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Peer Review

Review of: "Prevalence, Patterns, and Correlates of Depression Among Drug-Susceptible Tuberculosis Patient Enrollees in Ogbomoso, Oyo State: A Cross-Sectional Study"

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The study presents a significant and timely investigation into the prevalence and determinants of depression among patients with drug-susceptible tuberculosis (TB) in Ogbomoso, Nigeria. By drawing attention to the intersection between infectious diseases and mental health, the research highlights a crucial but often neglected domain of TB management. The introductory sections provide a clear rationale for the study, underscoring the high burden of TB in Nigeria and the growing evidence of psychiatric comorbidities, particularly depression, among TB patients. The authors appropriately contextualize the issue with global and regional statistics, and they cite prior research to justify the need for localized, population-specific data.

The methodology is sound and transparently reported, with a well-defined cross-sectional design and rigorous sampling approach. The inclusion and exclusion criteria are appropriately justified to ensure the reliability of mental health assessments, and the use of the PHQ-9 questionnaire offers a widely accepted tool for depression screening in public health studies. The multi-stage sampling strategy, encompassing both urban and rural health centers, adds to the representativeness of the sample, although the authors rightly acknowledge in the limitations that patients outside the DOTS network may have been excluded, potentially biasing prevalence estimates.

Findings indicate a high burden of depression, with 55.9% of participants screening positive—most cases falling within the mild to moderate categories. This prevalence aligns with other studies in sub-Saharan Africa, further validating the concern that depression is pervasive among TB patients and often under-

 doi.org/10.32388/ACVJ1B

recognized. Importantly, the study disaggregates the PHQ-9 items, allowing insight into specific symptoms such as appetite changes, sleep disturbances, and thoughts of self-harm, thus enriching the clinical relevance of the findings. However, clinical interviews to validate the PHQ-9 scores would have strengthened the reliability of the depression classification.

Among the most striking findings is the statistically significant association between HIV status and depression. Patients co-infected with HIV were 35 times more likely to develop depression, a figure that exceeds what is typically reported in similar studies. This dramatic elevation in risk warrants further investigation, possibly through qualitative inquiry into the lived experiences of TB/HIV patients facing dual stigma and treatment burdens. The study also confirms prior evidence linking diabetes mellitus with a higher depression risk, although to a lesser magnitude than HIV.

Sociodemographic factors such as sex, marital status, and education level also emerged as significant correlates of depression, albeit with some unexpected results. The observation that individuals with no formal education were significantly less likely to report depressive symptoms is counterintuitive and contradicts established literature, which generally correlates lower education with poorer mental health outcomes. The authors address this anomaly with appropriate caution, proposing plausible explanations such as underreporting, stigma, or health-seeking biases. Still, this finding deserves deeper scrutiny in future studies, especially with qualitative components that can unpack social and cultural mediators.

Interestingly, while sex was associated with depression at the bivariate level, it did not remain significant in multivariate analysis. This diverges from the well-documented global pattern of higher depression prevalence among women and may reflect complex, context-specific interactions of gender roles, care responsibilities, or stigma in the Nigerian setting. The authors could have further explored gender norms in the discussion to contextualize these patterns more robustly. Similarly, the role of age, which showed no significant association, contrasts with some studies suggesting increased depression risk in older TB patients, perhaps due to increased susceptibility to drug side effects and economic insecurity.

The multivariate analysis also raises interesting questions about the protective effect of lower educational attainment, which may stem from structural rather than individual factors. For instance, individuals with no formal education may have less exposure to mental health discourse, fewer expectations of emotional well-being, or limited capacity to self-reflect on depressive symptoms, leading to underreporting. Alternatively, this group may prioritize physical symptoms over psychological ones in health assessments, especially in resource-constrained settings. These hypotheses underscore the need for mixed-method approaches to mental health research in TB care.

Another strength of the study is its attention to socioeconomic variables, particularly monthly income, which showed significant bivariate associations with depression. While income did not remain a significant predictor in multivariate analysis, its role as a determinant of mental well-being remains relevant, especially in the context of chronic illness and prolonged treatment. Patients earning below the national minimum wage may face additional barriers to adherence and recovery, including food insecurity, transportation costs, and lack of social support. These economic stressors can exacerbate both physical and mental health outcomes.

The authors conclude with thoughtful and evidence-based recommendations for integrating mental health screening into TB care programs. They advocate for attention to psychosocial stressors, expansion of liaison psychiatry services, and proactive engagement with high-risk groups such as TB/HIV co-infected patients. These are crucial public health priorities, particularly in low-resource settings where mental health remains underfunded and understudied. The study's implications extend beyond Nigeria and could inform policy revisions across other high-burden countries seeking to adopt holistic, patient-centered TB care models.

In summary, this article makes a valuable contribution to the literature on TB and mental health by quantifying the burden of depression among drug-susceptible TB patients and identifying key demographic and clinical risk factors. While some findings require cautious interpretation due to the cross-sectional design and unexpected patterns, the study offers important insights and practical recommendations. Future research would benefit from longitudinal designs, clinical validation of depression diagnoses, and qualitative components to illuminate the lived experiences behind the data. Overall, the study is an important step toward improving TB outcomes through integrated, empathetic, and interdisciplinary care.

Declarations

Potential competing interests: No potential competing interests to declare.