on TB therapy, which they usually need more urgently, and then give them antiretroviral drugs, which are increasingly available in Africa.

In theory, because AIDS drugs improve the cellular immune response, you would expect to see these people fight TB better and become healthier. And that's true in about 80% of cases.

The remaining 20% paradoxically get much worse, developing huge abscesses in the stomach and elsewhere, swollen lymph nodes and lesions in the brain. Many suffer horribly, shuttling in and out of hospitals for months. About one in seven dies.

"This is becoming very, very common all over Africa, it's being reported all over the place and in very significant numbers," says Robert Wilkinson, professor of infectious diseases at the University of Cape Town. "Nobody knows how to deal with it."

All in the timing

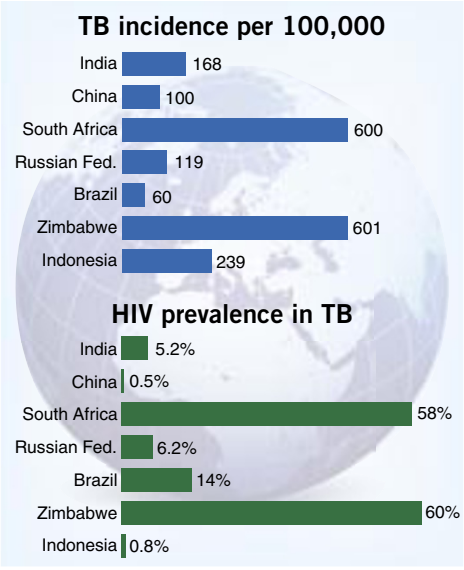
At a practical level, the debate has boiled down to timing: when should those with TB start taking HIV drugs? Start too early, and they might develop this bizarre syndrome. Start too late, and they might die.

"If you were to ask five doctors what they would do, you'd get five different answers," says Salim Karim, director of Caprisa, a South African consortium of AIDS researchers. "This question is being answered in the developing world."

Scientists are just beginning to grapple with this syndrome, which they've dubbed IRIS for immune reconstitution inflammatory syndrome, but say it is devastating, both to those it afflicts and to the healthcare workers who treat them.

Some at the World Health Organization (WHO), however, are dismissive. "This is what you find when you talk to academic researchers whose job it is to go and look for problems," says Paul Nunn, coordinator of TB-HIV at the World Health Organization's Stop TB program. At a global scale, Nunn says, IRIS has not had a big impact, and has yet to be properly defined.

Nunn's comments are indicative of the deep rift between basic researchers and the public health world. WHO officials rarely go to meetings where scientists present their findings,



WHO

Deadly duo: The TB epidemic is at its worst wherever HIV is the most prevalent.

Health agency pulls back on 'patronizing' approach to TB treatment

For more than a decade, the World Health Organization (WHO) has relied on Direct Observed Therapy Short-course, or DOTS, to fight tuberculosis (TB)—and for nearly as long, the strategy has been controversial.

The idea behind DOTS is that a healthcare worker should directly observe those infected swallow the TB drugs at least for the first two months of the six-month therapy. As the WHO likes to point out, the approach has successfully treated more than 22 million individuals worldwide. "In countries where they have done DOTS well, you don't see a high rate of drug resistance," says Chris Dye, coordinator of TB monitoring and evaluation for the WHO's Stop TB program.

Implementing DOTS well, however, is no easy task.

Activists and many on the ground have long argued that the DOTS approach is patronizing and impractical, and that it doesn't take individual circumstances into account. But in the past few years, it's become apparent to even the staunchest DOTS advocates that at least in Africa, the approach needs to be revised. "DOTS as a strategy has its limitations," says Dye.

For example, one TB clinic in Durban, South Africa, saw 9,000 infected individuals last year, nearly double compared with four years earlier. The HIV epidemic has also complicated matters, partly because HIV-positive individuals are at greater risk of TB infection and because the DOTS-recommended diagnostic method for TB, the smear test, detects fewer than 40% of TB infections in HIV-infected individuals.


WHO

"DOTS will meet its goals everywhere but in Africa," says Richard Chaisson, director of the Johns Hopkins Center for TB Research. "If activities in Africa are ramped up substantially it might not, but based on current projections, it will fail."

The WHO's new global plan to stop TB, launched last year, is seen by many as a long-overdue concession to the reality on the ground, acknowledging that "addressing TB/HIV, multidrug resistant-TB and other challenges requires much greater action and input than DOTS implementation."

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