

## Tuberculosis: an ongoing challenge

The World Health Organization (WHO) declared tuberculosis an international emergency in 1993. Since then there has been widespread mobilization to fight the disease, which affects and kills millions of people, principally in countries and regions with precarious socioeconomic conditions. The interaction with AIDS and the emergence of multiresistant bacilli, combined with the disorganization of health services, pose current challenges for control of the disease.

WHO estimates 8 million incident cases of tuberculosis per year, but fewer than half are reported. It is probable that underdiagnosis, underreporting, and overestimation are occurring simultaneously. In recent years the world incidence rate has remained stable, but where there has been a high incidence of HIV carriers coupled with important political and socioeconomic problems, there has been an upward trend in tuberculosis incidence, as in the former Soviet Union and various African countries.

Brazil is among the 22 countries which concentrate 80% of the world's estimated cases. In 2002, 97,875 cases were reported in Brazil, of which 81,034 were new. The highest incidence rate has been in the State of Rio de Janeiro, but in all States of the country there are municipalities (counties), especially in metropolitan areas and peripheral areas of large cities, in which tuberculosis displays extremely high rates. The male-to-female ratio is two to one. Certain population groups such as indigenous peoples, prison inmates, and homeless have much higher incidence rates than the general population.

The State of Rio de Janeiro has the highest mortality rate (7.0/100 thousand inhabitants), and Santa Catarina the lowest (1.0/100 thousand inhabitants). There has been a strong association with HIV in many States, such as Rio Grande do Sul (around 30%), thus justifying the recommendation for HIV testing in all patients with tuberculosis.

Resistance to drugs used for tuberculosis treatment has not been a major problem in Brazil. Patients considered resistant to multiple drugs are monitored, and some 1,800 have been diagnosed and treated since 2000.

In the 21<sup>st</sup> century it is surprising that there have been such enormous difficulties in properly diagnosing and treating tuberculosis. The internationally recommended strategy seeks to guarantee: political support from the proper authorities; access to both diagnostic means and medication; an information system that allows follow-up and evaluation; and supervised treatment.

The current Administration in Brazil has prioritized the control of tuberculosis and set the goals of discovering at least 70% of the cases (which has already been met) and curing at least 85% of the cases treated (a goal which has not been met thus far, due mainly to treatment dropout, which has persisted at some 12%). Some 315 municipalities have been identified with the highest tuberculosis burden, and these have been prioritized for intensification of control measures.

In addition to the above-mentioned treatment measures, progress is needed in science and technology in order to achieve a significant impact in the short term. Research currently under way is seeking more rapid diagnostic techniques, drugs that shorten treatment, and effective vaccines.

In the social and economic fields, the reduction of poverty and hunger would certainly help to reduce this disease, formerly known as the "white plague".

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