HIV AND YOUNG PEOPLE WHO INJECT DRUGS: A TECHNICAL BRIEF

DRAFT



ACKNOWLEDGMENTS

This technical brief series was led by the **World Health Organization** under the guidance, support and review of the **Interagency Working Group on Key Populations** with representations from: Asia Pacific Transgender Network; Global Network of Sex work Projects; HIV Young Leaders Fund; International Labour Organisation; International Network of People who use Drugs; Joint United Nations Programme on HIV/AIDS; The Global Forum on MSM and HIV; United Nations Children's Fund; United Nations Development Programme, United Nations Office on Drugs and Crime; United Nation Educational, Scientific and Cultural Organization; United Nations Populations Fund; United Nations Refugee Agency; World Bank; World Food Programme and the World Health Organization.

The series benefited from the valuable **community consultation and case study contribution** from the follow organisations: Aids Myanmar Association Country-wide Network of Sex Workers; Aksion Plus; Callen-Lorde Community Health Center; Egyptian Family Planning Association; FHI 360; Fokus Muda; HIV Young Leaders Fund; International HIV/AIDS Alliance; Kimara Peer Educators and Health Promoters Trust Fund; MCC New York Charities; menZDRAV Foundation; New York State Department of Health; Programa de Política de Drogas; River of Life Initiative (ROLi); Save the Children Fund; Silueta X Association, Streetwise and Safe (SAS); STOP AIDS; United Nations Populations Fund Country Offices; YouthCO HIV and Hep C Society; Youth Leadership, Education, Advocacy and Development Project (Youth LEAD); Youth Research Information Support Education (Youth RISE); and Youth Voice Count.

Expert peer review was provided by: African Men Sexual Health and Rights; AIDS Council of NSW (ACON); ALIAT; Cardiff University; Family Planning Organization of the Philippines; FHI 360; Global Youth Coalition on HIV/AIDS; Harm Reduction International; International HIV/AIDS Alliance; International Planned Parenthood Federation; Joint United Nations Programme on HIV/AIDS Youth Reference Group; Johns Hopkins Bloomberg School of Public Health; London School of Hygiene and Tropical Medicine; Mexican Association for Sex Education; Office of the U.S. Global AIDS Coordinator; Save the Children; Streetwise and Safe (SAS); The Centre for Sexual Health and HIV AIDS Research Zimbabwe; The Global Forum on MSM and HIV Youth Reference Group; The Global Network of people living with HIV; Thubelihle; Youth Coalition on Sexual and Reproductive Rights; Youth Leadership, Education, Advocacy and Development Project (Youth LEAD); Youth Research Information Support Education (Youth RISE); and Youth Voice Count.

The technical briefs were written by James Baer, Alice Armstrong, Rachel Baggaley and Annette Verster.

Damon Barrett, Gonçalo Figueiredo Augusto, Martiani Oktavia, Jeanette Olsson, Mira Schneiders and Kate Welch provided background papers and literature reviews which informed this technical series.

TABLE OF CONTENTS

INTRODUCTION	5
YOUNG PEOPLE WHO INJECT DRUGS	7
HIV RISK AND VULNERABILITY	10
LEGAL AND POLICY CONSTRAINTS	13
SERVICE COVERAGE AND BARRIERS TO ACCESS	15
SERVICES AND PROGRAMMES ADDRESSING THE NEEDS OF YOUNG PEOPLE WHO INJECT DRUGS	17
APPROACHES AND CONSIDERATIONS FOR SERVICES	23
REFERENCES	27

Definitions of some terms used in this technical brief

Children are people below the age of 18 years, unless, under the law applicable to the child, majority is attained earlier.¹

Adolescents are people aged 10-19 years.²

Young people are those aged 10-24 years.²

While this technical brief uses age categories currently employed by the United Nations and the World Health Organization (WHO), it is acknowledged that the rate of physical and emotional maturation of young people varies widely within each category.³ The United Nations Convention on the Rights of the Child recognizes the evolving capacity of people under 18 years of age to make important personal decisions for themselves, depending on their individual level of maturity (Article 5).

Key populations are defined groups who due to specific higher-risk behaviours are at increased risk of HIV, irrespective of the epidemic type or local context. They often have legal and social issues related to their behaviours that increase their vulnerability to HIV. The five key populations are men who have sex with men, people who inject drugs, people in prisons and other closed settings, sex workers, and transgender people.⁴

People who inject drugs refers to people who inject psychotropic (or psychoactive) substances for non-medical purposes. These drugs include, but are not limited to, opioids, amphetamine-type stimulants, cocaine, hypno-sedatives and hallucinogens. Injection may be through intravenous, intramuscular, subcutaneous or other injectable routes.

This definition of injecting drug use does not include people who self-inject medicines for medical purposes, referred to as "therapeutic injection", nor individuals who self-inject non-psychotropic substances, such as steroids or other hormones, for body shaping or for improving athletic performance.

INTRODUCTION

Young people aged 10–24 years constitute one-quarter of the world's population,⁵ and they are among those most affected by the global epidemic of human immunodeficiency virus (HIV). In 2013, there were an estimated 5 million people aged 10–24 years were living with HIV, and young people aged 15–24 years accounted for an estimated 35% of all new infections worldwide in people over 15 years of age.⁶

Key populations at higher risk of HIV include people who sell sex, men who have sex with men, transgender people and people who inject drugs. Young people who belong to one or more of these key populations – or who engage in activities associated with these populations – are made especially vulnerable to HIV by widespread discrimination, stigma and violence, combined with the particular vulnerabilities of youth, power imbalances in relationships and, sometimes, alienation from family and friends. These factors increase the risk that they may engage – willingly or not – in behaviours that put them at risk of HIV, such as frequent unprotected sex and the sharing of needles and syringes to inject drugs.

Governments have a legal obligation to support the rights of those under 18 years of age to life, health and development, and indeed, societies share an ethical duty to ensure this for all young people. This includes taking steps to lower their risk of acquiring HIV, while developing and strengthening protective systems to reduce their vulnerability. However, in many cases, young people from key populations are made more vulnerable by policies and laws that demean or criminalize them or their behaviours, and by education and health systems that ignore or reject them and that fail to provide the information and treatment they need to keep themselves safe.

The global response to HIV largely neglects young key populations. Governments, international agencies and donors fail to adequately fund research, prevention, treatment and care for them. HIV service-providers are often poorly equipped to serve young key populations, while the staff of programmes for young people may lack the sensitivity and knowledge to work specifically with members of key populations.

According to joint estimates by the United Nations Office on Drugs and Crime, the World Health Organization (WHO), World Bank and the Joint United Nations Programme on HIV/AIDS (UNAIDS), an estimated 12.7 million (range: 8.9 million-22.4 million) people globally inject drugs,⁷ with the majority living in low- and middle-income countries.^{7,8} The age distribution is not known. The continued high prevalence of injecting drug use, combined with insufficient coverage of harm-reduction programmes, is of concern because of the strong association of unsafe injecting with risk for transmission of HIV and other infections such as viral hepatitis.^{9,10} Although global coverage of harm-reduction services has slowly increased, there is a lack of services focused on and accessible to young people, despite low ages of initiation into injecting drug use in many countries and important differences in vulnerability and risk between younger and older people who inject drugs. Consequently, young people who inject drugs find it difficult to obtain information, sterile injecting equipment, drug dependence treatment, including methadone treatment for opioid dependence, and HIV

testing, counselling and treatment. Age restrictions or requirements for parental consent can also make services less accessible. Programmes are frequently not designed to respond to the overlapping vulnerabilities of young people who inject drugs or the specific challenges in working with legal minors. These vulnerabilities require responses that may go beyond the harm-reduction programmes recognized as effective for adults.

This technical brief is one in a series addressing four young key populations. It is intended for policy-makers, donors, service-planners, service-providers and community-led organizations. This brief aims to catalyse and inform discussions about how best to provide services, programmes and support for young people who inject drugs. It offers a concise account of current knowledge concerning the HIV risk and vulnerability of young people who inject drugs; the barriers and constraints they face to appropriate services; examples of programmes that may work well in addressing their needs; and approaches and considerations for providing services that both draw upon and build the strengths, competencies and capacities of young people who inject drugs.

Community consultations: the voices, values and needs of young people

An important way to better understand the needs and challenges of young key populations is to listen to their own experiences. This technical brief draws upon insights from the research and advocacy of young people who inject drugs. It also incorporates information from consultations organized in 2013 in six regions by Youth RISE, a global youth-led harm-reduction network, with the support of UNAIDS;¹¹ and consultations organized in 2013 by the United Nations Population Fund in collaboration with organizations working with young key populations, including young people who inject drugs, in eastern Europe and southeast Africa.¹² Since these were small studies, the findings are intended to be illustrative rather than general. Representative quotations or paraphrases from participants in the consultations are included so that their voices are heard.

Where participants in the consultations were under the age of 18 years, appropriate consent procedures were followed.

YOUNG PEOPLE WHO INJECT DRUGS

There is a critical need for more comprehensive age-disaggregated data on young people who inject drugs, their levels of risk for HIV and other illnesses, and their protective behaviours. Current methods of gathering and reporting data make it impossible to calculate a reliable global estimate of the number of young people who inject drugs.¹³ Fewer than a quarter of the countries reporting in the 2010 United Nations General Assembly Special Session on Drugs provided age-disaggregated data on people under the age of 25 years who inject drugs. 14 There are several reasons for this. In some countries there is simply no reliable data on drug use among young people in general. The criminalization and stigmatization of drug use in most countries forces many young people to hide their drug use. Legal and ethical constraints make it difficult to recruit children for studies, and the great majority of research therefore excludes participants under 18 years of age. 13 Older survey participants do not always accurately recall the age at which they began injecting drugs, and rapid changes in drug-using practices may in any case make their information out of date.¹³ Girls and young women are also underrepresented in surveys of injecting drug use. Harm-reduction services can serve as important mechanisms for data collection, 13 but the lack of such services, and age restrictions placed upon them, limit the amount of data they provide on young people.

Harm Reduction

Harm reduction refers to policies, programmes and practices that aim primarily to reduce the adverse health, social and economic consequences of the use of licit and illicit drugs. The harm-reduction approach is based on a strong commitment to public health and human rights, and targets the causes of risks and harms. Harm reduction helps protect people from preventable health harms and death from overdose, and helps connect marginalized people with other social and health services. The UN system has endorsed a core package of nine essential harm-reduction services for people who inject drugs which have been shown to reduce HIV infections:¹⁵

- Needle and syringe programmes
- Drug dependence treatment, including opioid substitution therapy
- HIV testing and counselling
- Antiretroviral therapy
- Prevention and treatment of sexually transmitted infections
- Condom programmes for people who use drugs and their sexual partners
- Targeted information, education and communication for people who used drugs and their sexual partners
- Diagnosis and treatment of, and vaccination for, viral hepatitis
- Prevention, diagnosis and treatment of tuberculosis

For some young people, drug use is a part of adolescent experimentation and pleasure-seeking. On the other hand, some participants in the consultations with young people who inject drugs identified negative experiences that spurred them to begin using – and eventually injecting – drugs: feelings of alienation, anger or emptiness, or difficulties with their families. ¹¹ In most cases there was a progression from smoking drugs to snorting them and then to injecting. Reasons for beginning to inject ranged from curiosity and the desire to get a more intense high, to a wish to use drugs more "efficiently" or to counteract the decreasing quality and potency of their drugs. The desire to belong to a group and participate in its activities is natural among young people, and it may be particularly strong for those whose social ties are otherwise precarious. Socializing with young people who inject drugs also normalizes and reinforces injecting behaviour. ¹⁶

"The drugs fill the emptiness of losing a father or a mother, or soa you seem to feel."

Young man, Mexico¹¹

Some countries, such as Pakistan, Russian Federation and Viet Nam, have reported increases in the prevalence of injecting drug use among young people.¹⁷ In Central and Eastern Europe an estimated 1 out of every 4 people who inject drugs is under 20 years of age.¹⁸ Whatever their motivation for drug use or for injecting, many people who inject drugs report that they began injecting in adolescence. In the consultations most said this occurred between the ages of 15 and 18 years,¹¹ but in some countries initiation takes place at a younger age: in a study among young people (aged 10–19 years) living or working on the streets in four cities of Ukraine, 45% of those who reported injecting drugs said that they began doing so before they were 15 years old,¹⁹ while in an Albanian study, one-third of people who inject drugs aged 15–24 years had begun before the age of 15.²⁰

The frequency with which young people inject varies, and they may not have developed dependence or experienced adverse consequences for their health. For these reasons, many of them may not identify as a "person who injects drugs" or see themselves as needing any guidance. This has important implications for the design of programmes to reach and support young people who inject drugs. Young people who inject drugs and who have overlapping vulnerabilities, such as homelessness or economic marginalization, may consider these to be more pressing concerns.

"The person [who injects drugs] doesn't realize that he already needs help. In his perspective he doesn't need anyone. He thinks he controls everything."

Young man, Portugal¹¹

In 2013, an estimated 1.7 million (range: 0.9 million-4.8 million) people who injected drugs worldwide were living with HIV. This represents a global HIV prevalence of 13.1 per cent among all people who inject drugs aged 15–64 years.⁷

There are few data about HIV prevalence among young people who inject drugs, but what is known is of concern:

- In a 2011 study in Dar es Salaam, United Republic of Tanzania, 25.6% of a sample of young people aged 17–25 years who injected heroin were living with HIV.²¹
- A 2010 survey of street youth across multiple cities in Ukraine found that one-third of those aged 15–17 years who injected drugs were living with HIV.²²
- Among street youth aged 15–19 years in St Petersburg, Russian Federation, who injected drugs, HIV prevalence was 79% in 2007.²³

A significant proportion of young people who inject drugs become infected with HIV within the first 12 months of initiation.^{24,25} In Ho Chi Minh City, Viet Nam, 24% of people who inject drugs under 25 years had started injecting within the previous 12 months, and of these, 28% were infected with HIV.²⁶

People who inject drugs have the highest risk of hepatitis C virus (HCV) infection of any key population.²⁷ Globally, around 10 million people who inject drugs, or 67% percent of the estimated global total of people who inject drugs, are infected with HCV, and an estimated 1.2 million (8.4%) with hepatitis B virus (HBV).²⁸ Some studies have reported much higher incidence of both HBV and HCV than HIV among people who inject drugs, and data suggest that HBV prevalence may be higher among younger people who inject.^{29,30}

- A baseline study in Hanoi, Viet Nam, found that 28.3% of young people who inject heroin aged 15–19 years were HCV positive.³⁰
- Among people who inject drugs aged 18–24 years in Sarajevo, Bosnia and Herzegovina,³¹ baseline HCV prevalence was found to be 36.0%.
- Among people who inject drugs aged 18–30 years in a neighbourhood of New York City, USA, HCV prevalence was 51%.²⁹

HIV RISK AND VULNERABILITY

Compared to their age peers in the wider population, and to older people who inject drugs, young people who inject drugs are more vulnerable to HIV. This is due to specific risk behaviours – sharing non-sterile injecting equipment, and unprotected sex – which are linked to numerous individual and structural factors.

Sharing non-sterile injecting equipment: Exposure to HIV through use of contaminated injecting equipment is six times more likely to result in infection than exposure through unprotected vaginal intercourse.³² Many adolescents' first experience of injecting involves being given drugs by a friend, peer, sexual partner or other person and sharing their used injection equipment.^{33,34} Young people who inject drugs often do so in groups and are more likely to share equipment than their older counterparts, especially where rituals develop around injecting in social networks.^{2,35} Such practices may involve the young person being last to use the equipment.

Sharing equipment for the preparation of drugs is a common behaviour among young people who inject drugs, and it is an additional risk factor for transmission of HCV.^{36,37} In a study of people who inject drugs aged 15–30 years in five US cities, those who reported sharing equipment (cottons, cookers, rinse water) to prepare drugs for injection had a threefold increase in the risk of HCV seroconversion.³⁸

Unprotected sex: Injecting drug use often occurs in the context of overlapping risks for HIV, such as sexual intercourse without the use of a condom. Factors including the young person's knowledge and their ability to gauge risk can influence choices to have unprotected sex. In addition, the use of certain substances – including alcohol – may increase sexual desire or lower behavioural inhibitions, further affecting risk perception. Apart from sexual contact with intimate partners, some young people may also exchange sex for drugs, or sell sexⁱ to obtain money for drugs, or may be at risk of sexual abuse.

"The main concern of young people who use drugs is their drugs. They do not think about diseases and have sex without protection."

Young person, Mauritius¹¹

Changes during adolescence: Adolescence is a period of rapid physical, psychological, sexual, emotional and social change. For some young people, drug use, like sex, is a way of experimenting with new forms of socialization and pleasure-seeking. The development of the brain in adolescence influences the individual's ability to balance immediate and longer-term rewards and goals, and to accurately gauge risks and consequences. ^{39,40} This can make adolescents more vulnerable to peer pressure, or to manipulation, exploitation or abuse by older people, and therefore potentially to HIV. This is especially true for those who lack stable and supportive family environments.

In this series of technical briefs, "selling sex" is used as an umbrella term to refer to young people aged 10–24 years. It therefore includes children/adolescents aged 10–17 years who sell sex, who under the United Nations Convention on the Rights of the Child (CRC) are defined as sexually exploited, and young adults aged 18–24 years, who are recognized as sex workers. For further information, please see HIV and young people who sell sex: A technical brief (Geneva: WHO, 2014).

Adolescents who inject drugs are more likely than older people to lack knowledge about safer injecting practices and HIV prevention and to be unaware of risks to their health. Many young participants in the consultations reported that when they began injecting drugs as adolescents they were unconcerned about HIV, other STIs, viral hepatitis or tuberculosis.¹¹ Adolescents who inject drugs are also more likely than older people to be isolated from harm-reduction services, and to be unable to afford to buy injecting equipment,^{16,41} thus increasing their vulnerability to HIV.⁴²

Social marginalization and discrimination: In many regions, injecting drug use is most prevalent among socially marginalized young people, including those who are orphaned, out of school, living in extreme poverty, or living or working on the streets.¹³ Each of these factors can contribute to a context of emotional or social disruption in which drugs may be both attractive and available, and where there are fewer deterrents to experimenting with them.

- In Albania, over one-quarter of males aged 15–24 years who inject drugs surveyed in 2008 had never been to school, and 30% were homeless.⁴³
- A multi-city assessment of street youth in Ukraine (aged 15–24 years) found that nearly 1 in 5 was HIV-infected, with prevalence considerably higher among those who injected drugs (42%) and highest among those who shared needles (49%).²²
- In a 2007 survey of children aged 12–17 years living or working on the street in Greater Cairo and Alexandria, Egypt, over half were currently using drugs, and 3% reported injecting. Only 5% were currently in school.⁴⁴

Drug use is highly stigmatized in nearly all countries, and social, familial and religious disapproval can lead to discrimination against people who use drugs, further isolating them from individuals or systems that might support health-seeking behaviour. Young people who inject drugs are more vulnerable to these negative consequences because they depend on family and educational institutions for housing and other resources. Spending large amounts of time on the streets increases the chances that young people who inject drugs will interact with others engaging in risky needle use and higher-risk sexual behaviours, including older adults more likely to be infected with HIV. The social and economic isolation of young people who inject drugs only increases the likelihood that non-sterile injecting equipment will be used. 45

"I was expelled from school and abandoned by my own family when they found out I was taking some [non-injecting] drugs. So I thought, Why not go all the way?"

Young person, Indonesia¹¹

Racial and ethnic marginalization: In some regions, injecting drug use is disproportionately prevalent among young members of ethnic minorities. A study in Bucharest, Romania, found that more than one-quarter of people aged 10–24 years who injected drugs were Roma, a proportion three times higher than their proportion of the general population.⁴⁶ Among people who inject drugs aged 13–19 years diagnosed with HIV in the United States in 2011,

61.7% were African American and 21.3% Latino, far higher than their proportion of the overall population.⁴⁷ More research is needed to understand the reason for these disparities, though it has been suggested that the social isolation and discrimination suffered by some ethnic-minority youth may be linked to drug and alcohol use, lack of easy access to health services, and lack of knowledge about HIV prevention.⁴⁸

Young women: Increased risk of injecting has also been noted among young females, who have additional vulnerabilities to HIV infection compared to their male peers who inject drugs. ^{49,50} Consultations in Nepal and Nigeria with groups of young women who inject drugs indicated that many rely on their male partners to provide injecting equipment, and they are consequently less likely than young men to access harm-reduction services. ¹¹ They reported frequent sharing of syringes with their male partners and, in Nigeria, "flashblooding" – a technique of injecting oneself with blood extracted from another person who has recently injected a drug, usually heroin. ¹¹

"When I was first introduced to injecting by my boyfriend I never knew anywhere to get needles because he was the one who used to inject me. So this was a major challenge for me."

Young woman, Kenya¹¹

Young females may also be more concerned than their male counterparts about being exposed as people who inject drugs because they face even stronger stigmatization. Young women who inject drugs in Kyrgyzstan said that sexual and reproductive health services were important to them, but they felt stigmatized when accessing them. Pregnant women who inject drugs are less likely than non-injecting pregnant women to have access to antenatal care and prevention of mother-to-child transmission services, thus increasing the risk of passing infection to their newborns.

"It's harder for females to seek help, get tested [for STIs], or even talk about it."

Young woman, Lebanon¹¹

Selling sex: Some young people exchange sex for drugs, or sell sex to obtain money for drugs, and this may make them less likely to turn down a transaction or to insist that a client use a condom, thus increasing their risk of contracting HIV or another STI. They are also at risk of violence, including rape.

LEGAL AND POLICY CONSTRAINTS

The United Nations Convention on the Rights of the Child (CRC, 1989) is the global treaty guiding the protection of human rights for people under 18 years of age. One of its key principles is that the best interests of the child should guide all actions concerning children (Article 3), also taking into account children's evolving capacity to make decisions regarding their own health (Article 5). The CRC also guarantees the rights to non-discrimination (Article 2), life, survival and development (Article 6), social security (Article 26), an adequate standard of living (Article 27) and protection from all forms of exploitation and abuse (Article 34). Article 24 stresses "the right of the child to the enjoyment of the highest attainable standard of health and to facilities for treatment of illness and rehabilitation of health".

International human-rights law is clear on the need to provide evidence-based and human-rights-compliant harm reduction, HIV prevention and drug dependence treatment programmes. ⁵² In practice, however, the access of young people who inject drugs to information and harm-reduction services is affected by significant legal and policy constraints, and the rights of young people under 18 years to life and health under the CRC are contravened when they are excluded from effective HIV prevention and life-saving treatment, care and support services.

Criminalization: Laws criminalizing use or possession of drugs or of injecting equipment can deter people from seeking services because of their fear of arrest and prosecution. In some countries, "aiding and abetting" or "encouragement" laws seek to protect those under 18 from people who incite or encourage drug use. These laws may deter harm-reduction service-providers from offering assistance, due to accusations that they are "facilitating" drug use and related concerns about their own legal liability.⁵³ Criminalization of drug use also reduces the future employment prospects of those who have been convicted and can lead to economic instability.

Police enforcement: Young people who inject drugs may be targeted by the police for arrest or extortion, and carrying a needle or syringe may be taken as evidence of drug use, which is a disincentive to seek services such as needle and syringe programmes (NSPs).⁵⁴ NSPs themselves may be targeted by police as a location to harass or arrest young people who inject drugs. Young people who exchange sex for drugs or sell sex to obtain money for drugs are also vulnerable to arrest or harassment by police.^{55,56,57}

"Of course police choose those who are young [to arrest], and we know that police are always present in such places [NSPs]."

Young woman, Kyrgyzstan¹¹

Incarceration: Imprisonment is a considerable risk for young people who use drugs, including children, despite the fact that Article 37 of the CRC specifies that imprisonment "shall be used only as a measure of last resort and for the shortest appropriate period of time". The detention and forced treatment of adolescents who inject drugs is also a human-rights violation and public-health concern, because access to harm-reduction measures in places of

detention is usually limited or non-existent. In addition, risk behaviours for HIV and hepatitis are more prevalent in such settings, and incarcerated young people are particularly at risk for sexual abuse by older prisoners.⁵⁸ Human-rights violations in so-called drug detention or rehabilitation centres are now well documented, leading the UN system, including the World Health Organization, to call for these centres to be closed down.⁵⁹

Legal minority status: For those under the legal age of majority, access to harm-reduction services is more complicated. Child protection laws and policies must be factored in and appropriately understood and applied to the situation.

Access to services can be legally restricted. For those below the legal age of majority, access to NSPs is often limited because of moral or ethical concerns that these programmes may inadvertently encourage or condone the use of drugs by children. Age restrictions exist for NSPs in 18 of 77 countries surveyed by Harm Reduction International in 2012, showing that while such restrictions are not the norm they still present an important barrier. A more common scenario is where the legal and policy situation is unclear or not sufficiently supportive. This is a considerable gap considering the widespread moral or ethical concerns among service-providers themselves about how to appropriately intervene with young people who use drugs, and fears about being seen to condone or facilitate drug use.

Opioid substitution therapy (OST) to treat opiate dependency is far less common among people under 18 years than among adults, partly because many young people who inject do not use opiates, and also because in many cases if dependency develops, most are of an age to fall under adult treatment protocols for OST. Nevertheless, in at least 29 of the 74 countries where OST is available, age restrictions are placed upon it. This hinders clinicians from making decisions in the best interests of the individual client.⁵³

Even in countries with no legal age restrictions, other requirements, such as mandatory parent/guardian consent requirements, or evidence of previous failed attempts at detoxification or other drug treatment modalities, limit or complicate young people's access to crucial harm-reduction services.⁵³

Policy and research: At a broader policy level, attitudes towards drug use influence what research is funded and what questions are asked. When the political goal is to reduce drug use overall among young people, research tends to focus on lifetime prevalence of drug use among this age group, rather than drug-related harms among those that use drugs. Straightforward "don't do drugs" messaging may be politically popular, but it is ineffective in changing the behaviour of vulnerable young people^{61,62} and obscures the need for research into preventing harm for those who do use and inject drugs.

"[Under-18s] can go [to harm-reduction services], but only with their parents – their father or someone who is over 18 must go with them. They cannot go by themselves."

Young person, Mexico¹¹

SERVICE COVERAGE AND BARRIERS TO ACCESS

Funding of programmes for young people who inject drugs is inadequate, despite their disproportionate risk of acquiring HIV. A 2010 systematic review found that worldwide coverage of HIV prevention, treatment and care services for all people who inject drugs, although increasing, is still very low.⁶³

Need for additional services for young people: While the harm-reduction approach has been proven to reduce HIV infections among people who inject drugs, as a rule such programmes are not designed with the specific needs and vulnerabilities of young people in mind. In addition to the core package of harm-reduction services and overdose prevention, many young people who inject drugs also require basic medical and psychological services, housing, food, social protection benefits and services, and access to education or to employment opportunities.

Lack of youth-friendly and youth-focused services and programmes: Most services specific to people who inject drugs, such as NSPs, are designed for adults and do not operate in a way that is engaging or friendly to younger people. Many younger people do not like to access services alongside adult clients because they feel they have little in common with them, or feel unsafe around them. Service-providers often lack the skills to work with vulnerable adolescents. Furthermore, unless outreach is directed specifically at young people who inject drugs through their social networks and the media they use, they are unlikely to be aware that services exist.

Young people want information

"Lack of information is the biggest problem when you are young. You don't know where to turn for syringes."

Young man, Slovenia¹¹

"Some of my brothers got HIV infected, and they wanted to take treatment but did not know how. We heard that we had to pay as well. I didn't know who and how to help. I didn't know any peer outreach workers to get consulted and get access to treatment."

Young person, Viet Nam¹¹

"When my parents found out that I was doing drugs they chased me onto the streets in order to keep me away, but I rather wanted some advice, such as not to share needles. They wanted me to stop. But they do not have access to information about drugs."

Young woman, Romania¹¹

"You have to inform people to help them make educated decisions. It's the only way you're going to help people make positive decisions in their lives – by giving them factual information."

Young man, USA11

Parent/guardian consent: Many participants in the Youth RISE consultations reported that even when services are available, they prefer to obtain needles from pharmacies, in part because of parent/guardian consent requirements for minors to access NSPs, or the need for an official ID, which many under-18s do not possess. 11 Pharmacies are less than ideal as a source of needles and syringes because most do not provide a full harm-reduction package or links to other services. Although some parents wish to actively support their children in seeking harm-reduction services, some young people who inject drugs express concerns about age restrictions and requirements for parental consent for OST, as well as the fear that by registering for OST, their drug use might be made public. 11

"Nobody wants to start on methadone at 18 because [...] you will have no normal life after that, no driving licence, and they will give out data on you everywhere, at school, local police and to doctors."

Young person, Kyrgyzstan¹¹

Stigma and discrimination by service-providers: Negative experiences with health services – such as judgemental attitudes of providers or the perception of lack of privacy and confidentiality – discourage young people who inject drugs from seeking the services they need. In some countries, a conservative social climate makes it harder for young people, especially females, to access sexual and reproductive health services.

"What ends up happening if you do end up being [HIV] positive? How could you deal with the stigma of that?"

Young man, USA¹¹

Lack of integrated services: Separate services for TB, HIV, viral hepatitis and other aspects of harm reduction, as well as for sexual and reproductive health, make it difficult for young people who inject drugs to access care. Services that address the non-medical needs of vulnerable youth beyond drug use are also frequently not integrated, and existing services may be poorly equipped to deal with the needs of young people who inject drugs.

Poor access to HIV testing and treatment: Access to antiretroviral therapy (ART) by people who inject drugs is disproportionately low compared with other key populations at higher risk of HIV – particularly in low- and middle-income countries – and remains restricted by systemic and structural barriers. For example, people who inject drugs comprise 67% of cumulative HIV cases in China, Malaysia, Russian Federation, Ukraine and Viet Nam, but make up only 25% of ART recipients. Where ART is available, regular drug use can make adherence difficult, but other factors such as homelessness also make adherence to care and treatment in general harder to maintain.

SERVICES AND PROGRAMMES ADDRESSING THE NEEDS OF YOUNG PEOPLE WHO INJECT DRUGS

Around the world, programmes with young people who inject drugs are being implemented by governments, civil-society organizations and by organizations of people who use drugs. Relatively few have been fully evaluated, but the elements of a number of promising programmes are presented briefly here, as examples of how the challenges in serving young people who inject drugs may be addressed. These examples are illustrative and not prescriptive. They may not be adaptable to all situations, but they may inspire policy-makers, donors, programme-planners and community members to think about effective approaches to programming in their own contexts.

In their own words: What young people say they are looking for in service delivery¹¹

"We want a safe place with a warm response and a happy face."

Young man, Indonesia

"A place to visit without any fear, with staff that care about your soul."

Young woman, Ukraine

"It is easier if [outreach workers] are your friends and you do the same [kinds of things] with them and [...] you can say this and that to them."

Young person, Nigeria

Reaching young people through a drop-in centre

Kimara Peer Educators and Health Promoters Trust Fund (Kimara Peers), United Republic of Tanzania

Kimara Peers, a community-based NGO in a low-income area of Dar es Salaam, opened a drop-in centre (DIC) to provide outreach and services to people who inject or otherwise use drugs, including those aged 16–24 years. The DIC is near a government-run health centre and dispensary. It is open between 8 a.m. and 4 p.m. and serves people who inject drugs as well as young people who sell sex, since there is an overlap between the two populations.

Services offered at the DIC include individual and group psychosocial therapy and support, basic information on harm reduction, HIV/AIDS, viral hepatitis and other STIs, and information on condom use. Referrals are made for methadone-assisted therapy and treatment of STIs. Education and materials designed for young people on sexual and reproductive health, including HIV, are available. Referrals to government hospitals are made only with the young person's consent, and confidentiality is maintained unless the young person gives permission for their parents or other family members to be informed. Government approval is being sought for provision of clean needles and syringes upon request at the DIC and by outreach workers.

Services are offered by Kimara Peers staff, including trained community outreach workers from the local area and a professional social worker. Outreach workers publicise the DIC when they are working in the community, as well as at public events such as for World Drugs Day.

Website: http://142.177.80.139/kimara/

Increasing the uptake of harm-reduction services through an incentives programme

STOP AIDS, Albania

STOP AIDS, an NGO in Tirana, implemented an incentives programme with a group of young people who inject drugs to assess whether small incentives could motivate reduction in higher-risk behaviours associated with drug use and increase alternative or less risky behaviours. These included getting clean needles and returning used ones, being tested for HIV, bringing new clients to the programme, and allowing home visits by STOP AIDS staff.

For six month, vouchers and coupons were used as incentives, redeemable for a variety of retail goods such as pre-paid phone cards, food, fuel, clothing and haircuts. Vouchers were accumulated in a clinic-managed bank account and distributed to clients once a week. The standard reward for participants ranged from 1 point (equivalent to US \$1) for receiving harm-reduction kits, to 5 points for those who introduced a new client to the programme.

The programme was successful in significantly improving clients' attendance and uptake of some harm-reduction services, especially the needle and syringe programme, HIV and hepatitis testing, as well as introducing new clients and sexual and injecting female partners to the programme, compared to a control group who did not participate in the programme. More than half of the clients introduced programme staff to their family members and allowed home visits or counselling. However, voucher incentives seemed less effective for changing certain behaviours such as returning used needles, switching from injecting drugs to non-injecting behaviours or compliance with opioid substitution therapy. Further study is needed to determine the sustainability of health-seeking behaviour change through incentives.

Website: www.facebook.com/stopaids.albania

Building the capacity of local programmes

Youth RISE (Resource, Information, Support, Education), Asia-Pacific Region

Youth RISE, an international youth-led network promoting evidence-based drug policies and harm-reduction strategies, was asked to help a community-based organization in Indonesia that was having difficulty engaging young people in services. A member of the Youth RISE leadership and an Indonesian Youth RISE member conducted a week-long consultation with the programme staff. One of the barriers identified was the perception that youth programmes should aim to prevent drug use rather than providing harm-reduction services to young people. Through reflection and discussion, staff decided that a harm-reduction approach was indeed necessary to protect the health and well-being of young people.

Focus group discussions with young people who use drugs identified barriers to services such as not knowing about the programme because of lack of targeted outreach; a strong programme focus on injecting drug use, even though many young people did not inject consistently or at all; feeling intimidated or bullied by older users; and a perception that drug services would attempt to dissuade young people from using drugs.

The programme developed a strategic plan to engage young people with relevant services and activities. This included a shift from targeting young people in schools to engaging with those living or working on the streets. The programme focus was widened to include non-injecting drug use and amphetamine-type stimulants. Recreational activities such as sports were organized, as well as educational workshops on sexual health and drug-related harm reduction. The programme also provided support around life skills, economic issues, legal issues and police harassment. The programme now engages 70 young people directly in regular activities, with outreach to more young people in the community by peer educators.

Website: www.youthrise.org

Disseminating information via multiple channels

Programa de Política de Drogas (Espolea, A.C), Mexico

Espolea, a youth-led organization in Mexico City, opened a Drug Policy and Harm Reduction Programme in 2008 and has developed online and face-to-face channels to provide objective information about drugs and risk reduction to young people aged 15–29 years.

The organization has found that information is most effective when disseminated at places where young people use drugs, particularly electronic dance music festivals, rock concerts and cultural gatherings. Espolea sets up a stand as a safe space for young people to access information about drugs that may be consumed at these events. The organization also facilitates workshops in schools and in communities with concentrations of most-at-risk young people.

Espolea has an active outreach strategy through social media, including Facebook and Twitter, as well as blogs on a variety of programmes and topics. One blog (www.universodelasdrogas. org) serves as a databank on drugs and has become the axis of the programme's harm-reduction campaign. Information is produced by staff and collaborators, and by other young actors in the region. Printed materials are also a part of outreach and include attractive designs and useful information, facts and recommendations about nightlife, alcohol consumption, risky sexual behaviours, HIV and other STIs.

Website: www.espolea.org

Engagement of young key populations in responding to HIV and sexual and reproductive health issues

Fokus Muda, Indonesia

Fokus Muda aims to promote the meaningful involvement of young key populations in the HIV and broader sexual health and rights response in Indonesia. The programme brings together young people aged 15–27 years for advocacy, capacity-building and technical assistance and to help them be effective leaders in representing young people's issues and securing rights for themselves.

To develop an advocacy toolkit for use by young key populations at the local level, the programme conducted extensive consultations and capacity-building with young people who inject drugs, young people who sell sex, young MSM, young transgender people, and young people living with HIV from 11 provinces with high HIV prevalence. Capacity-building sessions were held separately because of the differences between the profiles and interests of the various key populations. Each participant represented a local community-based organization and had been actively engaged with their community for at least one year. An additional national consultation meeting for young key population members was held.

Participants were encouraged to identify the issues of greatest concern for them. For young people who inject drugs, the issues were the lack of specific programmes for them countrywide and of relevant harm-reduction programming. Outcomes and recommendations from the consultations were fed back to the participants and to other stakeholders, and formed part of the data used in advocacy about the government's 2015-2019 National Strategic Plan on AIDS.

Website: www.fokusmuda.wordpress.com

APPROACHES AND CONSIDERATIONS FOR SERVICES

Considerations for programmes and service delivery

In the absence of extensive research on specific programmes for young people who inject drugs, a combination of approaches can be extrapolated from programmes deemed effective for young people or for key populations in general. It is essential that services are designed and delivered to take into account the differing needs of young people who inject drugs according to their age, specific behaviours, the complexities of their social and legal environment and the epidemic setting.

Overarching considerations for services for young people who inject drugs

- Acknowledge and build upon the strengths, competencies and capacities of young people who inject drugs, especially their ability to articulate what services they need.
- Give primary consideration to the best interests of young people in all laws and policies aimed at protecting their rights (CRC, Article 3). For example prioritise access to effective HIV and health services, including harm-reduction programmes and voluntary, evidence-based treatment for drug dependence, rather than focusing on criminal charges applied against young people who inject drugs.
- Involve young people who inject drugs meaningfully in the planning, design, implementation and evaluation of services.
- Make the most of existing services and infrastructure, e.g., services for youth, and add components for reaching and providing services to young people who inject drugs.
- Make programmes and services, integrated, linked and multidisciplinary in order to ensure they are as comprehensive as possible and address the overlapping vulnerabilities and intersecting behaviours of different key populations.
- Partner with community-led organizations of youth and people who inject drugs, building upon their experience and credibility with young people who inject drugs.
- Build monitoring and evaluation into programmes to strengthen quality and effectiveness, and develop a culture of learning and willingness to adjust programmes.

Implement a comprehensive health packageⁱⁱ for young people who inject drugs as recommended in the WHO *Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations:*⁴

Harm reduction, in particular provision of sterile injecting equipment through needle and syringe programmes, opioid substitution therapy for those who are dependent on opioids, access to naloxone for emergency management of suspected opioid overdose and other evidence-based drug dependence treatment. It is important that countries where injecting drug use occurs prioritize immediate implementation of NSPs and OST. Implementation of these essential harm-reduction services should

This package is essentially the same as the comprehensive health package for HIV prevention, treatment and care for people who inject drugs that has been widely endorsed at the highest political level and by major donor agencies (WHO, 2009; 2012).

- facilitate and enhance access to HIV-specific services, such as HIV testing and counselling and antiretroviral therapy, and improve adherence to treatment.
- HIV prevention including condoms with condom-compatible lubricants, postexposure prophylaxis, and voluntary medical male circumcision for heterosexual men in hyperendemic and generalized HIV epidemics.
- Voluntary HIV testing and counselling in community and clinical settings, with linkages to prevention, care and treatment services
- HIV treatment and care including antiretroviral therapy and management including access to services for prevention of mother-to-child transmission
- Prevention and management of co-infections and co-morbidities including prevention, screening and treatment for tuberculosis and hepatitis B and C
- Sexual and reproductive health services including screening, diagnosis and treatment of sexually transmitted infections, a range of contraceptive options, services related to conception and pregnancy care, cervical cancer screening and safe abortion where available, and services that protect health and human rights
- **Routine screening and management of mental-health disorders** including evidence-based programmes for those with harmful alcohol or other substance use.

Make programmes and services accessible, acceptable and affordable

- Offer community-based, decentralized services, through mobile, outreach and at fixed locations, with particular attention to young females who inject drugs.⁴
- Ensure that service locations are easy and safe for young people who inject drugs to access.⁶⁶
- Integrate services within other programmes such as youth health services and drop-in centres.⁴
- Provide services at times convenient to young people who inject drugs and make them free of charge or low-cost.⁶⁶
- Provide developmentally appropriate information and education for young people who inject drugs and their partners, focusing on skills-based risk reduction, including condom use and education on the links between use of drugs and unsafe sexual behaviour. Information should be disseminated via multiple media, including online, mobile phone technology and participatory approaches. 66,67
- Provide information and services through peer-based initiatives, which can also help young people find role models. Ensure appropriate training, support and mentoring to help young people who inject drugs reach their community to support them in accessing services.⁶⁸
- Address issues of parent/guardian consent for services and treatment, considered in the context of the best interests of the young person under 18.69
- Engage young people who inject drugs, including those under 18 years of age, in decisions about services, recognizing their evolving capacity and their right to have their views taken into account.¹

- Train health-care providers and other staff to ensure that services are non-coercive, respectful and non-stigmatizing, that young people who inject drugs are aware of their rights to confidentiality and that the limits of confidentiality are made clear.^{3,4}
- Train health-care providers on the health needs of young people who inject drugs, as well as relevant overlapping vulnerabilities such as selling sex.^{3,4}

Address the additional needs of young people who inject drugs, including:

- Primary health-care services for other health problems
- Trauma and assault care and post-rape care
- Immediate shelter and long-term housing
- Food security, including nutritional assessments
- Livelihood development and economic strengthening, and support to access social services and benefits
- Support for young people who inject drugs under 18 years to remain in education, and fostering return to school for those out of school, where appropriate
- Psychosocial support through counselling, peer support groups and networks, to address stigma, discrimination and other mental-health issues⁶⁶
- Counselling to families, including parents of young people who inject drugs where appropriate and requested – to support and facilitate access to services, especially where parent/guardian consent is required¹¹
- Legal services for advocacy and assistance, including information for young people who inject drugs about their rights, and reporting mechanisms and access to legal redress⁶⁹
- Services for those in prison or detention.⁶⁹

Considerations for policy, research and funding

Supportive laws and policies

- Apply a public-health and harm-reduction approach to drug use.⁵⁴
- Work for the decriminalization of drug use, and for the implementation and enforcement of antidiscrimination and protective laws, derived from human-rights standards, to eliminate stigma, discrimination and violence against young people who inject drugs based on actual or presumed behaviours and HIV status.⁵⁴
- Change policing procedures so they do not allow confiscation of needles and syringes for use as evidence of drug use for criminal charges.⁷⁰
- Work toward developing non-custodial alternatives to the incarceration of young people who use drugs, sell sex or engage in same-sex activity. Work for the immediate closure of compulsory detention and "rehabilitation" centres.⁵⁹

- Prevent and address violence against young people who inject drugs, in partnership with organizations led by people who use drugs. All violence including harassment and extortion –by representatives of law enforcement should be monitored and reported, and redress mechanisms established.^{4,69}
- Examine current consent policies to consider removing age-related barriers and parent/guardian consent requirements that impede access to HIV and STI testing, treatment and care.³
- Address social norms around drug use through education with adolescents in schools, using evidence-based methods to build social skills and decision-making capacities, delivered by health professionals and peer educators.⁶¹
- Include relevant programming specific to the needs of young people who inject drugs in national health plans and policy.

Strategic information and research, including:

- Population size, demographics and epidemiology, with disaggregation of behavioural data and HIV, STI and viral hepatitis prevalence by age group and sexⁱⁱⁱ
- Research into interventions and programmes for young people who inject drugs and the effectiveness of their delivery, especially services offered by organizations led by people who use drugs³
- Research into the structural factors that impact drug use, and the impact of laws and policies upon access to health and other services⁶⁹
- Involvement of young people who inject drugs, including those under 18, in research activities to ensure that they are appropriate, acceptable and relevant from the community's perspective.⁷¹

Funding

- Increase funding for research, implementation and scale-up of initiatives addressing young people who inject drugs.
- Ensure that there is dedicated funding in national HIV plans for programmes with young people who inject drugs, and for programmes that address overlapping vulnerabilities.
- Recognize overlapping vulnerabilities of key populations in funding and delivery of services.

iii In some circumstances, determining population size estimates or mapping key populations can have the unintended negative consequence of putting community members at risk for violence and stigma by identifying these populations and identifying where they are located. When undertaking such exercises, it is important to ensure the safety and security of community members by involving them in the design and implementation of the exercise. For more information see Guidelines on Estimating the Size of Populations Most at Risk to HIV by the UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance (Geneva: World Health Organization, 2010).

REFERENCES

- 1 United Nations. United Nations Convention on the Rights of the Child (Article 1). U.N. Doc. A/Res/44/25, 1989 (http://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx, accessed 16 June 2014).
- Interagency Youth Working Group. Young people most at risk of HIV: a meeting report and discussion paper from the Interagency Youth Working Group, U.S. Agency for International Development, the Joint United Nations Programme on HIV/AIDS (UNAIDS) Inter-Agency Task Team on HIV and Young People, and FHI. Research Triangle Park (NC): FHI; 2010 (http://www.unfpa.org/public/home/publications/pid/6565, accessed 16 June 2014).
- World Health Organization. HIV and adolescents: Guidance for HIV testing and counselling and care for adolescents living with HIV. Geneva: World Health Organization; 2013 (http://www.who.int/hiv/pub/guidelines/adolescents/en/, accessed 16 June 2014).
- 4 World Health Organization. Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2014.
- 5 World population prospects: the 2012 revision [website]. United Nations, Department of Economic and Social Affairs, Population Division; 2012 (http://esa.un.org/unpd/wpp/index.htm, accessed 16 June 2014).
- 6 Joint United Nations Programme on HIV/AIDS, unpublished estimates, 2013.
- 7 United Nations Office on Drugs and Crime. World drug report 2014. New York (NY): United Nations Office on Drugs and Crime; 2014.
- 8 International Harm Reduction Association. Global state of harm reduction 2010: key issues for broadening the response. London: International Harm Reduction Association; 2010 (http://www.ihra.net/files/2010/06/29/GlobalState2010_Web.pdf, accessed 16 June 2014).
- 9 Joint United Nations Programme on HIV/AIDS. Global report: UNAIDS report on the global AIDS epidemic 2012. Geneva: Joint United Nations Programme on HIV/ AIDS; 2012 (http://www.unaids.org/en/media/unaids/contentassets/documents/ epidemiology/2012/gr2012/20121120_unaids_global_report_2012_with_annexes_en.pdf, accessed 16 June 2014).
- 10 Joint United Nations Programme on HIV/AIDS. UNAIDS World AIDS Day Report 2012. Geneva: Joint United Nations Programme on HIV/AIDS; 2012 (http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/gr2012/jc2434_worldaidsday_results_en.pdf, accessed 16 June 2014).
- 11 Youth Research Information Support Education (Youth RISE) and Joint United Nations Programme on HIV/AIDS. Experiences of young people who inject drugs and their challenges in accessing harm reduction services. Forthcoming 2014, cited in this technical brief as "Youth RISE consultation".

- 12 United Nations Population Fund, unpublished data, cited in this technical brief as "UNFPA consultation".
- 13 Barrett D, Hunt N, Stoicescu C. Injecting drug use among under 18s: a snapshot of available data. London: Harm Reduction International; 2013 (http://www.ihra.net/files/2013/12/12/injecting_among_under_18s_snapshot_WEB1.pdf, accessed 16 June 2014).
- 14 Joint United Nations Programme on HIV/AIDS Global Interagency Task Team on HIV and young people. Securing the future today: synthesis of strategic information on HIV and young people. Geneva: Joint United Nations Programme on HIV/AIDS; 2011 (http://unfpa.org/webdav/site/global/shared/documents/publications/2011/SecuringtheFuture. pdf, accessed 16 June 2014).
- 15 World Health Organization, United Nations Office on Drugs and Crime, Joint United Nations Programme on HIV/AIDS. WHO, UNODC, UNAIDS technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users. Geneva: World Health Organization; 2009 (http://www.unodc.org/documents/hiv-aids/idu_target_setting_guide.pdf, accessed 16 June 2014).
- 16 United Nations Office on Drugs and Crime. HIV prevention among young injecting drug users. New York: United Nations Office on Drugs and Crime; 2004 (http://www.unodc.org/documents/hiv-aids/publications/HIV_Prevention_among_Young_Injecting_Drug_Users.pdf, accessed 16 June 2014).
- 17 Cook C, Fletcher A. Youth drug-use research and the missing pieces in the puzzle: how can researchers support the next generation of harm reduction approaches? In: Barrett D, editor. Children of the drug war: perspectives on the impact of drug policies on young people. New York (NY): International Debate Press; 2011 (http://www.ihra.net/files/2011/08/08/Part_4.pdf, accessed 16 June 2014).
- 18 United Nations Children's Fund (UNICEF). Blame and banishment: the underground HIV epidemic affecting children in eastern Europe and central Asia. Geneva: United Nations Children's Fund (UNICEF); 2010 (http://www.unicef.org/media/files/UNICEF_Blame_and_Banishment.pdf, accessed 16 June 2014).
- 19 Busza JR, Balakireva OM, Teltschik A, Bondar TV, Sereda YV, Meynell C, et al. Street-based adolescents at high risk of HIV in Ukraine. J Epidemiol Community Health. 2011;65(12):1166–70. doi:10.1136/jech.2009.097469.
- 20 Busza J, Douthwaite M, Bani R, Scutelniciuc O, Preda M, Simic D. Injecting behaviour and service use among young injectors in Albania, Moldova, Romania and Serbia., Int J Drug Policy. 2013; 25(5):423–31. doi:10.1016/j.drugpo.2013.03.004.
- 21 Atkinson J, McCurdy S, Williams M, Mbwambo J, Kilonzo G. HIV risk behaviors, perceived severity of drug use problems, and prior treatment experience in a sample of young heroin injectors in Dar es Salaam, Tanzania. Afr J Drug Alcohol Stud. 2011;10(1):1–9.

- 22 Robbins CL, Zapata L, Kissin DM, Shevchenko N, Yorick R, Skipalska H, et al. Multicity HIV seroprevalence in street youth, Ukraine. Int J STD AIDS. 2010;21(7):489–96. doi: 10.1258/ijsa.2010.010097.
- 23 Kissin DM, Zapata L, Yorick R, Vinogradova EN, Volkova GV, Cherkassova E, et al. HIV seroprevalence in street youth, St. Petersburg, Russia. AIDS. 2007;21(17):2333–40 (http://journals.lww.com/aidsonline/Fulltext/2007/11120/HIV_seroprevalence_in_street_youth,_St_Petersburg, 10.aspx, accessed 16 June 2014).
- 24 Hagan H, Pouget ER, Des Jarlais DC, Lelutiu-Weinberger C. Meta-regression of hepatitis C virus infection in relation to time since onset of illicit drug injection: the influence of time and place. Am J Epidemiol. 2008;168(10):1099–1109. doi: 10.1093/aje/kwn237 (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2727245/, accessed 16 June 2014).
- 25 Miller CL, Johnston C, Spittal PM, Li K, Laliberté N, Montaner JS, Schechter MT. Opportunities for prevention: hepatitis C prevalence and incidence in a cohort of young injection drug users. Hepatology. 2002;36(3):737–42.
- 26 National Institute of Hygiene and Epidemiology, Family Health International, Vietnam. Results from the HIV/STI integrated biological and behavioral surveillance (IBBS) in Vietnam 2005–2006. Hanoi: National Institute of Hygiene and Epidemiology, Family Health International, Vietnam; 2006 (http://www.aidsdatahub.org/sites/default/files/documents/Results_from_the_2006_Integrated_Biological_and_Behavioral_Survey_IBBS_2005_06_Report.pdf.pdf, accessed 16 June 2014).
- 27 Nelson PK et al. Global epidemiology of hepatitis B and hepatitis C in people who inject drugs: results of systematic reviews. Lancet. 2011; 378(9791): 571–583
- 28 Nelson PK, Mathers BM, Cowie B, Hagan H, Des Jarlais D, Horyniak D. Global epidemiology of hepatitis B and hepatitis C in people who inject drugs: results of systematic reviews. Lancet. 2011;378(9791):571–583. doi:10.1016/S0140-6736(11)61097-0.
- 29 Des Jarlais DC, Diaz T, Perlis T, Vlahov D, Maslow C, Latka M, et al. Variability in the incidence of human immunodeficiency virus, hepatitis B virus, and hepatitis C virus infection among young injecting drug users in New York City. Am J Epidemiol. 2003;157(5): 467–471. doi: 10.1093/aje/kwf222 (http://aje.oxfordjournals.org/content/157/5/467.full.pdf, accessed 16 June 2014).
- 30 Clatts MC, Colón-López V, Giang le M, Goldsamt LA. Prevalence and incidence of HCV infection among Vietnam heroin users with recent onset of injection. J Urban Health. 2009;87(2):278–91. doi:10.1007/s11524-009-9417-9 (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2845838/, accessed 16 June 2014).
- 31 United Nations Children's Fund (UNICEF) Bosnia and Herzegovina. Biological and behavioural survey among injection drug users, Bosnia and Herzegovina. Sarajevo: United Nations Children's Fund (UNICEF) Bosnia and Herzegovina; 2007 (http://www.unicef.org/ceecis/BBS_Among_IDUs_in_BiH.pdf, accessed 16 June 2014).

- 32 United Nations Office on Drugs and Crime. World drug report 2006. New York (NY): United Nations Office on Drugs and Crime; 2006 (https://www.unodc.org/unodc/en/data-and-analysis/WDR-2006.html, accessed 16 June 2014).
- 33 Roberts A, Mathers B, Degenhardt L. Women who inject drugs: a review of their risks, experiences and needs. Sydney: National Drug and Alcohol Research Centre, University of New South Wales; 2010 (https://www.unodc.org/documents/hiv-aids/Women_who_inject_drugs.pdf, accessed 16 June 2014).
- 34 Gray R, Longfield K, Nguyen N, Dairov A. Injecting drug users in Bishkek, Kyrgyzstan and Tashkent, Uzbekistan: injecting histories, risky practices, and barriers to adopting behaviors less likely to transmit HIV. AIDS 2006 XVI International AIDS Conference: Abstract no. CDC1384 [website]. International AIDS Society; 2006 (http://www.iasociety.org/Abstracts/A2195039.aspx, accessed 16 June 2014).
- 35 Rhodes T, Bivol S, Scutelniciuc O, Hunt N, Bernays S, Busza J. Narrating the social relations of initiating injecting drug use: Transitions in self and society. Int J Drug Policy. 2011;22(6):445–54. doi:10.1016/j.drugpo.2011.07.012.
- 36 Hahn JA, Page-Shafer K, Lum PJ, Bourgois P, Stein E, Evans JL, et al. Hepatitis C virus seroconversion among young injection drug users: relationships and risks. J Infect Dis. 2002;186(11):1558–1564. doi: 10.1086/345554 (http://jid.oxfordjournals.org/content/186/11/1558.long, accessed 16 June 2014).
- 37 Page K, Hahn JA, Evans J, Shiboski P, Lum P, Delwart E, et al. Acute hepatitis C virus infection in young adult injection drug users: a prospective study of incident infection, resolution, and reinfection. J Infect Dis. 2009;200(8):1216–26. doi:10.1086/605947 (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2821203/, accessed 16 June 2014).
- 38 Hagan H, Pouget ER, Williams IT, Garfein RL, Strathdee SA, Hudson SM, et al. Attribution of hepatitis C virus seroconversion risk in young injection drug users in 5 US cities. J Infect Dis. 2010;201(3):378–85. doi:10.1086/649783 (http://jid.oxfordjournals.org/content/201/3/378.long, accessed 16 June 2014).
- 39 Medina-Mora ME, Gibbs SE. Implications of science for illicit drug use policies for adolescents in low- and middle-income countries. Journal of Adolescent Health. 2013;52(2, Suppl 2):S33–S35. doi:10.1016/j.jadohealth.2012.09.013 (http://www.sciencedirect.com/science/article/pii/S1054139X12004089, accessed 16 June 2014).
- 40 Dahl RE. Adolescent brain development: a period of vulnerabilities and opportunities. Keynote address. Ann NY Acad Sci. 2004;1021:1–22.
- 41 Grund J-P, Merkinaite S, editors. Young people and injecting drug use in selected countries of central and eastern Europe. Vilnius: Eurasian Harm Reduction Network; 2009 (http://www.countthecosts.org/sites/default/files/young_people_and_drugs_2009.pdf, accessed 16 June 2014).

- 42 Thorne C, Ferencic N, Malyuta R, Mimica J, Niemetz T. Central Asia: hotspot in the worldwide HIV epidemic. Lancet Infect Dis. 2010;10(7):479–488. doi: 10.1016/S1473-3099(10)70118-3.
- 43 Institute of Public Health in Albania. Behavioral surveillance for HIV and STI among most at risk adolescents in Tirana. Tirana: Institute of Public Health in Albania; 2008 (http://www.unicef.org/ceecis/Behavioural_survey_on_most_at_risk_adolescents_Albania.pdf, accessed 16 June 2014).
- 44 Nada KH, Suliman el DA. Violence, abuse, alcohol and drug use, and sexual behaviors in street children of Greater Cairo and Alexandria, Egypt. *AIDS*. 2010; 24(Suppl 2):S39–44. doi: 10.1097/01.aids.0000386732.02425.d1.
- 45 Latkin, CA. Outreach in natural settings: the use of peer leaders for HIV prevention among injecting drug users' networks. Public Health Rep. 1998;113(Suppl 1):151–159 (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1307737/, accessed 16 June 2014).
- 46 Preda M, Buzducea D, Grigoraș V, Lazăr F. Research report on MARA: conducted as part of the project "HIV Prevention in Most-at-Risk Adolescents". Bucharest: University of Bucharest Faculty of Sociology and Social Work, United Nations Children's Fund (UNICEF) Romania; 2009 (http://www.unicef.org/ceecis/MARA_EN.pdf, accessed 16 June 2014).
- 47 U.S. Centers for Disease Control. HIV surveillance in injecting drug users (http://www.cdc.gov/hiv/pdf/statistics_surveillance_HIV_injection_drug_users.pdf, accessed 16 June 2014).
- 48 United Nations Children's Fund (UNICEF). Experiences from the field: HIV prevention among most-at-risk adolescents in Central and Eastern Europe and the Commonwealth of Independent States. Geneva: United Nations Children's Fund (UNICEF); 2013 (http://www.unicef.org/ceecis/ExperiencesFromTheField2013.pdf, accessed 16 June 2014).
- 49 Loxley W. Double risk: young injectors and sexual relationships. Sex Relation Ther. 2000;15(3):297–310. doi:10.1080/14681990050109872.
- 50 Hankins C. Sex, drugs, and gender? High time for lived experience to inform action. Inter J Drug Policy. 2008;19(2):95–96. doi:10.1016/j.drugpo.2008.01.001 (http://download.journals.elsevierhealth.com/pdfs/journals/0955-3959/PIIS0955395908000030.pdf, accessed 16 June 2014).
- 51 Thorne C, Semenenko I, Malyuta R. Prevention of mother-to-child transmission of human immunodeficiency virus among pregnant women using injecting drugs in Ukraine, 2000–10. Addiction. 2012;107(1):118–28. doi: 10.1111/j.1360-0443.2011.03609.x.

- 52 FXB Center for Health and Human Rights, Open Society Foundations. Health and human rights resource guide. Cambridge (MA): FXB Center for Health and Human Rights, Open Society Foundations; 2013 (http://fxb.harvard.edu/wp-content/uploads/sites/5/2013/09/HHRRG_Chapter-4.pdf, accessed 16 June 2014).
- 53 Fletcher A, Krug A. Excluding Youth? A global review of harm reduction services for young people. In: Stoicescu C, editor. The global state of harm reduction 2012: towards an integrated response. London: Harm Reduction International; 2012 (http://www.ihra.net/files/2012/07/24/GlobalState2012_Web.pdf, accessed 16 June 2014).
- 54 Joint United Nations Programme on HIV/AIDS. International guidelines on HIV/AIDS and human rights. 2006 consolidated version. Geneva: Joint United Nations Programme on HIV/AIDS; 2006 (http://data.unaids.org/publications/irc-pub07/jc1252-internguidelines_en.pdf, accessed 16 June 2014). See Guideline 4(d).
- 55 Werb D, Kerr T, Li K, Montaner J, Wood E. Risks surrounding drug trade involvement among street-involved youth. Am J Drug Alcohol Abuse. 2008;34(6):810–820. doi: 10.1080/00952990802491589.
- 56 Human Rights Watch. Rhetoric and risk: human rights abuses impeding Ukraine's fight against HIV/AIDS. New York (NY): Human Rights Watch; 2006 (http://www.hrw.org/sites/default/files/reports/ukraine0306webwcover.pdf, accessed 16 June 2014).
- 57 Human Rights Watch. Not enough graves: the war on drugs, HIV/AIDS, and violations of human rights. New York (NY): Human Rights Watch; 2004 (http://www.hrw.org/reports/2004/07/07/not-enough-graves-0, accessed 16 June 2014).
- 58 Global Commission on HIV and the Law. High income countries issue brief: rights of children and young people to access HIV-related services. New York: United Nations Development Programme; 2011 (http://www.hivlawcommission.org/index.php/regional-dialogues-main/high-income-countries, accessed 16 June 2014).
- 59 United Nations. Joint UN statement on compulsory drug detention and rehabilitation centres, 2012 (http://www.unaids.org/en/resources/presscentre/featurestories/2012/march/20120308adetentioncenters/, accessed 16 June 2014).
- 60 Stoicescu C, editor. The global state of harm reduction 2012: towards an integrated response. London: Harm Reduction International; 2012 (http://www.ihra.net/files/2012/07/24/GlobalState2012_Web.pdf, accessed 16 June 2014).
- 61 United Nations Office on Drugs and Crime. International Standards on Drug Use Prevention. Vienna: UNODC; 2013 (http://www.unodc.org/unodc/en/prevention/prevention-standards.html, accessed 16 June 2014).

- 62 European Monitoring Centre for Drugs and Drug Addiction. Guidelines for the evaluation of drug prevention: a manual for programme planners and evaluators (second edition). Lisbon: European Monitoring Centre for Drugs and Drug Addiction; 2012 (http://www.emcdda.europa.eu/publications/manuals/prevention_update, accessed 16 June 2014).
- 63 Mathers B, Degenhardt L, Ali H, Wiessing L, Hickman M, Mattick RP, et al. HIV prevention, treatment, and care services for people who inject drugs: a systematic review of global, regional, and national coverage. Lancet. 2010;375(9719):1014–28. doi:10.1016/S0140-6736(10)60232-2.
- 64 Wolfe D, Carrieri MP, Shepard D. Treatment and care for injecting drug users with HIV infection: a review of barriers and ways forward. Lancet. 2010;376(9738):355–366. doi:10.1016/S0140-6736(10)60832-X (http://www.unaids.org.cn/pics/20120821113255.pdf, accessed 16 June 2014).
- 65 Nchega J, Hislop M, Nguyen H, Dowdy DW, Chaisson RE, Regensberg L, et al. Antiretroviral therapy adherence, virologic and immunologic outcomes in adolescents compared with adults in southern Africa. J Acquir Immune Defic Syndr. 2009;51(1):65–71. doi: 10.1097/QAI.0b013e318199072e (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2674125/, accessed 16 June 2014).
- 66 World Health Organization. Making health services adolescent friendly. Developing national quality standards for adolescent friendly health services. Geneva: World Health Organization; 2012 (http://www.who.int/maternal_child_adolescent/documents/adolescent_friendly_services/en/, accessed 16 June 2014).
- 67 United Nations Educational, Scientific and Cultural Organization. International technical guidance on sexuality education: an evidence-informed approach for schools, teachers and health educators. Paris: United Nations Educational, Scientific and Cultural Organization; 2009 (http://unesdoc.unesco.org/images/0018/001832/183281e.pdf, accessed 16 June 2014).
- 68 United Nations Population Fund and Youth Peer Education Network (Y-PEER). Youth peer education toolkit: standards for peer education programmes. New York (NY): United Nations Population Fund; 2005 (http://www.unfpa.org/webdav/site/global/shared/documents/publications/2006/ypeer_standardsbook.pdf, accessed 16 June 2014).
- 69 United Nations Educational, Scientific and Cultural Organization, United Nations Population Fund, Joint United Nations Programme on HIV/AIDS, United Nations Development Programme. Young people and the law in Asia and the Pacific: A review of laws and policies affecting young people's access to sexual and reproductive health and HIV services. Bangkok: United Nations Educational, Scientific and Cultural Organization; 2013 (http://unesdoc.unesco.org/images/0022/002247/224782e.pdf, accessed 16 June 2014).

- 70 United Nations Office on Drugs and Crime. From coercion to cohesion: treating drug dependence through health care, not punishment. Discussion paper. Vienna: United Nations Office on Drugs and Crime; 2009 (http://www.unodc.org/documents/hiv-aids/publications/Coercion_Ebook.pdf, accessed 16 June 2014).
- 71 Family Health International in collaboration with Advocates for Youth. Youth participation guide: assessment, planning, and implementation. Research Triangle Park (NC): Family Health International; 2005 (http://www.unfpa.org/webdav/site/global/shared/documents/publications/2008/youth_participation.pdf, accessed 16 June 2014).