Tuberculosis and Solidarity

Joan A. Caylà,[a] José A. Caminero,[a] and Julio Ancochea[b]

[a]Coordinators of Tuberculosis and Solidarity Year, 2008, of the Spanish Society of Pulmonology and Thoracic Surgery (SEPAR)
[b]President of SEPAR

Tuberculosis is very probably the oldest human epidemic and the one that has inflicted the most harm in the history of the species. Recent studies have estimated tuberculosis to be about 3 million years old,[1] and during much of that time this disease has been our greatest scourge. It is difficult to accept that tuberculosis has been causing harm for so many millions of years and that even today, well into the 21st century, it still ranks among the 3 most deadly infectious diseases, alongside AIDS and malaria. Given that we have had the means to cure most cases of tuberculosis for over 40 years now, and that the scientific knowledge needed to control it in the community has been available for over 30 years, this situation is hard to justify.[2] Nonetheless, the World Health Organization (WHO) estimated a prevalence of more than 14 million cases worldwide in 2005, an annual incidence of about 9 million new cases and more than 1.5 million deaths.[3]

Spain and Portugal continue to be the Western European countries with the highest rates. According to the WHO, Spain registered about 13 000 new cases of tuberculosis in 2006. This would mean about 30 new cases per 100 000 inhabitants annually, a figure that is considerably higher than rates found in the rest of Western Europe.[3]

The main reasons for the appalling situation of tuberculosis worldwide are the following[4]:

1. The first reason, and probably the most important one, is inequality in standards of living—an inequality that is on the rise, placing over 80% of the world's population in conditions of dire poverty. Extreme poverty leads to overcrowding and malnutrition, ideal conditions for the transmission of tuberculosis and the development of the disease. Although this situation has improved in Spain in recent decades thanks to economic growth, there still exist small pockets of poverty that favor tuberculosis.

Correspondence: Dr J.A. Caylà
PTB, CIBERESP, Agència de Salut Pública de Barcelona
Pl. Lesseps, 1
08023 Barcelona, Spain
E-mail: jcayla@aspb.es

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2. Infection by the human immunodeficiency virus (HIV) affects the immune system and facilitates the progression and transmission of tuberculosis. The HIV factor was preponderant in Spain between 1985 and 1995, when the country had the largest number of AIDS patients in the developed world owing to the tremendous impact of heroin addiction. Fortunately, with the accessibility of highly efficacious treatments for all people with HIV, this factor, while still important, is not as weighty as in the past.

3. Tuberculosis resistant to first-line drug treatments plays a role. Estimated to affect about a half a million patients worldwide,[5,6] this form is almost incurable in many impoverished countries, requiring complicated treatment with drugs that are less efficacious, and much more toxic and costly (>€50 000 per patient annually). Drug-resistant tuberculosis is having little effect in Spain at present thanks to appropriate treatment administered in the past. However, there are reports of an ever increasing number of imported drug-resistant cases, arriving with immigrants, voluntary aid workers, and other travelers.

4. Tuberculosis control programs, based on early detection, patient adherence to treatment and evaluation of contacts, may be scarce or incorrectly managed. Although in Spain there are many good health-care professionals who have made great efforts to move in this direction, there has never been a national tuberculosis control program to coordinate the labor of the various autonomous communities. Fortunately, the National Tuberculosis Plan has just been announced by the Ministry of Health.[7] The Spanish Society of Pulmonology and Thoracic Surgery (SEPAR) has participated very actively in developing this plan.

5. Massive immigration from countries where tuberculosis is highly endemic to destinations with lower rates plays a role, although it should be emphasized that the tuberculosis disease that immigrants develop is more influenced by the social conditions in which the immigrant population finds itself in the host country than by the tuberculosis that immigrants bring from their places of origin.[8] In any case, immigration is clearly affecting tuberculosis in Spain, where certain autonomous communities have estimated that about 40% of cases are in foreign-born individuals. Now, at the beginning of the 21st century, Spain is undergoing great demographic

changes caused by the massive arrival of people from developing countries. In only a few years more than 4 million people have arrived from areas with high prevalences of tuberculosis, creating an epidemiological pattern that has been well-known in Western Europe for years: foreign-born residents accounted for high percentages of tuberculosis cases found.

Most of these factors are related to social conditions. Therefore, tuberculosis is a good barometer of inequality worldwide and within each country.[4] It has become accepted that the disease can be eradicated only with adequate distribution of wealth, thus doing away with overcrowding and malnutrition. If, in addition, efficacious tuberculosis control programs are implemented, the dream of eradication could be accelerated. Therefore, solidarity between the richest and poorest countries could play a fundamental role in the control of tuberculosis—solidarity in the form of aid for social and health-care development in the poorest countries and for adequately setting up efficacious tuberculosis control programs. For the country providing aid, cooperation would be an efficient way of improving tuberculosis control within its own territory since arriving emigrants would be less affected.

In recent years within SEPAR there has been a growing sense of a clear social dimension of scientific associations and a feeling that they should implement concrete policies of corporate social responsibility. SEPAR is a social institution that reaches beyond its scientific and professional objectives to take on a commitment to society at large. SEPAR's Tuberculosis and Solidarity Year is the result. To truly engage in solidarity means placing importance on such matters as raising awareness; training residents; facilitating the training of physicians, nurses, and physiotherapists in other countries; fulfilling needs of institutions that carry out aid projects; investigating the unexpressed needs of peripheral urban neighborhoods, neighboring countries, and developing countries; and supporting activities addressing respiratory problems similar to tuberculosis.

The dedication of the present year, 2008, to Tuberculosis and Solidarity has been an important new step in SEPAR's social involvement. The project has been undertaken in accordance with the plan initiated in 2002-2003 to dedicate each year to a particular respiratory disease that represents a significant burden for public health in Spain.[9] Tuberculosis and solidarity are intimately related concepts. The objectives of this SEPAR year are as follows:

– To raise awareness of tuberculosis as a public health problem.

– To develop activities and projects with other scientific associations, nongovernmental organizations, and international organizations (eg, the International Union Against Tuberculosis and Lung Disease [IUATLD, or "the Union"], the WHO, and the Centers for Disease Control and Prevention [CDC] in the United States).

– To foster research on tuberculosis and further our international scientific cooperation, primarily with Latin America; Morocco; and sub-Saharan countries, given their historical ties to Spain, geographical location, or high prevalence of people infected with HIV.

A project under way is the drafting of a white paper issued in trimestrial installments and based on the results of the Survey of Adherence to Tuberculosis Treatment in Spain (ECUTTE), in which researchers from the autonomous communities will participate and which is promoted by the SEPAR Integral Program of Tuberculosis Research (PII TB). A second project involves the writing of guidelines on the diagnosis and treatment of tuberculosis, promoted by the SEPAR Assembly on Tuberculosis and Respiratory Infections (TIR). Other proposals under discussion are a Delphi study to give voice to expert opinion and write recommendations for improved control of tuberculosis in Spain; a survey of opinions on tuberculosis held in the general population; 2 online, credit-bearing courses on tuberculosis to improve knowledge of the disease among health-care professionals and journalists; and a multicenter research project on immigration.

Also, World TB Day in March was promoted, in coordination with some of the autonomous communities. A roundtable discussion was set up with 3 presentations centered on the WHO slogan for this year: I am stopping TB.

A tent in the form of a world globe was taken from city to city to disseminate key messages and provide the general public with information about tuberculosis. A web site is also being designed. Other objectives are to have tuberculosis placed on the agendas of nongovernmental organizations concerned with AIDS and obtain funding to finance research relevant to that disease.

Through the Tuberculosis and Solidarity Year, coordinated jointly by the SEPAR TIR and the PII TB working groups, our association is promoting the Plan for the Prevention and Control of Tuberculosis in Spain, which has already been drafted by consensus and which we hope will prove to be an effective plan. All in all, these projects will be a great legacy of 2008, the SEPAR Tuberculosis and Solidarity Year, a dream we have realized.

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