## Collaboration is key for new global tuberculosis strategy

This month the World Health Assembly discusses the post-2015 global tuberculosis strategy and accompanying set of targets. Giovanni Battista Migliori tells Fiona Fleck how his institute – one of WHO's thousands of partners across the globe – can contribute in future to its implementation, once it is approved.

Q: How did you first become interested in tuberculosis?

A: As a young physician, I was fascinated by the fact that although tuberculosis could be prevented, diagnosed and cured, it was still a major public health challenge. This has not changed today. At the University of Pavia, I worked with the late Gianni Acocella, one of the pioneers of treatment with fixed-dose combination anti-tuberculosis drugs, and I started my career with an Italian nongovernmental organization called CUAMM (Collegio Universitario Aspiranti Medici Missionari) in the West Nile region of Uganda, where I was assigned the coordination of tuberculosis and HIV services from 1987 to 1989. At the time, little was known about this particular co-infection and it was my job to find ways to collaborate with HIV programmes. My paper on this experience was one of the first published on the topic, years before it became a public health challenge. Today tuberculosis is a major cause of death for people infected with HIV.

## Q: When did you start collaborating with WHO?

A: I started in Uganda while working for CUAMM. After returning to Europe in 1989, I ran an international unit at the Fondazione S Maugeri that collaborated with WHO. In the early 1990s, WHO sent me to the Russian Federation and Romania to implement the first pilots of the WHO-recommended strategy of tuberculosis control (known as "DOTS" at the time) in these two priority countries. That's when I started collaborating with Mario Raviglione, who was working at WHO with a focus on surveillance, drug resistance and eastern Europe and who subsequently became the director of the Global Tuberculosis Programme. We developed the Wolfheze documents to support WHO's policies together with the KNCV Foundation [a nongovernmental organization in the Netherlands] and the International Union against Tuberculosis and Lung Disease. These documents form the basis of Europe's tuberculosis control and elimination strategies that were launched in 1990 and that inspired the



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and other respiratory diseases. Since 1989, he has been a consultant chest physician at the Department of Pulmonology, in charge of the cell biology laboratory and clinical trials at the Fondazione S Maugeri. He graduated in medicine at the University of Pavia in 1985 and earned a postgraduate degree in tropical medicine at the University of Padua in 1987.

two key concepts in the draft post-2015 global tuberculosis strategy: universal coverage for tuberculosis services and the elimination of tuberculosis.

> Progress in the countries with the highest burden today, such as China, India, Indonesia, Nigeria and South Africa, will determine whether the proposed targets can be made.

Q: How did the Fondazione S Maugeri become a WHO collaborating centre?

A: This happened after many years of working closely with WHO's Global Tuberculosis Programme. Apart from collaborating on the DOTS pilots and the Wolfheze documents, we also collaborated with the WHO Regional Offices for Europe and Africa, and with WHO headquarters, providing technical assistance to countries in eastern Europe and Africa. The turning point for us came in 2000, when WHO asked us to develop a special training package for tuberculosis consultants and managers. The result was the training course that we run to this day in the village of Sondalo in northern Italy. It has been rolled out in English, French, Portuguese and Russian and attended by some 2200 people who are responsible for planning, organizing, implementing and evaluating tuberculosis, tuberculosis/HIV and multidrug-resistant and extensively drug-resistant (MDR-XDR) tuberculosis control activities, that is about half of all government-run tuberculosis units globally. WHO held us up as a model of cooperation and partnership. At the time, the organization was in the process of establishing stricter rules on collaborating centres and so, in the same year the Fondazione S Maugeri became a WHO collaborating centre.

Q: What are WHO and its partners doing to support the many thousands of tuberculosis practitioners working outside national programmes?

A: WHO recognized that while the Sondalo course reached out to a large section of professionals working mainly on government-run tuberculosis programmes in countries, there was a need to set standards for everyone working in this field. It asked our collaborating centre to work on the International Standards of Tuberculosis Care (ISTC), the first edition of which was issued in 2006. This document was developed to engage

all health-care providers, particularly those working in the private sector, who do not always follow guidelines and are not linked to national tuberculosis programmes. The ISTC introduced a new way of looking at clinical and public health guidelines for tuberculosis. It is not a guideline, as such, which would be much more detailed, but a set of 21 principles that guide day-to-day clinical decisions. Since then, the standards have been updated twice.

Q: Last year you became the Secretary-General of the European Respiratory Society. What does its work entail and how does it collaborate with WHO?

A: The European Respiratory Society is the largest scientific society working on respiratory health issues and runs the largest respiratory health conference in the world, with over 20 000 participants every year, so it is highly influential. Currently, the society is expanding fast by joining forces with national and regional societies to reach a total of about 100 000 members. The society plays a key role in disseminating information on core WHO priorities - including those relating to tuberculosis, influenza, tobacco control and others - at its annual conference to the whole respiratory diseases community, ranging from scientists and practitioners to government programme managers and industry representatives.

Q: How will the European Respiratory Society support the post-2015 global tuberculosis strategy?

A: The society was involved in the development of the new strategy and, at the opening ceremony of our conference last year, the director of the WHO Global Tuberculosis Programme presented the concept of the new strategy with its vision of the elimination of tuberculosis. The society has several initiatives supporting this, including an electronic platform - the European Respiratory Society/WHO TB Consilium, where clinicians from all over the world can ask questions and get answers on how to manage difficult cases. Access to the service is free and a clear answer from two experts is guaranteed within 48 hours. We operate the platform in English, Portuguese, Russian and Spanish.

Q: How does the draft post-2015 global tuberculosis strategy differ from the Stop TB Strategy, which underpins the current Global Plan to Stop TB 2006–2015?

A: Next year the Millennium Development Goal targets on tuberculosis, reflecting the Stop TB strategy, will reach their time-limit. While including many elements of this, the new strategy is more holistic with its vision of a tuberculosisfree world and its aim to eliminate tuberculosis, that is, to reduce tuberculosis cases and deaths to a very low level.

Q: How realistic are the proposed targets in the draft strategy, which was presented to WHO's Executive Board in January and will be discussed at the World Health Assembly this month?

A: The overall goal of the draft strategy is to "end the global tuberculosis epidemic". By 2035 it proposes: a 95% reduction in tuberculosis deaths as compared with 2015; a 90% reduction in the tuberculosis incidence rate (i.e. to fewer than 10 cases per 100 000 population); and a world in which families affected by tuberculosis no longer face financial ruin. These targets are ambitious, but not unrealistic. Ambitious targets are necessary to achieve success.

Q: What is needed to achieve such targets?

A: Progress in the countries with the highest burden today, such as China, India, Indonesia, Nigeria and South Africa, will determine whether the proposed targets can be made. Such targets would in any case require a technological breakthrough over the next decade. This could only happen with substantial investment in research and development, for example, to develop a post-exposure vaccine or a short, efficacious and safe treatment for latent tuberculosis infection, as these could substantially lower the risk of developing active tuberculosis among the millions of people around the world who are already infected.

Q: How can the ERS and your collaborating centre contribute?

A: It will be difficult to achieve a major reduction in incidence and mortality unless countries provide tuberculosis services universally to their populations and these services are of sufficient quality to be effective. This is where the ISTC comes in and our centre is, of course, training staff to provide these services and build capacity in countries. The ERS and the collaborating centre will work with WHO on the adaptation of the new strategy in countries, once it

is approved. At a meeting in Rome in July, for example, delegations from 40 countries, where tuberculosis incidence is low, are due to discuss a new framework to eliminate tuberculosis. This meeting is co-organized by WHO and the ERS. The meeting is due to endorse a new document that is expected to be a milestone for tuberculosis elimination.

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Q: Has the recent drive towards universal health coverage in countries that are most affected by tuberculosis brought improvements in prevention, detection and treatment of the disease?

A: Important steps have been taken in countries towards achieving universal coverage of tuberculosis services i.e. access to services of quality without incurring catastrophic expenditure for the patient and family. These services are in principle available to most people in Europe, but there are still barriers to full access to proper care. The main barrier is a lack of health insurance cover and, often, this affects migrant populations and seasonal workers. Another barrier is co-payments. These exist in many countries and, while a flat fee of 10 euros (US\$ 14) for a prescription may not seem all that much for some people in Europe, it may be a disincentive for the poor and homeless to seek treatment.

Q: Is direct observation still recommended or is it considered outdated and patronizing for health workers to watch to make sure tuberculosis patients take their medicine?

A: The ISTC still considers directly observed treatment important – with less of a military approach. Patient support for this supervision is crucial, so that it is done in the context of a true patient-centred process.