

# Catastrophic costs due to tuberculosis: a controlled study optimizing assessment

P.P. Carballo-Jimenez,<sup>1,2,3</sup> S. Datta,<sup>1,2,3,4</sup> L. Quevedo Cruz,<sup>1,2,3</sup> M.J. Saunders,<sup>1,2,3</sup> R. Montoya,<sup>2,3</sup> J. Gomez,<sup>2,3</sup> M. Rivero,<sup>2,3</sup> E. Ramos,<sup>2,3</sup> N. Bailon,<sup>2</sup> K. Alvarado,<sup>2,3</sup> L. Chamané,<sup>2,3</sup> C.A. Evans,<sup>1,2,3</sup>

<sup>1</sup>Imperial College London, Infectious disease, London, United Kingdom of Great Britain and Northern Ireland, <sup>2</sup>IFHAD: Innovation For Health And Development, Laboratory for Research and Development, Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>3</sup>IPSYD: Innovacion Por la Salud Y el Desarrollo, Asociación Benéfica Prisma, Lima, Peru., Lima, Peru, <sup>4</sup>Liverpool school of tropical medicine, Department of Clinical sciences,, Liverpool, United Kingdom of Great Britain and Northern Ireland

## Type selection

**Category:** Scientific research

**Preferred presentation type:** Oral abstract presentation

## Track selection

**Track:** C11: Cost-effectiveness of TB and lung health interventions

## Title

## Scientific Research Abstract Text

### Background:

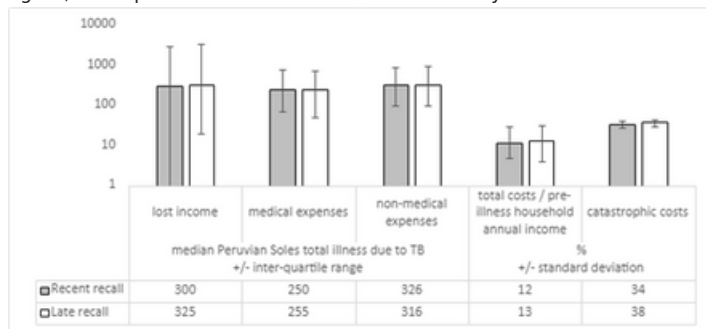
BACKGROUND. The WHO End TB strategy includes the target that zero patients and their households should face catastrophic costs due to TB by 2035. It is unknown whether patients can reliably recall costs due to TB throughout their illness, or only recent costs, so we compared these approaches.

### Design/Methods:

METHODS. When tuberculosis treatment was starting, we asked patients for 'recent recall' quantifying categories of pre-treatment costs due to tuberculosis since their illness began. Later, as they were completing their treatment, without reminding them of their previous assessment, we asked them to complete 'late recall' quantifying again the same pre-treatment costs. Other data were collected to calculate catastrophic costs due to TB, that were defined as the sum of total costs due to tuberculosis above 20% of the pre-illness annual household income. We assessed the reliability of late recall by comparing it with recent recall.

### Results:

RESULTS Pre-treatment costs due to tuberculosis occurred over median 30 (interquartile range, IQR= 7-78) days. When pre-treatment costs were recently recalled, the median Peruvian Soles (S/) total illness lost income was S/300 (IQR=0-3000), medical expenses were S/250 (IQR=72-790) and non-medical expenses were S/325 (IQR=95-910). Total household costs due to tuberculosis constituted a median 12% (IQR=5-29) of pre-illness household income (that was median S/1330, IQR=850-2000). Consequently, 34% (IQR=27-41) of households experienced catastrophic costs due to tuberculosis. As shown in the figure, when pre-treatment costs were assessed by late recall a median 184 (IQR=157-220) days later, these estimates were similar (all  $p > 0.001$ ).



**Conclusions:** DISCUSSION. This study demonstrates that patients and their households can recall pre-treatment costs due to tuberculosis similarly reliably whether assessed at the start of treatment or approximately 6 months later at the end of treatment. This finding should simplify the assessment of catastrophic costs due to tuberculosis.

## Summary

### Summary:

The World Health Organization End TB strategy prioritizes zero TB-affected households suffering catastrophic costs. To facilitate reaching this target, we studied optimizing the timing of quantification of TB-related costs. Our findings that patients with TB accurately remember costs throughout their treatment should simplify assessing catastrophic costs due to TB

## Other Fields

**Country of research:** Peru

**Did you benefit from the [Abstract Mentor Programme \(AMP\)](#)?:** No

**Do you have ethical clearance for this abstract?:** Yes

## Confirm submission

1. I confirm that I have previewed this abstract and that all information is correct.: Yes

2. I agree to the resubmission policy.: Yes

3. I have read the [Stigmatising Language Policy](#), and confirm I have not used stigmatising language in the abstract.: Yes

4. The corresponding author is responsible for informing the other authors.: Yes

5. If accepted, I hereby agree to the [attached information](#) relating to the release, recording and publication of the presentations and

session.: Yes

**6. I understand that my abstract if accepted may be used by the Scientific Committee of The Union for the rapporteur session or shared with the media team. The media and communication teams may use the summary of the abstract for advertisement of the conference content.:** Yes

**Do you intend to apply for a scholarship? (After notifications are sent).:** Yes

---