

A New Treatment Campaign, But With Limited Weapons

The government has promised free AIDS drugs, but the available therapies have serious limitations, and identifying and monitoring patients pose fundamental challenges

RUI, YUNNAN PROVINCE—As a user of opium and heroin for nearly 2 decades, Da Zhan Sha speaks with great authority about the drugs' pleasures and dangers. Da, a 45-year-old truck driver, learned in 1999 that he had become infected with HIV. A heroin-using son is infected, too. Here at the Jile Township Clinic, the doctors taught Da to use condoms to avoid transmitting the virus to his wife, who remains uninfected, and offered to help him quit using drugs. But they cannot offer treatment for his HIV infection. Indeed, when asked whether he has heard that anti-HIV drugs exist, Da looks puzzled. "I'm not sure," he says. "I'm not clear about that."

None of the many AIDS posters and graphics that decorate the walls of the Jile Township Clinic offers any information about anti-HIV drugs, and Rui Ying, a savvy doctor who comes from the predominant Dai ethnic group in the region and works with the many injecting drug users here, says she has yet to receive training about how best to use them. "I only do HIV/AIDS education," Rui says.

Yunnan, which borders heroin-producing Myanmar (formerly Burma), has more HIV-infected people than any other Chinese province. Until a few months ago, the lack of knowledge and medical training here about anti-HIV drugs made little practical difference: Few people could afford the drugs anyway. Last fall, however, the central government promised free anti-HIV drugs to all poor people in need. The dearth of information at the epicenter of China's epidemic shows that health officials here and across the country have a lot to do just to get this ambitious and much-welcomed program off the ground. They also have to contend with a paucity of drug choices and a dearth of equipment to monitor the immune systems and HIV levels of those being treated.

"In all treatment programs there are a lot of issues, but the first priority is we have to urgently respond to save patients," says Zhang Fujie, a clinician at China's Center for Disease Control and Prevention (CDC) in Beijing who heads the national effort.

"This is just the beginning."

Given the widespread lack of knowledge about the disease, identifying the people who most need treatment presents a major hurdle. An estimated 80,000 Chinese already have symptomatic AIDS, but China has identified less than 5% of them. "It's very difficult in China to find the patients," says Zhang. But he thinks as word spreads that AIDS drugs exist and are freely avail-



Drug dilemmas. Drug treatment had not yet reached Da Zhan Sha, an HIV-infected heroin user in Dehong Prefecture in hard-hit Yunnan Province.

able, it will trip a critical switch: More people will volunteer for testing, and if they learn they're positive, they're more likely to take precautions to prevent transmitting the virus. "We can't separate prevention from treatment and testing," says Zhang. "We have to organize the whole program." The program, he says, hopes to treat as many as 15,000 people by December and up to 50,000 by the end of 2005.

Training issues loom especially large. Zhang says perhaps 10 hospitals and fewer

than 200 clinicians in the country have experience with anti-HIV drugs. "Training a doctor takes time," Zhang says. "Not just 2 days or 2 weeks. We need 3 months."

The four AIDS drugs now available in the program—ddI, d4T, AZT, and nevirapine—also leave much to be desired. Not only do they have serious toxicities, but "the four drugs we're now using can easily develop resistance among HIV patients if they're not doing good adherence," says Wang Zhe, deputy director of the CDC in Henan Province, which started its treatment program last year (see p. 1438). Shao Yiming of the CDC in Beijing says they have analyzed 500 blood donors receiving treatment: After only 9 months, 20% to 30% indeed had become resistant to nevirapine. David Ho, head of the Aaron Diamond AIDS Research Center (ADARC) in New York City, says he'd be hard pressed to pick a worse combination. "It's awful," says Ho, who organized a treatment program here that uses drugs donated by GlaxoSmithKline (GSK). "My biggest complaint to the Ministry of Health is that no one in China is as well treated as some of the African patients."

Throughout China, AIDS clinicians bemoan the fact that most patients cannot access GSK's drug 3TC, which remains far too expensive. It is a key component of the cheapest, most effective cocktails used in Africa, India, Thailand, and Brazil. "We would like our HIV patients to have 3TC as early as possible," says Wang.

The problem is that GSK holds the patent on 3TC. Countries that make generic versions of it either have licensing arrangements with GSK or exemptions from World Trade Organization rules. But GSK has been reluctant to make such arrangements with China; critics say the company wants to protect its 3TC market, as a lower dose of the drug treats hepatitis B, a significant problem in China.

Ellen t'Hoen, a lawyer who runs Médecins Sans Frontières' (MSF's) Campaign for Access to Essential Medicines, argues that the Chinese government should invoke what's called a compulsory license, which would legally allow it to make the drug generically. "It's perfectly within the existing system," says t'Hoen, who was in Nanning, the capital of Guangxi Zhuang Autonomous Region, as a part of a visit to help China solve the problem.

Ideally, China's generic manufacturers would like to combine 3TC with other drugs to make a "fixed dose combination" that would require only two pills a day. "This is very key if we want to avoid resistance," says Yves Marchandy, who runs an MSF treatment project in Nanning. What's more, he says, China has a better capacity than any

Top doc. Zhang Fujie heads China's new drug treatment program.

country to make and export a cheaper fixed-dose combination, which he says could be "a major change for the world."

GSK says it is just about to ink a deal that will offer the Chinese government 3TC at "preferential prices." If the negotiations fail, Zhang says, China knows that it can invoke a compulsory license. "We have to get 3TC in the very near future," says Zhang. "We have no time to wait."

3TC isn't the only anti-HIV drug China



lacks, however. Similar problems have prevented it from importing or manufacturing several drugs available as generics elsewhere. China also has no formulations available for HIV-infected children. Says MSF's Marchandy: "We really are David facing Goliath, and we don't have a lot of stones."

More stones may come from the China AIDS Initiative, a project announced in November 2003 by ADARC's Ho and former

U.S. President Bill Clinton. The initiative joins ADARC with the Clinton Presidential

Foundation, leading Chinese universities, Yale University, and the Brookings Institution. The initiative hopes to help with AIDS advocacy, education, and treatment, with the Clinton Foundation now attempting to negotiate the purchase of low-priced AIDS drugs and monitoring tests.

China's new treatment program not only has few stones; the training and monitoring shortcomings mean it also has one hand tied behind its back. But in the next few months, the few anti-HIV drugs they do have should arrive at clinics across the country, including the one at Jile Township. And for HIV-infected people like Da, news of the existence of these drugs surely will overshadow concerns about their limitations.

—JON COHEN

Changing Course to Break the HIV-Heroin Connection

Injecting drug users account for more than half of China's HIV infections. Authorities are now tentatively launching "harm-reduction" programs in hard-hit provinces

YUNNAN PROVINCE AND GUANGXI ZHUANG AUTONOMOUS REGION—When people cross the short bridge from Myanmar to China at the tiny city of Wanding, a quaint billboard greets them. It shows a couple supping on a beach as the sun sets. "Preserve your purity, keep off drugs, prevent AIDS," the billboard advises in the language of the Dai and Jingpo ethnic minorities, Mandarin, and even English. The billboard's flip side has a similar multilingual message but a less genteel image that reflects China's new resolve against the burgeoning HIV/AIDS problem in this region: It shows a fist.

HIV has established a beachhead here among injecting drug users (IDUs). Myanmar (formerly Burma) is the world's second largest heroin producer, and the border in this area is so porous that the Dai and Jingpo in many places freely cross the shallow stream that separates the two countries. "We don't have any natural or cultural border," says Li Fanyou, deputy director of Dehong Prefecture's Center for Disease Control and Prevention (CDC). Not surprisingly, pure Burmese heroin has become plentiful, and HIV has traveled with it.

In 1989, tests of Dehong IDUs found 146 infections—75% of the reported cases in all of China at the time. HIV raced through Dehong, infecting more than 80% of one IDU group tested in

1992. By 1996, HIV had spread to IDUs beyond Yunnan's borders, with Guangxi to the south and Xinjiang to the north especially hard hit. Today, Yunnan still has more HIV-infected people than anywhere in China, ac-



Free trade. A needle-exchange program in Ningming tracks syringes by printing an AIDS ribbon on them.

counting for one-fourth of the reported cases, and in Dehong the virus infects more than 1% of pregnant women, an indicator that the epidemic has spread to the general population. It is in these border regions that China's most crucial HIV/AIDS battles now are being fought.

Encouraged by political changes that give them new freedoms, AIDS workers finally can attack the problem head-on. "In the past 10 years, the central government has not provided enough policy support for needle exchange and methadone substitution programs," says Chen Jie, deputy director of the Guangxi CDC. Now, Chen and other health officials are scrambling to determine how best to scale up their efforts. And each locale has unique visions of how to proceed.

Eyes wide shut

Ruili, a bustling city 20 kilometers from Wanding, is widely known as a place where cheap heroin and an abundance of sex workers can be found at "barber shops," massage parlors, and hotels. But it has another, less obvious, feature: "We have many people who have died from AIDS," says an HIV-infected IDU attending a seminar at the CDC in Ruili.

On 1 March, Yunnan Province issued Regulation 121, which calls for aggressively expanding education efforts. Freshly minted HIV/AIDS prevention banners already decorate the streets of Ruili and other cities. And, to the astonishment of many, the regulation explicitly promotes the distribution of clean needles, methadone, and condoms. Posters of Regulation 121 appear in the lobbies of hotels—which the government now says must offer condoms in the rooms—and in the infamous barber shops. It represents a radical turnaround.

For all the urgency, however, the provin-