



Timebomb: The Global Epidemic of Multi-Drug Resistant Tuberculosis

by Lee B. Reichman with
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In fighting a disease, there are right ways and wrong ways to do things, and the global war on tuberculosis (TB) has had prominent examples of each. Lay people and scientists are often surprised to learn that this disease of the Romantic era remains a public health threat. In fact, TB is the leading cause of death due to an infectious disease worldwide; three million people die from it each year and two billion are estimated to have latent disease. Vaccine and drug development are hampered by the mistaken assumptions that the disease will not generate sufficient revenue, and that labeling a new antibiotic as a first-line drug for TB will taint it in other markets. How can public and political support be marshaled for a war on a perpetrator mistakenly thought to be a problem of the past?

Timebomb: The Global Epidemic of Multi-Drug Resistant Tuberculosis by Lee Reichman offers a compelling brief for those who wish to press that important case. Reichman is a veteran of the front lines in the war on TB: He is the past president of the American Lung Association and a practicing physician and scientist at the New Jersey Medical School, serving as Director of the National TB Center. From this perspective, Reichman provides vivid, detailed and sometimes excruciating accounts of a recent successful battle in the war—the victory over multi-drug resistant (MDR) TB during the last 20 years in New York; and he describes a current losing battle—the outbreak that is ravaging Russia and other states of the former Soviet Union. The title may be misleading as the book does not dis-

cuss the global epidemic in depth, but rather focuses primarily on these two epidemics as indicators of the worldwide possibilities. These contrasting stories exemplify how in the modern world failure in one case makes success in the other far more difficult to achieve; for example, because some countries are failing to contain MDR strains of the disease, these strains are moving into countries that thought they had the situation in control.

In his account of the New York outbreak, Reichman traces the dismantling of TB public health programs not, as is typically asserted, to the Reagan administration's public health and economic policies, but to earlier policies of the Nixon and Ford administrations; he notes that epidemic and MDR TB occurred in New York City between 1972 and 1992. Eventually, through the heroic efforts of Margaret Hamburg, then New York City health commissioner, hundreds of dedicated public health workers and the expenditure of nearly one billion dollars, the epidemic was finally brought under control.

The chapters reviewing the TB epidemic in Russia are ominous, as we discover that in the new century, treatment of TB is still performed in the same style as at the turn of the last century. Although millions of dollars were available to help reform the current system

at key TB treatment centers, Russian clinicians and scientists turned down this aid in order to preserve what they believe to be superior approaches, despite these not conforming to World Health Organization standards. This section of the book reads like a thrilling novel, and the reader is left as frustrated as the international scientists who are trying to intervene. Further, human conditions in the Russian Gulag prisons are ripe for the ballooning of MDR TB, and humanity and hope are lost there as well. Finally, HIV infection is a major cofactor of TB, and Reichman reminds us that the Russian TB epidemic will be orders of

magnitudes worse once HIV appears on the scene. It is clear that the Russian public health system is on trial, and Reichman delivers a guilty verdict.

By comparing outcomes in New York City and Russia, Reichman spends a good deal of the book comparing right and wrong ways of combating epidemic TB: the right way the New York prison system handles prisoners and manages health care, and the wrong way the Gulag handles it; right treatment protocols that the World Health Organization has advocated based on a large and growing body of scientific evidence (that is, directly observed therapy) and wrong approaches Russia continues to use for treatment.

Like other recent works on the threat of infectious diseases such as Laurie Garrett's *The Coming Plague*, *Timebomb* has the power of fiction and it is sometimes easy to forget that it is not. Unlike the Garrett book, which is more a collection of short dramatic stories

collectively telling a big picture about our coexistence and evolution with microbes, Reichman selects one story and presents it in novel form with better material than most science fiction. The book is organized in a clear and riveting manner. Early chapters follow the history of the disease, including diversions into the tragic lives of the Bron-

te sisters, Chopin and Henry David Thoreau, through whose deaths the disease acquired its romantic sheen. Clever chapter titles such as "Ebola with Wings" and subtitles like "A Difficult Dinner" add a sense of literary irony. Within the narrative style, the book is rich with up-to-the-minute details and references that add to its depth.

An incredible account of politics and disease dynamics occurring at all levels, *Timebomb* helps us realize that controlling or eradicating TB is not just about science and facts; likely if it were, TB would have long been relegated to the history books.

