# Tackling tuberculosis with an all-inclusive approach

Dr Lucica Ditiu, newly appointed executive secretary of the Stop TB Partnership, spoke to Sarah Cumberland about the many challenges of dealing with a curable disease that is still a long way from elimination.

*Q: Why is tuberculosis (TB) still a major cause of death and disability in the world?*

A: TB is a disease that is perfectly curable with very cost-effective tools, drugs that are readily available, but we are still a way from reaching our goals. Last year there were around 1.7 million deaths due to TB and 9 million new cases diagnosed. This is due both to a lack of resources to properly address all the gaps, as well as a lack of involvement of all stakeholders and partners to engage at both the global and local levels. TB still needs better visibility and attention.

*Q: What do you consider is the biggest challenge in TB control?*

A: TB control is reaching a plateau, especially in case detection due to the fact that we are still not reaching the most vulnerable, marginalized, high-risk populations. We have done as much as we can using the public health sector, and there are "sparks" of care reaching pockets of these people, but not in a unified manner. About nine million people become ill with TB each year, and about a third of them fail to access accurate diagnosis and effective treatment.

> "There are vulnerable and at-risk populations everywhere – as we have pockets of poverty in rich countries too."

*Q: Why are these people missing out?*

A: TB is a disease of poverty and is directly linked to poor nutrition and living conditions – to the so-called "social determinants of health." Combine this with a lack of awareness and the stigma of TB, and people often delay seeking care. But TB cannot be tackled without looking at the bigger picture. How can you expect to control it when patients are sent home from hospital to sleep in a crowded, poorly ventilated room with 10 other people?

Courtesy of Lucica Ditiu

Dr Lucica Ditiu

Dr Lucica Ditiu is the newly appointed executive secretary of the Stop TB Partnership, based at the World Health Organization (WHO) in Geneva. She has worked at WHO since 2000 when she joined as a medical officer for tuberculosis in Albania and the former Yugoslav Republic of Macedonia within the disaster and preparedness unit of the WHO Regional Office for Europe. A 1992 graduate of the University of Medicine and Pharmacy in Bucharest, Ditiu completed specialty training in pulmonology through a joint programme with the Romanian National Institute of Lung Diseases (Marius Nasta). In 1999, she received a certificate in International Public Health from George Washington University in Washington, DC, which she completed as a fellow in the epidemiology of lung diseases, TB control and programme management and evaluation. In 2004 she received the National Order of Merit medal for medicine in recognition of her fundraising efforts on behalf of the TB Control Programme at the Ministry of Health in Romania.

*Q: How can health services deal with the social determinants that are so strongly linked with TB?*

A: By now, I think most health workers know the basics about TB care. There has been a lot of training provided in many countries – using funds from different donors – so, by now the essentials about TB should be known. However, what is needed are refresher courses for new developments in diagnostics, in providing the services and, most of all, health workers must be empowered to put in place what they know. What is really needed on a bigger scale is for communities to become educated about TB. It is important to educate people so that they recognize the symptoms of TB, understand TB, know their rights and responsibilities as TB patients and seek treatment quickly. Communities should understand that they are an important power at global but also at national level for getting the resources and attention needed to deal with TB. Civil society and nongovernmental organizations (NGOs) have been doing great work in villages and neighbourhoods but we need to work more directly with them, to bring them to the table with the national authorities, to empower them and to listen to their voices.

*Q: What work is being done to improve case detection in vulnerable populations?*

A: I am extremely proud of TB REACH, which is a Canadian-funded initiative of the partnership that gives grants to projects that find innovative ways of detecting TB cases in hard-to-reach, vulnerable populations. There are currently 30 projects in 19 countries, which aim to treat an additional 40 000 new TB cases over the next five years. It is the first time that we have the funding to encourage applicants to think out of the box on TB to detect more TB cases.

*Q: Globally, where are the TB hotspots?*

A: WHO has named 22 countries that deserve special focus because they have a high burden of TB. There are also lists of countries where TB drug resistance is a major concern or where TB/HIV is a burden. My vision is one of a partnership that is inclusive and that focuses on the TB problem everywhere it occurs in the world. We have partners working everywhere in TB and let us not forget that there are vulnerable and at-risk populations everywhere – as we have pockets of poverty in rich countries too.

*Q: Is access to drugs still a major problem?*

A: Since I started working in TB as a public health problem in 1996, we have been talking about the problems of drug



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management. It's hard to believe that now, in 2011, it's still such an important issue at the national and international levels. The entire cycle of drug management – for TB and other diseases – needs more clarity and assistance at the country level. It's very difficult to understand why we still have stockouts of first-line anti-TB drugs. Countries still face problems in planning, forecasting their needs and even in flagging drug shortages until the very last moment. In particular I am looking to civil society and activists to help flag these shortages. They should work together with the other partners in countries so that they can be proactive rather than reactive to situations. The partnership's Global Drug Facility (GDF) is an initiative that aims to improve access to first- and second-line drugs and diagnostics. It looks for innovative approaches to make the market more attractive to drug suppliers. Since its creation in 2001, GDF has delivered more than 17 million patient treatments in 115 countries and anticipates delivering an additional eight million anti-TB treatments between 2011 and 2015.

*Q: How is drug resistance hampering TB treatment and control?*

A: Multidrug-resistant (MDR-TB) and extensively drug-resistant tuberculosis (XDR-TB) are man-made public health threats. Drug resistance can emerge when the quality of treatment is inadequate or is interrupted, which could be for different reasons. It is difficult to complete a treatment that lasts 18 months. Sometimes there are drug shortages. Sometimes drug resistance emerges because the drugs used for treatment are of poor quality. Drug-resistant forms of TB also can be transmitted from person-to-person, in situations where there is a lack of infection-control measures or a lack of awareness. WHO estimated that there were about 440 000 cases of MDR-TB in 2008. As of July 2010, 58 countries reported at least one case of XDR-TB. The Global Plan to Stop TB sets ambitious targets for addressing MDR-TB: by 2015, 100% of confirmed cases should be treated in programmes following international guidelines. But this target will not be met without increased political commitment, joint efforts and adequate funding.

*Q: What impact is the HIV epidemic having on TB and what do you think needs to be done better to address this effect?*

A: People living with HIV are 20 to 37 times more likely to develop TB disease during their lifetimes than people who are HIV-negative. HIV and TB are so closely connected that the terms "co-epidemic" or "dual epidemic" are often used to describe their relationship. Of the 9.4 million people who became ill with TB in 2009, about 1.1 million were HIV-positive. An estimated 400 000 HIV-positive people died of TB in 2009, equivalent to about one in four of the deaths that occur among HIV-positive people each year. So this is a massive problem, and we need to address it by making sure that every person who seeks testing and treatment for HIV is screened for TB and receives TB prevention or treatment as needed. Every person seeking TB diagnosis should be offered HIV testing, counselling and, if needed, treatment. I think we all know what has to be done. I just think we need to really start doing it. The TB/HIV collaboration and integration efforts are already showing results – we just need to scale up further!

> "TB is still unable to capture the interest of the research community. For me, everything is a research priority."

*Q: What are the research priorities for TB?*

A: I would like to be very direct here – I think that TB is still unable to capture the interest of the research community. For me, everything is a research priority. We need to put much more effort and money into finding new diagnostic tools, drugs and vaccines. On the drugs, there are some in the pipeline but they will not make a dramatic change to treatment regimens, they might shorten treatment by a few months but will not make the significant breakthrough we are looking for.

*Q: You spoke about diagnostic tools. Could you tell us more about recent developments?*

A: In December, WHO announced its endorsement of a new rapid test that provides a TB diagnosis in 100 minutes, much faster than the usual tests. The new test uses DNA technology and is pretty straightforward to use. It looks like an espresso machine! While it isn't cheap, we think it's possible to roll it out to countries where it is most needed. We are now at the stage where the evidence for rolling it out is being gathered through different projects implemented globally. The good news is that there are more diagnostic tools still to come.

*Q: What is on your wish list for new discoveries?*

A: It would be fantastic to have a new vaccine. We don't expect to have one on the market before 2015, although by then we may well have one in Phase III trials. I am convinced that we can make tremendous progress getting effective treatment to people who need it and saving lives but, without an effective vaccine, we will not eliminate it.

*Q: What do you see as a priority in your new role?*

A: My all-time priority is the people who have TB – wherever they are, whomever they are. I will keep the people affected by TB and their organizations at the centre of my work and close to my heart! Always! I want to ensure that the partnership remains strong and becomes even stronger by making sure that all of our partners are engaged, motivated and willing to share the challenges, problems and achievements – the risk and the benefits. My work will centre on resource mobilization for TB and for all our partners to ensure that our Global Plan to Stop TB 2011–2015 is funded and its targets will be met. One of my objectives is to work more closely with the Global Fund (to Fight AIDS, Tuberculosis and Malaria), as the world's biggest funder of TB interventions.

*Q: Do you think that TB will ever be eliminated?*

A: Yes – TB will be eliminated, maybe not in my lifetime, but for sure in my eight-year-old son's. What people do not realize is that there is an incredible energy in the TB community. If we work together, we trust each other and, if we can channel this energy in the right direction, we can do fantastic things in TB!

*The Stop TB Partnership was established in 2001. Its secretariat is housed by the Stop TB Department at WHO in Geneva and comprises a network of international organizations, countries, donors from the public and private sectors, governmental and nongovernmental organizations and individuals that work together on such aspects as advocacy, resource mobilization and drug supply.* ■