

ERS/WHO TB Consilium

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EDITORIAL

Supporting TB clinicians managing difficult cases: the ERS/WHO Consilium

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Multidrug-resistant tuberculosis (MDR-TB), defined as active TB cases infected by *Mycobacterium tuberculosis* strains that are resistant to isoniazid and rifampicin (the two most important anti-TB drugs currently in use), and extensively drug resistant tuberculosis (XDR-TB), defined as active TB cases caused by infection with strains that are resistant to at least one fluoroquinolone and one injectable second-line anti-TB drug in addition to resistance to isoniazid and rifampicin, attract interest at different levels [1–5]. In recent years the alarming rates of MDR- or XDR-TB in Eastern Europe and some other parts of the world, have resulted in strong expressions of concern from national and international partners, health authorities, and professional societies.

At the media level, the key words MDR-TB and XDR-TB attract spikes of citations and consistent interest, as a simple Google search can testify (fig 1).

From the public health point of view, MDR- and XDR-TB is considered a serious threat for TB control and elimination. Therefore, the international community and national governments prioritise monitoring and evaluating prevalence rates and trends of drug resistant TB at both the global and the regional level [2, 3].

Recent evidence suggests that of the estimated 310,000 MDR-TB cases among notified TB patients with pulmonary TB in 2011, 60% occurred in India, China and the Russian Federation. XDR-TB is, at present, notified in 84 countries, although representative data on these difficult-to-treat cases are only available in 13 of them [2, 3].

The proportion of MDR-TB cases harbouring XDR-TB strains of *M. tuberculosis* was highest in Azerbaijan, Belarus, Estonia, Latvia, Lithuania and Tajikistan.

The prevalence of MDR-TB is dramatically high in several countries of the former Soviet Union, where 9–32% of new TB cases and ≥50% of previously treated cases harbour MDR-TB strains [2, 3] (table 1). In response to these alarming rates, the

53 member states of the World Health Organization (WHO) European Region have endorsed a five-year consolidated action plan to prevent and combat MDR- and XDR-TB in 2011–2015 [6].

In spite of the notable progress in case detection (the number of cases reported by the 27 high MDR-TB burden countries almost doubled between 2009 and 2011) we still rely on estimates: 3.7% of new cases and 20% of previously treated cases are estimated to have MDR-TB at the global level [2, 3].

As of today, the world record in terms of prevalence of MDR-TB was observed in Minsk, Belarus, where it was identified in 35.3% of new cases and in 76.5% of those previously treated: this means that about half of the cases diagnosed in that setting harbour MDR-TB strains. This finding was also confirmed at the national level.

The clinical outcome of MDR- and XDR-TB cases is largely unsatisfactory [7–10] (table 2). In the largest ever published cohort of 9,153 MDR-TB cases from 32 observational cohorts supporting an individual data meta-analysis, the outcomes of these cases were unacceptably poor (success 54%; default 23%; failure/relapse 8%; death 15%) [11]. In XDR-TB cases and in those harbouring *M. tuberculosis* strains with resistance patterns beyond XDR, the outcomes were even worse, with success ranging from 40% to 19%, failure/relapse from 15% to 54% and death from 15% to 35%, respectively [12, 13].

Due to the frequent occurrence of adverse events, limited availability of second-line anti-TB drugs, the eminent risk of acquiring further resistance, associated conditions such as alcohol and drug abuse and problems in patients' adherence, physicians often face major challenges to successfully treat their patients.

The WHO recommends that management of MDR-TB cases is supervised by a specialised team, including complementary medical professionals able to cover several perspectives (clinical, both for adults and children; surgical; radiological; public health; psychological; and nursing, among others). Implementation of such a body (known as a consilium in some countries belonging to the former Soviet Union) is a requisite to apply for international TB control funding and concessionary pricing of medicines to treat MDR- and XDR-TB cases.

The Green Light Committee for Europe, a WHO-hosted committee ensuring technical assistance to countries during yearly country visits and on an *ad hoc* basis via email or telephone, ensures that MDR-TB patients are prescribed

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Treating M/XDR-TB is difficult!!

Objectives:

- To support clinicians managing difficult to treat patients
- Web-based platform, free of cost
- Experts cover several perspectives: clinical aspects for both adults and **children**, laboratory, surgical, radiological, public health, psychological, nursing, etc.
- Managed by ERS, in collaboration with WHO Europe (formal agreement) and ECDC
- Now in ENG, RUS, SPA, PORT, soon FREN

ERS/WHO - TB Consilium

Are you a **physician** dealing with **complex M/XDR-TB, TB-HIV** and other **difficult-to-treat TB cases**?

The ERS/WHO - TB Consilium can help you to manage them, free of charge.

Username *

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Log in

Create an account

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Here you can:

- Find assistance in English or Russian from more than 40 internationally recognised experts, selected by the WHO, ERS and ECDC
- Load key case information including scans and images through a patient-anonymous web platform designed by physicians for physicians
- Communicate with the experts and follow the status of your case online
- Receive full personalised written treatment advice from two experts in your choice of English or Russian within a few days

Want to know more? Read the full *ERJ* Editorial "[Supporting TB clinicians managing difficult cases: the ERS/WHO - TB Consilium](#)"

Estimated time: 20-45 min

Target time for full review: 2-3 days

ERS/WHO TB Consilium (as of Oct 25, 2016)

-  **total cases:** 207 individual cases + 24 in 2 epidemics (4 TB and 20 LTBI)
- **From 31 countries:** South Africa (55), India (46), Italy (20), UK (11), Russian Federation (7)
- **Mean age:** 33 years, range: 1-68; 30 pediatric cases

• **Core clinical questions:**

- treatment regimen and/or duration
- advice for introduction of 1 new TB drug: Delamanid or Bedaquiline
- Delamanid Compassionate use inclusion
- advice for combined Dlm + bedaquiline and management of side effects

ERS/WHO TB Consilium

- *Create your account, upload your case and ask questions to the experts*
- *Invite your contacts to make use of this tool!*

www.tbconsilium.org