

Drug Use and HIV risk among young people in sub-Saharan Africa

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Executive summary

This report describes the results of an exploratory study commissioned by STOP AIDS NOW! in order to explore current developments regarding HIV and drug use in the sub-Saharan region. In addition, we determine whether tailored HIV prevention responses need to be developed in or adapted to the region to reduce drug-related HIV risk behaviour, in particular among drug-using youth. This study provides an overview and analysis of the current situation and trends regarding drug use and the related HIV risks, and provides recommendations for developing responses to adequately face these new challenges.

Specific attention is given to the vulnerabilities of youth engaging in high-risk behaviour due to drug use, and will also focus on the position of women and girls. The results here are based on the analysis of data attained through a literature review, interviews with key experts on HIV and drug use, and from observations during additional field visits to South Africa and Zambia.

The increasing risk of HIV due to illicit drug use has thus far been poorly described for Africa. Existing data on HIV and drug use in the region are very limited. However, several trends have been identified in this study:

- the increasing availability and use of illicit drugs and HIV-related injecting and non-injecting risk behaviours;
- the high vulnerability of large populations of young people becoming involved in drug use; and
- the limited response addressing drug use and its related HIV risks witnessed in the region.

Globalisation and shifts in the global drug trade have led to sharp increases in the availability of illicit drugs such as heroin and cocaine and increased domestic drug use is currently reported primarily in the coastal regions of Africa. The availability and use of illicit drugs in the region has grown very quickly; it is likely to develop along the lines of economic infrastructure to areas within close geographic proximity to harbours, airports, railways and highways.

Injecting drug use is currently reported in 31 countries across the sub-Saharan region. Studies on injecting drug use exist in five countries, all of which report concentrated epidemics among populations of injecting drug users. Data on HIV risk among drug using populations in these countries clearly indicate high levels of HIV risk behaviour due to the sharing of injecting equipment and/or unprotected sex. Injecting behaviour is associated with an extremely high risk of HIV transmission. Non-injecting drug use is also associated with a higher risk of HIV due to unsafe sexual behaviour triggered by heroin dependency, stimulant use and/or involvement in (informal) sex work

At least one example from the region of a situation where injecting drug use has led to the development of a generalised HIV epidemic exists: Mauritius has witnessed a concentrated HIV epidemic among injecting drug users which has developed into a nation-wide epidemic among the general population in a just a few years' time.

Trends in the region on drug use and HIV risks have similarities with other regions in the world (e.g., in Asia) where injecting drug use has become one of the main drivers of the HIV epidemic. The primary route of HIV transmission in sub-Saharan Africa will continue to be heterosexual contact, but (injecting) drug use and related HIV risk behaviours, including sexual risks, can initiate new HIV epidemics among drug users. Depending on the local setting and social networks, these concentrated epidemics have the potential of expanding into to the wider population. In countries which already have high HIV prevalence rates, drug use may generate even higher rates of HIV among drug users and their sexual partners, which may fuel or re-fuel existing generalised HIV epidemics.

Given the wide range of vulnerabilities many segments of populations in the region face, it is highly likely that if illicit drugs are available, people are likely to initiate drug use for various reasons. Hardships and limited opportunities due to poverty and inequalities provide an environment where individuals become more vulnerable to things like drug use. On the other hand, there are indications that drug use will also spread among those who have (attained) better opportunities in life and may become part of mainstream youth culture. Furthermore, the increasing spread of drug use across the region will trickle down to younger people and will also become increasingly common among girls. From the moment individuals become involved in drug use, their risk of becoming HIV positive will increase, either through injecting drug use or through unprotected sex.

Drug use is very likely to become a new challenge in the African HIV epidemic and addressing it will be an additional challenge on top of many others. International evidence-based measures related to drug use and HIV, which have been successful elsewhere, are largely missing from the African context. Thus, recommendations are outlined for regions experiencing increasing rates of drug use. Comprehensive prevention responses addressing drug use and the related risks, including awareness, school-based, and community-based programmes can play an important role in postponing the initiation of drug use and reducing drug use-related risks among youth. Drug treatment programmes and other interventions to address drug use are also crucial in reducing the associated health risks, including HIV. Likewise, harm reduction responses designed to prevent HIV among people who are already using drugs are key to reducing the spread of HIV among drug users and their sexual partners. Detailed recommendations and priorities are provided in the final section of the report.

1. Introduction

1.1 Background

HIV is one of the biggest global challenges of our time. While important steps are being made in treatment for those already living with HIV, HIV prevalence appears to have levelled off in some regions, and the epidemic seems to be slowing down in some countries in the sub-Saharan region, on-going prevention responses remain the highest priority.

The two-decades-old HIV pandemic on the African continent has mainly resulted from unprotected heterosexual contact. However, recent epidemiological evidence shows that routes of transmission are more diverse than previously assumed and is also driven by other means of transmission and among specific sub-populations such as sex workers, men who have sex with men and injecting drug users (UNAIDS, 2008).

Recent studies in sub-Saharan Africa have shown that rates of drug use are increasing and point to an increase in drug-related HIV risk behaviours. The UNAIDS website states that *'alarming new epidemics of injecting drug use are witnessed in the countries of sub-Saharan Africa'*.

These concerns regarding the Africa region are underlined by experiences in large parts of Asia and Eastern Europe, where within a single decade drug use and HIV have developed into *'dual epidemics'*. Drug-related HIV currently accounts for an estimated 30% of all new HIV cases beyond sub-Saharan Africa (UNAIDS, 2008). Drug users have also been identified as a key population in which HIV can develop into a concentrated epidemic, and as a potential bridging population where HIV may initially appear which then spreads to the general population resulting in larger epidemics (UNAIDS, 2008).

From experiences in other parts of the world, these developments in sub-Saharan Africa justify the urgent need to understand patterns and trends related to drug use and HIV risk behaviours.

This report was commissioned by STOP AIDS NOW! in order to explore current developments regarding HIV and drug use in the sub-Saharan region and to determine if tailored HIV prevention responses need to be developed for or adapted to the region to reduce drug-related HIV risk behaviour.

This report focuses on HIV risks related to the use of illicit drugs such as heroin, amphetamines and cocaine. HIV transmission through the sharing of injecting equipment, which is internationally considered the main risk for HIV transmission among drug users, is also taken into account; but, risks associated with non-injecting drug use (e.g., sexual risk-taking when under the influence of drugs) will receive considerable attention. Specific attention will be given to the vulnerabilities of youth engaging in high-risk behaviour due to drug use. Young people between the ages of 15 and 25 are most at risk of contracting HIV. They have limited knowledge on how HIV is transmitted and how it can be avoided, and half of all new HIV cases occur among young people (UNAIDS, 2008). In addition, young women are at an even greater risk of acquiring HIV than young men. This report will, therefore, also focus on the position of women and girls in the drug use and HIV epidemics.

1.2 Research questions

This report focuses on drug use and the risk of contracting HIV in the sub-Saharan region. It describes the existing and potential relationship between drug use and HIV risk behaviours and outlines the recommended responses needed to address drug-driven HIV risk. In other words, 'is there a need for responses to address drug-driven HIV, and if so, what should these responses look like?'

This report describes the findings on the following questions:

- What trends in illicit drug use exist in the sub-Saharan region?
- What trends in HIV risk due to injecting drug use exist in the region?
- What is the relationship between HIV and non-injecting drug use in the region?
- How does HIV risk driven by drug use contribute to the already existing HIV epidemics in the region?
- What makes young people vulnerable to drug use and HIV-related risk behaviours?
- What kinds of responses need to be developed in order to address HIV risk driven by drug use?

We focus on illicit drugs such as heroin, cocaine and methamphetamine—psychoactive drugs that are illegal. All of these drugs can be administered through injecting or non-injecting means, and both types of administration carry different risks associated with HIV. Substances such as 'khat' and other herbs used in some regions or among certain populations have no recorded HIV risk and have not been included here. Neither are solvents, glue or petrol, substances that are mainly used by street children (UNODC, 1999). Cannabis is an illicit drug produced and used across the region, but has no known risk associated with HIV transmission; it is, therefore, not included in the sections of the report dealing with HIV. Cannabis use is, however, mentioned in those parts of this report that focus on the vulnerabilities and consumption patterns of young people.

Although we primarily focus on the impact of illicit drug use, we have also looked at the role of alcohol consumption in relation to HIV risk. Alcohol use in the region is increasingly recognised as playing an important role in an individual's HIV risk-taking behaviour and alcohol consumption patterns may also provide insight into the role of other psychoactive substances especially among young people in the region.

Drug users are internationally recognised as one of the populations who have at a high risk of contracting HIV (UNAIDS, 2006). Other high-risk groups such as men who have sex with men or prisoners are not included in this report. Relations between drug use and sex work are reviewed in the report.

1.3 Methodology

Illicit drug use in the sub-Saharan region and its impact on HIV is a new phenomenon and data collection and the monitoring of current trends have thus far received limited resources and been relegated to a low priority. As a consequence, very little data is currently available.

Thus, the data collection and analysis carried out in this study, which is focused on the extent and nature of drug use in sub-Saharan Africa and the existing or potential relationship to HIV in the region, are drawn from three sources.

An extensive list of library databases and Internet resources have been searched as a part of the literature review. The sources are listed in Appendix 3. The sources drawn from here can be classified into the following categories:

General overviews and reports from international agencies and national and/or local organisations have provided background information.

Local studies which are concentrated on the situation in a few countries (five studies from Nigeria, five studies from Kenya, four from Tanzania, two from Mauritius, and 17 from South Africa) have also been used. All studies are local cross-sectional studies with relatively small sample sizes.

The mass media, referenced largely from the IRIN news service and PlusNews (an UN-facilitated HIV/AIDS news service), have published a few items on an increase in illicit drug use and the related HIV risks in the sub-Saharan region since 2005.

Interviews with key informants, representing international agencies, national research institutes, local service agencies, and other key informants, on issues related to drug use and HIV included questions related to the available data and information on drug use and HIV in the sub-Saharan region. A list of the key informants interviewed for this study has been included in Appendix 4. In addition, a meeting of the regional network addressing HIV risk among (injecting) drug users—the Sub-Saharan Harm Reduction Network—was attended in order to discuss the current situation and existing responses that address HIV and drug use with a broader audience of experts from the region.

Two field visits to the region were conducted to assess the background and nature of drug use and related HIV risk.

A 10-day field visit to South Africa was conducted to assess the impact of the advanced illicit drug market, the vulnerabilities of various groups of young people and the existing responses. Three regions of South Africa were visited (Cape Town, Pretoria and the surrounding townships, and Johannesburg). Key experts, including researchers, experts from international and multilateral agencies, the staff of health and social service facilities working with vulnerable populations in urban and township areas, were met with and interviewed at all three locations. Focus group discussions with youth were organised in four townships (Ekangala, Tembisa, Khayelitsha and Tafelsig). Extensive visits to the townships and meetings with young people and parents in the community were also carried out.

The second field visit included a five-day site visit to Zambia, which concentrated on understanding individual vulnerabilities and HIV risk and drug use in an area which has not been previously identified as having widespread illicit drug use. The visit was limited to the capital of Lusaka. A wide variety of key experts, from individuals at the Ministry of Health, the National Drug Enforcement Commission, a psychiatric hospital, as well as the staff of non-governmental organisations (NGOs) working on HIV prevention for youth and gender-specific HIV programmes, as well as with vulnerable populations such as street children, were met with and interviewed on HIV and the relationship to drug and alcohol use. Two separate meetings were organised to discuss the current situation regarding substance use (including alcohol) and the related HIV risk and potential responses. A meeting was organised during this field visit at the Ministry of Health and included national experts on substance use and HIV risk. An informal meeting was organised by committed experts from the NGO sector to share insights and experiences on HIV and substance issues. Three field visits to the socio-economically deprived compounds of Chobolya, Mtendere and Chilenjele were conducted to observe drug and alcohol use and to talk with people from and in these communities. Two focus group discussions were held with young people in Lusaka (one in the Mtendere compound and one among former street children at the Barefeet Project.).

Both in South Africa and Zambia, meetings with HIV specialists from the Dutch Embassy were held to discuss potential HIV prevention responses specifically addressing illicit drug use. Information on and contacts from the field visits to Zambia and South Africa can be found in Appendix 4.

1. 4 Limitations

This report describes a new and increasingly disturbing problem occurring in a part of the world that is already hard-hit by vast and persistent epidemics such as poverty, social and economic inequalities, instability and illness. Whereas HIV is omnipresent in every corner of African societies, the increasing risk of HIV due to illicit drug use has thus far been poorly described. The existing data on the risk of HIV associated with drug use are limited or, for large parts of the region, altogether non-existent, which limits our ability to draw excessively bold conclusions.

Moreover, this report is the result of an exploratory study on the subject. It reflects the exploratory and response-driven character of the study, rather than having purely scientific aspirations which cover the wide diversity of the continent. Therefore, this study aims at providing an overview of and insight into the current situation and trends, and aims to provide guidance in developing adequate responses in order to adequately face new challenges.

2. Findings

2.1 Trends in drug use and the effect on HIV risk

2.1.1 Introduction

Illicit drug use has become a global phenomenon and is no longer an issue that is limited to Western and industrialised nations, where, since the 1960s, drug use has developed into an integral part of youth culture.

The last 15 years have witnessed a sharp increase in drug use in transitional and developing countries in all regions. Globalisation and improved financial and economic infrastructures have enhanced the trade of various consumables, including illicit drugs. Many transitional countries (such as China, the Russian Federation and Vietnam) and developing countries (such as Indonesia, Iran and Bangladesh) have experienced sharp increases in the availability of illicit drugs, along with subsequent increases in drug use and injecting drug use among specific sub-populations within particular nations (UNODC, 2007).

An estimated 16 million people inject drugs globally. Approximately 80% of all drug users live in developing and transitional countries. Over 148 countries across the globe currently report injecting drug use of which 128 nations report that HIV is evident among those who inject drugs (Mathers, 2008; Aceijas, 2004). Many countries in Asia and Eastern Europe have witnessed fast developing HIV epidemics among drug users. Injecting drug use is recognised as one of the key drivers in these HIV epidemics. Non-injecting drug use is also associated with a higher sexual risk related to HIV transmission, although to a lesser extent than through injecting (WHO, 1998). Therefore, sexual risk behaviour due to (non-injecting) drug use is also included in the research reported herein, because many countries in the sub-Saharan region are already home to generalised sexually driven HIV epidemics which may be accelerated through drug-driven sexual risk behaviour.

Experience in other parts of the world indicates that the increased availability of drugs can expand through domestic markets, within which injecting behaviour in particular will emerge, which, in turn, often leads to localised HIV epidemics

The sections paragraphs will concentrate on the findings regarding the following questions:

- 2.1.2 What trends in illicit drug use exist in the sub-Saharan region?
- 2.1.3.1 What trends in HIV risk due to injecting drug use exist in the region?
- 2.1.3.2 What is the relationship between HIV and non-injecting drug use in the region?
- 2.1.4 How does HIV risk driven by drug use contribute to the already existing HIV epidemics in the region?

2.1.2 Illicit drug use patterns

Global trends suggest an increasing availability of illicit drugs, which has been followed by expanding domestic drug markets witnessed in the sub-Saharan region (UNODC, 2008). Trends regarding the use of the most common illicit drugs (e.g., heroin, cocaine and amphetamines) suggest that the use of these drugs is increasing in almost every country in the African region. Regional differences in terms of drug use patterns are primarily determined by the local availability of specific drugs.

Many countries across Africa have become major way stations along drug trafficking routes for various narcotics being shipped to Europe and North America; increasing drug use among communities, particularly those which are vulnerable, has been reported.

A wide range of West African countries (e.g., Senegal, Guinea-Bissau, Cameroon, Liberia, Côte D'Ivoire, Ghana, Togo, Benin, and Nigeria) are being used as transit hubs, especially for the transport of cocaine from South America. The increased availability of drugs, with a steady turnover and used as 'payments', has created domestic markets and pockets of drug use among vulnerable populations in all transit countries in Western Africa. Drug dependency and drug-related health consequences have thus far only been reported on a larger scale in Nigeria, where illicit drug use seems to have begun earlier and the relationship between sex work and drug use has also been noted (Adelekan, 2006).

Increased drug trafficking has also been found and reported for the coastal regions in East Africa (e.g., Tanzania, Kenya, Mozambique, and Mauritius), which are increasingly being used as transit hot spots for heroin being transported from Asia to the European and North American markets. These massive shifts in trafficking have had serious implications within the transit countries themselves. A steady turnover of drugs available for inter-regional trade has created pockets of drug use in local communities, similar to that seen in West Africa, which have likewise developed into expanding domestic markets. Drug use patterns in Eastern Africa seem (compared to those in Western Africa) to be further developed and entrenched among the vulnerable populations of the urban coastal areas. Several recent articles describe severe patterns of persistent heroin use and dependency among

disenfranchised populations in Tanzania, Kenya and Mauritius (Timpson, 2006; Deveau, 2006; Abdool, 2006).

The general trend of an increase in drug use in the region is most visible and better documented for South Africa, which has developed a sophisticated and further evolving drug market in less than a decade. South Africa has become the primary regional domestic drug market for a variety of drugs. The South African Drug Monitoring Centre describes various drug-using populations, a wide variety of drugs being used and various drug use patterns, ranging from the recreational use of stimulants and Ecstasy by clubbers to the problematic use of heroin, cocaine or amphetamine-type stimulant (primarily, methamphetamine) use by urban marginalised street youth (SACEDU, 2007). Significant regional and ethnic differences exist regarding the primary drug of choice. Methamphetamine use is currently regarded as the primary drug of choice in the West Cape coloured communities, whereas heroin is the drug of choice among black youth in Johannesburg and Pretoria.

There are, as well, clear signals witnessed during the field visit that heroin use is significantly increasing across South Africa. Local researchers as well as drug treatment experts have expressed their concern regarding persistent heroin use in poor black communities.

While significant increases in the availability of illicit drugs such as heroin and cocaine have been recorded in mainly coastal areas across the region, interior Africa also appears to have been affected. For example, current evidence suggests that countries such as Ethiopia, Zambia and Uganda may become new drug transit countries and the local availability of such drugs will increase (UNODC, 2007). The available data on illicit drug use in this sub-region indicates that the availability and consumption of drugs such as cocaine and heroin are increasing, but not to the extent of that seen in the coastal regions of many other parts of Africa. During the field visit in Zambia, contacts at the police, Ministry of Health and experts on substance use noted their concern regarding the steady increase in the use of drugs, in particular, of heroin use in poor urban communities. The level of drug use in Zambia does not appear to be at the same stage as that in other parts of the continent (e.g., Eastern Africa and South Africa), but trends suggest a growing availability and a developing drug market. Countries and sub-regional areas that have not yet reported an increased availability of illicit drugs may find themselves protected only by geography and time.

Thus, the overall availability of illicit drugs in the entire region has grown considerably and very quickly; it is likely to develop along the lines of economic infrastructure, from coastal areas and densely populated areas to other areas within close geographic proximity to airports, railways and highways. There seems little doubt that an increased availability will be followed by an increase in the use of illicit drugs in most countries in the sub-Saharan region.

2.1.3 Drug use and HIV risk behaviour

International studies on injecting behaviour show that drug use is primarily initiated through non-injecting, such as sniffing or inhaling (WHO, 1998). But often, in particular, over time as levels of dependency rise, users shift to injecting drug use. The higher the level of dependency, the more likely the individual is to shift towards injecting. Both injecting and non-injecting drug use have a well-known link to engaging in behaviour that puts them at an increased risk for HIV. These will be discussed separately.

2.1.3.1 HIV risk and injecting drug use

Epidemics driven by injecting drug use have different characteristics than epidemics where sexual contact is the primary route of transmission (Pisani, 2003). Behaviours that carry the greatest risk of HIV transmission centre around the sharing of needles, injecting equipment (such as cookers, rinse water, and filters) and injecting solution.

Injecting provides an extremely effective route for blood-borne viruses such as HIV to pass from one person to another. Most importantly, the likelihood of contracting HIV via injecting with shared equipment is nearly six times higher than via heterosexual contact since the virus bypasses bodily tissue and other barriers altogether and directly enters the bloodstream through an injection. Most studies have also found that those who inject heroin do so about 1–3 times per day; cocaine users inject even more frequently, so that the overall number of possible exposures is also greater (WHO, 1998). Another factor that contributes to the rapid spread of HIV among injecting drug users is that they tend to share their equipment with several individuals from within their network often on the same occasion. Due to the greater efficiency in terms of transmission, the higher frequency of exposing oneself to risk, and the number of individuals with whom one shares equipment, HIV epidemics linked to injecting tend to expand more rapidly than those driven by sexual transmission. It has been found time and again that soon after HIV is introduced into a community of injecting drug users, infection levels within these populations can rise from negligible numbers to 50–60% within 1–2 years (WHO, 2005).

Until recently, injecting drug use was not considered a major issue in Africa. In 1999, the United Nations Office on Drugs and Crime (UNODC) noted that injecting drug use in Africa appeared to be limited to elite consumers in Nigeria, South Africa and Zimbabwe, with some pockets of injecting behaviour among tourists and expatriates, for example, in the coastal areas of Kenya. At that time, the UN agency stated that '*injecting, generally speaking, tends to be viewed as un-African.*' This situation has changed dramatically in less than a decade.

Recent studies show that Africa is no exception in recent global developments indicative of increasing injecting behaviour. A recent study on the epidemiology of injecting drug use and HIV (Mathers, 2008) provides a global and

regional overview of countries reporting injecting drug use. The situation in sub-Saharan Africa is explicitly mentioned as an area of concern, where 13 countries in the sub-Saharan region report that injecting drug use exists—these countries are Côte d'Ivoire, Djibouti, Gabon, Ghana, Kenya, Malawi, Mauritius, Nigeria, Senegal, South Africa, Tanzania, Uganda, and Zambia.

In addition, UNODC reports injecting drug use in Angola, Benin, Burkina Faso, Cameroon, Cape Verde, Ethiopia, Gambia, Liberia, Mali, Mozambique, Rwanda, Seychelles, Sierra Leone, Somalia, Sudan, and Togo. Anecdotal evidence from various sources (IHRA, 2008) also indicates injecting drug use in Guinea, Madagascar, Niger, and Zimbabwe, bringing the total number of countries in which injecting drug use has been reported to 31 at the time of writing.

Country estimates for the number of injecting drug users are largely unavailable. Thus far, only three of these countries have provided estimates on the number of injecting drug users—130 748 in Kenya; 17 500 in Mauritius; and 262 975 in South Africa (Mathers, 2008).

Thus, existing data on the prevalence of injecting drug use in the region justify conclusions that it has become quite prevalent in the sub-Saharan region. In line with the rapid increases in the availability of illicit drugs in large parts of the region, domestic use and injecting behaviour in the majority of countries is reported to have begun around the turn of the century and has increased since then. Furthermore, trends suggest that injecting behaviour is following similar developments to the increased drugs availability and increased injecting prevalence in other developing or transitional regions in the world (e.g., Asia).

2.1.3.2 HIV risk and non-injecting drug use

Whereas injecting drug use is clearly recognised as carrying risks associated with HIV and may drive HIV epidemics, less international literature on the risks associated with non-injecting drug use exist. Research on these issues in Africa is further limited, although non-injecting drug use and the relationship to HIV is known and has been described in studies from the region (Parry, 2008; Plüddemann, 2006). These studies show higher risks of HIV transmission through unprotected sexual contact among people who use drugs and within their wider social networks, and provide evidence of drug-driven sexual risk as an additional factor driving the HIV epidemics across the region. The following issues have been documented as increasing an individual's risk of contracting HIV:

- unprotected sexual encounters among drug users and/or sexual partners;
- the relationship between sex work and drug use; and
- stimulant use catalysing unprotected sexual encounters.

Data is available on sexual risk behaviour among drug users from studies carried out in Kenya, Mauritius, Nigeria, South Africa and Tanzania (Deveau, 2006; Abdool, 2006; Adelekan, 2006; Parry 2008; Timpson, 2006). The limited number of studies available all provide evidence of higher sexual risk behaviour among drug users. The prevalence of risk factors such as unprotected sex with a casual partner, one's own partner or a sex work client have been reported as high among drug users. Studies in Nigeria describe low condom use among those who use drugs (38% of those interviewed with a casual partner and 40% of the interviewed with a sex client). Similar trends have been found in Kenya and Mauritius, where high percentages of drug users report *never* using a condom (40% in Kenya and up to 88% in Mauritius, respectively). An additional risk factor mentioned in studies (Deveau, 2006; Timpson, 2006; McCurdy, 2005; Beckerleg, 2005; Parry, 2008) such as these is having regular casual sexual relations. The available studies specifically focused on the risk behaviour of drug users in the above-mentioned countries indicate that having regular casual sexual relations is a factor that has contributed to the spread of HIV among networks of drug users, including regular sexual partners and broader networks of casual sexual partners.

Involvement in **sex work** is an important factor contributing to HIV transmission among an individual's social network as well as other groups. International evidence suggests that the exchange of sex for money or drugs is associated with high-risk behaviour, and that sex work can significantly contribute to HIV epidemics (UNAIDS, 2006). Regional literature on sex work and drug use also describes a certain degree of overlap including intertwined networks and various types of relationships with clients and partners (Beckerleg, 2005; McCurdy, 2005). Female drug users, particularly as drug dependency increases over time, are often involved in exchanging sex for money or drugs, and are reported to often pair up with a temporary 'partner' for security and other practical reasons and sex is often a part of this relationship. These partially overlapping networks of clients, partners and dealers (who often exchange drugs for sex) may serve as bridging mechanisms in the transmission of HIV from one social network to other groups within the general population.

A Kenyan study on drug use and sex work (Beckerleg, 2005) found intertwined networks, including 'support partnerships' and high-risk sexual behaviour, which is fully in line with experience from other parts of the world. The prevalence of HIV among female drug users is very high depending on the region, reaching up to 44% in Lagos (Adelekan, 2000), a rate that is 3 to 10 times higher than among men, with no significant difference in terms of an individual's injecting drug use history. This represents a highly significant gender difference, and is likely an indication of the role of sex work among female drug users in Nigeria. Increased sexual risk behaviour among drug users involved in sex work is also reported in the available studies from Mauritius, Tanzania and a growing number of studies on drug use and sex work from South Africa (Abdool, 2006; Deveau, 2006; Parry, 2008).

An underestimated and relatively new phenomenon is the use of specific types of drugs that catalyse in increased sexual risk behaviour. There is growing international evidence that certain drugs are more likely to result in unprotected sex. In particular, certain stimulants such as methamphetamines and crack cocaine have been found to enhance sexual risk taking (Molitor, 1998) by increasing sexual desire and, at the same time, decreasing levels of risk awareness and impairing one's judgment.

Both stimulants are potent psychoactive substances and the use of stimulants often leads to compulsive behaviour and binge sessions. The literature from developed nations, where stimulant use is well documented, describes a clear relationship between socio-economic deprivation, stimulant use and an elevated risk of contracting HIV (Reinerman, 1997). Methamphetamines as well as (crack) cocaine are associated with an increase in sexual risk taking, including unprotected sex and a greater number of partners. Stimulant use has been reported in a range of West African nations. In particular, cocaine use has been identified in Nigeria (Adelekan, 2006) and methamphetamine and (crack) cocaine use are reported in South Africa (Parry, 2008).

The potential implications of non-injecting stimulant use can be illustrated in the regional example of South Africa, where the increasing popularity of methamphetamines and crack cocaine among young people has been reported. Methamphetamine use specifically has been shown to enhance sexual risk taking, while simultaneously lowering HIV prevention awareness and increasing high-risk practices, such as not using condoms and having multiple sexual partners (Parry, 2008). There are indications of an increase in sexually transmitted infections and unintended pregnancies driven by methamphetamine use in antenatal clinics in the Western Cape province. Smoking methamphetamine (known as 'tic') was introduced around 2001 among young persons from the disenfranchised communities in the Cape Town area, which has spread to other South African cities (Parry, 2008). Nearly half of all patients entering drug treatment centres in Cape Town in 2005 stated that methamphetamine was the most problematic substance in young adults less than 20 years old (SACENDU, 2006).

The wide popularity of 'tic', particularly among young people, in parts of South Africa and the associated sexual risk-taking behaviours provide an illustration of the potential risk HIV non-injecting drug users are facing. 'Tic' is an example of a new regional drug use pattern that catalyses and increases young people's risk for HIV in a region that has been struck by a very high HIV prevalence.

To conclude, existing data on the drug use and sexual risk in the region justify the reason for concern. Although based on limited data, there are clear indications that drug users in the region are more likely to have a high risk of HIV transmission, due to unsafe sex, more casual sexual relationships, involvement in sex work and/or drug use catalysing sexual risk behaviour. These higher risks of HIV transmission through unprotected sexual contact among people who use drugs and within their wider social networks, and provide evidence of drug-driven sexual risk as an additional factor driving the HIV epidemics across the region.

2.1.4 HIV prevalence among drug users

The previous sections described trends in the region on increasing drug use and discuss the HIV risks through either injecting or non-injecting behaviour which could lead to HIV transmission among drug users and their sexual partners. The following paragraph will review the available information on HIV prevalence among drug users.

Detailed data on illicit drug use and the associated risk of contracting HIV are largely unavailable for the Africa region. Likewise, data on the HIV prevalence among African drug users are limited to a few cross-sectional studies in a handful of countries. Those countries that have carried out assessments of the risk of contracting HIV associated with drug use are Kenya, Mauritius, Nigeria, South Africa, and Tanzania (Deveau, 2006; Timson, 2006; McCurdy, 2005; Beckerleg, 2005; Parry, 2008). The data from these countries provide evidence that HIV is being transmitted among individuals who use drugs, further showing the potential implications of increasing drug use on the existing HIV situation in the region. The main findings on HIV risks and HIV prevalence are presented in Table 1. It shows the high rates of risk behaviour due to injecting (through the sharing of injecting equipment), high rates of sexual risk behaviour (multiple casual partners and unprotected sex), and higher HIV rates among drug users (compared to national and local HIV data among the general population). Although all of the studies are based on local data, they provide clear indications of drug-related HIV epidemics existing in the region.

Concentrated HIV epidemics have been found among injecting drug users in the region. The epidemic is primarily spread through unsafe injecting practices (that is, the sharing of needles and injecting equipment), but unprotected sexual contact especially among drug users involved in sex work can clearly not be neglected. Recent small-scale studies in the sub-Saharan Africa region (Deveau, 2006; Timson, 2006; McCurdy, 2005; Beckerleg, 2005; Parry, 2008) found that HIV prevalence in existing populations of injecting drug users range from 9% in Nigeria to 53% in Kenya.

Mauritius has developed a **generalised HIV epidemic** which has been driven by injecting drug use (Abdool, 2006). The situation on the islands of Mauritius provides a regional example of the potential role of injecting drug use in kick starting an HIV epidemic. Mauritius currently has an estimated 20 000 injecting drug users among an overall population of 1.3 million residents, suggesting it could stand as the world's second largest injecting drug using population. Estimates indicate that 1.4% of the general population is involved in injecting drug uses (Sulliman, 2004). Students and middle class youth report heroin use and injecting, while members of less privileged groups

such as sex workers and prisoners also report injecting. Within two years' time, the HIV prevalence among the general population climbed from 0.1–0.5% to 1.8%, with 90% of the new infections linked to injecting drug use. A large portion of the increases in HIV prevalence may be attributed to people involved in drug use and in sex work. High levels of sex workers report unsafe sexual and injecting behaviours.

The Mauritian example, although not representative of the entire region, provides a clear indication of how injecting drug use, multiple (injecting and non-injecting) HIV risk factors, and interlinked social networks can lead to a generalised HIV epidemic.

Table 1. Main findings on drug-related HIV risk behaviour and HIV prevalence per country

	Estimated no. of IDUs	Injecting prevalence among drug users	Injecting risk (% sharing equipment)	Unsafe sex practices (% multiple partners and/or unprotected sex)	HIV prevalence among the general population (%)	HIV prevalence among IDUs (%)
Nigeria		3–45	11–40	38–40	5	9 in Lagos, 44 among female IDUs
Kenya	130 748	23; 50 in Malindi	27.5	30	6	23–53
Tanzania	2000–2500 in Dar es Salaam	40 on Zanzibar	33 in Dar es Salaam; 46 on Zanzibar	68–85	10	29–42 in Dar es Salaam; 65 among female IDUs
Mauritius	17 000	1.5 among general population; 50 of prisoners	23–30	88	1.8	
South Africa	260 000		86	65	15–39	19–35

Sources: Adelekan, 2006; Deveau, 2006; Timson, 2006; Dahoma, 2006; McCurdy, 2005; Beckerleg, 2005; Parry, 2008; Mathers, 2008

Hence, the limited available data provide clear indications on the existing HIV epidemics in the region. All reports show a high level of HIV risk behaviour (through injecting and/or non-injecting) and all reports show HIV epidemics among people using drugs. Mauritius even has a developed generalised epidemic deriving from drug use.

2.1.5 Conclusions

The previous sections have concentrated on the findings regarding the following questions:

- What trends in illicit drug use exist in the sub-Saharan region?
- What trends in HIV risk due to injecting drug use exist in the region?
- What is the relationship between HIV and non-injecting drug use in the region?
- How does HIV risk driven by drug use contribute to the already existing HIV epidemics in the region?

Existing trends in illicit drug use in the sub-Saharan region point towards sharp increases in the availability of illicit drugs such as heroin and cocaine in particular, which have been found primarily in the coastal regions of western, eastern and southern Africa. The overall availability of illicit drugs in the entire region has grown considerably and very quickly; it is likely to develop along the lines of economic infrastructure, from coastal areas and densely populated areas to other areas within close geographic proximity to airports, railways and highways.

Trends in HIV risk due to injecting drug use in the region have been increasingly reported all across the sub-Saharan region. At the time of writing, 31 countries have reported the existence of populations of injecting drug users within their borders. Local reports on injecting drug use in 5 countries show high levels of HIV risk behaviour due to the sharing of injecting equipment. This can be compared with HIV risk patterns among drug using populations in other developing and transitioning countries such as that in large areas of Asia.

The relationship between HIV and non-injecting drug use in the region, although based on limited data, show clear indications that drug users in the region are more likely to have high risk of HIV transmission due to unsafe sex, casual sexual relationships, involvement in sex work and /or drugs catalysing sexual risk-taking behaviour. These higher risks of HIV transmission through unprotected sexual contact among people who use drugs and within their wider social networks can be an additional factor driving the HIV epidemics across the region.

HIV risk driven by drug use has contributed to concentrated HIV epidemics in the region due to several factors in relation to injecting and non-injecting risk behaviour. All studies on HIV risk behaviour among drug users show the same picture—high-risk behaviour leading to a higher (e.g., Nigeria), at times a staggeringly high (e.g., Kenya),

prevalence of HIV. At least one example of a situation where injecting drug use has led to the development of a generalised epidemic exists: Mauritius has witnessed a concentrated HIV epidemic among injecting drug users develop into a nation-wide epidemic among the general population in a just a few years' time. Mauritius is not representative of the entire sub-Saharan region, but it provides one of the potential outcomes of a drug-driven HIV epidemic

The primary route of HIV transmission in the region will most certainly remain unprotected heterosexual contact; but, injecting drug use and the related HIV risk behaviour, including sexual risks, can potentially initiate new epidemics or accelerate existing ones (Needle, 2006). According to one of the leading researchers on substance abuse and HIV in the region, Prof Charles Parry, the impact of drug use on existing HIV epidemics can vary. In countries in the region with a lower HIV prevalence, concentrated epidemics among specific sub-populations, such as drug users, may emerge or already exist. If drug users inject, HIV risk is very high and concentrated HIV epidemics are likely to occur; but, transmission patterns may differ. If drug users have limited links with other social networks in the broader population, the epidemic may remain within a specific community. In other settings, where drug users live more openly and amongst different social networks, HIV in drug using communities may extend along those auxiliary and parallel routes into other networks, and has the potential of kick starting wider HIV epidemics among the general population. Experience in Asia provides an example of this transmission pattern. In many other countries of sub-Saharan Africa, HIV epidemics are generalised and are, thus, self-sustaining within the population. However, even in generalised epidemics, the risk of transmission will be higher among vulnerable populations of individuals who engage in high-risk behaviours (e.g., have multiple sexual partners), multiple risks (e.g., individuals involved in sex work), or who are exposed to high-risk behaviour such as injecting. Current developments related to drug-driven HIV epidemics among specific populations indicate the potential fuelling or re-fuelling of existing generalised epidemics. This may limit or reduce the impact of current prevention and treatment efforts and keep the generalised epidemic at the current levels.

2.2 Youth and vulnerabilities to drug-related HIV risks

2.2.1 Introduction

The previous chapter describes clear trends of emerging HIV risks related to increasing drug use in the region, existing HIV epidemics among drug users, and the potential implications on the current HIV epidemic in the sub-Saharan region. It is hard to predict the magnitude of the impact of drug use on the future developments of the HIV epidemic in the African region, but a crucial factor is related to young people and drug use. Are young people likely to become involved in drug use? If they are using drugs, are they likely to become involved in HIV risks through drug use?

This chapter will review the following question: What makes young people vulnerable to drug use and what makes them vulnerable to HIV-related risk behaviours?

In order to understand the likelihood that an individual will contract HIV through drug use, both the specific HIV risks and vulnerabilities to avoiding and managing those risks need to be taken into account. Risk is defined as the probability or likelihood that a person may become infected with HIV. Certain behaviours create, increase, and perpetuate risk (UNAIDS, 2008). As described above, the sharing of injecting materials and/or unsafe sex are behaviours that are associated with a high or extremely high risk of HIV transmission. In addition to these individual risks, wider environmental factors also largely influence an individual's behaviour and also determine the likelihood of risk behaviour.

Vulnerability results from a range of factors outside the control of the individual that reduce the ability of individuals and communities to avoid risks associated with HIV (UNAIDS, 2008).

Vulnerability to HIV can be influenced by three sets of factors and the interactions between them:

- individual factors such as gender or an individual's coping skills;
- situational factors such as family and community values or access to prevention materials; and
- broader societal and environmental influences such as gender inequalities and economic disparities.

These questions related to young people's vulnerability were examined during field visits to Zambia and South Africa. Key experts on HIV prevention and substance use in both countries were consulted in order to discuss if and how young people are likely to become involved in additional HIV risk behaviour due to drug use. Extended visits to townships and communities were held to observe drug use, to meet key persons within the communities, and to hold focus group discussions with young people. Four meetings with groups of young people were held in South Africa, and two meetings were held in Lusaka, Zambia. The meetings in South Africa mainly concentrated on illicit drug use and the vast majority of young people spoken had experience with a variety of these drugs. Young people in Zambia had far less experience with illicit drug use (due to a decreased availability) and discussions were more focussed on alcohol and cannabis use and the likelihood that they would start experimenting with illicit drugs if these became available.

The following section of the report is mainly based on the information collected during the field visits. It will describe different individual, situational and environmental factors that make people (and, in particular, young people) vulnerable to becoming involved in drug use and, secondly, to become engaged in drug-related HIV risk behaviour.

2.2.2 Vulnerability and drug use

The primary question in this section is 'what makes young people in the region vulnerable to drug use'? Individual, situational and wider environmental factors that influence an individual's vulnerability to drug use have been assessed and are discussed.

• Individual factors

Certain individual factors such as **age or gender** have a very strong relationship to drug use. Adolescence is a crucial period of transition that lies between childhood and adulthood, and is characterised by the search for one's identity, which is expressed through issues such as lifestyle, sexual behaviour and, also drug use. International drug prevalence rates among young people are higher than that for the general population. Prevalence rates among youth can be three or four times higher than those found among the general population, partially due to the fact that young people often feel resilient, invincible, and immune to harm (UNODC, 2001).

Gender is another important factor influencing drug use. Men and boys are over-represented among drug using populations. International experience suggest that prevalence rates of drug use among men and boys are always higher than those for girls and women. This gender difference in drug use can be partially explained by the fact that boys are generally more prone to exploring and challenging social norms and are more likely to become involved in deviant acts, including illicit drug use, while girls are more likely to develop and invest in social relationships and are more likely to live according to traditional expectations. Girls and women are reported to be more involved in the

use of socially accepted drugs such as 'over-the-counter' prescription drugs and alcohol.

Both of these factors—age and gender—were reported and found to influence the likelihood of drug use during the field visits. Experts, researchers and specialists on drug treatment observed that drug use is primarily an issue among young men. Drug using men outnumber female drug users in both the more advanced drug markets such as that in South Africa and drug markets that are in the initial stage of development such as that in Zambia.

Drug use and alcohol use among boys were described as important rituals as they grow up. Boys and girls in South Africa considered drug use among girls as a sign of maturing, as well as a sign of being open for (casual) sexual relationships. In Zambia, exactly the same patterns and norms on substance use (in this case, alcohol) were witnessed.

'You use when you are man enough to use', 17-year-old focus group member in Ekangala, a black South African township.

In South Africa, experts witnessed a tendency towards women and especially girls increasingly becoming more involved in illicit drug use and 'catching up with boys'. One explanation could be that drug use, along with the higher availability and greater consumption rates, is gradually becoming more socially acceptable, which might decrease the barriers to drug use among girls (Laubscher, treatment expert, Pretoria, personal communication). This trend was clearly observed during all four focus group discussions with adolescent boys and girls. Some experts in Zambia have expressed a concern for and early indications of similar trends regarding an increased availability of drugs, younger populations engaging in drug use, and larger numbers of women using substances as the availability and use increase further over time (Mayeya, Ministry of Health, personal communication).

A similar trend of 'trickling down' to younger ages was also reported and observed in the more developed drug market in South Africa. Experts monitoring drug use trends have seen a decrease in the age of individuals involved in drug use over time. In particular, in the Cape Town region where drug use developed early and quite rapidly, drug use has become one of the major issues for young people. According to Grant Jardine, director of a treatment facility in Cape Town, *'[The] ages of youngsters on drugs are getting younger by the year'*.

Individual personal and social skills include the ability to take a decision, to express what one feels, to assert oneself, and to solve problems. Undeveloped or underdeveloped personal and social skills also put a person at greater risk of substance use. If these skills are underdeveloped, the person is less likely to be able to cope with difficult situations and is more vulnerable to becoming involved in substance use, whether it be alcohol or drugs. Drug use is often used as an individual's way of coping with personal and other challenges in life. The relationship between an individual's personal coping skills, difficult situations, and substance use has been clearly identified by experts in the region. Likewise, the focus groups with youth revealed that drug use is considered an effective way of 'being able to face [one's] life', 'of getting relief', 'a way of winding down', 'escaping reality', 'feeling comfort', 'being able to deal with [one's] problems', and so on. Drug use is considered a (temporary) solution to one's problems rather than an additional problem. Key experts in both South Africa and Zambia also indicate that drug use plays the role of a coping strategy. This tendency of 'forgetting [one's] sorrows' through substance use has been witnessed and reported in both countries.

'Look where I live; I know there is another life. I often think, what can I do? Give me unga-heroin. It numbs my feelings'. Busta, a 25-year-old black boy in Khayelitsha, a poor township near Cape Town, South Africa

'What can you do in a place like this? It is either drinking or sex. In a bar, you find both'. Man in his 30s, densely populated compound of Mutendere, close to Lusaka, Zambia

- **Situational factors**

Certain situational factors such as the influence of one's peers, family or community factors are well known to contribute to one becoming involved in illicit drug use.

Family support is regarded as an essential system that protects and guides young people in developing their abilities to make decisions and shaping one's future. Substance use experts in both Zambia and South Africa mentioned a limited family and community influence and stated that community values do not provide guidance or protection for young people. Issues such as family disruption, families lacking one or both parents, and inadequate family support and supervision are common in Zambia and South Africa, where large groups of young people lack positive role models in their surrounding environment.

Peer influence is regarded as the main source of information for young people and a crucial factor contributing to a young person's decisions. One of the findings during the focus group discussions was the fact that young people (in both countries) expressed their love of drinking and getting drunk and their love of cannabis and getting stoned. Young people considered substance use cool, attractive and 'the thing to do'. The widespread use of cannabis and alcohol provides a clear indication that young people are interested in the use of psychoactive substances including those that are currently available and those that may become available at some other moment in time.

'The best thing we have is a series of 5 drinks: 80% rum, vodka, Sambuca, a 40% cinnamon drink and a local drink with rum and chocolate. You stand at the bar, light a cigarette and down them one by one. Your blood rushes, into your head; it is explosive. Then, we go down on cocktails and start dancing'. Chantal 24-year-old girl, former 'tic' user from Cape Town, South Africa

Community values related to specific issues (such as sexual relationships or substance use) can be distinguished as a third situational factor influencing the attitudes and behaviour of youth regarding important decisions. Several experts expressed a 'lack of moderation' as a common denominator guiding substance use in the region. The field visit to South Africa demonstrated wide spread illicit drug use in large poor communities. The visit to Zambia showed a different pattern regarding illicit drug use, which is currently not yet widespread. On the other hand, an identical picture regarding the wide spread use of alcohol among young and older individuals in poor communities was seen in Zambia. This provides a clear indication of the vulnerability of young people growing up in these communities and the likelihood that they may become involved in illicit drug use as it becomes more widely available.

A related issue is the very **limited availability of information** on drug use and health risks. Young people in various parts of both Zambia and South Africa base their judgments on various types of drugs solely on the experience of peers, rather than by getting information and support from parents, schools, families, and/or communities. If drug use-related information is available, it was found to be outdated or unbalanced and based on ineffective scare tactics. Those family and community members with whom we spoke in South Africa have limited experience with the challenges posed by illicit drug use and expressed feeling as though they were left out in the cold. They see the devastating effects of illicit drug use on their family members and have no adequate information on drug use and health (as well as on other issues such as treatment and/or referral options).

'With what kind of message do we go out? Not the same bullshit as we did on HIV: 'Don't have sex'. This one—on substance use—is even more complicated. We don't even know what we want people to do?' HIV and behavioural change expert, Lusaka, Zambia

- **Broader societal and environmental influences**

The **availability** of illicit drugs is key in influencing the prevalence of drug use. As already mentioned in an earlier section, illicit drugs are becoming available to an increasing number of individuals across the region. If the transit infrastructure (such as harbours, airports, and major roadways) is present, illicit drug use is likely to be present or will be in due time. This development is clearly illustrated by the case in South Africa where international shipments and domestically produced drugs have become available in large areas of the country. Initially, drug use was confined to urban areas; but, according to local researchers and informants in the community, drug use can also now be found in densely populated areas (townships, slums, etc.) in the wider areas surrounding major cities. The increasing availability of drugs was also witnessed during visits to the townships in regions surrounding these larger cities. Focus group discussions touched upon the wide availability of various drugs, although participants were from townships an hour or more travelling time from the bigger cities.

Drug use in Zambia is at an earlier stage of development. But illicit drugs such as heroin bought in Zambia, where illicit drug use was witnessed in various compounds on the outskirts of the capital. During the focus group discussions in Zambia, individuals stated that illicit drugs such as heroin are currently available if you have the right contacts.

With an increasing availability, illicit drugs become cheap and affordable for many. Prices for a single dose may be as low as a couple of dollars. Drug use only becomes more expensive with repeated use and especially when an individual develops a dependency. Once an individual has developed a dependency, they need to feed their habit using a considerable additional proportion of their income, which may come from theft or sex work.

Drug treatment experts and researchers in both Zambia and South Africa report that drug prices are not an issue for richer people or **middle class** youth. These trends were clearly visible in South Africa among middle class youth. These trends were expressed during focus group discussions in areas where economic development is gradually catching on and bringing (some) progress to its inhabitants.

A significant finding in Zambia was that young people (boys and girls) in poorer compounds reported that drug use (as well as alcohol use) is an expression of economic development and social status. They considered themselves as confined to a life of poverty (with cheap cannabis and cheap beer), while they long for an escape from poverty, gaining some prosperity and consuming it through what they considered a more sophisticated means of consumption, including illicit drugs. Drug and alcohol experts in Zambia confirm these developments among middle class youth.

One former drug user described the situation in this way: *'I joined the global network. By chasing the dragon—smoking heroin—I was reaching out to Pakistan, India, Japan, Chile, Columbia, LA, London, Budapest, Moscow, New York. I was part of the commonwealth of culture...'* (Melissa Ferguson in her book *Smacked*).

Environmental issues such as economic hardship, **poverty**, unemployment, homelessness, illness and inequalities,

or gender and/or ethnic discrimination can provide an environment where individuals become more vulnerable to issues such as drug use. On a very basic level, drug use may be seen as functional—for example, to get to sleep, to stay awake for work, to reduce physical and emotional pain, to overcome fear, or to alleviate hunger. More indirectly, harsh living conditions and bleak perspectives as witnessed in many parts of Africa create a set of socio-economic factors that make individuals very vulnerable for ‘escaping reality’ through drug use. The influence of poverty, unemployment and social inequalities all lead to (young) people being more vulnerable to illicit drug use and are internationally recognised as risk factors. Recent experiences in developing countries in Asia (e.g., Iran, India, Pakistan, Nepal) demonstrate that poverty is a major driver of illicit drug use (UNAIDS, 2007).

‘We live in freedom, but what kind of freedom? Look outside; look at my house. No wonder my three children are on ‘tic’. And, I sell beers in my living room in order to survive’. 45-year-old woman from Cape Flats, South Africa.

Hence, there is a wide variety of individual, situational and environmental factors that make large groups of individuals in the African region and especially youth very vulnerable to drug use. The following factors are important in considering one’s vulnerability: being male and young with a lack of personal and social skills, a lack of family support, peer pressure, conflicting community values, and a lack of information. Equally important are wider environmental factors such as poverty and inequalities that make people highly vulnerable to drug use. If drugs become available, individuals are likely to become involved in using drugs for various economic and cultural reasons. For instance, poor, unemployed youth use drugs to forget their hardships and poverty, while better off young people may wish to celebrate their opportunities through drug use.

2.2.3 Vulnerability and HIV

The primary questions in this section will focus on the issue of if an individual initiates drug use, does this make him/her more vulnerable to becoming HIV positive?

In this section, we describe the various individual, situational and environmental factors that make young people vulnerable to drug-related HIV risk behaviours. Both injecting and non-injecting drug use will be reviewed as factors enhancing an individual’s vulnerability to HIV.

2.2.3.1 Vulnerabilities and injecting drug use behaviour

- **Individual factors**

Local studies on injecting drug use (Beckerleg 2004; McCurdy, 2005) describe enhanced **heroin dependency** as a crucial factor in driving injecting drug use. With increased dependency rates—in particular in relation to heroin—individuals tend to look for the most efficient means of using. Injecting is without a doubt the most efficient way of administering drugs. Heroin use among middle class youth and especially among youth in poor communities can be seen as a potential factor leading to injecting drug use in parts of the region.

Age and limited drug use experience are internationally recognised as pivotal factors in an individual’s risk for HIV (Dolan, 2003). Younger people have less information on how to prevent HIV, limited experience and skills related to safe injecting behaviour, and have less access to prevention tools (e.g., condoms, clean needles and/or syringes, etc.). International evidence has demonstrated that the early years of injecting are crucial in avoiding exposure to HIV (WHO, 2005). This trend has also been seen in East Africa, a region where only a few years after the first signs of (injecting) drug use were seen, high levels of HIV-related risk behaviours and increasing HIV prevalence rates have been reported (Beckerleg, 2005; McCurdy 2005).

‘I was invited to a party. Everybody was doing drugs. I saw people injecting and I gave in. It was complicated, painful. I just took a syringe from the table. I didn’t think about who had used it’. 24-year-old black boy living in Cape Town, South Africa.

No specific data has been found on the relationship between injecting drug use and **gender** in Africa. Local studies do suggest that *if* a woman becomes involved in injecting drug use, they are more vulnerable to becoming HIV positive. Due to the stigma associated with drug use, they are also less likely to use available services. Those local studies which are available from the region are in line with international experience (IHRD, 2007) describing a higher vulnerability among female drug users. For women who inject drugs, the stigma of injecting drug use is added to the stigma and discrimination associated with drug use of any kind; these factors combined can push women into behaviours that increase their risk of transmitting HIV. Female drug users may rely on men to inject them and to acquire drugs and injecting equipment (Beckerleg, 2005).

Specific individual and cultural beliefs related to injecting behaviour are internationally known to play an important role in whether or not one initiates injecting (Kools, 2004). For instance, in certain regions, injecting is mainly seen as a very efficient means of drug use, whereas, in other cultural settings, people have large objections against injecting drug use. These cultural attitudes partially explain, for instance, the popularity of injecting drug use in Eastern Europe; drug users from Suriname, however, avoid injecting. Experts from the African region have not indicated similar notions regarding injecting drug use among groups there, which make injecting either more or less likely. In the Cape Town area, however, non-injecting drug use is widely accepted as the norm. During field visits to

South Africa and Zambia, considerable attention was given to finding factors that drive or protect communities and/or individuals from drug-related harm. During focus group discussions in the various communities, some individuals expressed their personal or friends' experiences with injecting and mentioned beliefs that both drive and reject injecting drug use. Interestingly, no widespread evidence of protective cultural beliefs related to the statement that '*injecting [is] un-African*' were witnessed.

'I'd do anything for drugs. But I'm afraid of injecting'. 'I would do it, if I felt it needed to be done'. Two black boys in Khayelitsha township, South Africa

Where there are no clear indications related to whether and how injecting behaviour will develop, clearer trends can be described for those who do start injecting. Once people start injecting, they are very vulnerable to becoming involved in sharing injecting equipment and are, therefore, at a higher risk of HIV transmission. International experience, especially in transitioning and developing countries, demonstrates that, if individuals become involved in injecting drug use, avoiding the sharing of equipment, however crucial, is quite difficult to sustain (WHO, 2005).

- **Situational and environmental factors**

The following situational and environmental factors influence an individual's vulnerability to HIV transmission through injecting drug use.

The availability of clean injecting equipment and information on how to use these properly is essential in order to avoid drug-related harm. Syringes are sold in pharmacies and drug stores, but a drug user often faces obstacles in obtaining them. In particular, young people and women face stigma and marginalisation when buying injecting equipment and are more likely to depend on drug dealers, drug using peers, or even medical facility waste bins for obtaining their equipment. Fifty percent (50%) of injecting drug users in Cape Town reported having had difficulties obtaining the necessary HIV prevention equipment (Parry, 2008). The costs of equipment and (fear of) discrimination and harassment by police are burdens faced when obtaining and carrying clean injecting equipment.

'We see more and more injecting. Syringes are sold by the dealers; pharmacies don't sell to drug users', Community youth worker, downtown Johannesburg, South Africa.

Those local studies available on injecting drug use-related risks indicate that large groups of drug users are aware of the relationship between injecting and HIV (Parry, 2008). However, those same studies indicate that they have only a general notion 'that injecting spreads HIV' and have no detailed knowledge on specific measures that can prevent HIV transmission. For the entire region, there is no HIV prevention information available on safe injecting drug use which will provide in-depth information to users on how to avoid HIV.

Another factor enhancing an individual's vulnerability to HIV transmission has to do with existing **laws and regulations** on drug use and **law enforcement**. Drugs are illegal and those who use drugs are subject to prosecution and incarceration. The intense repression of drug users drives them further underground and away from drug treatment, HIV prevention services and other health or social services. Fear of the police, hiding from mainstream society and very limited contact with health and social services were clearly witnessed during the field visits in Zambia and South Africa. Young drug users stated that a fear of rejection, discrimination, harassment and incarceration were all factors that made them reluctant to seek help and support.

Thus, there are several considerable factors that enhance an individual's vulnerability of becoming involved in injecting behaviour. The most significant factors include heroin dependency, age, limited drug-taking experience, a lack of prevention materials and information, and laws and law enforcement harassing individuals. Once involved in injecting, individuals are at a (extremely) high risk of transmitting HIV.

2.2.3.2 Non-injecting drug use-driven HIV risk

As previously described, sexual transmission driven by drug use has been identified as an additional risk among drug users. This specific non-injecting HIV risk deserves special attention because of the existing sexually driven HIV epidemics and high HIV prevalence rates as seen in the sub-Saharan region. The following issues related to non-injecting drug use can increase an individual's risk of becoming HIV positive.

Sexual risk behaviour

Previous sections of this report have described a higher sexual risk among (injecting) drug users in the region. All reports on drug use primarily from east Africa and South Africa (Adelekan, 2006; Deveau, 2006; Timson, 2006; Dahoma, 2006; McCurdy, 2005; Beckerleg, 2005; Parry, 2008) indicate higher HIV sexual risk-taking behaviour among injecting and non-injecting drug users alike. Furthermore, young people have limited knowledge regarding how HIV is transmitted and how it can be prevented. In addition, young women are recognised as having even less knowledge regarding HIV than young men (UNAIDS, 2005).

Experts in the region (Medical Research Council in South Africa and experts on behavioural change and HIV in both South Africa and Zambia) have explained that this additional vulnerability along with similar factors may lead to drug use, which includes a **lack of family support and positive role models, gender issues, insufficient personal and social skills**, and more **deeply rooted conditions such as poverty and marginalisation**.

In particular, young people—given that they are at a stage in life when they develop their sexual orientation and skills—are generally recognised as a group who have a higher vulnerability to engaging in HIV-related risks. Drug use adds to these risks. When young people use drugs, consistent HIV prevention behaviour is less likely and they are even more likely to engage in unsafe sexual behaviour. This was also expressed very clearly by various members of the focus group discussions. In South Africa in particular, individuals identified the difficulties they face related to safe sex while they are on drugs. In Zambia where illicit drug use is not (yet) very widespread, focus group participants identified similar problems with alcohol use which catalyses sexual risk taking as inhibitions decrease and individuals are less likely to follow prevention measures such as safer sex practices.

Large numbers of young people in the focus group discussions expressed their explicit aversion towards the use of condoms and mentioned preferring sex without condom, even when with casual partners. The saying *'sex with a condom is like eating a sweet with the wrapper still on'* was heard in nearly every meeting with young people in Zambia as well as in South Africa.

Stimulants and unsafe sex

Specific attention needs to be paid to the catalysing effects of specific substances including alcohol. For instance, stimulants are known to enhance sexual risk-taking behaviour (Molitor, 1998), and stimulants such as methamphetamines and crack cocaine have been linked to higher risk sexual behaviour by increasing sexual desire and, at the same time, decreasing an individual's risk awareness and impairing their judgment. Both stimulants often lead to extensive binge sessions, where men and women are using drugs and in which sex is often one of the currencies used to obtain drugs. Researchers in South Africa suggested that there is preliminary evidence that the rates of sexually transmitted infections and unintended pregnancies are being driven by methamphetamine use in antenatal clinics in the Western Cape province.

Young people in the focus group discussions in the Cape Town region strongly underline the relationship between 'tic' use and sexual risk-taking behaviour. Drug use, the sharing of drugs, being intimate and having sex represent an inseparable amalgam of the daily life of young people growing up in the poor townships in the area. The following statements illustrate this situation:

'Tic is very kind to me. It makes me emotional, wanting to communicate, come closer. And when I'm with a women, we have sex', Anwar, 35-year-old, black man, Cape Town, South Africa.

'If you want to have sex, just go out and look for a girl who is 'ticcy'. It is easy to get her—just offer some "tic"', Shaun, 22-year-old coloured boy from the Cape Flats area, South Africa.

'HIV comes from 'tic'. You start to use at the age when you are becoming sexually active, if you know what I mean. I was 17 when I started with drugs—XTC and, a little later, 'tic'. We have nothing but to walk around, put some money together, buy some 'tic' and play cards at the house of one of our parents. Just have a good time, we take our lollies—glass smoking device—and share the 'tic'. Boys, girls, and you know how it goes'. Felicia, 23-year-old coloured girl Cape Flats area, South Africa.

Alcohol

Although not in the direct scope of this explorative study, alcohol needs to be taken into consideration when discussing substance-driven sexual risk taking. The relationship between alcohol and sexual risk taking has been described in the region (Morris, 2006). A meta-study that includes the findings from 20 African studies found an association between alcohol use and HIV prevalence (Fisher, 2007). The World Health Organisation reports that the highest consumption of alcohol per individual can be found in the eastern and southern regions of Africa, and heavy drinking patterns are second only to Eastern Europe. There is a growing recognition that alcohol is an important factor driving the general HIV epidemics in the sub-Saharan region.

Experts with whom we talked during meetings at the Ministry of Health in Zambia mentioned alcohol as a key factor driving unsafe sexual behaviour in their country. They described patterns of heavy drinking among large groups of the general populations and high-risk sexual behaviour. Public health experts with whom we met in Zambia expressed the need to address alcohol-driven sexual risk taking as an important priority in their country. Alcohol regulations on under-age drinking and restricting opening hours are in place, but are seldom enforced.

Youth and minors have been identified as highly vulnerable to alcohol use and numerous examples of HIV risk and alcohol use exist. The following striking example was provided from a poor compound in Lusaka:

'Out of every 10 people who visit our voluntary counselling and testing service, 7 of them have questions or concerns regarding something done under the influence of alcohol. Girls find themselves in other houses or get raped. Men pick up girls and regret it later on. Some get sloppy regarding their antiretroviral treatment. Can you imagine, 7 out of 10...?', Voluntary Counselling and Testing counsellor in Mutendere compound, Lusaka, Zambia.

Sex as a commodity

Involvement in sex work is an important factor contributing to HIV transmission among drug-using communities and

other networks. This relationship is complex and difficult to quantify, but there is clear evidence that the exchange of sex for money, consumables or drugs is associated with high-risk behaviour. Overlapping and intertwined networks of drug users, sexual partners and clients significantly contribute to HIV epidemics (UNAIDS, 2008).

During the field visits, individuals regularly mentioned occasional 'survival sex' or what a worker in a Zambian community called 'compound sex'—that is, sex in exchange for money to obtain basic commodities in life, including income, food, rent, school books, etc. Various young people involved in drug use (in Zambia as well as in South Africa) reported the regular exchange of sex in order to obtain something, either a cell phone, jeans or additional 'drugs'. Trading sex is often used as a way of 'making ends meet'. Sex exchanged for money or goods seems widespread among poor people in the region and is more or less accepted as a fact of life. No clear distinctions have been observed between professional sex work, incidental sex work and the occasional exchange of sex for a commodity.

Thus, there are several factors that enhance an individual's vulnerability to becoming involved in sexual risk behaviour through non-injecting drug use. The most significant ones are drug dependency, a lack of personal and social skills, gender inequality, poverty, and the exchange of sex and unsafe sex catalysed by stimulants or alcohol.

2.2.4 Conclusions

The preceding sections of this report have described patterns of increased drug use, the risks of becoming HIV positive associated with injecting and non-injecting drug use, and an increasing HIV prevalence among drug-using populations in Africa. How these patterns will further develop remains unknown, but should be viewed against the backdrop of these risks and vulnerabilities. The various factors that make it more or less likely that young people will engage in HIV-associated risk-taking behaviour have been described.

This chapter has explored the following questions: **'What makes young people vulnerable to drug use and what makes them vulnerable to related HIV risk behaviours?'** Both vulnerabilities to drug use and vulnerabilities to HIV risk have been reviewed. First and foremost, it is important to understand the likelihood that an individual initiates drug use. Secondly, if an individual uses drugs, s/he is likely to become involved in HIV-related risk behaviours.

Next, we explored the question regarding **'what makes young people vulnerable to high HIV risk behaviour due to drug use?'** The field visits to South Africa and Zambia illuminated a wide variety of factors that make large groups of individuals in the African region and especially young people very vulnerable to drug use. Important factors that make an individual vulnerable include the following: being male and young, a lack of personal and social skills, a lack of family support, peer pressure, conflicting community values, and a lack of information. Equally important are the wider environmental factors such as poverty, inequalities and hardships that make people very vulnerable to drug use. If illicit drugs become available, large populations of poor people are likely to be tempted to 'escape' via drug use. Young people in large parts of Africa have a wide range of things they'd like to forget—e.g., poverty, lack of education, employment and/or social constraints in personal development. Drug use is considered by many people to be a temporary solution to their problems rather than an additional problem with long-term consequences. On the other hand, middle class youth or those who have reached a certain level of prosperity may wish to enjoy their opportunities and link with 'modernity' through drug use. Information from experts in the region and observations during the field visits provided clear indications that drug use is likely to become a new challenge for large populations of young people in the region. And, with the increasing availability of illicit drugs, consumption will trickle down to younger people and will also become increasingly common among girls.

The following table provides an overview of the most important vulnerabilities to drugs use and related HIV risks identified through this exploratory study.

Table 2. Primary factors identified that relate to one's vulnerability			
	Drug use	HIV risk	
		Injecting related	Non-injecting related (sexual risk behaviour)
Individual	<ul style="list-style-type: none"> • Age (young) • Gender (male) • Lack of personal & social skills 	<ul style="list-style-type: none"> • Heroin dependency • Age (young) • Limited injecting experience • Gender (female) • Cultural beliefs regarding injecting 	<ul style="list-style-type: none"> • (Heroin) dependency • Age (young) • Gender (female) • Lack of personal & social skills • Attitudes towards condom use • Stimulant use • Alcohol use • Sex exchanged for drugs/money
Situational	<ul style="list-style-type: none"> • Lack of family support • Peer influence • Conflicting community values • Limited prevention information 	<ul style="list-style-type: none"> • Availability of injecting equipment & information • Peer influence 	<ul style="list-style-type: none"> • Lack of family support • Peer influence
Environmental	<ul style="list-style-type: none"> • Availability of illicit drugs • Poverty • Socio-economic inequalities • Prosperity 	<ul style="list-style-type: none"> • Poverty • Laws & regulations • Limited (access to) healthcare system 	<ul style="list-style-type: none"> • Poverty • Gender inequalities

In this chapter, we also explored the question of **'what makes young people vulnerable to HIV risks via (injecting or non-injecting) drug use?** Once involved in drug use, avoiding HIV-related risk all the time becomes complicated particularly in relation to injecting. There are several considerable factors that enhance one's vulnerability of becoming involved in injecting behaviour. The most significant factors include heroin dependency, age, limited drug-taking experience, a lack of prevention materials and information, and laws and law enforcement targeting individuals. No major protective cultural values or beliefs were identified that could prevent individuals from initiating injecting drug use. Once involved in injecting, individuals are vulnerable to a (extremely) high-risk of transmitting HIV through the sharing of equipment.

Drug use may also lead to an additional risk through unsafe sex. There are several factors that enhance an individual's vulnerability of becoming involved in sexual risk behaviour through non-injecting drug use. The most significant factors are drug dependency, a lack of personal and social skills, poverty, gender inequality, the exchange of sex for money/drugs and unsafe sex catalysed by stimulants or alcohol.

Existing drug laws and enforcement have been identified as issues which may hold drug users back from seeking prevention services or assistance. The fear of harassment and incarceration are factors that prevented them from seeking help and/or support and makes them even more vulnerable to HIV risk.

Finally, the questions of **'what makes young people vulnerable to drug use and what makes them vulnerable to related HIV risk behaviours?'** needs to be addressed with great care. The breadth and the speed at which drug use is spreading is largely dependent on external factors related to the global drug trade and may be slowed by major events or crises that disrupt the trade and the diffusion of drugs. There are many uncertainties and limited data exist; nevertheless, the wide range of vulnerabilities related to becoming involved in drug use, injecting and/or non-injecting-related risks associated with HIV are compelling.

Given existing trends and the speed of developments during the last decade, it is very likely that, over time, larger populations of young people will come into contact with illicit drugs. From the moment they become involved in drug use, their risk of becoming HIV positive will increase. If individuals do inject drugs, they are vulnerable to an extremely high risk of contracting HIV through the sharing of equipment. If they do not (yet) inject, they are vulnerable to engaging in higher-risk sexual practices triggered by or associated with drug use, which is an additional reason to be seriously concerned given the high prevalence of HIV in the region.

2.3 Responses

2.3.1 Introduction

Previous sections of this report have described trends of increasing HIV risks due to injecting and non-injecting drug use behaviour and the vulnerabilities that young people in the region face which make them more likely to engage in drug-related HIV risk. It is very likely that, over time, young persons will come into contact with illicit drugs. From the moment they initiate drug use, their HIV-related risks are very likely to increase.

In what follows, we will review the following question: **What kind of responses need to be developed in order address HIV risk driven by drug use?** We will describe existing responses in place designed to address drug use and drug-related HIV risks and will draw conclusions regarding the impact of these existing responses and if additional responses are needed.

The focus here is on risk reduction responses (primarily to address drug use) and harm reduction responses (primarily to address HIV risk among drug users).

Responses designed to reduce one's risk are based on information from UNODC, the Global Youth Network and key regional experts. The latter part of this section describing the specific HIV-related responses for drug users will be based on a recent report on global harm reduction responses (IHRA, 2008) and additional information from key regional experts.

2.3.2 Risk reduction responses

This section will describe two types of responses: general responses aimed at preventing drug use and more specific responses focused on individuals who are more likely to initiate or already have initiated drug use. General responses are aimed at preventing drug use, targeting wider audiences and groups such as school children, community youth groups or segments of the general population. Specific responses are aimed at stopping (initiation or more advanced) drug use and target individuals or smaller groups.

2.3.2.1 General risk reduction responses

Different types of general risk reduction responses are known, which include awareness campaigns, school-based programmes and community-based programmes. All of these responses aim at preventing youth from initiating drug use by delaying or preventing all together the initial use of a substance and ultimately reduce the potential harm.

General drugs awareness campaigns are extremely limited in terms of availability in the region. Those that do exist are primarily focused on scaring young people regarding the ultimate consequences of drug use—death and incarceration. There is no evidence that this scare tactic has any positive impact on curbing drug use among young people (UNODC, 2001).

The South African campaign, *Ke Moja* ('No Thanks'), is the only example of a more advanced drug awareness campaign. *Ke Moja* promotes drug-free and healthy lifestyles, addresses youth between 10 and 18 years old, and provides information on various substances (such as drugs, alcohol, and tobacco) and their associated health risks. The programme also supports after-school information sessions, youth initiatives and community action. The *Ke Moja* programme is currently being evaluated. In the meantime, it is important to point out that programmes like this may provide an effective model of awareness campaigns including elements that aim at empowering young people to prevent drug use and eliminate the associated health risks.

School-based drug education programmes are a popular means of prevention, and provide an opportunity to reach very large groups of young people. These programmes also provide the opportunity to provide repeated information messages and long-term support.

School-based drug education programmes have been carried out and reported on in many parts of the region. The general impression of school-based programmes is one of *ad hoc* initiatives that rely upon a variety of approaches with different aims. The majority of initiatives rely on basic scare tactics, which do not include alcohol and its related risks, promote abstinence, and seldom offer alternatives or possibilities aimed at developing empowerment skills. An audit of prevention programmes in the Western Cape, South Africa (Harker, 2008) identified several issues related to the quality and impact of school-based programmes. The primary recommendations for school-based programmes are that drug use prevention should be part of the life skills training of the school curriculum, provide realistic information on drug use, alcohol and tobacco and their related health risks, include risk reduction strategies, include HIV prevention messages and referrals for treatment, provide skills building exercises, include interactive teaching methods, provide repeated information messages on a long-term basis, provide healthy alternatives, equip teachers in facilitating training, and include parents or caregivers. Life skills programmes that address sexual and reproductive health issues and HIV risk reduction information provide an excellent opportunity for educating youth on various risks associated with drugs and alcohol (including HIV-related risk behaviour).

Community-based drug education programmes are known for being effective methods of reaching and informing populations who are at a higher risk and/or vulnerability to becoming involved in drug use. Experience from other regions in the world (e.g., Asia) provides examples of responses which focus on community health education and health interventions, and which rely on addressing parents, and include peer education, skills building-based programmes, vocational training services, and youth recreation and sports.

Community-based programmes are seldom carried out in the region. If they do exist, local community campaigns in the region are often found to be in line with national awareness campaigns and rely on the use of ineffective scare tactics. Examples observed during the field visits from South Africa and Zambia were found to lack resources and quality health promotion information, and those providing them lacked the knowledge, skills and experience needed to address drug-related problems. Thus, several areas of improvement were identified.

A striking example of the potential of community-based interventions addressing youth and substance use was found in one of the poverty-stricken compounds in Lusaka:

'The boys you see over there playing pool, they are the ones who are no longer allowed in both bars next door. We spoke with the owners and now they refer those kids to our service. We bought some second-hand pool tables and here they are, all afternoon in our community centre', director of a community centre in the Mutendere compound, Lusaka, Zambia.

The UNODC office in South Africa has produced a useful guideline, 'Conducting Effective Substance Abuse Prevention Work Among the Youth in South Africa', which includes information and references on school-based and community-based services.

Hence, general risk reduction programmes addressing drug use through awareness campaigns, school-based and community-based programmes are considered important responses to informing, educating and empowering young people to meet the challenges of the increasing availability of illicit drug and the increase in their use. Those risk reduction programmes reported in the region, are not based on existing best practices, are not widespread enough, and unlikely to meet the growing needs of young people regarding drug use (and related risks).

2.3.3.2 Specific risk reduction responses

This section will focus on responses that target specific populations at risk for initiating drug use and people who are currently already using drugs. Two types of risk reduction responses that have been reviewed include early interventions and drug treatment.

Early interventions targeted to specific audiences that are at a higher risk of drug-related HIV transmission (e.g., street children, school drop outs, young people experimenting with drug use, or youth at risk in poor communities) can play an important role in HIV prevention. These early interventions through counselling and referral services may reduce and/or limit drug use-related problems before they spread and become more acute. Early intervention responses were found among services providers who support street children, a population of youth that is considered to have a number of vulnerabilities.

After the prevention of drug use, **drug treatment** is a second-line intervention strategy. Drug treatment programmes are recognised as a very important HIV prevention response for those who use drugs (MAP, 2004). Throughout the region, there are very few treatment or rehabilitation facilities outside of psychiatric hospitals that support individuals wishing to end their dependency on drugs or alcohol. Those that do exist have a limited capacity. South Africa and Kenya lead Africa in terms of their abilities to provide drug treatment. Mauritius, Nigeria, Uganda, Zambia and Zanzibar offer some drug treatment options for those seeking it.

South Africa has the most extensive range of treatment and rehabilitation services available in the region; but, all experts agree that services are unable to cover the enormous increase in demand. A system of publicly funded substance treatment facilities for people with a dependency exists, but with a limited capacity. Private treatment centres exist across the country, but are expensive and only available to those who can afford them. Local chapters of Narcotics Anonymous exist in various cities across South Africa and provide valuable support to people recovering or dealing with drug dependency. They provide an important example of a type of support that is low cost and has the potential of reaching those who are not reached by treatment centres (if any). Out-patient treatment, support groups, home detox, and community-based care are models that could increase the coverage of treatment and support at low cost for those in need.

To conclude, early intervention and drug treatment programmes are recognised as very important responses that can indirectly have a great value in HIV prevention among those who are in the early stages of drug use. Existing interventions, however, lack the scale to meet the growing needs of drug use. The costs of in-treatment programmes are likely to be a burden in rolling in reaching adequate coverage. Out-patient treatment, support groups, home detox, community-based treatment and support have a significant additional impact at lower costs.

2.3.3 Harm reduction responses

This section reviews the HIV prevention responses for those who are currently using drugs. 'The term "harm reduction" refers to policies and programmes aimed at reducing the health, social and economic harms associated with the use of illicit and legal psychoactive substances. Harm reduction is entrenched in both public health and human rights rationales, and takes a pragmatic and non-judgemental approach to addressing the problems associated with drug use' (IHRA, 2008).

Harm reduction is the most effective public health response to address health-related issues among active drug users (WHO, 2005). Harm reduction is an HIV response that considers 'the full spectrum of problems that drug users face while they are injecting or alternating between abstinence and non-abstinent phases' (UNAIDS, 2004).

Harm reduction interventions include the dissemination of information (through community outreach) on how to reduce the risks associated with drug use, the provision of prevention commodities such as clean syringes and needles, and a range of drug dependence treatment options including methadone and other opiate substitutes. The following interventions were reviewed in the African context.

Needle and syringe exchange programmes are essential in order to reach drug users and to provide them with proper prevention materials. In at least 13 countries in the region, individuals can obtain syringes in pharmacies; but, practice suggests that drug users are often denied the right to buy syringes. More than 50% of injecting drug users in Cape Town, South Africa have experienced a denial in the month prior to being interviewed (Parry, 2008).

The only country in the region with an official syringe exchange programme is Mauritius, where three exchange sites operate and distribute injecting equipment via community-based outreach. In Kenya, NGO-led outreach services provide syringes and information in Mombassa and Nairobi. All other countries lack similar prevention services.

The medically prescribed substitution of illegal opiates is internationally recognised as a crucial policy in reducing the spread of HIV. Treatment with an opiate substitute such as methadone or buprenorphine is regarded as a highly effective replacement for illicit drug use and in stabilising an individual's life. At present, **opiate substitution therapy** is not available in the sub-Saharan region. However, in Mauritius, legislation was enacted to introduce methadone replacement therapy and 400 drug users at 7 sites are receiving treatment. In South Africa, medication is available, but is only used in private clinics or detoxification settings.

Community based outreach. Providing adequate information about specific health risks and how to avoid them is an essential HIV prevention service for drug users. **Community-based outreach** is an effective method to access to hard-to-reach populations. Outreach workers know the language and the setting, and have a good position from which to communicate on sensitive issues such as drug use and/or sexual behaviour.

Outreach activities targeting drug users are known in Burkina Faso, Kenya, Mauritius, Mozambique, South Africa, and Tanzania, but are few and have a limited coverage. The services available in several cities in Kenya offer harm reduction education, sexually transmitted infection prevention, peer support, referral services and voluntary HIV counselling and testing. Information campaigns or materials targeted to drug users exist in Mauritius. Peer support programmes can be effective in increasing coverage and the impact of outreach prevention messages, but are only in place in Kenya.

No written or other information materials used to inform drug users on how to protect themselves have been found.

Voluntary counselling and testing services are a crucial step in enabling individuals to determine their HIV status and to support them in further following up on prevention and/or treatment. Counselling services targeting vulnerable populations such drug users are available in Burkina Faso, Kenya, Mauritius, Mozambique and South Africa. Some studies from the region (e.g., from Kenya and South Africa) suggest that people are unable to locate services and often face stigma and feel discriminated against when receiving counselling and testing services.

Supporting policies and regulations

With the increasing numbers of individuals using drugs, injecting drugs or at risk for HIV, there is a growing recognition in several countries across the region that there is a need to address HIV risk among drug users. The African Union recently recognised the '*need to prioritise regional and national capacity building to enhance prevention and care [related to] substance abuse and related to HIV and AIDS*' as well as requiring '*Member States to conduct training on harm reduction, drug abuse treatment and rehabilitation, and provide services for drug dependent individuals, including street children and child soldiers*' (African Union, 2007).

National policies to address HIV risk among drug users have been developed in a few African countries. Kenya, Mauritius, South Africa, Tanzania, Zambia, and Zimbabwe have mentioned drug-related issues in their HIV prevention policies. Some countries, such as Kenya, Mauritius and Tanzania, have given priority to individuals who use drugs in their national strategic plans. Mauritius included specific objectives in their HIV strategic framework in order to reduce the spread of HIV among injecting drug users and prisoners. The government of Tanzania has identified an adequate response to injecting drug use as critical in their HIV prevention policy. Likewise, Zanzibar

developed a five-year plan (2007–2011) on substance use and HIV.

A promising recent initiative in the region is the initiation of a regional harm reduction network (Sub-Saharan Harm Reduction Network), which was established to advocate for harm reduction activities in the region and to exchange regional examples of good practice regarding harm reduction.

Notwithstanding these recent amended policies, HIV and substance use experts in the region have expressed ‘a general lack of awareness among policy makers and healthcare practitioners related to the emerging injecting drug use and HIV’ in large parts of the region (Needle, 2006).

The dominant response towards drug use across almost the entire region remains law enforcement, and drug users are among the most discriminated against and vulnerable populations within their own societies.

Resources

Thus far, the currently developing phenomenon of drug-related HIV risk has been barely addressed and has received very limited attention and resources.

Current HIV prevention measures, aimed at reducing HIV risks among drug users, are very limited in number and are mainly supported by international donors and multilateral agencies. Funds from the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) support a programme in Kenya and the World Bank supports the Tanzanian government in addressing HIV and drug use. UNODC offices in the region support various health initiatives on the prevention of drug use and HIV prevention among people using drugs. The UNAIDS, WHO and UNICEF offices in the region, already engaged in technical and financial support for programmes there, can play a significant role in advocating and supporting HIV prevention responses among drug users in the region (IHRA, 2008). Harm reduction is recognised as a cost-effective HIV response (Marseille, 2002), but the extreme economic situation in some parts of the region may also limit implementation of cheaper HIV prevention responses such as harm reduction interventions.

Hence, harm reduction responses are considered essential HIV prevention responses to address HIV risks among those who are currently using drugs. There is growing recognition in the region that injecting drug use is playing a role in the HIV epidemic, but very few harm reduction policies and services have been implemented. Mauritius and to a certain extent Kenya, with important support from UNODC, play a leading role in addressing HIV risks among drug users and their partners.

2.3.4. Conclusions

The current HIV epidemic in large parts of the sub-Saharan region puts a heavy burden on the health and social service systems that are already struggling to cope with other pressing issues. Existing prevention responses have been largely developed to tackle the mainstream heterosexual transmission of HIV. Current trends related to increasing drug use and associated HIV risk need to be addressed in order to sustain the early successes in curbing and slowing down the HIV epidemic in the region.

This chapter has reviewed the following question: **what kinds of responses need to be developed in order to address HIV risk driven by drug use?**

Risk reduction responses (primarily to address drug use) and harm reduction responses (primarily to address HIV risk among drug users) have been reviewed with reference to their potential and existing impact.

General risk reduction programmes addressing drug use through awareness campaigns, school-based and community-based programmes are considered important responses to inform, educate and empower young people to meet the challenges of the increasing availability of illicit drug use. Risk reduction programmes are reported in the region, the majority of which lack evidence-based messages and unlikely to meet the growing needs of young people regarding drug use (and the related risks).

Early intervention and drug treatment programmes are recognised as very important responses that can indirectly have a great value in HIV prevention programmes among those who are initial stages of drug use. Existing interventions, however, lack the scale necessary to meet the growing needs of drug use; likewise, the high cost of adequately scaled programmes for in-patient treatment may be a burden for many countries. Out-patient treatment, support groups, home detox, and community-based treatment and support could have a significant additional impact at a lower cost.

Harm reduction responses are considered essential HIV prevention responses addressing HIV risks among those who are currently using drugs. There is growing recognition in the region that injecting drug use is playing a role in the HIV epidemic, but very few harm reduction policies and services have been implemented. The costs of harm reduction programmes are relatively low, but may still limit implementation. Economic and the careful use of resources may be required. Mauritius and to a certain extent Kenya, with important support from UNODC, play a leading role in addressing HIV risks among drug users and their partners.

To conclude, determining which responses are needed to address HIV risk driven by drug use, effective responses must be comprehensive in their coverage of vulnerabilities and the risk of initiating drug use (risk reduction) and HIV-related risks among those who currently use drugs (harm reduction). Current prevention responses do not match the existing needs to address existing developments regarding increasing drug use and the associated HIV risk.

3. Main conclusions and recommendations

Within the exploratory character of this study, various trends in the sub-Saharan region can be identified. Although limited data on the spread of HIV among drug using populations in Africa exists, indications are compelling that HIV risk among drug using populations is a quickly developing phenomenon, which has been triggered by unsafe injecting behaviour and drug-driven unsafe sexual behaviour among people who use drugs.

The following trends have been identified:

- Sharp increases in the availability of illicit drugs such as heroin and cocaine have been found primarily in the coastal regions of Africa. Many countries in western, eastern and southern Africa have become important drug transit areas. The increased availability of illicit drugs has resulted in expanding domestic markets and pockets of illicit drug use in all transit countries. Illicit drug use is very likely to become available in urban areas, harbours, airports or highways, but is likely to spread to other densely populated areas (townships, slums, compounds) in the wider regions surrounding major cities or transporting routes.
- Injecting behaviour among drug users is increasingly reported across the entire sub-Saharan region. Thirty-one (31) countries are reported to have populations of injecting drug users. Local reports on injecting drug use show high levels of HIV-related risk behaviour due to the sharing of injecting equipment. Studies on HIV risk among populations of injecting drug users in a number of countries also clearly indicate high levels of unsafe sex. There are clear indications that drug users in the region are more likely to have a high risk of HIV transmission, due to unsafe sex, casual sexual relationships, involvement in sex work and/or drugs catalysing sexual risk behaviour. These higher risks of HIV transmission through unprotected sexual contact among people who use drugs and within their wider social networks can be an additional factor driving the HIV epidemics across the region.
- Unsafe injecting and unsafe sexual contact among drug users have contributed to concentrated HIV epidemics among drug using populations in certain parts of the region. There is evidence of concentrated epidemics among drug users in countries such as Kenya, Nigeria, South Africa, and Tanzania. Mauritius has witnessed a concentrated HIV epidemic among injecting drug users develop into a nation-wide epidemic among the general population in just a few years' time.
- Trends on future developments are hard to estimate, but the breadth and the speed at which drug use is spreading is largely dependent on external factors related to the global drug trade and may be slowed by major events or crises that disrupt the trade and diffusion of drugs. Nevertheless, the wide range of vulnerabilities of youth to become involved in drug use, injecting-related and/or non-injecting-related risks associated with HIV are compelling: in particular, socio-economic factors such as poverty, inequalities and hardships make young people very vulnerable to drug use. If illicit drugs become available, large populations of poor people are likely to be tempted to 'escape' via drug use. Young people in large parts of Africa have a wide range of things they'd like to forget—e.g., poverty, a lack of education, unemployment, or social constraints in personal development. Drug use may be considered by many people to be a temporary solution to their problems rather than an additional problem with long-term consequences. On the other hand, middle class youth or those who have reached a certain level of prosperity may wish to enjoy their opportunities and link with 'modernity' through drug use. There are indications that, with an increased availability over time, drug use trickles down and younger individuals and more young girls may become involved in drug use.
- Given existing trends and the speed of developments during the last decade, it is very likely that, over time, larger populations of young people will come into contact with illicit drugs. From the moment they become involved in drug use, their risk of becoming HIV positive will increase. If individuals do inject drugs, they are vulnerable to an extremely high risk of contracting HIV through the sharing of equipment. If they do not (yet) inject, they are vulnerable to engaging in higher-risk sexual practices triggered or associated with drug use, which is an additional reason to be seriously concerned given the high prevalence of HIV in the region.
- The primary route of HIV transmission in the region will most certainly remain unprotected heterosexual contact; but, injecting drug use and the related HIV risk behaviour, including sexual risks, can potentially initiate new epidemics or accelerate existing ones. In countries in the region with a lower HIV prevalence, concentrated epidemics among specific sub-populations, such as drug users, may emerge or already exist. If drug users inject, HIV risk is very high and concentrated HIV epidemics are likely to occur; but, the transmission patterns may differ. If drug users have limited links with other social networks in the broader population, the epidemic may remain within a specific community. In other settings, where drug users live more openly and amongst different social networks, HIV in drug using communities may extend along those auxiliary and parallel routes into other networks, and has the potential of kick starting wider HIV epidemics among the general population. Experience in Asia provides an example of this transmission pattern.

- In many other countries of sub-Saharan Africa, HIV epidemics are generalised and are, thus, self-sustaining within the population. However, even in generalised epidemics, the risk of transmission will be higher among vulnerable populations of individuals who engage in high-risk behaviours (e.g., have multiple sexual partners), multiple risks (e.g., individuals involved in sex work), or who are exposed to high-risk behaviour such as injecting. Current developments related to drug-driven HIV epidemics among specific populations indicate the potential fuelling or re-fuelling of existing generalised epidemics. This may limit or reduce the impact of current prevention and treatment efforts and keep the generalised epidemic at the current devastating levels
- Against this background, prevention responses addressing drug-driven HIV are essential in curbing the HIV epidemic. Effective responses must be comprehensive in their coverage of vulnerabilities and the risk of initiating drug use (risk reduction) and HIV-related risks among those who currently use drugs (harm reduction). Current prevention responses do not match the existing needs to address existing developments regarding increasing drug use and the associated HIV risk.
- Risk reduction programmes addressing drug use through awareness campaigns, school-based and community-based programmes are considered important responses to inform, educate and empower young people to meet the challenges of the increasing availability of illicit drug use. Risk reduction programmes are reported in the region; however, the majority of these programmes lack the evidence-based messages needed and are unlikely to meet the growing needs of young people regarding drug use (and the related risks).
- Other types of risk reduction programmes such as early intervention and drug treatment programmes are recognised as very important responses that can indirectly have a great value in HIV prevention among those who are in the initial stages of drug use. Existing interventions, however, lack the scale necessary to meet the growing needs of drug users and the high cost of adequately scaled programmes to provide in-patient treatment may be a burden for many countries.
- Harm reduction responses are considered essential HIV prevention responses for those who are currently using drugs. Harm reduction interventions include the dissemination of information (through community outreach) on how to reduce the risks associated with drug use, the provision of prevention commodities such as clean syringes and needles, and a range of drug dependence treatment options including methadone and other opiate substitutes. There are very few harm reduction programmes and services available in the region. Mauritius and to a certain extent Kenya, with important support from UNODC, play a leading role in addressing HIV risks among drug users and their partners. The implementation of harm reduction services may be hampered in (very) low-resource areas in the region.

Against these trends of increasing drug use, increasing HIV-related risk behaviours, the many vulnerabilities among young people in the region, and the limited responses addressing these trends, we would like to make the following general recommendations:

The overarching recommendation is the development of HIV prevention responses for populations at risk of becoming involved in drug use and for those who are currently using drugs.

Effective responses addressing HIV-related risk behaviour among drug users must be comprehensive in addressing both vulnerabilities and the risk of initiating drug use (through **risk reduction**) and the need to address HIV risks among those who currently use drugs (through **harm reduction**).

In order to respond adequately, it is essential to 'know your epidemic' and understand the trends related to drug-driven HIV transmission in all parts of the region, especially in those countries which have already reported increases in illicit drug use or those who may be expected to witness increases due to their proximity to drug transit areas. Assessing the local situation in terms of (injecting or non-injecting) drug use and its characteristics and dynamics are essential in order to outline adequate responses. Local investigations and/or assessments will provide insight into if and how specific responses are required. Rapid situation assessment and response (RSAR) is a research tool that is often used to assess local situations and prepare or initiate related (local) health interventions.

The following table provides an overview of the comprehensive HIV risk prevention responses and the suggested priorities.

Table 2

			Prevention priorities to address drug-related HIV					
			Risk reduction				Harm reduction	
			general		specific			
Category	Prevalence	Rate	Awareness campaigns	School-based	Community-based	Drug treatment	Early intervention	
A (e.g., Ethiopia)	HIV	Low to moderate						
	Drug use	Low	+	++	+	-	-	-
B (e.g., Mauritius)	HIV	Low to moderate	+	+	++	+	+	++
	Drug use	Present / Increasing						
C (e.g., Zambia)	HIV	High						
	Drug use	Low	+	++	++	-	-	-
D (e.g., South Africa)	HIV	High						
	Drug use	Present / increasing	+	+	++	+	+	++

Recommendations on risk reduction

- General interventions aimed at drug use, alcohol use and HIV-associated risk should be developed and implemented across the entire region.
- Existing HIV prevention responses are recommended which include drug and alcohol use issues. Drug and alcohol use interventions should include HIV prevention messages including interventions that promote safer sexual behaviours.
- Community sensitisation on the issue of drug use, alcohol use and HIV-related risks are highly recommended. A wide variety of behavioural change communication (BCC) strategies can be used to inform individuals and communities on drug and alcohol use and HIV-related risks.
- School-based and community-based programmes can play a role in raising awareness on HIV-related risks and drug use issues and to inform and support young people on how to reduce the risk of initiating drug use and to reduce the risk of HIV transmission through drug use.
- The main message of school-based and community-based programmes should be evidence-based, focus on health issues, provide factual information on the related risks, and provide alternatives for individuals. The content of prevention messages should be specifically tailored and prioritised to meet the needs and characteristics of the target audiences. Depending on the prevalence of drug use and the prevalence of related risk behaviour, the key health message should be tailored to a hierarchy of risk: 'avoiding drug use', 'limiting drug and alcohol use', or 'avoiding injecting drug use', or it should promote 'avoiding the sharing of injecting equipment or disinfecting equipment' and 'avoiding unsafe sex and using condoms'.
- Specific interventions targeting populations at high risk are encouraged in countries where drug use has become more prevalent. Specific interventions aimed at certain populations that are at a higher risk (e.g., street children, young people experimenting with drug use or youth at risk in poor communities) can play an important role in HIV prevention. These early interventions through counselling and referral services may reduce and limit drug use-related issues before they increase and become more acute.
- Community-based interventions on drug and alcohol use prevention and HIV-related issues are key in reaching, informing and supporting young people and other vulnerable populations. These should be peer-based, provide vocational training, include community health education, youth recreation and other alternatives. If individuals are trained and well equipped, these types of community-based services can play an important role in addressing drug use, alcohol use and the related risks in these communities.

- Extended drug treatment services should be implemented in areas with growing numbers of drug users. Out-patient treatment programmes, community-based programmes, home-based detoxification and peer support groups are strongly encouraged since they may have a bigger impact and a higher coverage at lower costs. Learning from best practices related to community-based drug and HIV intervention and low-cost drug treatment services in other developing regions (e.g., in countries like Pakistan and India) is also highly recommended to develop African solutions to address drug use.

Recommendations regarding harm reduction

In order to reduce or halt the spread of HIV among drug users and the wider communities, tailored HIV prevention interventions like harm reduction are urgently needed in countries that are witnessing high or increasing rates of drug use. In order to address HIV among drug users, governments, non-governmental organisations and community-based organisations need to co-operate and join efforts to respond to the epidemic.

Governments are encouraged to include drug use–related responses in their national HIV action plans and should include HIV prevention–related strategies in their national drug use plans. Likewise, governments should remove legal barriers to HIV prevention (such as providing clean syringes and needles and/or opiate substitution therapy) and integrate HIV prevention for drug users into other healthcare services.

Non-governmental organisations and community-based organisations are encouraged to advocate for the inclusion of harm reduction approaches in the national healthcare strategies. Civil society can play an important role in catalysing the development and implementation of harm reduction services and other health and HIV prevention services for drug users.

Non-governmental organisations and community-based organisations are encouraged to integrate drug-related issues into HIV programming and to ensure that drug users have access to voluntary counselling and testing services as well as HIV-related treatment and care.

Non-governmental organisations and community-based organisations in regions affected by higher HIV prevalence rates among drug users are urged to explore the development and implementation of low cost types of HIV prevention services for drug users such as:

- clean needle and syringe exchange programmes,
- opiate substitution therapy,
- peer support,
- community-based outreach, and
- last but not least, condom use programmes.

Harm reduction strategies and services, as mentioned above, very likely need to be adapted to fit the African setting. In order to develop African harm reduction services, a more detailed understanding is needed on the following issues:

- how drug users in the African region can manage and mitigate risk and the potential harms related to drug use.
- how non-injecting behaviour shifts to injecting in order to develop responses at reducing (or the initiation of) injecting behaviour.
- how harm reduction services can be adjusted in order to be applicable and accepted in poor counties where general health systems are weak and often over-burdened.

Priorities:

- Drug and alcohol use–related issues should be included in life skills training programmes and sexual health curricula in schools. Life skills training programmes can be effective in enabling individuals to adapt and to deal with the demands and challenges of life. Life skills approaches are already in use in various countries in the region, either in school or community settings, but should be adapted to address issues regarding drug and alcohol use.
- Risk reduction and harm reduction strategies may need to be translated and adapted to the specific conditions in the African setting. Learning from the best practice examples of low-cost drug treatment strategies, community-based drug interventions, home detoxification, peer support groups and various harm reduction services like syringe and needle exchange programmes, opiate substitution treatment, community-based outreach and street-based services applied in other developing regions (e.g., in countries such as Iran, Pakistan, India, Cambodia) is highly encouraged.
- Non-governmental organisations and community-based organisations are strongly encouraged to provide capacity building training to healthcare workers and law enforcement officers on working with (injecting) drug users. The use of innovative information technologies, in combination with traditional methods of knowledge-sharing and information exchanges, may be used to provide timely education.
- HIV-related services—in particular, critical services such as voluntary counselling and testing—should be

made known and accessible to those who use drugs and counselling services should be equipped to deal with drug- and alcohol-related issues. Counselling and testing services should be mobile and flexible in order to reach out to vulnerable populations in the communities.

- Community-based outreach is recommended as a first step in establishing contact, and informing and supporting those individuals within communities who use drugs. Peer education plays a critical role in outreach programmes. Outreach-based programmes also serve as a point of referral for counselling and other HIV- and health-related services. Community-based outreach is a valuable tool in monitoring and addressing on-going issues and trends among drug-using communities.

Finally, the HIV epidemic is very complex with a myriad of social, economic, political, legal and ethical issues, which vary from setting to setting. When drug use is added to these issues, complexities multiply. Drug use is very likely to impact the existing HIV epidemic and, thus, human development in large parts of Africa.

Young people are the basis of the future and represent the hope for an AIDS-free generation. Some successes in curbing the epidemic have been noted, but many challenges still lie ahead including new challenges such as drug use and its related HIV risks. Increasing drug use among young people in the region as witnessed in many places could lead to new epidemics, refuel existing ones, and it is very likely to pose a new challenge in the response to HIV.

'If we are not able to respond adequately to current drug issues, along with injecting behaviour and/or unsafe sex, we will slow down any decline in our HIV epidemic or even keep the epidemic at its current level', Prof Charles Parry, Medical Research Council, Cape Town, South Africa

Appendix I

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Appendix II

Recommended reading

- The report '**The Drug Nexus in Africa**' (UNODC,1999) is the first report of its kind to focus on increasing illicit drug use and injecting practices in the region.
- The report '**Global overview on injecting drug use and HIV injection among injecting drug users**' by Aceijas et al. (2004), conducted on behalf of the 'UN reference group on IDU in Developing and Transitional Countries', provides the first global and regional overview of country estimates of injecting drug use populations and HIV prevalence and includes information on the region.
- An updated version on the global state of injecting drug use was recently published as '**Global epidemiology of injecting drug use and HIV among people who inject drugs: a systematic review**' (Mathers, 2008). The publication was conducted also on behalf of the 'UN reference group on IDU in Developing and Transitional Countries' and also reviewed existing data from the sub-Saharan region.
- An important overview of existing and increasing drug-related HIV behavior is presented in a **Special Issue of the African Journal of Drug and Alcohol Studies** published in 2006. The journal compiles recent studies in five countries: Nigeria, Kenya, Tanzania, Mauritius and South Africa. The introduction of this Special Issue gives a clear overview of the current data and provides a state of the art analysis regarding injecting drug and alcohol use and the related HIV risks in the region.
- Another study providing an overview of existing data in Africa can be found in '**Review of injection drug use in six African countries: Egypt, Kenya, Mauritius, Nigeria, South Africa and Tanzania**' (Dewing, 2006).
- South Africa is the only country in the region with a functional surveillance system that monitors trends in drug and alcohol use and related HIV risk behaviour. The responsible initiative **SACENDU** (South African Community Epidemiology Network on Drug Use) provides regular bi-annual updates of trends in alcohol and drug use.
- An overview of global drug use, HIV risk and existing harm reduction responses can be found in '**The Global State of Harm Reduction 2008**', which was recently published by IHRA (International Harm Reduction Association). The report also has a section included on the situation regarding drug use and HIV in the sub-Saharan region.

Appendix III

Key references during desk research

- Rey Chad Abdool, UNODC representative East Africa office, drug expert, Kenya
- Adriaan Backer, photographer, documented substance use in South Africa, The Netherlands
- Murdo Bijl, Health Connections International
- Tara Carney, Medical Research Council, Cape Town, South Africa
- Alan Clear, Harm Reduction Coalition, USA
- Thomas Cronin, UNODC representative Southern Africa office, South Africa
- Miriam Groenhof, STOP AIDS NOW!, The Netherlands
- Salman ul Hasan Qureshi, Program manager, Nai Zindagi, Pakistan
- Prof Charles Parry, Medical Research Council, Cape Town, South-Africa
- Dagmar Thomas, UNODC representative West Africa office, Nigeria
- Fayal Sulliman, National Drug Agency in Mauritius, coordinator Sub-Saharan African Harm Reduction Network, Mauritius
- Els Klinkert, Ministry of Foreign Affairs, DGIS, HIV/AIDS policy, The Netherlands
- Reinhilde Konig, anthropologist, University of Amsterdam, The Netherlands
- Sheryl McCurdy, Center for Health Promotion and Prevention Research, University of Texas, USA
- Jo Reiners, World Populations Fund, The Netherlands
- Lanre Onigbogi, Nigerian Network on Harm Reduction, Nigeria
- Carina Santos, Mainline, The Netherlands
- Patricia Spittal, anthropologist, expert on substance use and gender relations, Canada
- Heino Stover, University of Bremen, Germany
- Annette Verster, WHO, HIV department, Switzerland
- Hans Verbraeck, Center for Addiction Research, The Netherlands
- Tariq Zafar, Executive Director Nai Zindagi services for drug users, Pakistan

Key contacts (meetings, interviews) during visit to South Africa

- Bongani Bergh, SANCA community worker, township Shosangove
- Sylvie Bertrand, UNODC Southern Africa office, Pretoria
- David Collins, SHARP drug treatment center, Johannesburg
- Ricus Dullaert, mission post Sisanani,
- Gregg Gonzalves and Paula Akugizibwe AIDS and Rights Alliance for Southern Africa, Cape Town
- Grant Jardine, Cape Town Drug Counselling Centre, Cape Town
- Magda Laubscher, SANCA treatment centre, Pretoria
- Mandla Majola (Treatment Action Campaign, Khayelitsha township
- Laura Myers, Dance4Life, Cape Town
- Neo Morojele, Medical Research Council, Pretoria
- Nomhlanga and Nomanini, Community workers in Retabiseng township
- Wilson Nxumalo, MES, Johannesburg
- Charles Parry, Andreas Plüddemann, Medical Research Council, Cape Town
- Agnes Pass, Don Bosco, Cape Town
- Mozes Phofu, MES, Johannesburg
- Jane Pritchett, Twillight Children, Johannesburg
- Nicolette Sass, community worker, Tafelsig township, Cape Town
- Petrus Steyn, Unit family Planning and Reproductive Health, Stellenbosch University, Cape Town
- Tako Seeleman, providing information on Narcotics Anonymous
- Nhlanhla Sithole, Medical Research Council, Pretoria
- Thabiso, township Tembisa
- Monique Van Welie, Dutch Embassy, Senior Policy Officer HIV/AIDS, Pretoria

Focus group meetings were held with youth in the following townships: Ekangala (17 youngsters, boys and girls), Tembisa (5 young boys, 1 girl), Kayelitsha (5 boys), and Tafelsig (14 youngsters, boys and girls)

Key contacts (meetings, interviews) during field visit to Zambia (Lusaka)

- Evans Banda, Africa Directions
- Philip Baxter and Sister Emily (Serenity House, Lusaka, Zambia)
- Bernard Chisanga, Stella Mlewa-Nkhoma, SHARE
- Peter de Haan, Dutch Embassy, Senior Policy officer HIV/AIDS
- Henry Kalolo, Zambian Initiative for Harm Reduction
- Shadrack Lobitha, Drug Enforcement Commission, Zambia
- Prof Nkando Luo

- Godfrey Malembeka, Prisons Association
- John Mayeya, Ministry of Health
- Adam McGuigan, street children programme Barefeet, Lusaka
- Clothilda Phiri, Tasinta, NGO supporting sex workers
- Kate Puce and Womba Phiri, Student Partnerships Worldwide
- Scott Robertson, Envision Zambia
- Emily Sikazwe, Women for Change
- Felly Simmonds, Family Health International
- Rachel Smith (ZARAN, Lusaka, Zambia)
- Joseph Wapabeti, Chainama Psychiatric hospital,
- VCT staff of Bauze Community Centre, Mutendere compound

Focus group meetings were held in the Mutendere compound (7 youngsters; 5 boys, 2 girls) and among former street children at the Barefeet Project (5 boys)