

Health Leadership and Response to HIV/AIDS: The Opportunities Ahead

1

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In December of each year, a global report on the situation of HIV/AIDS is unveiled by UNAIDS and WHO. It is, however, clear that in many countries of the South-East Asia Region, the prevalence of HIV has been declining over the past few years and the epidemic has already peaked not only in Asia, but also in Africa, and the Americas. The past decade has also witnessed major advances made in HIV treatment and care led by production of inexpensive but effective anti-retroviral (ARV) drugs led by the pharmaceutical industry in India, and the availability of substantial additional resources at country level, mobilised with support from the WHO.

In spite of these notable successes, the HIV epidemic still remains a major public health problem in the developing world. Of some 33 million people worldwide with HIV/AIDS, 95% are in the developing countries. The virus which was first reported in a developed country, is now a problem primarily of developing countries – and especially of populations who are least capable of fending for themselves. The epidemic remains dynamic and evolving. While HIV is on the decline in some countries, the prevalence continues to increase in certain population groups engaging in high-risk behaviour. Moreover, unfortunately, thousands of patients in the region living with HIV/AIDS have no access to life-saving anti-retroviral drugs. This must be seen against various declarations made globally, and many targets set, including the ambitious target of ensuring universal access to prevention and treatment and care services by 2010.

In view of the evolving situation of HIV, it is clear that the health sector today has even a more critical role to play in leading response to HIV/AIDS, be it in advocacy, ensuring scale-up of interventions, or in technical monitoring and evaluation. This chapter will review the situation of HIV, the achievements made so far in the health sector response, and the opportunities that lie ahead based on the lessons learnt so far.

The historical perspective

AIDS or the acquired immunodeficiency syndrome was first reported in San Francisco, USA, in 1981 in a homosexual male. The diagnosis was based on signs and symptoms as no test was available to confirm the HIV-infection. The causative agent, the HIV (human immunodeficiency virus), was detected in 1983 and the first test to detect antibodies against it became available in 1985. The epidemic spread rapidly across the world. Epidemiological studies indicated only three modes of transmission, namely sexual transmission (homosexual and heterosexual), transmission through infected blood and blood products and infected injecting equipment, and mother-to-child transmission. The World Health Organisation (WHO) and UNAIDS estimate that there were over 33 million people living with HIV/AIDS in the world at the end of 2007.

In the South-East Asia Region (SEAR) of WHO, HIV was first reported in Thailand in 1984 in a homosexual male. Early cases in this country were generally confined to homosexual males until 1987 when an explosive outbreak occurred in Bangkok among injecting drug users (IDUs) in whom HIV prevalence shot-up from 1 to 40% between November 1987 and August 1988. This was followed by an outbreak among female sex workers, which subsequently spread to their clients, then to clients' spouses, and finally to their children. HIV prevalence among sex workers in Chiang Rai province increased from 1 to 37%. By 1993, 12% of young military recruits based in northern Thailand were found to be HIV-positive. By 1996, HIV prevalence was as high as 7.1% among pregnant women in Chiang Rai.

Similar patterns and trends were seen in other countries of the region. In India, the infection spread mostly through heterosexual transmission in the country, the six southern states being the most affected areas. However, there have

been outbreaks of HIV among IDUs as well in some areas. For example, HIV prevalence in Manipur increased from 1% in 1988 to 56% in 1995.¹ In Myanmar, HIV prevalence among IDUs increased from 17% in 1989 to 59% in 1990 to 74% in 1992. The epidemic spread subsequently to their sexual partners and then to the general population. In Indonesia, HIV prevalence among IDUs increased from 0% in 1998 to nearly 50% in 2001. In Nepal, HIV prevalence increased among female sex workers from 0.7% in 1992 to 15.7% in 2001 and among IDUs in Kathmandu from 0% in 1994 to 68% in 2001. HIV prevalence is at a low level in other countries of the region.

There have been adverse health, social and economic impacts of the HIV epidemic. There has been an increase in morbidity and mortality due to HIV/AIDS and TB which is the commonest opportunistic infection.² As HIV mostly occurs among the productive age group, the decreased productivity and the cost of care severely affect the economy. There have been adverse emotional and psychological effects on the family, particularly widows and orphans. Stigmatisation and discrimination against the infected persons and their family members have worsened the situation further.

HIV/AIDS epidemiology: present trends, and factors driving the epidemic

Monitoring the HIV situation

With an estimated 3.6 million people living with HIV-infection in the region at the end of 2007 (Table 1), the South-East Asia Region is the second most affected region in the world after sub-Saharan Africa.³ Five countries (India, Indonesia, Myanmar, Nepal, and Thailand) account for the vast majority of the HIV burden in the region. Unsafe sex and injecting drug use are the two main factors for the spread of the HIV epidemic in the region. Approximately 37% of the infected persons are women. Every year, there are 260,000 new infections with HIV, and 300,000 deaths from AIDS.

Several factors facilitated the rapid spread of the epidemic. These include high rates of partner change, low condom use in commercial sex, sharing of injection equipment, and high prevalence of sexually transmitted infection (STI), particularly ulcerative STIs.

Table 1: An estimated 3.6 million people are living with HIV in South-East Asia

Country	Estimated number of people living with HIV (PLHIV)	% of adult population infected with HIV
Bangladesh	12,000	<0.1
Bhutan	<500	<0.1
DPR Korea	0	0
India	2,400,000	0.3
Indonesia	270,000	0.2
Maldives	<100	<0.1
Myanmar	240,000	0.7
Nepal	70,000	0.5
Sri Lanka	3,800	<0.1
Thailand	610,000	1.4
Timor-Leste	<100	<0.1

In countries where HIV prevalence has been at a medium-to-high level (e.g., India, Myanmar, Nepal, and Thailand) and where targeted interventions have been instituted early and effectively, encouraging results are being observed.⁴ The HIV prevalence has either declined or has stabilised in the adult population in these countries (Fig. 1). However, in countries where the HIV prevalence has been low, and targeted interventions began late, the prevalence continues to rise among people with high-risk behaviours, e.g. Bangladesh and Indonesia (Fig. 2). This calls for continued and vigorous efforts for implementing prevention and care interventions.

Factors driving the HIV epidemic in the South-East Asia Region

It is known that the risk of HIV is dependent on population behaviour which in turn is shaped by a combination of individual and societal factors. The individual factors include unsafe sex, injecting drug use, male-male sex, presence of other STI, and male circumcision. Among the societal factors are social, economic, cultural, and political factors.

Individual factors

Unsafe sex: The HIV epidemic in the region largely occurs through heterosexual contact due to unsafe sex, mostly through the paid female sex worker — client network. Socio-

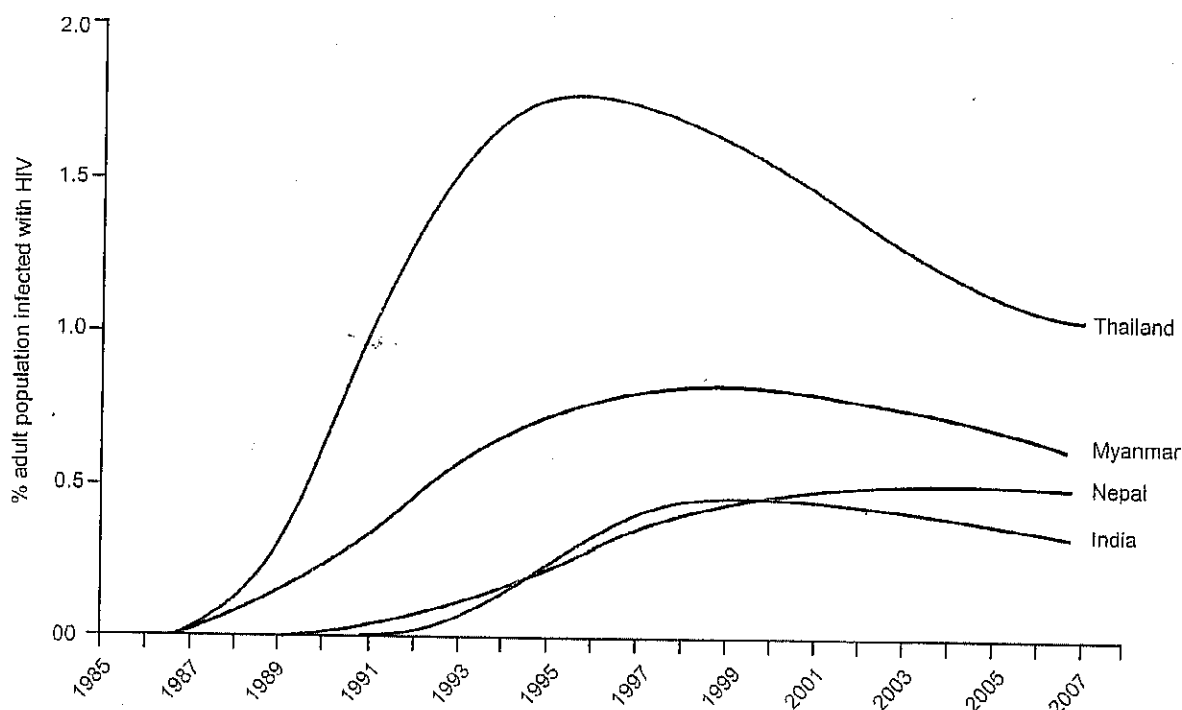


Fig. 1: HIV prevalence is decreasing or stabilising in some countries.

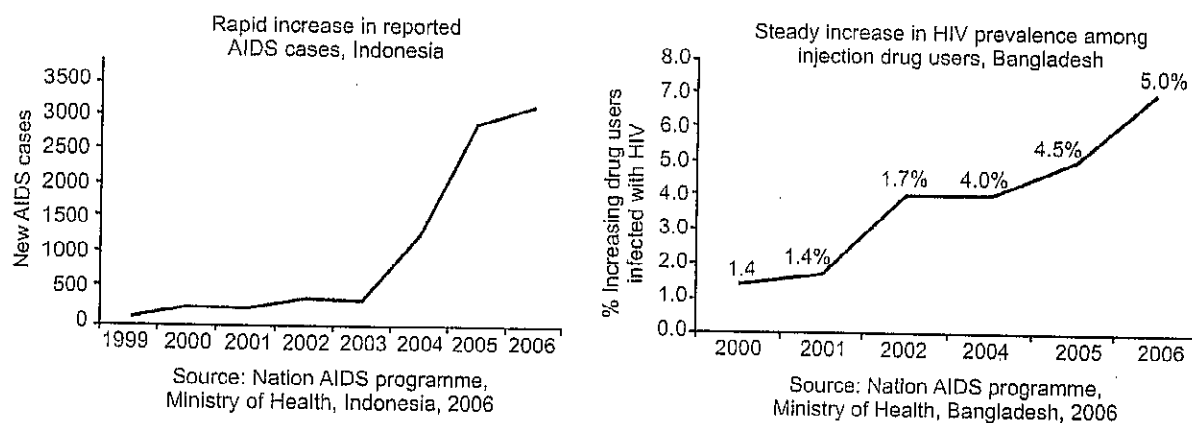


Fig. 2: But HIV is still increasing in other countries.

cultural and demographic factors, such as migrant labour, low socio-economic status of women and castigatory laws, have fuelled the paid female sex work nexus resulting in migrant men buying sex and poor women selling sex. HIV infection rate among female sex workers is very high in India, Myanmar, and Indonesia,⁵ ranging from 11 to 50%. HIV prevalence was also higher among migrant men from Nepal who had sex

with commercial sex workers than those who had not (13.2% vs 1.5%).⁶ Early sexual debut and unprotected sex among the large youth population in the region are also contributing to the increase in HIV transmission. The average age of sexual activity for both boys and girls was 13 years in Thailand and only a small proportion of them used a condom at the last commercial sex encounter.

Injecting drug use: Injecting drug use is increasing in the region, and so also the sharing of injection equipment.⁷ The relationship between needle-sharing behaviours and spread of HIV among IDUs and their non-injecting sex partners in Asia has been well-described.⁸⁻¹⁰ IDUs are usually the starters of the epidemic in the region⁷ and have a high efficiency of infection (0.95). HIV among IDUs increased twelve-fold in Kathmandu, Nepal (from less than 5% in 1990 to 68% in 2003), and three-fold in Jakarta, Indonesia (from 16% in 1999 to 50% in 2001). HIV prevalence continues to be very high among IDUs (77%) in Myanmar.¹¹ Even in Thailand, despite an overall successful reversal of the HIV epidemic, HIV prevalence among IDUs has remained consistently high (30% to 50%) over the past 15 years.

Sex and drugs is a classic and lethal combination. In Manipur, India, which has a well-established IDU-driven HIV epidemic, 30% of female sex workers reported injecting drugs. In Indonesia, a high proportion of IDUs shared needles, and 40% of them reported buying commercial sex. Nearly 88% of them seldom or never used condoms with sex workers.

Male-male sex: Men having sex with men (MSM) tend to remain hidden socially from fear of discrimination and stigmatisation. Based on limited information available in the region, HIV prevalence is increasing among MSM in India (up to 18%), Indonesia (up to 8%), Myanmar (up to 35%), and in Thailand (up to 28%). There is a similar trend in other countries as well.¹² There is a high partner turnover. A majority of them did not use a condom consistently. Also, as a high proportion of MSM are married, they act as bridging population to transmit the infection to their female partners.

Presence of other sexually transmitted infections: The presence of other STIs augment the risk of HIV transmission significantly.^{6,13} The association between STIs and HIV is strongest for infections that cause genital ulceration,¹⁴⁻¹⁶ but has also been demonstrated for infections such as gonorrhoea, chlamydia, and trichomoniasis. HSV-2 has also been associated with risk of HIV transmission in the general male population in India.¹⁷ Although STI rates are generally high in South-East Asia, the patterns are variable. In Indonesia there is high prevalence of gonorrhoea and chlamydia (20-50%) and syphilis (10-20%) among sex workers and other population groups with high-risk behaviours.¹⁸ In Nepal, prevalence of STIs was 19.4% among migrants, and 11% in their wives. In Bangladesh, although STIs had decreased among sex workers over the

years, they appear to be increasing among MSM. In Pune, India, genital ulcer disease was common among MSM.¹⁹ A high proportion of STIs associated with increased HIV prevalence was also reported from transgenders in Jakarta, Indonesia,¹⁸ and India.²⁰

Male circumcision: Evidence from randomised controlled trials indicates that population rates of circumcision are inversely proportional to HIV prevalence. A study from an STI clinic in Pune, India showed that prevalence of HIV among circumcised men attending the STI clinic was 8 times lower than among uncircumcised men (0.7% vs 5.5%).²¹

Societal factors

In addition to the individual behavioural risk factors, the HIV epidemic in SEAR needs to be understood in the context of various social, economic, cultural, and political factors that increase vulnerability to HIV-infection.

Social factors: The majority of South-east Asia is a conservative society where sexual issues are not openly talked about. Denial of prostitution, MSM, and STIs is common in the general population. Social determinants of female vulnerability to HIV include gender disparities, poverty, sexual norms, lack of education, and violence. This is affecting women as they are being increasingly infected in countries with maturing epidemics – such as Thailand, where the patterns of HIV transmission have changed and the reported AIDS cases among women (mostly monogamous married heterosexual) has increased from 15% in 1990 to 38% in 2005. Their risk is that their husbands are engaging in risk behaviour (visiting paid sex workers) that they have no say in. The increasing urbanisation and globalisation are further crumbling barriers held-up by social and cultural taboos in the region that had significantly controlled sexual behaviour in the region in the past.²²

Economic factors: The relatively conservative societies in the region have further increased the economic dependence of poor women who are struggling against adverse conditions such as illiteracy, gender inequities and less economic opportunity, making them especially vulnerable to HIV-infection through sex work, which is one of the few economic options available to these women.²²⁻²⁴

Migration of people outside their native place in search of work is very common in the region. These workers are free

from inhibition regarding sexual practices and indulge into casual or extramarital sex with the paid sex work nexus. Truck drivers represent another group of workers who spend considerable periods of time away from home, thus making them vulnerable to casual sex with commercial sex workers. Another example of the effect of migration for economic reasons is provided by the Nepalese sex workers in Mumbai, India, where 50% of them are infected with HIV.

Cultural factors: Cultural norms in most of South-east Asia grant sexual freedom to males with constraints on female sexual behaviour,²⁵ adding concerns regarding a woman's lack of power for demanding safe sex as well as being vulnerable to violent sexual acts, particularly in the lower end of the socio-economic strata. In contrast, the changing culture of female sexual behaviour in Thailand²⁵ — with pre-marital sex being more accepted — is leading to sexual debut at a lower age, and thus an increased risk of HIV-infection. Women also enter sex work due to ethnosociocultural reasons; examples being that of traditional sex workers, the *devadasis* of Karnataka, India²⁶ and *dommuri* community of Andhra Pradesh, India.²⁷

Political factors: Human rights abuses that occur during civil conflicts also increase HIV risk among women through rape, sexual violence, and increased vulnerability to trafficking into prostitution as evidenced from the long-standing civil conflict in the Shan States of Myanmar²⁸ as well as in Nepal which has also increased migration of men outside their native place. The unfavourable legal environment and policing attitudes are also fuelling the HIV epidemic in SEAR by making sex workers, IDUs^{10,29} and MSM even more invisible, and thus remaining inaccessible to health-care services and being at increased risk of violence.

Discrimination against HIV-infected persons and their families is considered to be one of the major societal determinants of the epidemic in South-east Asia.³⁰ Ambiguities within legislation, combined with failure to enforce anti-discriminatory laws effectively, as well as differences in conviction or sentencing on the grounds of HIV status, have caused people with HIV to experience discrimination in health-care settings, within the community, from family, and in employment and education.³¹⁻³⁴ This deters them from seeking HIV testing and disclosing their HIV status for fear of abuse and discrimination, thus depriving themselves of the opportunity to care and treatment.

Notable achievements and health sector interventions

Effective implementation of targeted interventions in some of the countries in the region has resulted in a number of successful achievements in the control of the HIV epidemic. These achievements include a decreasing incidence of HIV, decreasing STIs, reduced mother-to-child transmission, successful needle-exchange programmes, reduced health-care related infections, and increased survival with ART.

Decreasing incidence of HIV

In Thailand the HIV prevalence decreased among sex workers, military recruits, and antenatal clinic attendees as a result of increased condom use among sex workers and clients under Thailand's 100% condom use programme (CUP). The 100% CUP began as a pilot in Ratchaburi province in 1989. Government officials and owners of sex establishments initiated the programme jointly. Owners instructed sex workers about use of condoms in all sexual encounters. Penalties were imposed on owners for non-compliance. Condom use increased gradually and STIs declined. In 1991, the programme was expanded nationwide. A strong surveillance system started at the beginning of the epidemic helped guide the programme and decriminalisation of sex work. By 2002, an estimated 5.7 million HIV-infections had been averted.

Decreasing sexually transmitted infections

There have been notable achievements in decreasing STIs in the South-East Asia Region. In Thailand, the incidence of STIs decreased rapidly following the nationwide implementation of the 100% CUP, and rates of curable STIs fell by over 95% during the 1990s. In the Sonagachi red light area of Kolkata, India, peer involvement of sex workers decreased the vulnerability to HIV, and increased sex workers' empowerment. As a result, condom use increased to 85% in 2004, prevalence of active syphilis decreased from 25% in 1992 to 1.2% in 2003, and HIV prevalence remained at a low level (11%), compared to red light areas in other cities. The Avahan India AIDS Initiative has made considerable progress with scaling-up of interventions targeted at sex workers and other high-risk populations in six southern states with high HIV prevalence. Similarly, in Sri Lanka, data from sentinel STI clinics showed a steady decrease in infectious syphilis despite increase in clinic attendance.

Reduced mother-to-child transmission

In Thailand, a high coverage of prevention of mother-to-child transmission (PMTCT) services has resulted into a significant decrease in the number of paediatric AIDS cases. In 2005, of the 639,363 women who delivered in the public sector, 98% received HIV counselling and testing; 5,143 women were found positive and 4,824 (93.8%) received anti-retroviral preventive therapy.

Reduced transmission among injecting drug users

Successful harm reduction interventions for injecting drug users have been in progress in Bangladesh, India, and Myanmar. Bangladesh began a harm reduction programme including needle/syringe exchange, condom distribution, abscess management, and advocacy. By the end of 2004, the needle/syringe exchange programme covered 3,900 IDUs in 19 districts of Bangladesh. HIV prevalence has remained low (< 5%), and there has been no explosive epidemic. Harm reduction intervention in Manipur, India, has resulted in a substantial decrease in the prevalence of HIV among IDUs. Myanmar is conducting successful substitution maintenance treatment with methadone in 20 of the 325 townships.

Reduced health-care related infections

All countries in the region are implementing the programme to increase blood safety and injection safety. National regulatory policies have improved injection safety. With the improvement in blood safety interventions in the region, there has been a steady decrease in HIV in screened blood units, thus decreasing the threat of transmission through unsafe blood and accidental occupational exposure.

Increased survival with ART

There has been a steady progress in scaling-up services for HIV counselling and testing, care and support, anti-retroviral therapy (ART), and prevention of mother-to-child transmission (PMTCT). Scale-up of the (ART) programme has been remarkable in India and Thailand. In India, the number of voluntary counselling and testing (VCT) centres increased from 79 in 1998 to more than 3,000 in 2006. In Thailand, VCT services are now available in approximately 1,000 hospitals and clinics across the country. The number of deaths due to AIDS has decreased dramatically with the increase in ART coverage. Survival on first-line drugs was high and comparable to other countries, and opportunistic infections have decreased over time, thus making AIDS a treatable and manageable disease.

Lessons learnt

From the experiences of HIV prevention and control in the countries of the region, a number of useful lessons have been learned as regards what works and what does not work. Targeted interventions along with the involvement of targeted populations in the implementation of the programme can halt and even reverse the HIV epidemic. This is true for all kinds of target populations, such as sex workers, IDUs, and MSM. Provision of effective care can reduce the burden of STI and prolong the life of AIDS patients. Government leadership and health sector response can ensure blood safety.

A high level political commitment with mobilisation of resources is essential for the success of the programme. For the programme to be effective, it is necessary to involve all sectors — including the community, vulnerable groups, and those infected and affected by HIV. The health sector's role is central in the overall national response to the epidemic, and a strong public health infrastructure is crucial for the response. Interventions proven to be successful for prevention and care in pilot areas need to be scaled-up in order to reverse the epidemic and mitigate its impact.

Grand opportunities ahead for the medical/health sector

Progress towards achieving the Millennium Development Goals depends on the health policy and infrastructure of the countries in the region. It would mean expanding HIV/AIDS control programmes to foster an enabling environment to prevent new infections and to care for those already infected. The measure of this progress is the percentage of people with HIV in the region who have access to key prevention, treatment, care, and support services.

While access to services has increased since 2001, it is low for VCT, PMTCT, IDUs, MSM, sex workers, and prisoners. Coverage levels are still low for care and treatment services. The region has the highest number of IDUs (5,900,000) and MSM (6,300,000) but prevention programme coverage is only 3% and 2%, respectively. Prevention programmes reach only 20% of the 1,600,000 sex workers and 31% of the 1,400,000 male prisoners in the region. While the annual number of risky sex acts are very high, condom coverage is limited to 10% only. This region has the maximum annual births (46,900,000), but PMTCT service is offered to 5% only. Despite the rapid scale-up of ART in the past few years, it is available to only 10% of

the 1,400,000 who need it. There is an obvious gap in implementation, i.e., low coverage of services, low percentage of health spending, and poor allocation and utilisation of existing funds and co-ordination of donors. There is a need in many countries to formulate favourable policies regarding oral substitution therapy and needle exchange for IDUs, and promotion of use of condom at all sites.

Future approaches to combat the HIV epidemic would include the urgent need to accelerate the scale-up of HIV testing, prevention, care, and treatment services; and to ensure robust strategic information to monitor and guide the national response to the HIV epidemic. Improved health systems, sustained finances, and increased capacities of human resources are critical for a successful response. Specific directions for the future should include targeted interventions, achieving sufficient coverage, and creating an enabling environment.

Population groups practicing risky behaviours (such as sex workers and male clients, MSM, and IDUs) drive the HIV epidemic in the region. Because these groups have the highest transmission rate and the highest rate of new infections, interventions should be targeted specifically at these groups. There is a need to achieve sufficient coverage, i.e., at least 80% coverage for condom use, and 60% coverage for harm reduction interventions.

The wide gap in coverage of HIV care and treatment services needs to be improved with good planning, provision of integrated services, and good management and monitoring. Without adequate coverage, interventions may not work effectively. Unless HIV interventions are brought to scale, there will be little impact on halting or reversing the epidemic.

Conclusions

The HIV epidemic in the region is multifaceted and diverse, and it is growing. It is driven by population groups practicing risky behaviours, such as unsafe sex as well as sharing of infected syringes and needles among drug users. The presence of STIs also contribute to increased transmission of HIV. Various individual and societal factors influence the risk-taking behaviours.

To halt and reverse the epidemic in the region, there is a need to address the individual and societal factors, as well as to increase access to prevention and care interventions. These include focusing interventions on populations practicing high-

risk behaviours where the highest transmission and the highest rates of new infections are occurring, improving coverage of prevention interventions in the high-risk behaviour groups, scaling-up of the interventions that work, and creating an enabling environment by repealing unfavourable laws, policies, and practices in order to increase access of vulnerable populations to health services.

Despite the challenges, even countries with modest resources have demonstrated that HIV epidemics can be stabilised and reversed. In these countries, elements of success have included high-level political commitment for HIV prevention, capable national programmes, realistic plans, adequate funding, and strong community involvement. Effective and feasible interventions for HIV prevention and care are available. Widespread condom promotion and use can reduce HIV prevalence in high-risk populations, and education programmes for young persons can result in decreased risk-taking behaviour. Providing education and increasing access to clean syringes and needles and to drug treatment can reduce infection risk in the drug-using populations. Improving STI control can slow HIV-infection rates. Provision of rational ART can reduce morbidity and mortality due to HIV. Administering anti-retroviral agents and advising women on breastfeeding can substantially reduce mother-to-child transmission. Quality testing and guidelines for blood use can promote a safer blood supply.

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