Reviewer’s report

Title: Depression symptoms and cognitive function among HIV-positive individuals in Uganda

Version: 1 Date: 6 November 2009

Reviewer: David Tate

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I provide the following critiques.

Introduction
The last sentence in the introduction is unnecessary and should be removed or moved to another place. It is really out of context where it is.

Methods
What exclusion/inclusion criterion were used in this study? This information is particularly important with regards to the HIV negative controls.

The description of the tools used to assess depression and cognition are poorly reference and require additional explanation. For example, are there studies that describe the validity and reliability of these measures in the population of study? Were the tools administered in native languages?

It also needs to be made clear if the statement in the methods regarding the CESD (In a general population, approximately 20% of individuals would be expected to score in this range.) is valid in Uganda. There is literature out there suggesting that the socially acceptable cultural expression of depression can vary widely from culture to culture. So, a well validated instrument in one culture may not yield the same results.

You mention “a battery of 8 neuropsychological test” administered. Is this in addition to the IHDS or are these tests used to derive the IHDS score? If they are not used to derive the score, I would not mention them otherwise you should provide some explanation as to what tests the are and how they were used in your study.

Since the cut-off scores factor heavily into your analyses, some discuss of the validity of this instruments in this population is critical.

Can you provide some rationale for the use of logistic regression when determining the differences in prevalence measures? Are you certain these data meet the assumptions for regression of this type to be valid?

How exactly were your confidence intervals for prevalence calculated? Where did you get your prevalence error estimates for this calculation?
When discussing the proposed statistics on page six, it is unclear if the last statement is a summary finding in your data are you are making some sort of expectation statement.

Results
You don’t need the first sentence of the results. Already established in the methods.

Age may be comparable, but it is still different statistically speaking and the HIV positive patients have almost twice the degree of variability.

Karnofsky Performance Scale scores are reported in the results but not discussed in the methods.

MSK scores are compared to depression in the results but MSK is not mentioned in the methods nor is it clear what statistic is used in this comparison.

In the longitudinal follow-up it is unclear what statistic is used to determine the decrease in prevalence. Is this the repeated measures logistic regression?

Not sure what is meant by the statement in the results on page 7 that says “However, the symptoms did not completely resolve.” This statement is repeated again in the discussion (page 8) and I am not sure what is exactly meant there as well.

The only reference given for the CES-D is the early normative paper. There are studies suggesting that the CES-D performs different across different ethnic groups. Can the authors please provide some sort of rationale that supports the use of the CES-D in Uganda?

I think the discussion could be greatly improved by including a broader review of the literature. A brief literature search of the subject tends to bring up more references than described in the discussion.