



Published in final edited form as:

*Int J Tuberc Lung Dis.* 2016 October ; 20(10): 1280–1281. doi:10.5588/ijtld.16.0543.

## State-of-the-art series on tuberculosis and migration

**Knut Lönnroth<sup>\*,†</sup>, N. Sarita Shah<sup>‡</sup>, and Christoph Lange<sup>§,¶,#,\*\*,††</sup>**

Knut Lönnroth: lonnrothk@who.int

<sup>\*</sup>Global TB Programme, World Health Organization, Geneva, Switzerland <sup>†</sup>Department of Public Health Sciences, Karolinska Institutet Stockholm, Sweden <sup>‡</sup>Division of Global HIV and Tuberculosis, Centers for Disease Control and Prevention, Atlanta, Georgia, USA <sup>§</sup>Division of Clinical Infectious Diseases, Research Center Borstel, Borstel <sup>¶</sup>German Center for Infection Research (DZIF), Braunschweig <sup>#</sup>International Health/Infectious Diseases, University of Lübeck, Lübeck, Germany <sup>\*\*</sup>Department of Medicine, Karolinska Institute, Stockholm, Sweden <sup>††</sup>Department of Medicine, University of Namibia, School of Medicine, Windhoek, Namibia

The world health organization's (WHO's) global tuberculosis (TB) strategy targets a 90% reduction in global incidence by 2035.<sup>1</sup> Low-incidence countries—presently a group of predominantly wealthy nations—are already preparing to move towards TB elimination, defined by less than 1 case per 1 million population.<sup>2</sup> Rapid decline of TB, as well as eventual elimination, will not be possible unless TB care and prevention is seen as a shared responsibility across countries. In the age of increasing globalization and migration, no single country or region can successfully move towards TB elimination unless there is a substantial and sustainable global reduction in TB burden. We have been reminded of this by the recent increase in TB incidence in the two low-incidence countries that have received the largest number of asylum seekers during the ongoing wave of migration to Western Europe: in 2015, Germany and Sweden experienced an increase of 30%<sup>3</sup> and 22%,<sup>4</sup> respectively.

Migration is a fundamental phenomenon of human existence. Throughout history it has been a driver of societal change, economic growth, knowledge-sharing, innovation, and development of language and culture. It has also caused tension and conflicts. With the increasing ease of travel, improved connectivity, and interlinked world economy, the world is experiencing an acceleration of migration that is likely to continue. Although most of it is voluntary and planned, economic hardship, military conflicts, and other disasters force people to migrate. Bearing these conditions in mind, TB control must include variables of globalization and migration in the equation.

Addressing TB in migrants requires efforts on several fronts: cross-border collaboration, domestic strategies to optimize the diagnosis, treatment and prevention of TB in immigrants, and minimization of the risk of TB in future emigrants through support for TB care and prevention in high-burden countries. A recent inter-regional WHO consultation on TB and migration—appropriately organized in Catania, Italy, one of the main ports of entry for migrants perilously crossing the Mediterranean—highlighted the importance of analyzing the implications of migration for TB epidemiology, clinical care and health systems challenges and to translate evidence into effective TB control strategies anchored in principles of equity, ethics, and human rights.<sup>5</sup> One outcome of the consultation was a

tentative list of priority research areas that should ideally be pursued through interdisciplinary, multi-country, and cross-regional approaches:

- Better epidemiological data on TB in different subgroups of migrants
- Further research into cross-border care
- Evaluation of different interventions to improve access, uptake and adherence to care
- Assessment of yield, impact, and cost-effectiveness of migrant TB screening
- Evaluation of different screening algorithms for active TB and latent infection
- Social determinants of TB in migrants
- Ethics, equity, human rights, and political aspects of TB screening and access to care.

Much data and experiences exist already that would benefit from consolidation. It is timely that the *Journal* has decided to launch a state-of-the-art series on TB and migration that will be published in nine consecutive issues in 2017. There are also important knowledge gaps, however. To complement these reviews, the *Journal* welcomes submissions of original research papers on this vast, topical subject. The final article of the series will revisit the research agenda on TB and migration, which the *Journal* hopes will stimulate further publications on this theme in the future.

## Acknowledgments

KL is a staff member of the World Health Organization (WHO) and NSS is a staff member of the US Centers for Disease Control and Prevention (CDC). The authors alone are responsible for the views expressed in this publication and they do not necessarily represent the decisions or policies of the WHO or the CDC, respectively.

Conflicts of interest: none declared.

## References

1. Uplekar M, Weil D, Lönnroth K, et al. WHO's new End TB Strategy. *The Lancet*. 2015; 385:1799–1801.
2. Lönnroth K, Migliori GB, Raviglione MR, et al. Towards tuberculosis elimination: An action framework for low-incidence countries. *Eur Respir J*. 2015; 45:928–952. [PubMed: 25792630]
3. Fiebig L. Welttuberkulosestag 2016: Gemeinsam gegen Tuberkulose. *Epidemiologische Bulletin*. 2016; 10/11:81–82. [German].
4. Folhälsomyndigheten, Swedish Public Health Agency. Tuberkulos under 2015 [Tuberculosis in 2015]. Sweden: Folhälsomyndigheten; 2016. <https://www.folkhalsomyndigheten.se/folkhalsorapportering-statistik/statistikdatabaser-och-visualisering/sjukdomsstatistik/tuberkulos/Stockholm>[Swedish] [Accessed July 2016]
5. World Health Organization. Interregional workshop for tuberculosis control and care among refugees and migrant populations. Copenhagen, Denmark: WHO Regional Office for Europe; 2016.