloted a transitional care unit designed to accommodate the complex needs of drug-using patients. The apartment-style unit provides care 24 hours a day, not only for immediate medical problems—including the AIDS-related illnesses frequently found in this population—but also access to drug treatment programmes and social services such as housing when they leave. Since the project began in early 2005, monitoring has found improved health outcomes among patients, higher levels of satisfaction in both patients and staff, and significantly lower costs in comparison with hospital care (Vancouver Coastal Health Authority, 2005).

ACCOMMODATING DRUG CONTROL OBJECTIVES AND PUBLIC HEALTH POLICY

The tension between law enforcement objectives and public health concerns may never be fully resolved with regard to injecting drug use. However, as a

matter of both basic ethical principle and proven public health practice, drug control policies should reduce, not increase, the HIV risk faced by injecting drug users (for example, they should not deprive them of access to medical care or reduce their access to sterile injection equipment). At the same time, HIV prevention activities should not inadvertently promote illegal drug use. In practice, there needs to be clear government policies and legislation that authorize the implementation of all elements of the comprehensive package of HIV prevention and care activities, as well as sufficient funding so they can be carried out on a sufficiently large scale. As with all HIV programmes aimed at vulnerable populations, policies and programmes that deal with injecting drug users and their families should also conform to international human rights standards.

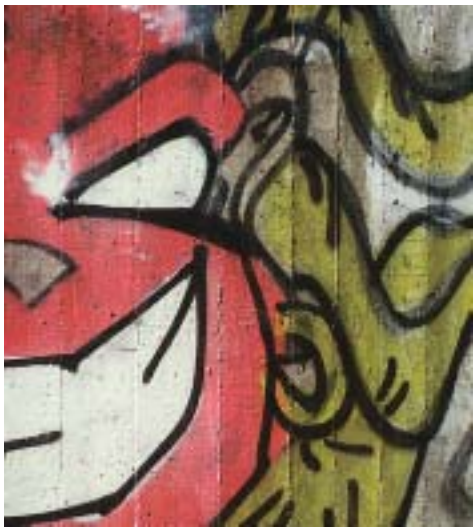
Prisoners

"It was Dostoevsky, of course, who said that the degree of civilization in society can be judged by entering its prisons. He was a wise man.... . We cannot allow discrimination and stigma to stand between us and a solution. Injecting drug users in prison must have access to the same care offered to people on the outside."

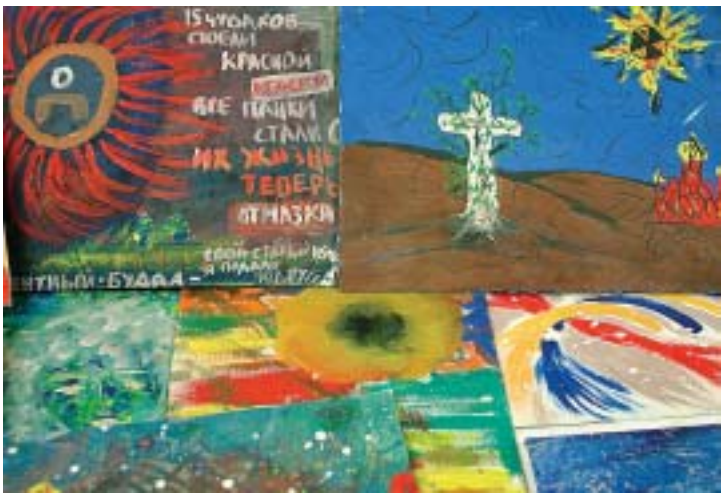
Speech by Antonio Maria Costa, Executive Director, UNODC, 1 April 2005

It is estimated that at any given time there are over nine million people in prisons, with an annual turnover of 30 million moving from prison to the community and back again (Walmsley, 2005). Conditions reigning in most prisons make them extremely high-risk environments for HIV transmission, leading them to be called 'incubators' of HIV infection, as well as of hepatitis C and tuberculosis (OSI, 2004). Prisons are sites for illicit drug use, unsafe injecting practices, tattooing with contaminated equipment, violence, rape and unprotected sex. They are often overcrowded and offer poor nutrition, limited access to health care and high rates of airborne and bloodborne diseases.

Although data from low- and middle-income countries are relatively scarce, the evidence available confirms that the prevalence of HIV infection in prisons is almost invariably higher than that in the general population. In South Africa, estimates put the figure as high as 41% in the general prison system and higher yet in individual prisons. In Cameroon, HIV prevalence at the New Bell prison in the city of Douala was 12.1% in 2005. A recent report from Zambia's prison headquarters stated that, in 2004 alone, some 449 inmates had died of AIDS-related illnesses (Simooya and Sanjobo, 2006). HIV prevalence in prisons in the Russian Federation has been estimated to be at



If countries are reluctant to introduce harm reduction programmes to the general population, or to recognize and condone sex between men, they are even more unlikely to do so in their prisons.



least four times higher than that in the wider population (Russian Ministry of Justice, 2004). Nor is HIV confined to male prisoners: in the United States it is estimated that women prisoners are 15 times more likely to be HIV-positive than women in the general population (De Groot, 2005).

The risk factors explaining these prevalence levels are clear. To begin with, both male and female prisoners often come from marginalized populations, such as injecting drug users or sex workers, who are already at an elevated risk of HIV infection. Use of contaminated or non-sterile injecting equipment is almost invariably higher inside prisons than among injecting drug users outside of prison, while the prevalence of male–male sexual activity is often higher in prison than in the general population (WHO, 2005; Dolan et al., 2004). Tattooing represents another risk factor for the transmission of bloodborne viruses as contaminated instruments are often used. There is generally no access to sterile injecting equipment and condoms—the basic tools against HIV transmission.

HIV PREVENTION AND CARE

If countries are reluctant to introduce harm reduction programmes to the general population, or to recognize and condone sex between men, they are even more unlikely to do so in their prisons. There is considerable anecdotal evidence that some public officials feel that prisoners who inject drugs or participate in male–male sex "get what they deserve." More pragmatically, many worry that harm reduction measures and condom provision in prison might lead to an increase in sex between men or injecting drug use.

In fact, there is no empirical evidence for these fears. In European prison systems there has been no increase in sexual risk behaviours as a result of harm reduction programmes for inmates (WHO, 2005). Rather, provision of HIV prevention services in prisons has been a considerable success story in many countries (Stöver and Nelles, 2003). Following successful pilot programmes beginning in the late 1990s, Spain has expanded its provision of needle and syringe exchanges to more than 30 prisons. Other countries are only beginning to see the benefits

of such programmes. In Ukraine, a 2005 study found that most prisoners' knowledge of HIV was generally poor, with only 39% having basic knowledge of how to prevent the sexual transmission of HIV. However, among prisoners who had been reached by prevention programmes in prison, two-thirds knew how to protect themselves against HIV (Ministry of Health of Ukraine, 2005). Following implementation of a peer-based health education programme in a prison setting in the Siberia region of the Russian Federation, HIV-related knowledge and condom use among prisoners increased, while the prevalence of tattooing declined (Dolan et al., 2004).

Prisons are not closed off from the world. Prisoners are eventually released and infection acquired inside prison can be readily transmitted outside it. HIV prevention and treatment for prisoners is also therefore a strategy with high potential benefits for the rest of society. To be truly effective, national AIDS programmes must significantly expand their provision of comprehensive HIV prevention, treatment, care and support services in prison.

In October 2004, WHO convened an international meeting on prisons and health in De Leeuwenhorst. The resulting *Status Paper on Prisons, Drugs and Harm Reduction* recommended that all prison systems adopt an approach based on public health and human rights "even if this means acknowledging the limitations in depending on an official enforcement of total abstinence [from drug use and sex]" (WHO, 2005). Recommended HIV-related measures for prisons include:

- providing what is required so that prison staff can ensure that all prisoners are given basic information relating to HIV and other bloodborne diseases and how they spread;
- providing clinical management of drug-dependent prisoners at a standard equivalent to that in the local community;
- ensuring that adequate information and guidance are provided before prisoners are released; and
- providing follow-up care with links to community services, which is important for all prisoners with health problems, but is essential for those dependent on drugs.

All prison systems are urged to move as quickly as resources allow to introduce important additional harm reduction action:

- developing a planned and comprehensive clinical treatment programme for drug-dependent prisoners, including the use of opiate substitution maintenance therapy;
- developing a needle and syringe exchange programme equivalent to that available in the community, especially if the local prevalence of HIV or hepatitis C is high or if injecting drug use is known to occur in the prison; and
- providing an effective method for disinfecting needles and syringes and tattooing instruments along with appropriate information and training should needle and syringe exchange programmes be considered not necessary or feasible.

A MATTER OF HUMAN RIGHTS

HIV prevention and treatment efforts in prisons should be important components of national AIDS strategies not only because of the undoubted benefits in

HIV PREVENTION: AS NECESSARY OUTSIDE OF PRISON AS INSIDE

The United Nations Office on Drugs and Crime (UNODC) emphasizes that the presence of drugs and HIV in prisons presents two distinct dilemmas. First, drugs in prison represent a failure of security and a breach in the rule of law. Second, injecting drug use among prison populations results in high rates of HIV transmission between prisoners and to uninfected sexual partners once the prisoner is released. Two population streams—new inmates who may be uninfected and inmates who are already HIV-positive—flow in and out of prisons on a regular basis.

Experience in various countries has shown that evidence-based HIV prevention programming is effective in prisons. But UNODC, along with WHO and other UNAIDS Cosponsors, emphasize that prison authorities alone cannot fix the problem. Coordinated efforts with other government entities, particularly health and justice agencies, are necessary to break the chain of HIV transmission that accompanies incarceration and release, and to care for prisoners living with HIV—whether they are in prison or have served their sentence and are outside.

public health terms but also as a matter of fundamental human rights. People retain the majority of their human rights when they enter prison, losing only those that are necessarily and explicitly limited because of their imprisonment. They retain such rights as freedom from cruel and inhuman punishment, and the right to the highest attainable standard of health and security of the person. Courts in many parts of the world have ruled that governments actually have greater obligations to prisoners than to the general public because governments are the sole source of essential services provided to prisoners, including health care.

In a presentation to the United Nations Commission on Human Rights in April 1996, UNAIDS stated (UNAIDS 1996):

"[By] entering prisons, prisoners are condemned to imprisonment for their crimes; they should not be condemned to HIV and AIDS. There is no doubt that governments have a moral and legal responsibility to prevent the spread of HIV among prisoners and prison staff and to care for those infected."

Some 10 years later, this position has not changed.