Correspondence

Tackling the MDR-TB epidemic in Ukraine: every little helps ... and much more needed

Dear Editor,

The 2016 TBnet Academy, a meeting to support collaboration and learning about tuberculosis (TB) amongst students, doctors and researchers from across Europe, was held in Odessa, Ukraine. We witnessed first-hand the commitment of local healthcare professionals to tackle the increasing multi-drug-resistant TB (MDR-TB) burden. Ukraine is one of the WHO's 30 high-burden countries for MDR-TB.¹ In 2014, 8000 patients started on MDR-TB treatment, accounting for 22% of all new TB cases.¹

We write this letter to share the progress being made locally, to highlight the difficulties being faced, and to call for ever stronger international collaboration to tackle the MDR-TB epidemic.

Access to key laboratory diagnostics has improved significantly within Ukraine. Since 2011 rapid liquid culture (BACTEC MGIT, Becton Dickinson, USA) and molecular tools (GeneXpert, Cepheid, USA), procured by the Global Fund, are being systematically introduced across the country. Ukraine has developed a national electronic TB register and international funding has improved the coverage of antiretroviral therapy (ART) for HIV/TB co-infected patients. Local initiatives have led to the allocation of regional funds for the renovation of TB facilities and have also developed new international collaborations (http://cordis.europa.eu/project/ rcn/108387_en.html).

Unfortunately, the impact of the military conflict and the resultant economic downturn puts the progress in TB control at significant risk.² Due to rising inflation salaries for healthcare workers (HCWs) have effectively fallen by a third making the retention of HCWs skilled in TB ever more chal-(http://data.worldbank.org/indicator/FP.CPI. lenging TOTL.ZG?locations=UA). We also observed shortages of drugs (rifampicin), basic infection control equipment for staff and limited access to HIV testing for TB patients. Many are only provided with one of the two tests required to be offered ARTs, thus denying access to live-saving treatment. Hospital facilities are still limited and overcrowded while the management of MDR/extensively drug-resistant (XDR)-TB patients in communal rooms is a major risk for nosocomial transmission.³ Newly approved MDR-TB drugs,

such as Bedaquiline and Delamanid, are not yet available in Ukraine, despite the country participating in clinical trials to prove the efficacy of Bedaquiline. This lack of access to new and existing reserve drugs contributes to poor cure rates amongst MDR/XDR-TB patients.⁴

The End TB strategy identifies the need for 'political commitment' to 'support global TB... control'.⁵ With increasing political isolationism across Europe and beyond, one thing is clear: to tackle the rise of MDR-TB better international collaboration is essential.

Ukraine illustrates the benefits that international collaboration and support can bring to TB control within a country, but is a stark reminder of the threat to global health posed by MDR-TB. As a group of students and doctors, and researchers from across Europe, we call for increased international funding, collaboration and expertise exchange to ensure that we succeed in the fight against TB and MDR-TB.

Submitted on behalf of the Attendees of the 2016 TBnet Academy (a full list of attendees is available as supplementary data).

Supplementary data

Supplementary data are available at the *Journal of Public Health* online.

References

- 1 WHO. *Global Tuberculosis* Report 2015. Geneva: World Health Organization, 2015. http://apps.who.int/iris/bitstream/10665/ 191102/1/9789241565059_eng.pdf?ua=1. (20 June 2016, date last accessed).
- 2 Dudnyk A, Rzhepishevska O, Rogach K et al. Multidrug-resistant tuberculosis in Ukraine at a time of military conflict. Int J Tuberc Lung Dis 2015;19(4):492–3. doi:10.5588/ijtld.14.0940.
- 3 Crudu V, Merker M, Lange C et al. Nosocomial transmission of multidrug-resistant tuberculosis. Int J Tuberc Lung Dis 2015;19(12): 1520–3. doi:10.5588/ijtld.15.0327.
- 4 Lytvynenko N, Cherenko S, Feschenko Y. Management of multiand extensively drug-resistant tuberculosis in Ukraine: how well are we doing? *Public Health Action* 2014;4(Suppl 2):S67–72. doi:10.5588/ pha.14.0035.
- 5 Lönnroth K, Migliori GB, Abubakar I et al. Towards tuberculosis elimination: an action framework for low-incidence countries. Eur Res J 2015;45(4):928–52. doi:10.1183/09031936.00214014.

Matthew Burman¹, Vladyslav Nikolayevskyy^{2,3}, Irina Kontsevaya⁴, Barbara Molina-Moya⁵, Olena Rzhepishevska⁶, Lorenzo Guglielmetti^{7,8} ¹Centre for Primary Care and Public Health, Queen Mary University of London, London, UK ²Public Health England, National Mycobacterium Reference Service South, London, UK ³Imperial College, London, UK ⁴Department of Medicine, Infectious Diseases and Immunity, Imperial College London, London, UK

⁵Institut Germans Trias i Pujol (IGTP), Universitat Autònoma de Barcelona, Barcelona, Spain ⁶Department of Chemistry, Umeå University, Umeå, Sweden ⁷Centre Hospitalier de Bligny, Briis-sous-Forges, France ⁸Center of Immunology and Infectious Diseases, Sorbonne Université, Paris, France

Address correspondence to Matthew Burman, E-mail: m.burman@qmul.ac.uk

doi: 10.1093/pubmed/fdx014