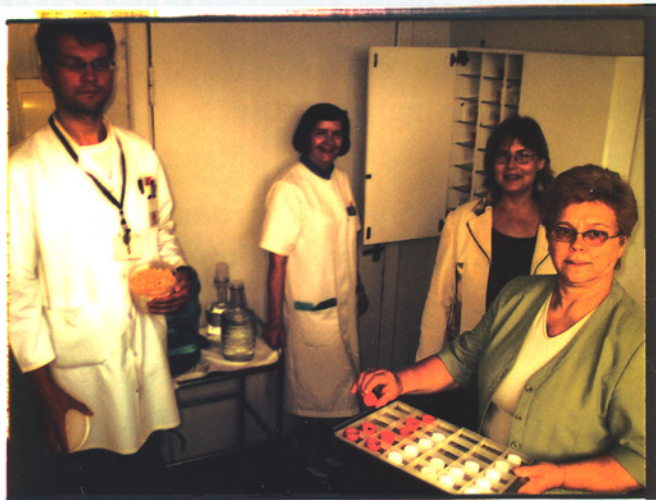




STORY Michael Dumiak

In the woods of Latvia, a band of doctors and nurses battle against a rising tide of multi-drug-resistant tuberculosis.



PHOTOS: LATVIA STATE CENTRE OF TUBERCULOSIS AND LUNG DISEASES



Facing Page: Director of the WHO training centre for MDR TB, Vaira Leimane (far right) in the new laboratory. Left: 'Tuberkulozes Slimnica'

# Battleground resistance

Leimane is a stout, restless woman, given to call-length skirts and turquoise necklaces. She's a bundle of energy with frosted hair. Her outpost in the woods, the Latvia State Centre of Tuberculosis and Lung Diseases, is becoming one of the more important nodes in the network of organisations struggling against multi-drug-resistant tuberculosis (MDR TB), a manmade problem that's wracked Eastern Europe and Russia for several years with increasing potency. And now with the opening of the European Union, it is encroaching on new territory.

Drug-resistant tuberculosis carries with it all the visions of rough times gone: sanatoriums; turn-of-the-century American blues; the period long past when mobile X-ray caravans roamed Australian streets.

Now the disease has new faces and fresh venues: overcrowded Russian prisons; health-care systems still in disarray in many former Soviet republics; patients unable or unwilling to stay on treatment regimes.

MDR TB is caused and passed on when patients start and stop treatment, mutating the pathogen and developing resistance. Treating common tuberculosis is a long process, using powerful antibiotics such as rifampicin and isoniazid - at us\$10 (a\$13.50) a month for six months. When an infected person goes through only partial treatment, the infection isn't killed off entirely and instead builds resistance to the frontline drugs.

The patient can then spread this mutated form the same way common TB is spread. By definition, MDR TB can survive at least two frontline drugs. It costs 100 times as much to treat as standard TB and takes two years to cure. And the pills used to treat it, sometimes as many as 25 a day, are difficult to swallow and cause nausea.

Last year, figures released by the World Health Organisation (WHO) showed that six of the world's top 10 hotspots for MDR TB were in Eastern Europe and Central Asia. Up to 14 per cent of new cases have MDR TB, and patients in hotspot countries are 10 times more likely to have the resistant strains.

Some 100,000 infected people are coughing and dying in Russia, and 70,000 new cases of common TB are diagnosed annually - not to mention the constant strains of drug resistance. In her headquarters on the frontline of the battle, Leimane is always trying to find housing for visiting doctors.

"Let's go," she says, putting down the phone to walk the hospital wards. Only 30km west, Riga city has become a popular tourist destination, so that during the summer it is becoming increasingly difficult to find lodging for the doctors that come to her - all from far-flung places with no budgets - for training in the fight against MDR TB. Leimane's group today is from Murmansk. Next week it's Tbilisi. For these doctors Leimane is teacher, organiser, spark, nurse; she knows her hospital.

A little way down the track from the bus stop, the hospital resembles an old brick school in the woods. The corridors are dim and have that hard, old-hospital smell - not sterile, but like sweat mixed with a few generations of illness shuffling through the halls. Patients, mostly older men, smoke and sit on benches, talking together, gaunt in their paisley flannels. In contrast, the laboratory and classrooms are new. The WHO recently designated this place as a frontline training centre to fight the disease.

"Today, they have MDR TB for children. Drug management for second-line drugs in the morning," she says of her Murmansk group. "Now they are learning on paediatric tuberculosis, and after lunch they will have TB-HIV." The training is intense, so Leimane tries to arrange for her students to have some recreation as well, perhaps her favourite opera, *La Traviata*. It's a lot of activity for two weeks.

**"DNA vaccines may one day prevent TB. Until then, it's hand-to-hand combat against a disease that gains a little ground every day."**

And here there's much to learn. Leimane greets the new ward chief, looking around the hall she herself used to run, past the isolation glass where telephones sit on either side waiting for a patient to have a visitor. In comes a patient, Kristine Putniņa, a sunny 29 year old. Dark hair with blond streaks; a denim skirt; cut-off T-shirt that says "Hustler". No way she's heard of Larry Flynt, though. "I am a religious person and I love Jesus," Leimane translates. "It helps me accept what's happened."

She's been in the hospital for four months but only stayed a week in isolation. Maybe it's her strength, something in the way the treatment's handled, but Putniņa's moving fast. It'll be harder when she gets back to coastal Leikāne and can't go back to work at the florist, but in the meantime she's putting on concerts and running a ward newsletter. She says her friends will help her. And as Leimane says, tuberculosis doesn't have to be a dead end.

Leimane stays put after training while her doctors go out into the field. Back to Georgia, back to Murmansk to progress slow and steady, like her. Hundreds of miles away to the west in the heart of old American-sector Berlin, however, others are trying to put the 61-year-old Leimane out of business, a move she would welcome. They are the biotech research companies, developing DNA vaccines that provoke immune responses that would prevent TB. That's the future, while the present is hard work: hand-to-hand combat against a disease that gains a little more ground every day.

Leimane opens the door to the cracked stairs in her hospital in the woods, getting on with organising courses, walking once more past the isolation ward. Through the observation window, I see a man shuffle past the bookshelf: slippers, unbuttoned paisley flannel top, greasy hair, glazed eyes. It's not breezy in here anymore, as in Soviet days with leaky windows, but it doesn't matter. Behind the glass he looks very angry. Angry, and inexpressibly sad. ■

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**IT MUST BE THE STUDENT** radio station from Riga spinning the hard-luck sounds of an indie Brooklyn country band through the dash. But even as the sounds become more current, the Latvian pines close in. The barely-there village of Līči - to all appearances comprising a basketball court, a rusty Soviet substation and a dusty block of flats - is well past. The road becomes bumpier and narrower. Finally we come to a clearing with a lean-to and a bus stop. 'Tuberkulozes Slimnica': Tuberculosis Hospital.

Here is where Vaira Leimane's been punching the clock for the past 30 years, although she lives in the new suburbs on the lakes north of Riga. And here is also where her husband works. And her daughter-in-law.