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## Executive Summary

South Asia's HIV epidemic is severe in magnitude and scope, with at least 60 percent of all people with HIV in Asia living in India. Because the HIV epidemic is highly heterogeneous, designing informed, prioritized, and effective responses necessitates an understanding of the epidemic's diversity between and within countries. This review was undertaken to provide a basis for rigorous, evidence-based HIV policy and programming in South Asia.

### **Focus**

This book focuses on five South Asian countries for which significant data are available:

- Bangladesh
- India
- Nepal
- Pakistan
- Sri Lanka.

Although data limitations preclude detailed analyses for Afghanistan, Bhutan, and the Maldives, data from those countries are cited where available. The monograph focuses on prevention, but it also acknowledges and affirms the important and complementary role of treatment.

## Heterogeneity

South Asia is a heterogeneous and highly mobile region. South Asia's most severe epidemics occur in parts of India, particularly in a cluster of southern and western states, including Tamil Nadu, Karnataka, Andhra Pradesh, Goa, and Maharashtra, where sex work is the critical driver of HIV transmission. Epidemics also occur in some northeastern states, including Mizoram, Nagaland, and Manipur, where injecting drug use is a major driver of transmission. In these states, HIV prevalence varies between districts; between subdistricts (variously called blocks, *tahsils*, or *talukas*); and even between villages in the same block. The HIV epidemic may be as severe in parts of Nepal, where transmission occurs largely through sex work and injecting drug use, and among the sexual partners of those engaging in injecting drug use. Both Bangladesh and Pakistan face growing epidemics, particularly among injecting drug users (IDUs), but HIV rates remain relatively low among sex workers (SWs) in those countries, providing an opportunity to avert a major heterosexual epidemic. HIV prevalence in Sri Lanka remains low, even among vulnerable groups. In all of these countries, men having sex with men (MSM) represent an important vulnerable population, but much more information is required to better understand their role in the dynamics of HIV transmission. Despite Afghanistan's limited HIV data, the country must act urgently to curb rapidly growing HIV infection in its large population of IDUs, especially where drug use and the sex trade intersect. Other South Asian countries—Bhutan and the Maldives—have too little data to form a core focus of this review, but data are adequate to suggest that they still have low-prevalence epidemics.

## Structural Amplifiers

All countries in South Asia have a diverse range of structural factors that amplify HIV vulnerability and risk, including widespread poverty and inequality; illiteracy; low social status of women; trafficking of women into commercial sex; a large, structured sex work industry; porous borders; widespread rural-urban, interstate, and international migration; high levels of mobility; stigma and cultural impediments to

sexual discussion; high rates of sexually transmitted infections (STIs); and limited condom use.

## **A Preventable Epidemic**

South Asia's HIV epidemic is severe, but further spread is preventable. The future size of South Asia's epidemic will depend on an effective two-pronged approach. First, and most critical, the epidemic's growth will depend on the scope and effectiveness of HIV prevention programs for male and female SWs and their clients, for IDUs and their sexual partners, and for MSM and their sexual partners. Second, it will depend on the effectiveness of efforts to address the underlying socioeconomic determinants of the epidemic and to reduce stigma and discrimination toward people engaging in high-risk behaviors, who are often the marginalized in society, as well as toward people living with HIV/AIDS.

## **Success of Prevention Efforts**

HIV prevention programs for SWs, IDUs, and MSM in South Asia have worked to a large extent. Results have been achieved through targeted interventions aimed at reducing risk behaviors and exposure. Furthermore, countries such as India are making strides in tackling stigma and discrimination, although much remains to be done. The AIDS community is gaining experience on how to work through key sectors other than health, such as the transportation sector, to effectively reach potential clients of SWs. Achieving high coverage poses the greatest challenge today: reducing HIV transmission requires saturation of preventive interventions among people engaged in high-risk behaviors.

## **Prevention Programs' Cost-Effectiveness**

HIV prevention among SWs and clients, IDUs and their sexual partners, and MSM and their sexual partners is relatively inexpensive and provides a high return on investment. Effective programs for SWs, IDUs, MSM, and sexual partners of these individuals can reduce their HIV risk and prevent further viral spread. Such actions will greatly

reduce the costs of controlling HIV infection and will mitigate the socioeconomic impact. HIV programs' priorities and investments should closely address these transmission patterns and their key structural determinants.

## **Rural Epidemics**

Evidence is growing of significant rural epidemics in parts of India and Nepal, but knowledge is lacking of HIV prevention needs and service delivery patterns in South Asia's rural settings. Understanding rural epidemics and configuring an effective response to them constitute a major challenge.

## **Country Priorities**

Each country faces its own challenges and has to set its own priorities.

### *India*

The future size of India's HIV epidemic will depend above all on the scope and effectiveness of programs for SWs and clients; however, it also will depend on the scope and effectiveness of programs for MSM and their other sexual partners, and IDUs and their sexual partners, the latter particularly in the northeast. Throughout India, tackling stigma and discrimination toward people engaging in high-risk behaviors and those living with HIV remains vital. In certain high-prevalence states, districts, and subdistricts (blocks, *tahsils*, and *talukas*), tailoring and applying focused strategies to reduce HIV transmission into vulnerable segments of the general population also constitute a programmatic priority. HIV prevention and HIV/AIDS treatment have potential reciprocal benefits: HIV prevention makes treatment more affordable, and treatment creates important opportunities for enhanced HIV prevention.

### *Nepal*

The future size of Nepal's HIV epidemic will depend above all on the scope and effectiveness of programs for SWs and clients, as well as for

IDUs and their sexual partners. Cross-border migration, especially involving women migrating or being trafficked into sex work, particularly to Mumbai, increases HIV transmission. The national response should also address the further risk of sex between men. Nepal's continuing internal civil strife poses a formidable challenge but also increases the importance of civil society's contributions to the country's response. Tackling stigma and discrimination is a priority, as elsewhere in the region, and efforts to reduce trafficking of women are critical.

### *Pakistan and Bangladesh*

The current HIV epidemics in both Pakistan and Bangladesh occur mainly within networks of IDUs, with evidence of limited but growing epidemic spread among MSM and *bijras* (transgendered men). Effective prevention programs among those communities may avert a wider epidemic. The possible spread of HIV from IDUs to networks of male and female SWs will increase the severity of the epidemic and narrow a major window of opportunity for prevention. In Bangladesh in particular, levels of risk are high, exacerbated by mobility and individuals' rapid transition from smoking drugs to injecting drugs. The potential therefore exists for a substantial epidemic if significant spread occurs among IDU networks, and particularly if these networks intersect with commercial sex networks. HIV infection among SWs in both countries remains at a low level, and intensive programs for them and their clients—including a major focus on SWs who inject drugs or whose sexual partners inject drugs—can prevent the epidemics from escalating. High-quality programs with wide coverage necessitate a reduction in stigma for those groups.

### *Sri Lanka*

The HIV epidemic remains at a low level in Sri Lanka, even among high-risk groups. Early and effective programs for SWs and their clients, and for MSM and their other sexual partners, can ensure that HIV remains at very low levels if those programs are combined with programs to detect any growth in injection drug use and to increase capacity to manage opiate addiction. Sri Lanka has an opportunity that it must not lose.

### *Afghanistan*

The evidence suggests considerable HIV transmission among some of Afghanistan's IDUs. IDUs returning from Iran, which has a significant injecting drug use epidemic, are at high risk. The country must act urgently to limit HIV infection in this high-risk subpopulation.

### *Bhutan and the Maldives*

Data are limited; however, these disparate countries—for very different reasons—appear to have low HIV prevalence and relatively small numbers of IDUs, SWs, and clients. Nevertheless, recent observational accounts suggest that injecting drug use may be growing in the Maldives.

## **Programmatic Implications and Conclusion**

South Asia requires a dual approach to HIV prevention. Most important is to have effective large-scale programs for SWs and clients, IDUs and their sexual partners, and MSM and their sexual partners. Second, support for these programs must include information on HIV prevention for the general population and stigma reduction in particular. Capable and committed individuals and groups are needed to facilitate program implementation at all administrative levels. Given the enormous scale and heterogeneity of the HIV epidemic in South Asia, governments and their program implementing partners need to invest in building and using a comprehensive information base to identify the priority constituents and locations for focused prevention programs. In addition, improving the scale, coverage, quality, and integrity of program implementation requires substantial capacity building. Multisectoral responses can address both the immediate practices and the underlying socioeconomic factors that contribute to transmission. Large-scale, targeted prevention programs with saturation coverage based on these principles can greatly decrease the size of South Asia's HIV epidemic, prevent the establishment of an epidemic in the general population, markedly reduce expenditures for disease control, and mitigate socioeconomic impact, hence providing a high return on investment.