

Tough measures in Russian prisons slow spread of TB

Nearly a decade after starting work with the Russian Federation to stem a tuberculosis (TB) epidemic, WHO is reporting slow but steady progress. The WHO-recommended DOTS treatment strategy is gradually taking hold across world's largest country, but its vast network of prisons and labour camps remains a hotbed of the disease.

When Russian billionaire Mikhail Khodorkovsky was sent last October to a remote Siberian labour camp near a uranium mine to serve an eight-year fraud and tax evasion sentence, friends and relatives accused the Kremlin of trying to ruin his health.

Yet Anatoly Rusin, who was released from prison last year, told the *Bulletin* that Khodorkovsky had better worry about a far less exotic threat to his health.

"I have not heard of inmates dying of radiation, but I have seen them die of TB," Rusin said.

Until the 1990s, Soviet authorities kept tuberculosis (TB) under control. With the collapse of the Soviet Union, falling living standards, mass migration and a crumbling health system contributed to a 7.5% annual increase in new cases from 1991 to 1999.

Professor Margarita Shilova, Head of the Tuberculosis Epidemiology Department at Moscow's Phthisiopulmonology Research Institute, recalls those days with horror.

"Suddenly, the money stopped. There were no drugs, communication with local hospitals broke down as telephones were cut off over unpaid bills, there were no stamps or envelopes to send letters, doctors could not use a car to see their patients, it was impossible to transport patients to hospitals, the system broke down," Shilova said.

"Discipline among patients and doctors — which is key to treating the disease — was no longer there," she told the *Bulletin*.

By the end of the 1990s, tuberculosis had reached alarming proportions, particularly in the country's vast penal system.

Virtually every prisoner was exposed to tuberculosis. Many became sick, many died, and thousands of

infected ex-convicts were being released into the general population every year.

It was not until 1995 that tuberculosis cases among prisoners were included in official statistics, revealing a concentration in the penal system.

While prisoners account for 0.5% of the 143-million population — there were 765 000 prisoners at the end of 2004 — about 12% of cases are detected in prisons alone compared with 27% in 1995, Shilova said.

In recent years tuberculosis cases and deaths have fallen slightly across the country, largely due to this decline of the disease in prisons, but also improved control and general health improvements, according to WHO's *Global Tuberculosis Report 2005: Global Tuberculosis Control — Surveillance, Planning, Financing*.

WHO experts started working with the ministries of health and justice to revise the national tuberculosis strategy in 1999. WHO's help was

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Anatoly Rusin, former prisoner who contracted tuberculosis in a Siberian prison.

timely and welcome, but the first pilot projects were difficult because of a diversity of approach.

"Russia has a very rich history of TB control," said Dr Wieslaw Jakubowiak, WHO's Tuberculosis Control Programme Coordinator in Moscow.

"But the Russian school took a different approach to WHO and, at first, it was not easy to talk the same language and establish the same definitions," Jakubowiak said.

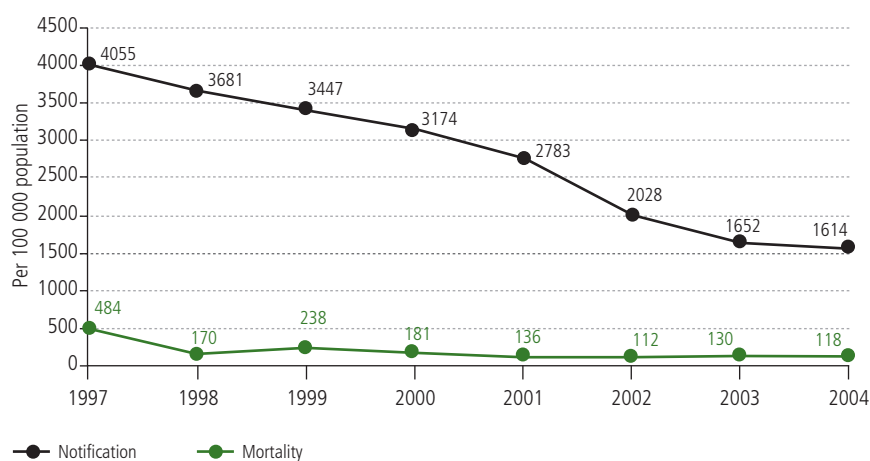
"Since then, we have been able to sit down around one table and to reach a consensus," Jakubowiak said.

WHO reckoned that the country's unwieldy X-ray machines were too expensive and exposed patients to unhealthy doses of radiation. In response, Shilova said the Russians dropped their old methods and switched to the WHO-recommended DOTS strategy.

DOTS once stood for Directly Observed Treatment (Short Course). Now the acronym refers to a five-element treatment strategy encompassing: government commitment, diagnosis through sputum microscopy, regular drug supply, 6–8 months of regularly supervised treatment including direct observation of drug-taking for at least two months; and reporting systems to monitor treatment progress and programme performance.

DOTS was first introduced in the Russian Federation in 1994. Initially it encountered resistance from some Russian tuberculosis experts, but WHO experts say it was often misinterpreted.

TB notification and mortality rate in penal setting, Russian Federation



The number of reported tuberculosis cases and deaths in Russian prisons and penal camps fell between 1997 and 2004.

WHO 06.34

The Siberian city of Tomsk was chosen as a test ground in a project run by nongovernmental organizations, Merlin of the United Kingdom and the Public Health Research Institute of the United States.

“It did not work,” Shilova said. “They dismantled a system of early TB detection and introduced DOTS, it led to a deterioration. Very soon the health ministry realized and re-established all the old procedures, adding to those WHO’s microscopy and short-course treatment. I think it was the time when both sides started to realize that putting all the eggs into one basket was wrong and began listening to each other much more carefully.”

WHO experts say that DOTS has always complemented radiology with microscopy and culture examination. By the end of 2004, DOTS had been implemented in 37 regions of the Russian Federation covering 45% of the population.

“There is a new dynamic now in place in the Russian Federation, prompted by stronger collaboration between the government and WHO.

We are seeing growing government commitment and effective coordination with all partners and this is producing good results,” said Dr Mario Raviglione, Director of the WHO’s Stop TB Department.

Thanks to joint efforts by Russian doctors and WHO experts, and to a series of new laws and regulations, the spread of tuberculosis has been more or less contained over the last three years.

Under a 2001 law, tuberculosis detection, treatment and care are free of charge. A more controversial part of that law stipulates that tuberculosis case-finding is obligatory with mandatory examination of tuberculosis patients — a provision doctors say has been applied in prisons but not in the civilian sector.

Rusin, like many other prisoners, contracted tuberculosis in jail.



Keystone/AP/I. Sekretarev

A prison doctor tells a prisoner to lie down for an examination for tuberculosis in the city of Tula, the Russian Federation. Overcrowded prison conditions contribute to the risk of prisoners transmitting and contracting tuberculosis.

Today he earns a living as a salesman shuttling 400 km between his native region of Tver and the Russian Federation’s second-biggest city of St. Petersburg. Rusin is a textbook example of why strenuous efforts to combat tuberculosis often yield only limited results.

Behind bars inmates have little chance of escaping treatment, as prison guards stand by to make sure they take their medicine. Once released, they often stop taking medication, particularly when they start feeling better.

In an attempt to instil some order into the chaotic lifestyles of former prisoners, WHO has been working closely with the Russian justice authorities.

By 2005, there were 37 hospitals and 57 other facilities providing tuberculosis treatment in the penitentiary system, according to the *Global Tuberculosis Report 2005: Global Tuberculosis Control — Surveillance, Planning, Financing*.

“WHO has established quite good cooperation with the Ministry of Justice. Many WHO recommendations on tuberculosis treatment and prevention have been adopted in the prison sector,

and we jointly organized workshops to train prison staff,” Jakubowiak said, adding that this work included initiatives to encourage former prisoners to continue treatment after their release.

Two big challenges are a growing HIV/AIDS epidemic and multidrug-resistant tuberculosis (MDR-TB) in patients, who are resistant to first-line drugs and require longer treatment with more expensive second-line drugs.

These and other issues are addressed by WHO’s new Stop TB Strategy, launched last month.

While effective control measures have cut the overall number of new tuberculosis cases from the 2000 peak of 90 per 100 000 people to 83 in 2004, health officials hope additional funds will help reduce cases further.

The Russian Government has increased its budget allocation for tuberculosis control.

The country has been granted a US\$ 150-million World Bank loan, two-thirds of which is earmarked for tuberculosis, and received a US\$ 91-million grant from the Global Fund To Fight AIDS, Tuberculosis and Malaria.

“Now we work together very positively,” Shilova said. “Over the years we have learned to listen to each other and respect each other. As a result, we have preserved all the best that we had, adding to it all the good things that the WHO had to offer.” ■

Andrei Shukshin, *Moscow*

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