

Programmatic data over-estimate deaths due to tuberculosis during treatment and under-estimate deaths due to tuberculosis after treatment.

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Type selection: Scientific research

Preferred presentation type: Oral abstract presentation

Track: D1: TB epidemiology across the life course

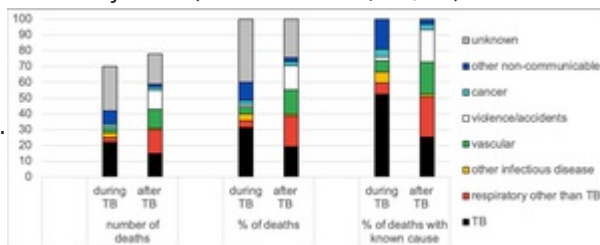
2nd Track: B7: Identification and management of TB infection

Background: Reducing deaths due to tuberculosis is the World Health Organization (WHO) End Tuberculosis Strategy first priority. However, determining the cause of death is notoriously difficult. The aim of this study was to compare routine programmatic mortality data in patients with tuberculosis during and after therapy versus the cause of death (CoD) determined by WHO verbal autopsy (VA).

Design/Methods: After ethical approval, we prospective followed a cohort of 2152 unselected consecutive patients who gave informed consent to be interviewed during and 18-24 months after tuberculosis treatment. We did this between 2016-2022 in 32 community health centers in shantytowns in Callao, Peru. We used WHO definitions of CoD from VA done using the smartVA-Analyze program during face-to-face household visits with members of the households of people who had died.

Results: The overall mortality rate was 6.1% (95% confidence intervals, CI=5.2-7.1, 148/2421). Deaths were more common in men (70%, 95%CI=62-77, 104/148) and people with HIV coinfection(64%, 95%CI=56-72, 95/148). 47% (95%CI=41-49, 70/148) of deaths occurred during TB treatment. VA were completed for 68% (95%CI=60-76, 101/148). The following data are for those whose CoD was determined. During tuberculosis treatment when deaths are all attributed programmatically to tuberculosis, only 52% (95%CI=36-68, 22/42) of CoD were tuberculosis. After tuberculosis treatment, the CoD was tuberculosis for 25%, (95%CI=15-38, 15/59) but recurrence had been diagnosed in none of these cases, so none would have been attributed to tuberculosis programmatically. Thus, there were 43 deaths during tuberculosis treatment that would programmatically be attributed to tuberculosis but only 51% (95%CI=35-67, 22/43) of these were amongst the 37 deaths

that VA attributed the CoD to be tuberculosis.



Conclusions: Tuberculosis as the CoD is was over-estimated by tuberculosis programmatic data during therapy and under-estimated after therapy.

Summary: Programmatic mortality data in TB patients is not well characterized. Our findings suggest over-estimation of the real TB attributable deaths during treatment and under estimation after therapy. This is important for global estimates of mortality due to tuberculosis.

Country of research: Peru

Did you benefit from the Abstract Mentor Programme (AMP): No

Do you have ethical clearance for this abstract?: Yes

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