



Closing the gap in surveillance of tuberculosis and HIV co-infection, and the need for clinician–public health alliances

To the Editor:

We read with much interest the editorial by VAN DER WERF *et al.* [1] in the *European Respiratory Journal* (ERJ). The authors rightly advocate for the need to improve completeness, accuracy and timeliness of tuberculosis (TB)/HIV co-infection data in Europe, pledging for more cooperation between primary care physicians, medical specialists and social workers. We agree with them and others [2] that much can be gained from closer collaboration between TB and HIV control programmes, and would like to share our experience from the Netherlands. In addition, we would like to comment on the incompleteness of surveillance registers in our country, as raised by the authors.

2 years ago, we established a TB/HIV platform in the Netherlands with 16 interested clinicians and public health professionals working in TB and HIV control. The objectives for the platform were: 1) to share knowledge on both diseases; 2) to discuss management of TB/HIV patients; 3) to improve collaboration between professionals working in TB and HIV clinics and programmes; and 4) to systematically collect data for operational research. Table 1 provides an overview of key indicators on TB/HIV in the Netherlands.

We identified and studied three topics.

1) HIV-co-infected TB patients: over the last 5 years, 2.9% of notified TB patients were known to have an HIV co-infection in the Netherlands [3]. We studied the records of 123 TB/HIV patients notified in 2011–2015 [5]. 66 (54%) patients had already been diagnosed with HIV prior to the time of TB diagnosis. Among this group, 29 (44%) had been diagnosed with HIV >5 years prior to TB diagnosis, 46 (70%) were on antiretroviral therapy and 14 (21%) had a history of previous TB treatment.

2) HIV screening of TB patients: VAN DER WERF *et al.* [1] stated that in 2015, the proportion of TB patients with known HIV status in the Netherlands was only 60.7%. They may not have been aware of our recent study of causes of unknown HIV status, published in the *ERJ* [6]. Our efforts to complete data entry in the National TB registry raised the proportion of TB patients with known HIV status to 73.2%, all newly entered cases being HIV negative. The proportion of patients with registered HIV status in different public health authority areas ranged from 22.2% to 98.3%. Our study also indicated that professionals often do not offer an HIV test to patients with a perceived nil pre-test probability and we concur with them that some patients could be exempted from testing (*e.g.* children born in the Netherlands because 99.8% of pregnant women are screened for HIV in the Netherlands) [7].

3) Latent tuberculosis infection (LTBI) screening of HIV-positive individuals has been a controversy in our country and, as discussed during the Wolfheze Workshops 2017, also in several other low TB incidence countries. The Dutch TB/HIV guideline has been amended after research showed that clinicians did not agree with the recommendation to screen all newly diagnosed HIV-positive individuals for LTBI [8, 9]. The current recommendation is only to screen HIV-positive individuals from high TB incidence countries or with known exposure to TB. Research is ongoing to evaluate the implementation of the guideline and the yield of LTBI screening.

Lastly, we like to comment on the incompleteness of surveillance registers. With the current electronic register, mandatory TB notification by clinicians and laboratories, and the national DNA fingerprinting



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Collaboration between professionals working in TB and HIV clinics and programmes improves TB/HIV surveillance <http://ow.ly/sety30hXdqk>

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TABLE 1 Key indicators and data on tuberculosis (TB)/HIV in the Netherlands in 2016

Indicator	Number	Proportion
TB patients notified	889	5.2 per 100 000
Newly diagnosed individuals with HIV, projected	816	4.8 per 100 000
Estimated individuals with HIV	22 900	
Cumulative individuals with HIV diagnosed and linked to care	20 264	94%
Cumulative individuals with HIV retained in care	19 136	84%
Individuals with HIV on antiretroviral therapy	18 599	81%
TB patients with known HIV status	620	70%
TB patients co-infected with HIV	21	2.4%
HIV/TB patients on antiretroviral therapy	15 [#]	71%
Eligible individuals with HIV screened for latent TB infection	Under study	Under study
Eligible individuals with HIV diagnosed with latent TB infection	Under study	Under study

[#]: in three patients, this information was unknown [3, 4].

programme capturing all or nearly all *Mycobacterium tuberculosis* isolates, we argue that very few culture-confirmed TB cases are missed in the National TB Register in the Netherlands. Additionally, the Dutch HIV Monitoring Register, organised on a voluntarily basis, has very good national coverage [4]. The capture–recapture study [10] cited by VAN DER WERF *et al.* [1] may have severely overestimated nonreporting due to imperfect record linkage, which is a well-known caveat of this methodology. We are currently discussing how to close the gap between the two surveillance systems in our country and to increase our collaborative efforts to further reduce both diseases.

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