

NIS and CEE's Coming Plague

By Barbara Ruben

The gaunt 15-year-old boy in the Tbilisi, Georgia refugee settlement could stand only with the support of his mother, his eyes glazed by fever and his legs a welter of wounds that wouldn't heal. When he first fell ill with rheumatic fever months before, the boy's mother scraped together enough money to purchase a week's worth of antibiotics, which were sold alongside vegetables at a downtown market. The boy bounced back, but still harbored the hardier bacteria, which later invaded his bones, causing osteomyelitis, an inflammation of the marrow and adjacent bones. Refugees pooled their money to buy the boy another round of self-prescribed antibiotics, but these, also, contained too low of a dose and were taken for too short a time to be effective.

For Pulitzer Prize-winning journalist Laurie Garrett, who traveled to the NIS and CEE for three months last spring to write about the state of health care there, the boy symbolized how the region's economic and political instability is producing a dangerous new ingress for infectious diseases, from hepatitis to syphilis.

"It was very apparent he had bred antibiotic resistance with the intermittent drug therapy," Garrett said. "The black market marketeering in antibiotics in Georgia must be higher than that of narcotics."

Cephalosporins and a host of other antibiotics were readily available at a market Garrett visited. Many of the vials were long past their expiration dates. Some were manufactured in developing countries with few standards for drugs. But most disturbing to Garrett was the fact that market stall workers arbitrarily dispensed the medicine without knowing what illness the patient had.

For Garrett, who documented emerging infectious diseases and their increasing resistance to drugs in her 1994 book *The Coming Plague*, the scene in Tbilisi was another step in the increasingly vitriolic march of the microbes. She crisscrossed the region, from Georgia to Ukraine to Russia and then on to Estonia and the Czech Republic, finding similar instances of practices that created "fertile ground for an explosion of infectious diseases."

Garrett, who trained in immunology before making the transition to journalism, wrote about her trip in a 28-part series for the newspaper *Newsday*, on Long Island, New York. During her trip, she visited several AIHA partnership institutions, as well as many non-partner institutions.

"The depth of the problem was greater than I had [initially] thought. It wasn't just isolated areas of disease, but far more profound, cutting across a swath of issues," she said.

One of these issues is an inability across the region to provide an accurate epidemiological portrait of the population because of a lack of studies using control groups and consistent record keeping, she said. For example, she heard doctor after doctor tell her that children today are weaker than the previous generation. Those in a wide area around Chernobyl ascribed this to radiation; elsewhere they blamed industrial pollution. But Garrett said she did not see a single scientifically designed study that substantiated these claims.

And this perception of frail children is having dangerous repercussions, she said. "Pediatricians are telling parents that their kids are too weak to tolerate vaccines. So that helps explain the high rates of diphtheria and measles," Garrett noted.

In Ukraine and Russia, Garrett observed the tangle of circumstances leading to soaring hepatitis rates and an escalating number of patients infected with HIV. A high youth unemployment rate, a growing sense of despair among young people, easy access to heroin and the popular opiate called poppy straw compote, and a syringe shortage have laid the groundwork for the continuing spiraling of disease.

"Hepatitis A, B, C, D and E are rampant and rising at terrifying rates in the whole region," she said. "What's really frightening is that [whereas] in the West we had a surge in hepatitis B after A was under control, and hepatitis C came much later, in the former Soviet Union all the strains are moving in parallel. No one targeted intervention can stop them all. The disease is grossly underreported and undertreated."

As patients are infected with both B and C and left untreated, their chances of developing liver cancer later in life dramatically increase unless they are able to get a liver transplant. But it is unlikely that any but the very rich will be able to afford a transplant.

"I met a 19-year-old boy who started drugs in high school and shared needles and now has both viruses," Garrett recounted. "The odds are virtually zero he's going to have a transplant. So even if he gets off drugs and becomes a productive citizen, he will be an economic burden down the road with cancer."

Unlike in the United States, where AIDS patients with compromised immune systems are easy prey for hepatitis and tuberculosis, youth in the NIS are developing TB and hepatitis first and then contracting HIV. As drugs dull inhibitions, youth are engaging in more risky sexual behavior, which has already caused skyrocketing syphilis and gonorrhea rates.

"All it takes is for one HIV-positive person to enter that social circle, and you have an explosion," Garrett said.

In Odessa, HIV cases climbed from 119 in 1994 to 925 in 1995 to 4,325 by the end of last year, according to the Plague Institute, which keeps records on infectious diseases. With 40,000 intravenous drug users in the city, many of whom have not been tested for HIV, the number is likely to continue to escalate. Officials at the institute project that by the end of 1998, there will be 2,500 cases of AIDS in Odessa, one of the most highly infected areas of the NIS.

"The costs of treatment, if you're using US standards, will completely bankrupt Odessa's health care system in a single year," Garrett said she was told.

And some of those who are infected are likely to move onto cities like St. Petersburg or Moscow that now have much lower rates of infection. Garrett even saw a case of AIDS in Siberia, above the Arctic Circle.

"Any second now it's going to hit Moscow. The only reason it hasn't yet is because middle class teens who are using drugs don't have much interaction with foreigners."

The costs in Russia, as in Ukraine, will deplete already-strapped health care systems, Garrett predicted.

"Everyone in authority recognizes there's a problem. They're counting on the West to pay for everything. But just like in the United States, everything to do with AIDS is controversial. I don't think we'll see widespread needle exchange programs, for example."

But amidst a seemingly overwhelming portrait of despair, Garrett also says there are signs of positive change: Doctors in the Czech Republic regularly consult reports on local drug

resistance compiled by hospital microbiologists to ensure they correctly prescribing antibiotics. Estonia is systematically testing new policies and programs, such as health care financing, to ensure they work. And new non-governmental organizations in the NIS have stepped in to provide health promotion information, particularly on AIDS and other sexually transmitted diseases.

"The biggest hope lies with the generation currently under 30. There are a lot of bright young doctors, medical students and scientists who grew up in perestroika and haven't been as inculcated with outmoded, rigid ideas about medicine and health. They seem to be receptive to new ideas from all directions," Garrett said. "The question is whether there is enough time to allow that generation to mature and take charge before there are too many more epidemics."