## The household economic burden of drug-susceptible TB diagnosis and treatment in The Gambia

I. Devoid, A. K. Sillah, J. J. Sutherland, O. Owolabi, O. Ivanova, S. C. Govathson, K. Hirasen, M. Davies, K. Lönnroth, L. Loum, A. Touray, S. Charlambous, D. Evans, M. Quaife

'Faculty of Public Health and Policy, London School of Hygiene & Tropical Medicine, London, UK: "Medical Research Council Unit The Gambia at the London School of Hygiene & Tropical Medicine, Banjul, The Gambia; "Center for International Health, Ludwig-Maximillans-University (LMU) Munich University Hospital, "Division of Infectious Diseases and Tropical Medicine, Medical Centre of the University of Munich (LMU), Munich, "German Centre for Infection Research (DZIF), Partner Site Munich, Munich, Germany; "Health Economics and Epidemiology Research Office, Department of Internal Medicine, School of Clinical Medicine, University of the Witwatersrand, Johannesburg, South Africa: "Department of Public Health Sciences, Karolinska Institute, Sweden; "Aurum Institute, Johannesburg, South Africa

SUMMARY

OBJECTIVE: To determine the costs and catastrophic costs incurred by drug-susceptible (DS) pulmonary TB patients in The Gambia.

METHODS: This observational study collected cost and socio-economic data using a micro-costing approach from the household perspective from 244 adult DS-TB patients with pulmonary TB receiving treatment through the national treatment programme in The Gambia. We used data collected between 2017 and 2020 using an adapted version of the WHO generic patient cost survey instrument to estimate costs and the proportion of patients experiencing catastrophic costs (>20% of household income).

RESULTS: The mean total cost of the TB episode was

\$104.11 (2018 USD). Direct costs were highest before treatment (\$22.93). Indirect costs accounted for over 50% of the entire episode costs. Using different income estimation approaches and catastrophic cost thresholds, 0.4–75% of participants encountered catastrophic costs, showing the variability of results given the different assumptions we utilised.

CONCLUSIONS: We show that despite the benefits of free TB care and treatment, DS-TB patients still incur substantial direct and indirect costs, and cases of impoverishing expenditure varied vastly depending on the income estimation approaches used.

KEY WORDS: tuberculosis; patient costs; catastrophic costs; The Gambia

Until the COVID-19 era, TB disease was the leading cause of death from a single infectious agent worldwide, and nearly half of patients living with TB in low- and middle-income countries (LMICs) reported financial difficulties due to the disease. TB patients encounter sizeable medical and non-medical costs from before diagnosis until after treatment, but also due to morbidity and disability that can lead to lost productivity during this time.

The WHO End TB Strategy aims to eliminate TBrelated catastrophic costs that patients and their families experience by 2030, and defines TB costs as "catastrophic" when they exceed 20% of annual pre-TB household income. Despite efforts from policymakers and health systems to alleviate patient costs, many households still face catastrophic costs due to TB.<sup>1,4</sup> TB treatment is often provided free at the point of access in many settings. While there is information regarding catastrophic costs for high TB burden countries, there is limited information for The Gambia, which has a relatively low incidence of TB, but ranks among the poorest in the world with a gross national income per capita of less than \$1,500.5

The majority of patients initiate care at government (public) health facilities in The Gambia, incur no charges for diagnostic GeneXpert testing and are then treated at governmental facilities, where they incur no cost. However, patients who require additional tests such as X-rays or other imaging must pay out-of-pocket expenses at private pharmacies, clinics or hospitals. Patients also incur non-medical costs through expenditure on transport, food, accommodation and indirect costs due to an inability to work or perform daily activities.

Substantial patient costs can impede those most

ID and AKS are joint first authors; DE and MQ are joint last authors.

Correspondence to: Denise Evans, Health Economics and Epidemiology Research Office, Department of Internal Medicine, School of Clinical Medicine, University of the Witwatersrand, 39 Empire Road, Parktown, Johannesburg 2193, South Africa, email: devans@hercoa.org

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# **Snr Sec Eng Tb 10 Gambia**

Wenbin Ji

Snr Sec Eng Tb 10 Gambia:

## Snr Sec Eng Tb 10 Gambia Book Review: Unveiling the Magic of Language

In a digital era where connections and knowledge reign supreme, the enchanting power of language has are more apparent than ever. Its power to stir emotions, provoke thought, and instigate transformation is truly remarkable. This extraordinary book, aptly titled "Snr Sec Eng Tb 10 Gambia," published by a very acclaimed author, immerses readers in a captivating exploration of the significance of language and its profound effect on our existence. Throughout this critique, we will delve to the book is central themes, evaluate its unique writing style, and assess its overall influence on its readership.

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