

Correspondence

Title: Beyond measurement: taking bold multisector actions towards zero catastrophic costs and suffering due to TB

Authors: Debora Pedrazzoli^{1*}, Rein Houben¹, Kerri Viney^{2,3}, Knut Lönnroth²

Authors' affiliations

1. Department of Infectious Disease Epidemiology, London School of Hygiene and Tropical Medicine, London, United Kingdom
2. Department of Public Health Sciences, Karolinska Institutet, Stockholm, Sweden
3. Research School of Population Health, Australian National University, Canberra, Australia

***Correspondence to:** Debora Pedrazzoli, Department of Infectious Disease Epidemiology, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E 7HT, United Kingdom.

E-mail: debora.pedrazzoli@lshtm.ac.uk

Running head: Multisector actions against TB

Key words: tuberculosis; patient costs; financial protection, social protection

Word count: 533

References: 5

1 We agree with Timire and colleagues that all financial barriers faced by people with TB at all stages of
2 the care cascade should be addressed if we are to achieve the ambitious targets set by the End TB
3 Strategy and the Sustainable Development Goals. Further evidence on economic hardship during
4 pathways to care, and also after treatment completion, is warranted. Several studies are ongoing,
5 including “TBSequel”, which tracks costs after completed TB treatment in four African countries (1).
6

7 Although national TB patient cost surveys focus on diagnosed TB patients, they also aim to capture
8 retrospective information about pre-diagnosis costs related to seeking care (2). In addition, the survey
9 instrument can be incorporated into patient pathway analyses, prospective studies and trials and
10 thereby provide important complementary information.

11
12 The design and sampling strategy are as important as the choice of the instrument. Even studies with
13 inception during the diagnostic pathway will inevitably miss those that never seek or receive any care,
14 or do so at facilities that are not captured in the study design. Prospectively collecting patient costs
15 from symptomatic individuals as part of a TB prevalence survey is an attractive design, but challenging
16 to implement, due for instance to the geographical spread of small numbers of untracked patients.

17
18 We welcome the suggestion from Timire and colleagues for more evaluations of different social
19 protection interventions. Findings from ongoing or planned intervention studies in e.g. Vietnam,
20 Nepal, Uganda and Mozambique, aiming to improve completion of the care pathway through different
21 modalities of socioeconomic support will contribute important evidence. Several of these studies are
22 linked to the Social Protection Action Research & Knowledge Sharing (SPARKS)(3), an international
23 interdisciplinary research network on social protection, aiming to facilitate networking and knowledge
24 sharing between academia, public health practitioners, international organizations and civil society.
25 Government-led schemes such as the Direct Benefit Transfer in India may encourage people to engage
26 with care, thus addressing another gap that is not tackled by looking at individuals who are lost to
27 follow-up pre-treatment. This potential needs rigorous evaluation.

28
29 TB patient cost surveys provide important information on how health service delivery and financing
30 can be changed towards patient-centred care to eliminate TB patient costs, as well as enhancing social
31 protection measures(2). They are a powerful tool to draw focus towards eliminating the financial
32 plight and barriers for presumptive and TB patients, through collaboration with relevant stakeholders
33 within and across the health sector.

34

35 For example, addressing pre-diagnosis medical costs involves streamlining the TB patient pathway,
36 expanding access to rapid molecular testing and digital X-rays, intensifying contact investigation and
37 case finding(4), looking for synergies with programmes on HIV, nutrition, diabetes.

38

39 Ghana, the first country in Africa to conduct a national TB patient cost survey(5), recently developed
40 a national roadmap to eliminate financial catastrophe for TB patients through a broad multi-sectoral
41 agenda. The first policy action of this roadmap has led to the decision of the Ghana National Health
42 Service and National Health Insurance Authority to enrol all TB patients in the National Health
43 Insurance Scheme free of charge. This should serve as an example and reminder to other countries
44 and technical partners that ongoing efforts to measure TB-related costs can, and should lead to even
45 greater concerted efforts to take bold actions towards zero catastrophic costs due to TB, zero TB
46 suffering and ultimately TB elimination.

References

1. Rachow A, Ivanova O, Wallis R, Charalambous S, Jani I, Bhatt N, et al. TB sequel: incidence, pathogenesis and risk factors of long-term medical and social sequelae of pulmonary TB - a study protocol. *BMC Pulm Med.* 2019;19(1):4.
2. World Health Organization. Tuberculosis patient cost surveys: a handbook. Geneva, Switzerland 2017.
3. Health and Social Protection Action Research & Knowledge Sharing (SPARKS) Network. Rationale, Objectives and Work Plan. Report from the first SPARKS consultation 15-16 December, 2016. 2017.
4. Morishita F, Yadav RP, Eang MT, Saint S, Nishikiori N. Mitigating Financial Burden of Tuberculosis through Active Case Finding Targeting Household and Neighbourhood Contacts in Cambodia. *PloS one.* 2016;11(9):e0162796.
5. Pedrazzoli D, Siroka A, Boccia D, Bonsu F, Nartey K, Houben R, et al. How affordable is TB care? Findings from a nationwide TB patient cost survey in Ghana. *Tropical medicine & international health : TM & IH.* 2018;23(8):870-8.