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A systematic review and meta-analysis of strategies to quantify catastrophic costs due to tuberculosis and achieve the World Health Organization target of their elimination

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Abstract:

Since records began, tuberculosis (TB) has killed more people than any other infectious disease. The World Health Organization (WHO) strategy to "End TB" by 2030 includes the milestone of no affected households facing catastrophic costs (CC) due to TB. Costs due to TB are usually defined as catastrophic if they exceed 20% of the pre-disease annual household income. The strategies to quantify and eliminate catastrophic costs are incompletely defined. To inform this policy, we aimed to assess the evidence for strategies to quantify or eliminate catastrophic costs due to TB. We followed the Prisma-P guidelines and screened 441 eligible studies (see DOI: 10.12688/wellcomeopenres.17521.1). 94 studies were included for the qualitative and quantitative analysis; 32 were not original research but described strategies such as how to implement CC instrument measurements; how to implement socio-economic support and strategies about cost estimates. From the 62 original research, 48 were CC surveys; including 17 National CC surveys and 31 regional surveys. Only 8 studies assessed interventions to prevent or eliminate CC. One randomized controlled trial (RCT) found that a socio-economic intervention decreased CC by 40% (Odds Ratio (OR) 0.60, 95% Confidence Interval (95%CI) [0.36–0.98])).Whilst an RCT of home-based care (versus hospital) showed a 93% reduction of CC (OR 0.07, 95%CI [0.03-0.15]). The other 6 intervention studies evaluated active (versus passive) case finding and we performed a meta-analysis that demonstrated an approximate halving of CC (OR 0.59, 95% CI [0.38–0.91]). This review found diverse strategies used to quantify CC, none of which have been compared. Furthermore, the few studies that evaluated an intervention did reduce CC, but none achieved the WHO target of eliminating CC.

Category (Complete): Pneumonia, Respiratory Infections and Tuberculosis Presentation Preference (Complete): Oral Keyword (Complete): Tuberculosis ; catastrophic costs ; meta-analysis Disclosures (Complete): Response : I did not indicate a conflict of interest. Response : I confirm

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: There are no meta-analysis about interventions being done to prevent or eliminate catastrophic costs due to Tuberculosis, catastrophic costs is a definition just establish only 7 years ago but WHO third goal to End TB is their elimination

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