known. However, both the real and perceived predictive values could have important impacts on the use of TB resources and on the failure to provide appropriate care.

Finally, this study was conducted at a single institution in New York City serving a population in which TB, as well as other comorbidities such as HIV infection, are common. Therefore, our findings may not be generalizable to other institutions, especially those serving populations with a lower prevalence of TB. Whereas ratios similar to ours of total patients isolated to cases of TB isolated have been reported from an institution in Atlanta, Georgia,[3] another study from Iowa[9] noted a ratio of 92:1. This suggests that, given clinicians' adoption of a conservative strategy and a high index of suspicion for TB, the lower the prevalence of disease among a hospital's admissions, the greater the proportion of TB-specific resources that are consumed by patients who ultimately do not prove to have TB.

In spite of these limitations, we believe our data provide an informative accounting of the utilization of TB-specific resources and a more relevant basis upon which to plan future resource allocations for managing confirmed and suspected disease, as opposed to data that are generated by identifying only those patients with a confirmed diagnosis. In addition, our results indicate that prolonged diagnostic uncertainty, misclassification of cases due to AFB-smear results, and conservative management have a profound impact on use of TB resources. Finally, our findings raise the question as to whether more accurate and rapidly available diagnostic tests, such as nucleic acid amplification assays, could reduce use of resources in patients who do not have TB.

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Global Problem of Drug-Resistant *Mycobacterium tuberculosis*

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Scientists participating in the Global Tuberculosis Program, World Health Organization (WHO), Geneva, recently reported the prevalence of *Mycobacterium tuberculosis* resistance to four first-line drugs in 35 countries participating in the WHO-International Union against Tuberculosis and Lung Disease Global Project on Anti-Tuberculosis Drug Resistance Surveillance between 1994 and 1997.

The study included a review of data from cross-sectional surveys and surveillance reports. Participating countries followed guidelines to ensure the use of representative samples, accurate histories of treatment, standardized laboratory methods, and common definitions. A network of reference laboratories provided quality assurance. The median number of patients studied in each country or region was 555 (range, 59-14,344).

Among patients with no prior treatment, a median of 9.9% of *M tuberculosis* strains were resistant to at least one drug (range, 2%-41%); resistance to isoniazid (7.3%) or streptomycin (6.5%) was more common than resistance to rifampin (1.8%) or ethambutol (1.0%). The prevalence of primary multidrug resistance was 1.4% (range, 0%-14.4%). Among patients with histories of treatment for 1 month or less, the prevalence of resistance to any of the four drugs was 36.0% (range, 5.3%-100%), and the prevalence of multidrug resistance was 13% (range, 0%-54%). The overall prevalences were 12.6% for single-drug resistance (range, 2.3%-42.4%) and 2.2% for multidrug resistance (range, 0%-22.1%).

Particularly high prevalences of multidrug resistance were found in the former Soviet Union, Asia, the Dominican Republic, and Argentina.

Resistance to antituberculosis drugs was found in all 35 countries and regions surveyed, suggesting that it is a global problem.

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