Health-related quality of life among Ugandan TB survivors

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Introduction:

155 million people globally have survived tuberculosis (TB) and many report substantial on-going health issues. There is an urgent need to improve identification of individuals at risk of poor post-TB outcomes. We characterize health-related quality of life (HRQoL) among Ugandan TB survivors a year after treatment completion and identify predictors of poor HRQoL.

Methods:

We surveyed a cohort of Ugandan TB survivors 12-25 months after treatment cessation. HRQoL was assessed with the EQ-5D 5L tool, a 6-item validated generic utility-based instrument that measures capacity in five health domains: mobility, self-care, usual activities, pain and anxiety/depression. We calculated summary index scores using previously validated Uganda-specific weights. An index score of one indicates perfect health and zero indicates a health state equivalent to death. We fit a normal linear model to identify demographic and clinical features predictive of the index score.

Results:

We successfully traced 2,110 (87.7%) of 2,406 TB survivors; 138 (5.7%) were deceased. Of the remaining 1,972 TB survivors, 1,923 (97.5%) completed the survey. Participants reported high rates of impairment in most domains. Over a quarter of participants experienced at least some impairment in mobility (26.1%), usual activities (30.6%), and pain/discomfort (35.7%); about half experienced anxiety/depression (48.4%). The median index score was 0.92 (interquartile range: 0.80-1.00). Female sex and older age were associated with lower summary scores (-0.03, 95% confidence interval [CI]: [-0.06, -0.01], and -0.02, 95% CI: [-0.02, -0.02], respectively). Living with HIV was associated with a higher score (0.05, 95% CI: [0.03, 0.08]).

Conclusion:

TB survivors reported challenges in several health domains after TB treatment. Higher HRQoL among people living with HIV suggests that ongoing contact with the healthcare system could ameliorate some of these health issues. TB survivors may benefit from routine health screening and referrals to interventions like pulmonary rehabilitation to promote health post-TB.

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