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The HIV/AIDS Epidemic in Asia

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The HIV/AIDS epidemic began relatively late in Asia, and HIV infections have not reached the high levels observed in some other parts of the world. Yet behavioral patterns that increase the risk of HIV transmission—such as unprotected sex and needle sharing—are not uncommon in many Asian societies. Without interventions to modify high-risk behavior, the virus continues to spread, and current infection levels could rise rapidly in many Asian countries.

This issue of *Asia-Pacific Population & Policy* begins with an assessment of the current HIV/AIDS situation in Asia and goes on to offer several suggestions for policymakers in the region. The discussion summarizes a chapter in *The Future of Population in Asia*, a special East-West Center publication supported by the Bill and Melinda Gates Foundation.

CURRENT HIV PREVALENCE LEVELS

Three countries in Southeast Asia and several states in India now have serious HIV/AIDS epidemics. In Thailand, HIV prevalence among pregnant women peaked at just above 2 percent before aggressive prevention efforts slowed the number of new infections. Prevalence among pregnant women reached a peak of more than 3 percent in Cambodia and then began to fall in response to prevention programs. High prevalence levels have also been detected in Myanmar, and recent data show that more than 1 percent of pregnant women are infected in parts of India.

Other countries appear to be in a transitional phase, with recent evidence of rapidly growing HIV prevalence in specific populations and regions, although national levels may still be low. This group includes China, Indonesia, Iran, Japan, Nepal, and Vietnam. A third group—including Bangladesh, Hong Kong, Laos, the Philippines, and South Korea—has yet to see extensive HIV spread. Table 1 gives the most recent HIV prevalence estimates available for 25 Asian countries.

DYNAMICS OF THE EPIDEMIC

Although the magnitude and timing of the spread of HIV have varied, the epidemic seems to follow a similar pattern in most Asian countries. HIV appears initially as "sub-epidemics" in specific population groups and then spreads among these groups and to the population at large through complex behavioral interactions. Such sub-epidemics have been described among: (1) men who have sex with men; (2) injecting drug users; (3) sex workers and their clients; and (4) the wives and girlfriends of the clients and their children.

There is strong evidence of extensive spread of HIV among men who have sex with men. In 2000, studies found 14 percent infection levels in this group in Cambodia, and similar levels have been observed among male sex workers in Thailand. Small surveys in Malaysia and Myanmar have reported

Table 1 HIV/AIDS in Asia's subregions and selected countries at the end of 1999

Subregion and country	Total estimated number living with HIV	Prevalence rate (%) in adults (15–49)	Total estimated deaths, 1999	Total number of AIDS orphans, cumulative
East Asia	530,000	0.06	18,000	5,600
China	500,000	0.07	17,000	4,500
China, Hong Kong SAR	2,500	0.06	<100	NA
Japan	10,000	0.02	150	NA
Korea, Dem. Rep. (North)	<100	<0.01*	NA	NA
Korea Rep. (South)	3,800	0.01	180	<100
Mongolia	<100	0.00	NA	NA
Southeast and South Asia	5,600,000	0.54	460,000	850,000
Afghanistan	NA	<0.01*	NA	NA
Bangladesh	13,000	0.02	1,000	610
Bhutan	<100	<0.01	NA	NA
Brunei Darussalam	<100	0.20*	NA	NA
Cambodia	220,000	4.04	14,000	13,000
India	3,700,000	0.70	310,000	NA
Indonesia	52,000	0.05	3,100	2,000
Iran (Islamic Rep.)	NA	<0.01*	NA	NA
Lao PDR (Laos)	1,400	0.05	130	280
Malaysia	49,000	0.42	1,900	680
Maldives	NA	0.05*	NA	NA
Myanmar	530,000	1.99	48,000	43,000
Nepal	34,000	0.29	2,500	2,500
Pakistan	74,000	0.10	6,500	7,900
Philippines	28,000	0.07	1,200	1,500
Singapore	4,000	0.19	210	120
Sri Lanka	7,500	0.07	490	600
Thailand	755,000	2.15	66,000	75,000
Vietnam	100,000	0.24	2,500	3,200

Source: UNAIDS (2000), *Report on the global HIV/AIDS epidemic: June 2000*. Geneva.

NA: Data not available.

*Not enough data were available to produce an estimate of HIV prevalence at the end of 1999. The 1994 prevalence rate published by the WHO Global Programme on AIDS (*Weekly Epidemiological Record* (1995), 70:353–60) was applied to the country's 1999 adult population to produce the estimates given here.

even higher levels, and in the past year, the number of AIDS cases among men who have sex with men sharply increased in Japan.

In many Asian countries, HIV began spreading early and rapidly among injecting drug users. In India's Manipur State, China's Yunnan Province, Myikyina in northern Myanmar, and several urban areas of Thailand, HIV infection levels of 40 to 80 percent have been recorded among injecting drug users for several years. In 1999, surveys in 19 cities of Nepal found that 40 percent of injecting drug users were infected. In 2001, the infection rate in this group was also 40 percent in Jakarta, Indonesia.

HIV is a major threat for sex workers and their clients. Prevalence levels among sex workers in Cambodia and Thailand peaked during the 1990s before they were reduced by vigorous prevention programs. More recently, prevalence has risen rapidly among sex workers in urban areas of India, Indonesia, Vietnam, and China.

Behavioral studies have shown clear links among these three sub-epidemics. One study in Cambodia found that 40 percent of men who have sex with men had both male and female partners in the previous month. Many of the female partners were sex workers who, presumably, went on to have sex with other clients. A study in Delhi, India, found that up to one-third of injecting drug users had visited a sex worker in the previous month. In Hanoi, one-quarter of sex workers inject drugs.

There is an obvious link between HIV sub-epidemics in sex workers and their clients, the wives and girlfriends of the clients, and their children. Studies have shown, however, that transmission from husbands to wives occurs slowly. In several states of India, the average lag between the start of an HIV epidemic in sex workers and the rise of infection levels among pregnant women has been about five years.

Transmission from pregnant women to their children occurs in one-quarter to one-third of births unless antiretroviral therapies are provided during pregnancy. In most Asian countries, these therapies are not yet widely available.

POTENTIAL SCALE OF THE EPIDEMIC

What are the risks for a widespread HIV/AIDS epidemic in Asia? Data from

behavioral studies suggest that anywhere from 5 to 20 percent of adult men in Asian countries visit sex workers at least once a year, ranging from 7 percent in the Philippines to about 11 percent in Japan to 15–20 percent in Cambodia. Clearly, the potential exists for substantial expansion of the HIV epidemic in many Asian societies.

But while the potential exists, it is difficult to predict if and when the HIV epidemic will begin to expand in specific Asian countries or how quickly infection levels will rise. HIV prevalence often remains low for years and then suddenly explodes.

In Katmandu, Nepal, for example, high levels of needle sharing were documented in 1990, but HIV prevalence among injecting drug users remained virtually at zero. Then six or seven years later infection levels shot up, reaching 50 percent in 1997. In Thailand, HIV transmission between men and women was documented as early as 1985, along with substantial levels of risk behavior. Yet the heterosexual epidemic did not take off until 1989.

Once an HIV epidemic takes off, how high are infection levels likely to go? Current understanding of the complex factors involved does not allow precise predictions, but large numbers of Asian men are sex-work clients, and this situation provides HIV with access to a significant proportion of the general population. Given the strong behavioral linkages among the various sub-epidemics in Asia, any indication of an upswing in infection levels in any group should raise serious concerns.

Such upswings have recently been observed in several countries. In China, little or no infection was detected among sex workers in the 1990s except in Yunnan Province. Now the most recent surveillance rounds have detected 10 percent prevalence levels among sex workers in neighboring Guangxi and 3 percent in Guangdong to the south. HIV levels among male patients seeking treatment for sexually transmitted infections (STIs) are also rising rapidly in several provinces. Many men in this group are sex-work clients.

In Indonesia, HIV levels among sex workers and injecting drug users were undetectable throughout the 1990s, but prevalence has now risen to 6 percent or higher among sex workers and 20 percent or higher among drug users in several cities. In Vietnam, prevalence levels among sex workers and male STI patients have recently started rising rapidly in Hanoi and Ho Chi Minh City.

POLICY RECOMMENDATIONS

There is some good news, however. Successful HIV prevention efforts in Thailand and Cambodia have shown that it is possible to limit the spread of the epidemic in other Asian countries.

In Thailand, prevention programs for sex workers and their clients, coupled with education and public-awareness programs, had a quick and dramatic impact on risk behavior. Condom use in sex work increased from less than 30 percent in 1990 to more than 90 percent in 1997. Between 1990 and 1993, the percentage of men using sex services declined by half.

As a result, STI levels in Thailand fell by more than 90 percent during the 1990s. HIV prevalence among young men peaked at 4 percent in 1993 and then declined steadily, falling below 1 percent in 2000. In pregnant women, HIV peaked at 2.4 percent in 1995 and fell to 1.1 percent in 2001.

In Cambodia, both the epidemic and the response began somewhat later, but by 1997, condom use in sex work had reached 70 to 90 percent. HIV levels among pregnant women peaked in 1997—at 3.2 percent—and then declined for four straight years, reaching 2.3 percent in 2000.

Careful analysis of the successful prevention programs in these two countries points to several recommendations for other Asian governments.

1. Obtain accurate information on HIV prevalence and risk behavior.

An accurate assessment of HIV risk requires constantly improving surveillance systems, expanding behavioral studies, and regular analysis of available information. In Cambodia and Thailand, extensive surveillance systems documented the spread of HIV.

By contrast, national surveillance systems in some other countries of the region are limited or flawed. In large countries such as China, India, and Indonesia, surveillance systems still only cover a small portion of the high-risk population, resources for surveillance are limited, and data quality is often an issue.

In some countries, policymakers have also been unwilling to collect data on risk behavior. Some insist on removing all “sensitive” questions from studies on sexual behavior or refuse to support behavioral studies in the general population at all.

Others focus exclusively on one aspect of the epidemic, such as injecting drug use, while downplaying other modes of transmission. This ignores the complex nature of HIV epidemics and leads to misdirected and ineffective prevention efforts.

2. Target policymakers for sustained commitment.

Policymakers are the gatekeepers of political will and financial resources. It is critical that they overcome their tendency to deny the HIV threat and accept how much risk exists in their own societies. Researchers and advocates must convince policymakers of the importance of initiating prevention programs quickly, before an epidemic reaches the stage of rapid expansion.

They must also convince policymakers to sustain programs for vulnerable groups and to expand long-term support for broader prevention work.

3. Provide the public with full and accurate information.

A clear understanding of HIV risk and prevention strategies requires the steady dissemination of information. In both Thailand and Cambodia, broad-based programs used multiple channels to inform the public about the seriousness of the epidemic and the need to take preventive measures.

In many other Asian countries, HIV prevention messages have still not reached the vast majority of the population. According to the 1998–99 National Family Health Survey (NFHS-2), only 40 percent of ever-married women in India have even heard of AIDS, much less know how to prevent it. Doubtless similar knowledge gaps are common in many other countries of Asia with large rural populations.

Another problem is that policymakers in some countries have been unwilling to support prevention messages that are too "explicit" or too direct in addressing risk. Such attitudes keep condom use low and needle sharing high, allowing HIV to spread unchecked.

4. Move quickly to provide effective coverage of groups most at risk.

Focused prevention efforts can only work if they achieve substantial coverage of key population groups—sex workers and their clients, injecting drug users, men who have sex with men, and people living with HIV and AIDS. The dynamics of the epidemic in several countries show the importance of acting quickly while prevalence levels are still low.

The association of HIV in the early stages of the epidemic with stigmatized population groups has slowed down political and financial support for prevention work. Even in Thailand and Cambodia, if the governments had acted two years sooner, hundreds of thousands of HIV infections could have been averted.

5. Sustain and expand prevention work, especially for youth.

In addition to an early focus on groups particularly at risk, it is important to convince the larger population to reduce risk behavior. Governments, nongovernmental organizations (NGOs), and private-sector agencies need to work together to implement a mix of mass-media campaigns, workplace programs, and developmental activities.

Young people, in particular, must be convinced to change behavior that heightens the risk of HIV transmission. And programs must be national in focus, including rural as well as urban areas.

6. Convince lawmakers and local authorities to take a pragmatic approach.

Sex work and injecting drug use are illegal in most Asian countries. Yet strict enforcement of laws against sex work and drugs is unlikely to alter behavior sufficiently to prevent the spread of HIV. Often, such policies just force "illegal" activities underground and make prevention efforts more difficult. Today, national drug policies are the primary barrier slowing down HIV prevention among injecting drug users in Asia.

Although sex work is illegal in Thailand and Cambodia, both governments took a pragmatic approach and enlisted the participation of sex workers, brothel owners, local health authorities, police, NGOs, and other partners to ensure that sex-work clients used condoms. This pragmatic approach was an important component in the success of HIV prevention in these countries.

7. Ensure the active involvement of key communities.

One of the main lessons from two decades of HIV prevention is that it is essential to secure the active involvement of the people who are most at risk, including sex workers, men who have sex with men, and injecting drug users. This often means working with communities whose behavior breaks the law or goes against social values. Government health personnel are generally ill equipped to communicate or collaborate with these groups.

The stigma associated with HIV itself and discrimination against those living with HIV and AIDS also impede the development of effective prevention and care programs. This is a major limitation because experience has shown that people living with HIV and AIDS are among the most effective prevention workers and spokespersons and have the best understanding of the types of program needed.

8. Put an end to complacency.

Complacency has consistently been a key factor in the spread of the HIV epidemic, and nowhere else in the world has there been more complacency than in Asia. Yet every country of the region faces the risk of a substantial rise in HIV infection levels. Whether and how much the epidemic actually grows is entirely in the hands of the people of the region and their leaders.

Cambodia and Thailand have shown that the HIV epidemic can be contained with good epidemiological and behavioral information, strong political will, a pragmatic approach, and effective mobilization of resources. The Philippines and India have taken the first steps toward putting effective national programs in place. The other countries of Asia have an unprecedented opportunity to avert a disaster by acting now before it is too late.

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