THE PRICE OF PROSPERITY
"To get rich is glorious," the late Chinese leader Deng Xiaoping once exhorted his people. Defending this reformist vision, he added, "If you open the window for fresh air, you have to expect some flies to blow in." In the two decades of breakneck economic development since China's embrace of gaige kaifang (reform and opening), both the promise and the peril of Deng's two maxims have become abundantly clear. Although China enjoys growing wealth, increasing per capita incomes, and rising living standards, it also suffers from environmental degradation and a host of social ills including political unrest, increased crime, and a fraying social safety net. China, like other developing nations, faces tough choices between the benefits and the costs of modernity.

Unfortunately for China, however, the very nature of its particular political, social, and economic systems exacerbates the dangers of opening up. The growing problem of HIV/AIDS in China is a glaring example of this phenomenon, and one with enormous implications. Once dismissed by Chinese officialdom as a Western problem, the spread of HIV/AIDS has only recently gained serious attention from Beijing. But it may be too late: China now faces a major epidemic, one that the government will find extremely difficult to combat.

A RISING TIDE

After years of neglect, the Chinese government has now begun to recognize the enormity of the country's HIV/AIDS problem. In June 2001, the Chinese health minister, Zhang Wenkang, made a stunning announcement while attending the United Nations General Assembly Special Session on HIV/AIDS: China could have as many as 600,000 cases of HIV. This admission stands in stark contrast to previous official statistics, which in 2000 counted only 22,517 registered cases. Even the higher numbers are suspect, for both practical and political reasons. The U.N. AIDS program (UNAIDS) estimates that there are more than one million people infected with HIV in China -- and this figure might be even two or three times larger. Among mainland China's 22 provinces, serious HIV epidemics are already raging in 7, and threatening to break out in another 9. UNAIDS warns that the disease, if left unchecked, could afflict 20 million Chinese by 2010.

In certain parts of China the problem is already particularly acute. Along China's southern borders with the opium-growing regions of Burma, Thailand, and Laos, widespread intravenous (IV) drug use was an early source of HIV infection. Drug use -- and with it the spread of HIV -- has also extended along drug trafficking routes into China's northwestern province of Xinjiang. And it appears that the central province of Henan, China's second most populous, has been hit the hardest. According to some experts in international nongovernmental organizations (NGOs), as many as 1.2 million
people in Henan are HIV-positive, largely owing to an unsafe blood collection system. Chinese and Western news media reports have focused in particular on "HIV/AIDS villages" in Henan where up to 80 percent of inhabitants have contracted the virus, and more than 60 percent already suffer from AIDS.

According to the health minister's speech at the United Nations, China's HIV caseload is increasing at 30 percent a year, although a later report by Deputy Health Minister Yin Dakui said that new cases actually increased by 67 percent in the first six months of 2001. Even accepting lower government estimates for infections and their annual growth, China will harbor some 6.4 million cases of HIV/AIDS in 2010, and even Health Minister Zhang has acknowledged that the number could rise to 10 million if the infection rate increases significantly. By comparison, in the United States, where the disease was detected nearly 20 years ago, there are today an estimated 900,000 people living with HIV/AIDS, and an additional 40,000 new cases are reported each year. Even the most conservative projections for China will easily place it among the world's most heavily HIV-infected nations within the next five to ten years.

How did this crisis emerge, and what can be done about it? What may have begun as a "foreign" disease has now swept through China. This is largely due to recent, dramatic changes in demography and social mores in the country, as well as deteriorating health care practices. Seen in this light, China's spreading HIV/AIDS problem is becoming both a cause and a consequence of the country's socioeconomic transformation. Given that the government is both unaccustomed and increasingly unable to respond to a health care crisis of this magnitude, the problem will certainly get much worse before it gets any better.

LOST BOYS (AND GIRLS)

During the Maoist era, the hukou system of household registration bound people to either the rural village or the urban area where they lived. Few could successfully evade the hukou system, because of a strict rationing and coupon system for food and other basic items. But in today's China, freedom of movement has increased enormously. The most dramatic expression of this mobility is the "floating population" (liudong renkou): an estimated 100 million itinerants who have left their official residence -- typically in the poorer countryside -- to seek a better living in urban areas, but without the benefit of official assistance in housing subsidies, health care, or education. Adding to this group, many of the 40 million, mostly urban workers laid off in recent years from failing state-owned enterprises are also now on the move, in search of a decent living.

These large numbers of roaming workers will become one of the most significant sources of new HIV infections in China over the coming years. The floating population is largely composed of young to middle-aged men and women, persons in their most sexually active stages of life. According to a survey in the mid-1990s, 81 percent of floating workers are between 15 and 45 years old, with over half of them between 20 and 30 years old. The very nature of the floating population renders it difficult to monitor, educate, and treat. Many of its members are poorly educated, illiterate, or speak only non-Mandarin
dialects, making it all the more difficult for health care workers to target them effectively. As undocumented and unregistered citizens, they must live a semi-clandestine existence beyond the reach of officialdom; because of their willingness to take on low-paying or illicit employment disdained by city-dwellers, they are often alienated from society. If these workers run into legal or financial trouble and are forced to return home or move elsewhere, the HIV carriers among them can spread the infection wherever they go.

To make matters worse, IV drug abuse among this group is on the rise -- as it is throughout much of China. The despair and dislocation brought on by economic hardship helps explain why many Chinese have turned to drugs. But drug use is not restricted to marginalized or socially disaffected groups. More and more urban youths also now have access to illegal drugs. As a consequence of the one-child policy, many children are indulged by their parents and by two sets of grandparents with money and freedom, both of which can be used to experiment with drugs. This augurs ill for China's HIV epidemic. In the recent past, IV drug use was seen as the principal source of HIV infection in China, with the government estimating that some 70 percent of HIV-positive individuals are IV drug users. Although drug use may not have been the initial cause of infection in all these cases, the sharing of needles is a highly efficient mode of transmission. With the Chinese government claiming there are some 860,000 drug addicts in China -- probably an underestimate -- this group will continue to be a significant contributor to the country's HIV/AIDS problem.

COURTING RISK

The focus on drug users, however, distorts public perceptions as to who faces a high risk of contracting HIV. Although IV users constitute the largest proportion of HIV cases in China today, the fastest growing cause of the disease's spread in the country is unprotected sex within the heterosexual population. Beijing's statistics claim that less than 10 percent of HIV infections are attributable to heterosexual intercourse (and an even smaller percentage is linked to homosexual sex). But with more than 700 million Chinese aged between 15 and 49, public health specialists can readily envision a major epidemic spreading among the heterosexual population alone. Casual and premarital sex has increased markedly in China. A 2001 survey on attitudes toward sex and marriage showed that only 27 percent of young respondents, as opposed to 84 percent of people in their parents' generation, believe that an individual's first sexual experience should occur after marriage.

This boom in promiscuity has been further fueled by China's resurgent commercial sex industry. Like widespread drug use, prostitution was thought to have been all but eradicated under the stringent societal norms of Maoist China. However, the opening of Chinese society in the 1980s demonstrated that the sex trade, as old as Chinese civilization itself, had never fully disappeared and was reemerging in full force. Today, Chinese police estimate that there are around four million prostitutes in the country.
This expansion in commercial sex work owes to forces both old and new. Growing income disparities, poverty among women, labor mobility, and consumerism all contribute. So does the increasing consumerism and commodification of modern life in China, which produces a parallel commodification of women. For many Chinese men, having a second wife or mistress has become a status symbol, much like owning a car or a cellular phone. It also comports with practices of the not-so-distant past, when it was common for monied Chinese men to marry more than one wife. Furthermore, business-related entertaining involving prostitutes has become standard practice in some quarters. A recent report on self-employed entrepreneurs (getihu), a growing social class in China, found that "getihu young men are frequently identified as spreading [sexually transmitted infections] and engaging in HIV-related risk-taking sexual practices." Meanwhile, the spread of new technologies, such as pagers and cell phones, is allowing commercial sex workers to move out of traditional red-light districts, promoting a further spread of sexually transmitted diseases while also complicating regulation and preventive education. Numerous epidemiological studies have demonstrated the steady spread of HIV through China's population of prostitutes. From there, HIV goes into the general population (or is circulated back to previously uninfected sex workers) via clients who pass the virus to their spouse or other sex partners in mainland China and beyond.

Take, for example, the town of Dongguan. Located in Guangdong province and near the border with Hong Kong, Dongguan is home to an estimated 300,000 women sex workers. These women -- mostly from poor inland or northeastern provinces -- mainly serve Hong Kong businessmen who regularly shuttle to the mainland. Similar enclaves on the coast of Fujian province cater to Taiwanese businessmen who frequent nightclubs, beauty parlors, massage parlors, and karaoke bars that also provide sexual services.

Another source of the spread of HIV in China is homosexual intercourse, especially among men. Some estimates place the number of gay men in China at between five and seven percent of the male population. As China grows more liberal, homosexuality is more openly expressed and tolerated. It was only recently removed from China's official list of psychiatric disorders, and reports suggest that local law enforcement has reduced crackdowns on gay bars and clubs in larger Chinese cities. Fortunately, such tolerance may have beneficial effects on the spread of HIV. If it means that China's gay community is no longer driven underground, anti-HIV awareness, prevention, and treatment programs might more readily reach this vulnerable population.

TRADITIONS AND TABOOS

Although dramatic socioeconomic transformation has exacerbated the spread of HIV/AIDS in China, the persistence of long-standing traditions and taboos is another contributing factor. Take, for instance, the deeply ingrained cultural preference for male children. One of the most startling demographic trends in China is the growing divide between the number of males and females born each year. The natural ratio of males to females born each year is about 105 to 100. However, according to Tyrene White, a scholar at Swarthmore College, China's ratio in 1995 was 117.4 boys for every 100 girls, and in 1997 it was skewed even further to 120 males for every 100 females. Figures
compiled by the CIA show an imbalance that is not as great, but still dramatic: in the Chinese population aged under 15, the ratio is about 110 to 100. Even this disparity means that over the next decade some 15 million Chinese men will come of age with bleak prospects for finding female partners, let alone wives.

The rapid socioeconomic changes of the 1980s and 1990s, combined with the one-child policy, have tended to reinforce this traditional preference for male heirs who carry on the family name, are expected to take care of aging parents, and tend to bring in more income. Now that ultrasound technology allows parents to identify the gender of their child before birth, sex-selective abortions, although illegal, are further altering the makeup of Chinese society. The consequent dearth of available brides fuels demand for commercial sex workers, helps accelerate male migration into cities, and increases the numbers of women who are kidnapped and sold into prostitution or as "unwilling brides."

A traditional conservatism in China also makes it difficult to have frank and open discussions on sex-related topics, which in turn stymies anti-HIV education and other preventive measures. Schools do not have formalized sex education, which explains why so many Chinese youth know very little about sexually transmitted diseases. A recent survey of 4,000 Chinese showed that fewer than four percent of them understood what HIV and AIDS are and how HIV is transmitted; more than half believe that sharing utensils with HIV carriers can transmit the disease. Such ignorance about HIV transmission also results in the stigmatization of people with the disease, which forces the problem deeper into the shadows. Not only do infected individuals feel alienated in their hometowns, but they may even be rejected by their own families. Making matters worse, there is even a great deal of ignorance in China's public health sector, as illustrated by the many cases of hospitals and clinics refusing to treat infected patients.

Public education could make a big difference. Thailand, which has a well-developed sex industry, has been able to use education, government regulation, and preventive programs to help stem the spread of HIV. In contrast, although sexual mores in China are changing rapidly, attempts to increase HIV/AIDS awareness have met with strong conservative opposition. Moves to put condom machines on university campuses, for example, or to erect billboards promoting condom use have been harshly criticized.

BLOOD MONEY

A cultural taboo against blood donation also means that the country suffers from chronically low blood supplies. China has only about 0.8 milliliters of blood per capita available for transfusions, far below the World Health Organization recommendation of 7.0 milliliters. Unfortunately, the predisposition against donation also means that much of China's blood supply comes from blood sellers -- typically a less safe source than voluntary donors. China has learned too late how easily HIV can be introduced into the general population through tainted blood transfusions.

The buying and selling of blood in China is a lucrative and poorly regulated enterprise. Although the nation's 1998 Blood Donation Law made blood selling illegal, the law of
supply and demand guarantees continued collection schemes, now moved underground where regulation is virtually impossible. Reports in Beijing Wanbao, for example, tell of state-run factory workers who, when given mandatory blood donation quotas to meet, paid dealers known as xuetou, or "bloodheads," to find migrant workers who "donated" blood in their stead. Until the supply of voluntarily donated blood more closely meets domestic demand, such schemes will be difficult to wipe out.

The transmission of HIV from illegal blood sales has received considerable coverage in the Chinese and Western news media. In circumstances now routinely repeating themselves in parts of rural China, poor farmers in the late 1980s and early 1990s were lured by cash to sell their blood to bloodheads. In some cases, bloodheads enticed entire villages of hundreds of adults to sell their blood or plasma for between 40 and 100 yuan (about $5 to $12) each. Poor peasants, otherwise making the equivalent of two or three hundred dollars per year, eagerly sold their blood, in some cases over the course of months and years, to supplement their meager incomes. Few of them had ever heard of HIV or AIDS. Those who did know about it considered it a "Western disease" or a "rich people's disease" and probably asked few questions before selling their blood.

Selling blood plasma is particularly appealing. By selling plasma -- instead of whole blood -- sellers do not lose red blood cells, and thus believe they can sell more often without fear of anemia. After extraction, an individual's blood is often mixed with other sellers' blood of the same type and placed in a centrifuge. Plasma is then removed from the whole blood, and the remaining mixture of blood cells and platelets is reinjected into the donors. The entire process takes only about 30 minutes, and there are reports of people selling blood plasma as many as three times a day for five days or longer. But this method of pooling, reinjection, and multiple plasma sales means that blood-borne disease in one seller can easily infect dozens of others. Moreover -- again as a cost-saving measure -- syringes are commonly reused during the collection process. Blood collectors rarely screen sellers for HIV, hepatitis, or other blood-borne diseases, nor do they test the blood before selling it to hospitals or individuals in need of transfusions. Indeed, because of increasing health care costs in China, many people needing blood transfusions are advised to go directly to collection stations to purchase inexpensive blood, bypassing hospital screening altogether.

Tenacious health care workers, increasingly vocal HIV/AIDS sufferers, and Chinese and Western news media are beginning to unearth the disastrous effects of nearly a decade of illicit blood sales in the Chinese countryside. In response, many local officials have sought to conceal their involvement in these practices and to prevent reporters and government health care professionals from visiting villages and towns with HIV-infected residents. Central government health officials are unable to gauge the full extent of the HIV/AIDS situation in the countryside and rely almost entirely on village officers and their own informal networks for information about the prevalence of HIV and AIDS. Efforts by local officials to conceal incidents of HIV in the countryside not only deprive afflicted citizens of medical attention, but also foster the continued spread of the disease.

AILING HEALTH CARE
The tragedy of blood-selling schemes are part of a larger problem: China's failing health care system. Economic pressures have forced the state to cut back on its traditional role as the country's sole health care provider, leaving a largely unregulated vacuum in its place. Although wealthy Chinese can access state-of-the-art medical technologies, hundreds of millions no longer have even basic medical care, especially in the countryside. In 1978, some 20 percent of the national health budget was spent on rural areas, but this figure had been slashed to 4 percent by the mid-1990s. Less than one-tenth of China's 900 million peasants have any form of health insurance, yet health care costs have increased enormously, and local clinics have closed their doors because they cannot compete in the market economy. Hardest hit by these changes is the urban floating population. Not only do they risk contracting HIV and other diseases, but, living in shanties on construction sites or on the edges of cities, they lack even basic health services and are highly unlikely to receive any form of preventive education or treatment.

Chinese health care professionals emphasize that although HIV testing is now widely available, albeit sometimes for a hefty fee, few HIV-positive patients can afford the cost of anti-HIV drugs produced by Western pharmaceutical companies. (In North America, a carefully prescribed and monitored "drug cocktail" regimen costs between $15,000 and $30,000 a year.) Some major drug companies have announced that they will cut prices of anti-HIV drugs sold in China, and the Chinese government is launching an effort to negotiate even lower prices. But although such measures will help, the vast majority of anti-HIV therapies available today were designed to combat strains of HIV found predominantly in Western Europe and North America, and may not be as effective against HIV strains prevalent in China. For both these reasons, doctors are forced to focus on the symptoms of HIV/AIDS -- such as coughs, fever, skin lesions, stomach ailments, and pneumonia -- but are unable to slow the infection's fatal course. In remote rural areas, afflicted individuals might go without even this most basic care.

As with blood collection, another problem is the reuse of needles and syringes, particularly since many medications in China are administered by injection. A large underground market exists for used needles, which are cleaned, repackaged, and resold to hospitals and clinics in other provinces. To save money, some clinics also reuse needles and syringes themselves. Such unsanitary injections are rapidly spreading blood-borne diseases such as hepatitis B and C, and some experts believe that they will become one of the main modes of HIV transmission in the future.

TOO LITTLE, TOO LATE?

Foreign public health officials see the potential for a disastrous convergence of the three main paths of HIV transmission in China: from the southern border regions, the spread of HIV largely through intravenous drug use; from the eastern seaboard, the spread of HIV through sexual contact; and from the central inland provinces, the spread of HIV through illicit and unsafe blood collection. Beijing has also taken note and began to take some action in the late 1990s. As early as 1996, the central government established a commission to coordinate the national response to HIV/AIDS in China, and in 1998 and
again in 2001 issued formal action plans. But it was not until late 2001 that the government began to make a serious and public effort to combat the disease. According to the health minister, funding to combat HIV/AIDS increased to about 100 million yuan (around $12 million) annually in 2001 and national bonds amounting to 950 million yuan have been issued for the improvement of blood bank services. China has also established a national-level Center for AIDS Prevention and Control within the Chinese Academy of Preventative Medicine, under the Ministry of Health.

Following the dramatic revelation of China's HIV/AIDS crisis in mid-2001, a number of other high-profile steps were taken. China held its first international AIDS conference in November 2001, with some 2,000 participants from 20 countries. Generally speaking, the official media in China has been increasingly free to write and broadcast about HIV/AIDS. On World AIDS Day, December 1, in addition to large government-sponsored education events in China's major cities, China Central Television broadcast a cautionary play in prime time about a businessman who contracts HIV through casual, heterosexual sex. Emulating other Asian countries such as Thailand, China has apparently begun to test its new military recruits, typically teenage males from poorer rural areas, for HIV infection. The government has also taken steps to provide special care to victims of HIV in the country's most notorious "AIDS village," Henan's Wenlou. There are even a number of reports of courts granting compensation to HIV victims infected through faulty blood transfusions.

Looking ahead, Chinese authorities have issued some ambitious goals. Officials who organized last year's national AIDS conference have stated their aim of reducing the growth rate of HIV infection to 10 percent annually by 2005. In a recently released action plan, the Chinese health ministry forecast new and augmented funding through budget increases and the issuance of government bonds. But because such funds are still limited, they will go primarily to education, counseling, and cleaning up the country's blood-donation system. Beijing hopes that at least 75 percent of the urban and 45 percent of the rural populations will have a basic preventive understanding of HIV and its transmission by 2005, and that all health care providers will have on-the-job training concerning HIV/AIDS. The document also includes a call for raising condom usage to at least half the people in high-risk populations. Another goal is that at least 50 percent China's HIV victims should receive local treatment and care. But given the already advanced stage of the HIV epidemic in China, these targets seem extremely optimistic.

Many problems remain before China gets a handle on its HIV/AIDS crisis. Although there has been more official media coverage, the scandals of rural blood collection or the more general breakdown of China's health care system are rarely mentioned. Some investigative reporting by the quasi-independent Nanfang Zhoumou has revealed the abuses of blood collection schemes in Henan, but the newspaper's publishers have been pressured by provincial authorities to cut back on their coverage. HIV sufferers who do appear at conference venues or on television are typically not identified or are disguised, further contributing to the stigmatization of the disease. To fulfill its mission in educating the public and caring for victims, the Chinese Ministry of Health will require far greater governmental support and political clout. But even that is not enough. Since the spread of
HIV/AIDS occurs at the grassroots, it needs to be addressed at that level. China, however, lacks the expertise and capital to focus on the grassroots, and the authorities are wary of semi- or wholly autonomous organizations that might try to do so. The preference for Leninist "democratic centralism" -- that is, a top-down, Communist Party-led approach -- still prevails in China and complicates Beijing's ability to deal fully with its HIV/AIDS problem.

A TORTUOUS ROAD

To avoid a looming health disaster, China's government and the international community must take more aggressive action. Aside from the potentially monumental human cost, experience across the globe has also demonstrated the destabilizing social consequences of widespread HIV infection.

Given the scarcity of resources, anti-HIV efforts in China should focus on three major areas: education and awareness, improved health care, and intensified government oversight. Chinese public health professionals recognize that education and prevention are the most important near-term tactics. This approach should include a stronger focus on HIV/AIDS education and awareness, including the promotion of condom use and the introduction of sex education in schools. Providing better information will require improved epidemiological studies and enhanced monitoring of the disease's progression. HIV/AIDS awareness campaigns need to be targeted at the very venues where high-risk behavior occurs, such as teahouses, public bathhouses, barber shops, massage parlors, and nightclubs.

China's health care system also needs top-to-bottom improvements if the fight against HIV/AIDS is to succeed. Local public health officials should be given greater latitude to identify vulnerable populations and to establish appropriate clinics, prevention programs, and counseling centers. Health care providers also need to recognize and treat other sexually transmitted diseases, such as herpes and gonorrhea, which facilitate HIV infection, especially among high-risk groups such as commercial sex workers. And aggressive measures are needed to develop and implement high national standards for blood collection, organ donation, and the sanitary use of needles and other medical equipment.

The political context in which these steps unfold is equally important. Local and national laws and policies are needed to prevent discrimination against HIV victims, ensure the confidentiality of HIV testing and counseling, promote HIV awareness, encourage voluntary blood donation, and impose heavy, enforceable penalties on illicit blood-collection rackets. Government leaders need to devote more resources to this problem, not only through budget increases, but also by untangling bureaucratic obstacles so that health officials and practitioners, family planning agencies, the Education Ministry, the State Drug Administration, official media outlets, and public security bureaus will work more effectively together to combat HIV/AIDS. Overall, the Chinese leadership will need to place a far higher priority on HIV/AIDS prevention and treatment. Unfortunately, past experience suggests that China's political machine will not mobilize against a pervasive
social problem (as with corruption), until one of its own high-level officials is openly
affected.

The international community can do more as well. Many intergovernmental bodies,
national governments, and NGOs from around the world have begun to provide expertise
and financial resources to help China deal with its HIV/AIDS epidemic. For example, the
World Bank recently loaned $250 million to support HIV prevention programs in four
Chinese provinces, augmenting millions of dollars in anti-HIV assistance provided by
Western governments. U.S. government cooperation has included two visits by
delations from the Centers for Disease Control and Prevention (CDC), and plans for
changes between Chinese and U.S. specialists. According to CDC officials, potential
ollaborative programs in the future could focus on surveillance, epidemiological studies,
education, blood safety, and community health care. The National Institute of Allergies
and Infectious Diseases has also established collaborative programs with its Chinese
counterparts. This list should be expanded to include other U.S. agencies such as the
Food and Drug Administration and the National Cancer Institute. U.S.-China cooperation
in combating HIV/AIDS stands out as a potentially positive area for bilateral relations.

Until very recently, denial and institutional inertia characterized the Chinese
government's response to HIV/AIDS. When the first cases were reported in the mid-
1980s, the government immediately treated the problem as a public security issue,
blaming foreigners, prostitutes, drug users, and minorities for introducing the disease into
China. Only recently has the government realized that attempts to isolate and purge
infected individuals simply drives the problem further underground. For the Chinese
government and those foreign agencies wishing to help, the first matter of business will
be an accurate assessment of the actual magnitude of the crisis. But accepting that there is
a problem is only the first step on a tortuous road to containing the epidemic. China must
also learn to balance the perils and the promise of increased modernization and openness.

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