

MDR-TB in Eastern Europe in the era of the TB elimination action framework

SINCE 2011, the Tuberculosis Network European Trials group (TBNET)¹ has organised a junior Academy that provides opportunities for medical students and young clinical scientists across Europe to get to know their peers and to become engaged in tuberculosis (TB) related research. The TBNET Academies focus on research priorities and health care inequalities in the European Region.

Two recent TBNET Academies were held in Odessa, Ukraine (2016) and Chisinau, Moldova (2015). Both countries are situated in the immediate neighbourhood of the European Union (EU) and face significant challenges in controlling their TB epidemics in conditions of political and military instability. In 2014, Ukraine alone notified 40 302 TB cases, almost two thirds of the number of cases notified by all EU member states.² Ukraine and Moldova rank among the countries with the highest MDR-TB burden worldwide and, in addition, rising rates of TB and human immunodeficiency virus (HIV) co-infection and high rates of emigration for seasonal work have led to a reduced treatment success rate, especially among MDR-TB patients (34% in Ukraine and 59% in Moldova).² While the World Health Organization's TB elimination strategy in the low-incidence countries of Western Europe³ appears unrealistic, with rising rather than decreasing numbers of TB cases—related to recent waves of migration despite the fact that TB remains a rare disease in these countries—attention should be shifted to the control of MDR-TB in Eastern Europe.

According to the End TB Strategy, in 2020 national TB programmes (NTPs) should be able to achieve milestone indicators of a 35% reduction in numbers of TB deaths and a 20% reduction in TB incidence compared with 2015.⁴ It is difficult to be optimistic about these indicators, given the current gaps in TB control in the Eastern European countries. Among the most striking TB problems that mark Eastern Europe are the inefficient, frequently overcrowded TB hospitals with a high risk of nosocomial MDR-TB infection; delays in time to adequate diagnosis and treatment initiation; lack of good mechanisms for keeping patients on treatment and following them up as out-patients; insufficient medical personnel involved in TB health care; and the lack of efficient policies for TB contact tracing, especially contacts of patients with MDR-TB.

Today, a positive turnaround in the current TB deadlock in countries such as Ukraine or Moldova can be obtained only by supporting local NTP activities and addressing the following priorities:

- 1 Strengthening ambulatory TB care services by better funding, staffing and training of ambulatory health care providers
- 2 Rapid TB diagnosis and more accurate assessment of drug resistance by large-scale implementation of rapid molecular diagnostics for first- and second-line anti-tuberculosis drugs
- 3 Improving treatment adherence by providing the most comfortable treatment conditions possible and adequate social and financial support throughout the duration of TB treatment
- 4 Well-organised, comprehensive access for all TB patients for treatment of MDR-TB and potential comorbidities
- 5 Enhanced screening activities among TB contacts and high-risk groups by reinforcing efficient contact tracing and implementation of a long-term screening approach.

It is important to emphasise that as long as the current TB issues in Eastern Europe are not adequately addressed and health care inequalities are not overcome, TB elimination in the neighbouring low-incidence TB countries will be doomed to failure. While initiatives such as the TBNET Academy create awareness about MDR-TB in the region and provide welcome support for research capacity building, collaborative efforts are needed to curb the threat of drug-resistant TB.⁵

ANDRII DUDNYK*

DMYTRO BUTOV†

VALERIU CRUDU‡§

CHRISTOPH LANGE§¶#**††

DUMITRU CHESOV§

**Department of Tuberculosis and Clinical Immunology*

National Pirogov Memorial Medical University of Vinnytsia

†Department of Phthysiology and Pulmonology Kharkiv National Medical University Kharkiv Ukraine

‡Phthisiopneumology Institute Chisinau, Republic of Moldova

§State University of Medicine and Pharmacy 'Nicolae

Testemitanu'
Chisinau, Republic of Moldova
 ¶ *Division of Clinical Infectious Diseases*
Research Center Borstel
 # *German Center for Infection Research, Clinical*
Tuberculosis Center
Borstel
 ** *International Health / Infectious Diseases,*
University of Lübeck
Lübeck
Germany
 †† *Department of Medicine*
Karolinska Institute
Stockholm, Sweden
 ‡ *Department of Internal Medicine*
University of Namibia School of Medicine
Windhoek, Namibia
e-mail: clange@fz-borstel.de

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