HIV and Heroin: A Deadly International Affair

HIV is largely confined to injecting drug users in Vietnam, but it is crossing into China. A novel project is tackling the drug route

VIETNAM

LANG SON, VIETNAM—As though navigating through a minefield, Doan Ngu steps gingerly through an abandoned dirt lot near the center of this small, northern city. Once an elementary school, the lot now has become a popular place to inject heroin; hundreds of used syringes and their plastic wrappers litter the ground. Ngu, wearing open-toed sandals, points his toe at the tip of one syringe. "This is a new one," says Ngu. "It still has fresh blood."

Ngu, an official at the National AIDS Standing Bureau in Hanoi, a 3-hour drive south, looks up at the majestic, striated mountains in the distance. "It makes me very sad," says Ngu, who grew up a few kilometers away from the old schoolyard. "There are plenty of places like this."

Vietnam, a long, narrow country with 80 million people, has relatively little HIV: At the end of 2001, the Joint United Nations Programme on HIV/AIDS estimated that 130,000 of its adults, or 0.3%, had become infected—fewer per capita than in the United States. But as this dirt lot in Lang Son suggests, Vietnam has a serious problem with injecting drug users (IDUs). HIV is spreading in this group, and the effects are spilling over into neighboring China. According to official estimates, IDUs account for 65% of Vietnam's HIV infections.

A novel, intriguing intervention study run by Ngu and a team of distinguished international researchers aims to slow the spread of HIV in both Lang Son Province and across the border in China's Guangxi Province. "We can save many human lives and the economy," says Ngu of the project, which met much resistance. "But only a few people understand that."

Political pressures

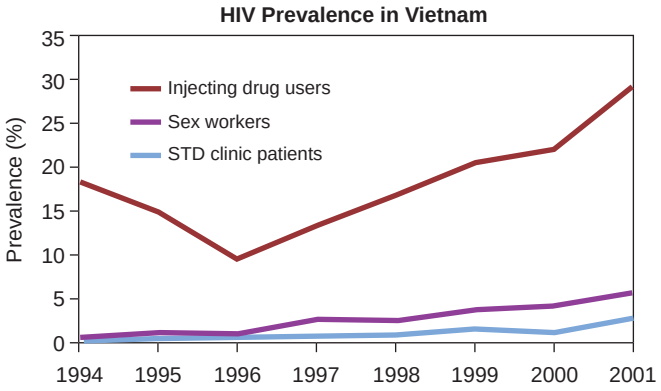
In 1991, Vietnam tested the blood of 70,000 IDUs, patients who had sexually transmitted diseases, sex workers, and blood donors. Only one case of HIV surfaced. By 1994, the country had begun to see an exponential spread of the virus in IDUs, and international alarm bells began to sound. It was feared that Vietnam, like its neighbors, would soon see HIV rampantly spreading through sex workers, migrants, and the heterosexual population. "It's especially developed very fast in the recent few years," says A Chung, who heads the National AIDS Standing Bureau.

But the domino effect from IDUs to other groups has yet to happen on a dramatic scale. "Vietnam is not Cambodia or Thailand," says Jamie Uhrig, a Canadian public health physician who has worked in Vietnam for the past 10 years, including a 2-year stint with the United Nations Development Programme. Uhrig contends that the spread of HIV in Vietnam likely will remain primarily in IDUs. "There is no heterosexual epidemic in Vietnam, and there won't be," he predicts. "Most of the factors that produce a generalized epidemic in Asia aren't there." Led by an authoritarian regime that opened to outsiders only in the 1990s, Vietnam does not have brothel-based sex workers, Uhrig points out, and the sex trade that does exist is "among the quietest in the world." Truck drivers, police, and military men do not often frequent sex workers. Gonorrhea, one of the sexually transmitted diseases that helps spread HIV, "has all but disappeared." Condom use, he says, is common. "They don't want other people's fluids touching them."

Vietnam has, however, had little success in slowing the spread of HIV among IDUs. The country has "cold-turkey" rehabilitation centers—methadone is considered an illegal drug—and some in-home treatment. Chung, a sociologist by training, says they have failed. "It's not showing any success, because relapse is about 90% after detoxification," says Chung. Convincing the government to embrace harm-reduction strategies that treat drug addiction as a disease rather than a crime also has presented serious challenges. "Working with the police and other agencies is more difficult than working with IDUs," he says.

The virus may not yet be spreading much from IDUs into Vietnam's general population, but it is crossing the border with China. Epidemiologists who study molecular changes in the virus have found evidence that much of the HIV infecting IDUs in southern China comes from northern Vietnam, where heroin is purer and cheaper.

Against this backdrop, Abt Associates, a research consulting firm based in Boston, Massachusetts, organized a meeting in Kunming, China, in 1997 on the regional spread of HIV. The meeting, sponsored by the Ford Foundation, led three of the attendees to hatch the idea for what became the Cross-Border HIV Prevention Intervention project. "We thought if we have momentum for this regional conference, why don't we see if we can get international cooperation?" recalls one of the trio, Don Des Jarlais, a renowned researcher on IDUs and HIV based at the Beth Israel Medical Center in New York City. Des Jarlais, the Ford Foun-



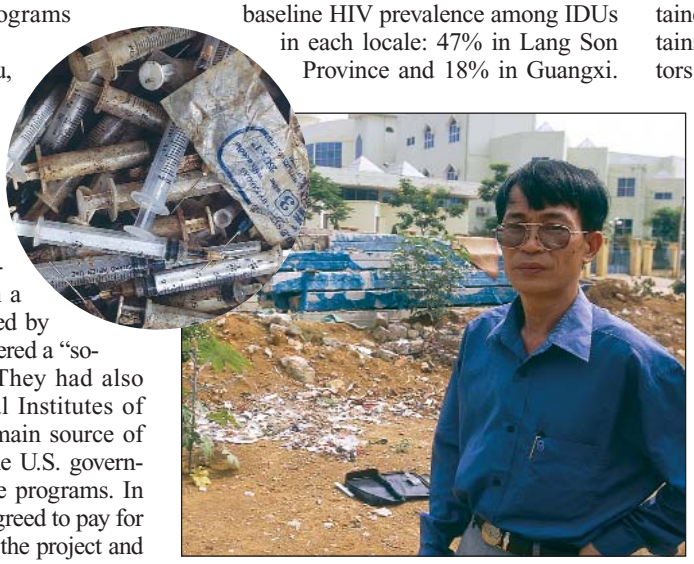
Testing ground. A needle-exchange program in Lang Son samples blood from residents (*above*) to monitor HIV prevalence, which continues to rise countrywide in injecting drug users.

GRAPH SOURCE: VIETNAM'S MINISTRY OF HEALTH; PHOTOS BY MALCOLM LINTON

dation's Joan Kaufman (a reproductive health specialist who now heads Harvard University's AIDS Public Policy Program), and Abt's Ted Hammett decided to try to organize syringe-exchange programs in both countries.

They soon recruited Wei Lu, director of HIV/AIDS Prevention and Control in Nanning, China, and other leading AIDS officials from both regions. But several hurdles quickly appeared. China and Vietnam have had many conflicts in the past, resulting in a touchy atmosphere, exacerbated by the fact that drug use is considered a "social evil" in both cultures. They had also hoped that the U.S. National Institutes of Health (NIH) would be the main source of support for the project, but the U.S. government forbids needle-exchange programs. In the end, the Ford Foundation agreed to pay for the needle-exchange aspect of the project and hire the peer educators. NIH awarded the group a grant that will provide nearly $2 million over 4 years. China also did not permit syringe exchange, so Des Jarlais suggested that they use a "social marketing" scheme that allows IDUs to exchange used syringes for a voucher that they can turn in at local pharmacies to receive clean syringes.

The project began in 2002, with teams of (supposedly) former IDUs hired at each of the project's 10 sites to serve as peer educators who distribute vouchers or even clean syringes. The researchers also established baseline HIV prevalence among IDUs in each locale: 47% in Lang Son Province and 18% in Guangxi.



Field of nightmares. Peer educators working with Doan Ngu regularly remove needles from this open-air shooting gallery.

"In the absence of intervention, 18% could go to 40% in a year," says Des Jarlais, who notes that this is the first research project attempting to stop HIV's spread across international borders.

Open borders

Walking up to a broken wall from the old schoolhouse, Ngu points out evidence of the project's impact. A dirty Styrofoam container and a wicker basket each hold mountains of used syringes that the peer educators have collected from the abandoned lot, to prevent both their reuse and accidental needle sticks. "That's just from 1 week at this site," Ngu says.

Before burning these syringes, the project workers count them: From January through December 2002 alone, they totaled 163,827 in Lang Son Province. The Vietnam arm of the project also distributed more than 25,000 new syringes in that period. Preliminary data show that the prevalence of HIV has not increased in Lang Son in more than a year, further evidence that the program has made some headway.

Ngu well recognizes the limits of the project and would much like to see Vietnam embrace a more comprehensive harm-reduction program, including offering methadone. "We need to work harder to explain things to our policymakers," says Ngu. "They're still mixing up and confusing the political with the HIV/AIDS problem. Now's the time for action. I say this not because I'm a fortune-teller. It's because we have learned from other countries."

–JON COHEN

Two Hard-Hit Countries Offer Rare Success Stories

By heavily promoting condom use, Cambodia and Thailand have blunted their epidemics, but the virus continues to make headway in some populations

CHIANG RAI AND BANGKOK, THAILAND, AND PHNOM PENH, CAMBODIA—On a moonless evening, a group of female and transgendered sex workers wearing identification cards around their necks strolls through a park that abuts a Buddhist temple in downtown Phnom Penh. The dark park has a wide variety of sex for hire. Men seeking men head for the fountain. Straight women sit on the grass with small piles of oranges in front of them, a thinly veiled cover for negotiating a later sexual rendezvous. Men dressed as women, some of whom have breasts from taking steroids, hang out near the restrooms. The people with the identification cards have worked this park themselves many a night, but this evening they have a different mission: Oxfam Hong Kong has hired them to distribute condoms.

THAILAND & CAMBODIA

Like neighboring Thailand, Cambodia has mounted a "100% condom program" that, with help from sex workers themselves, aims to persuade everyone selling or paying for sex to use a condom with each encounter. Supported by government and nongovernmental organizations, the campaigns have yielded measurable successes. In Cambodia, HIV prevalence among all adults fell from 4% in 1999 to 2.6% by the end of 2002, by which point the Ministry of Health estimated that a total of 259,000 Cambodians had become infected since the first case surfaced in 1991. A recent study by the Cambodian Ministry of Health projected that without increased condom use and other behavior changes, Cambodia would have had about three times as many HIV infections.

Thailand, which recorded its first HIV case in 1984, by 1991 had already launched a nationwide 100% condom campaign. Although national figures do not exist for the early years of the epidemic, prevalence has stabilized at around 2%. "Most of the data confirm that prevalence declines after 1993, 1994," says Sombat Thanprasertsuk, who directs the Ministry of Public Health's AIDS branch. A recent model by his office similar to the Cambodian one suggests that if the country had not attempted to thwart HIV, 10% of the population would have become infected by 2000. "The condom program re-

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