A generation has passed since the onset of the HIV/AIDS pandemic. During this time, 65 million people have been infected with HIV and more than 25 million people died of AIDS. Despite the devastation, many countries, using a variety of interventions, have been successful in slowing the spread of the virus. The interventions that have been most successful are those that are congruent with the local epidemiology. With the overall HIV/AIDS epidemic being composed of a series of smaller local epidemics interconnected by space or time, a range and mix of responses in the fight against HIV/AIDS is necessary. And the relative impact of each response will always depend upon the level, stage and pattern of the epidemic in each locale. Therefore to be effective, interventions should respond to local needs.

Cambodia is an example of a country that has successfully responded to its concentrated HIV/AIDS epidemic with a prevention strategy tailored to its own epidemiology. In the past decade, it has reduced HIV infection rates among sex workers and their paying clients through well-targeted condom promotion. Now, fifteen years after the first case of HIV was detected in Cambodia, the main mode of HIV transmission is from husband-to-wife and monogamous married women have begun to make up an increasing proportion of those newly infected and condom use remains low among regular partners.

In response to this evolution of its epidemic, the country is once again challenged to refine and tailor its approach. Cambodia has dealt forthrightly with commercial sex—but now with a generalized epidemic, it needs to keep doing more of the same but also address increasing infections among married women and other regular partners just as forthrightly.

Concentrated epidemic in the 1990s: Targeted Response and Results

Initially, transmission of the virus in Cambodia was accelerated by a mobile and poor working population, and entrenched gender inequalities that lead to a pervasive sex industry. HIV/AIDS prevalence peaked in 1997 at three percent among the reproductive-age population aged 15 to 49, and then fell to 1.6 percent in 2005. The Royal Government of Cambodia responded with the 100% Condom Use Program (CUP) in 1998, which required condom use in every sexual encounter between commercial sex workers and their clients. The program was piloted and gained strong support from the local authorities in the city of Sihanoukville, a main seaport in Cambodia and a significant center of the sex trade. The 100% CUP has now expanded nationwide to all 24 Cambodian provinces.
The Cambodian response had the right ingredients for success. It was quick and strategic. It used local data to engage local policymakers. The 100% CUP garnered commitment and involvement at many levels (policymakers, local authorities and the owners of sex establishments), and was executed to scale to reach all parts of the country. Informed by one of the best HIV/AIDS surveillance systems in the developing world, the response was designed to disrupt the main mode of transmission, and recognizing early on that HIV/AIDS is not solely a health issue. General awareness of the epidemic was raised to high levels through mass media programs, peer education and community outreach. In 2004, over 20 million male condoms were distributed, primarily through the social marketing programs of Population Services International (PSI), which began its work in Cambodia early on in 1994, in close collaboration with the government. PSI/Cambodia’s Number One condom is now available in 97 percent of brothels in urban and rural Cambodia.\(^2\) As a result, protective behavior among high-risk groups increased, and infection rates declined.

After the 100% CUP program was initiated, consistent condom use increased among sex workers and their paying clients, and there was a decline in the percent of men buying commercial sex between 1997 and 2001. During this period, consistent condom use increased dramatically, and more than doubled among brothel-based sex workers and female beer promoters. Condom use also increased among the military, moto-taxi drivers and policemen (see Figure 1).\(^1\) At the same time, the percent of men purchasing commercial sex dropped from 72

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**Figure 1: Trend of consistent condom use among high risk groups in Cambodia, 1997-2001**

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to 32 percent of police, 82 to 33 percent of the military, and 52 to 18 percent of motor-taxi drivers.

Between 1999 and 2002, HIV incidence rates declined among high risk groups in Cambodia. Incidence rates were halved among brothel-based sex workers and non brothel-based sex workers and decreased significantly among and the police (see Figure 2). Despite these declines, HIV incidence rates among high risk groups in Cambodia remain high compared to levels among high risk groups in other countries in the region.

**Figure 2: Trend of HIV incidence among sentinel surveillance groups, 1999-2002**

Between 1998 and 2003, HIV prevalence was almost halved among brothel-based sex workers, and decreased significantly among non brothel-based sex workers and the police (see Figure 3). Also, between 1996 and 2001, the prevalence of curable sexually transmitted infections (STIs) (chlamydia, gonorrhea and syphilis) was almost halved in Cambodia. This decline in prevalence among high risk
groups is most likely due to the emphasis placed on them—especially on brothel-based sex workers because they were the easiest to reach—by the national program.

Generalized Epidemic Today: Focus on Regular Partners and Long-term Strategies

Despite the dramatic decline in HIV prevalence among high risk groups described above, Cambodia to date still has the highest rate of HIV/AIDS prevalence in Southeast Asia and one of the highest in Asia. Moreover, in 2003, almost half of people living with HIV in Cambodia were women—up from 35 percent in 1997. The majority of the 57,500 women infected with HIV are likely to be married and have not worked in commercial sex work.6

While condom use has risen to high levels among sex workers and their clients due to the response of the government in the 1990s, the practice remains uncommon among married couples and regular partners. A mere one percent of married couples use condoms in Cambodia.7
Condom use is low in non-commercial non-marital longer-term sexual relationships such as sweetheart relationships, which are on the rise in Cambodia. As in many societies, condoms are associated with infidelity and casual or commercial sex.

Unlike among sex workers and their clients, HIV prevalence among pregnant women attending antenatal clinics declined only slightly from 2.5 percent to 2.1 percent between 1998 and 2003. At the same time that incidence was dropping among high risk groups in the 1990s, incidence among pregnant women declined even less significantly. Currently, husband-to-wife transmission is the main route of HIV transmission, causing two-fifths of new infections, while mother-to-child transmission (MTCT)—in-utero, through breastfeeding, or during delivery—accounts for another quarter of new HIV infections every year. Prostitution now accounts for about one-fifth of new infections in Cambodia, down from over 80 percent in the 1990’s. Such high levels of family transmission of HIV indicate that Cambodia has a generalized epidemic.

High levels of HIV infection are not the only risk to Cambodian women. One in 36 women faces the risk of dying from pregnancy or childbirth during her lifetime, compared to 1 in 2,800 in the developed world. Only a third of births are attended by skilled personnel, which is the second lowest rate in Southeast Asia. Cambodia has the highest level of unmet need for family planning in Southeast Asia and among the highest in Asia, and only a quarter of married women of reproductive age use a method of contraception. A shattered infrastructure resulting from one of the most brutal conflicts of the 20th century, uneven power and gender dynamics, and poverty all contribute to an elevated reproductive risk.

All Strategies will be more Effective if Women’s Status is Improved

Cambodia’s pragmatic and strategic approach to its concentrated epidemic in the 1990s had an effective public health impact. Now, however, the epidemic has matured and increased infections among married women and other regular partners have brought to the forefront issues of women’s reproductive health and their overall status in society.

Preventing infections among monogamous women and newborns requires additional longer-term strategies and addressing the roots of gender inequality and poverty.

The promotion of the notions of monogamy and the reduction in the number of sexual partners among men is one very important strategy that has not gained much currency, in Cambodia and elsewhere. Instilling these values in younger boys is essential to changing some
deep-rooted notions of masculinity. Increasing girls’ and women’s access to resources and their rewards including quality education and employment, and legal protection of women and their resources and enforcement of such laws will enable women to exert control over their relationships and health. Improving surveillance of new risk groups and of women’s reproductive health will identify where changes in strategy are needed. Investments in institutions and in social and legal infrastructure are long-term and difficult propositions, but they are necessary ones—not only for Cambodia but for any country serious about meeting the needs of half its population.

Cambodia won its first round in its fight against HIV/AIDS epidemic through well-targeted promotion of condoms that helped reduce unprotected paid sex, the driver of its concentrated epidemic. In order to sustain success, and contending against a generalized epidemic, it should continue promoting behavior change among high risk groups while adding strategies to interrupt transmission among regular partners. Monogamy and partner reduction is an effective HIV prevention strategy for all risk groups.

Be it abstinence, monogamy, reduction in the number of sexual partners or condom use, each of these prevention strategies will be more effective if women’s status in society is in good standing. Of course, affecting social norms require long-term generational changes, but a generation has already passed since the onset of the epidemic.

PAI will release a full report on the Cambodian HIV/AIDS program in August 2006.

Notes

4. Ibid.
6. Ibid.


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