Diagnostic test accuracy of cognitive and occupational performance tests used in the identification of HIV associated neurocognitive disorders

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Seventy percent of the world's HIV/AIDS population currently resides in Africa. Symptoms experienced by HIV/AIDS sufferers are complex and debilitating which highlights the need for effective management of the disease. Neurocognitive impairments negatively affect quality of life, however these impairments are not identified early enough as the available assessment tools are not diagnostically accurate.

This study aimed to determine the diagnostic accuracy of cognitive and occupational performance assessment tools to identify HIV associated neurocognitive disorders. The methodology followed was diagnostic test accuracy which is a type of systematic review where index tests were evaluated against the gold standard Traditional Neuropsychological Battery. The search strategy aimed to find empirical data in published studies from a variety of databases. Papers selected for retrieval were assessed by two independent reviewers using the QUADAS-2 tool. The STARD checklist was used to extract data from selected papers such that a 2x2 table reflecting the results of each index test could be formulated.

Sensitivities and specificities were calculated and plotted on a ROC curve using RevMan5 software. Results depicting 95% confidence intervals were plotted in a forest plot. The Chi-square test will be used to determine heterogeneity. Where statistical pooling was not possible, a narrative synthesis will be presented.