

Predictors of mortality among tuberculosis patients with mental health disorders: a retrospective study at a national referral mental hospital in Uganda

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Background

- Despite medical advancements, tuberculosis (TB) remains a significant global health issue, particularly for vulnerable groups like individuals with mental illness, HIV, and older adults in areas with limited healthcare resources.
- We aimed to evaluate mortality predictors among TB patients with mental illnesses to inform targeted interventions and improve patient outcomes.



Results

- We included 150 patients with mental health disorders receiving TB treatment from (Jan 2020 - Dec 2023)
- Males (64.67%), 73% aged 20 to 40 years (median age 35.5 years, IQR 29-45)
- Mean weight at diagnosis - 50.8 kg (SD 12.52)
- 95.21% were newly diagnosed with TB, 44% were HIV-positive.
- Pulmonary Clinically Diagnosed Tuberculosis (PCD) was the most common classification (50.67%), with X-ray as the primary diagnostic tool (46%).
- Fifty-five patients (36.67%) died, with a median time to death of 27 days post-diagnosis.
- Significant mortality predictors included advanced age (over 50 years; aOR 16.88, 95% CI 1.66 - 171.57, $p = 0.017$) and HIV-positive status (aOR 3.57, 95% CI 1.57 - 8.15, $p = 0.002$)



Methodology

- Retrospective study on TB patients at Butabika National Referral Mental Hospital (Jan 2020 - Dec 2023).
- Data on Demographics, HIV status, treatment details, diagnostic methods, TB classification, comorbidities, and care entry points were collected from electronic and paper based HMIS tools.
- Multivariate logistic regression identified independent predictors of TB-associated mortality.

Conclusion

A high mortality rate of 36.67% was observed among TB patients, with deaths occurring soon after diagnosis. Advanced age and HIV co-infection were strongly linked to this increased risk. These findings underscore the urgent need for targeted interventions, including early detection and tailored care for older patients and those with HIV, to reduce TB-related mortality. Prioritizing vulnerable groups in TB control programs could significantly improve outcomes.

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Hope for the future