Prevalence and factors associated with depression and anxiety in people living with HTLV-1: A systematic review with meta-analysis and meta-regression

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Background
Human T-cell lymphotropic virus type-1 (HTLV-1) infection is a neglected tropical disease associated with many clinical manifestations, such as erythematous-scaling skin lesions, cutaneous lymphomas, and spastic paraparesis, which could be a potential cause of mental health concerns. This study investigates the prevalence of symptoms and diagnoses of depression and anxiety and its associated factors in people living with HTLV-1 (PLWH).

Methods
A systematic review was performed in the Pubmed/MEDLINE, Embase, LILACS, and PsycINFO databases for original studies investigating symptoms of depression and anxiety and diagnoses of major depressive disorder and anxiety disorders in PLWH, and a random-effects meta-analysis with meta-regression was performed to obtain a summary frequency of symptoms and diagnoses of depression and anxiety.

Results
Considering both symptoms and diagnoses, the pooled prevalence for depression was 35% (95% CI: 27 to 43) and for anxiety was 33% (95% CI: 23 to 45). Clinically significant symptoms were more prevalent than diagnosed disorders for depression (47% vs. 21%) and anxiety (44% vs. 11%). PLWH were more likely than seronegative controls to present symptoms and diagnoses of depression (pooled OR: 4.25; 95% CI: 2.7 to 6.68) and anxiety (pooled OR: 3.79; 95% CI: 2.6 to 5.52). Spastic paraparesis was significantly associated with symptoms and diagnoses of depression (pooled OR: 1.81; 95% CI: 1.11 to 2.95) and anxiety (pooled OR: 2.75; 95% CI 1.26 to 5.96).

Conclusion
PLWH present a much higher prevalence of symptoms and diagnoses of depression and anxiety than seronegative controls, which could be explained by social vulnerability or neurological impairment associated with spastic paraparesis. More studies comparing asymptomatic PLWH and seronegative controls are needed.

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