Reviewer's report

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

Version: 1 Date: 22 November 2009

Reviewer: Vincent Le Moing

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This is a prospective study comparing the prevalence of both depressive symptoms and cognitive impairment between untreated HIV-infected patients and asymptomatic subjects in Uganda and describing the evolution of these neuropsychological symptoms during antiretroviral therapy.

Major compulsory revisions

1- My main concern is about the selection of patients. In the methods section, authors say they selected patients at risk for cognitive impairment i.e. who had CD4 < 200 or poor performance on a screening test for HIV dementia. Due to this latter criteria, patients are not representative of all patients initiated on antiretroviral therapy because they are selected on neuropsychological symptoms. The prevalence of depressive symptoms and cognitive impairment is thus probably largely overestimated in this study.

2- I have another concern is about the validity of the questionnaires used for this study. English is not the maternal language of Ugandans. Therefore, the validity of these questionnaires, whether or not translated, must have been specifically studied in this particular population before their use in clinical studies. Indeed their reproducibility is questionable when one sees the huge variations of both scores in the control population (table 1).

3- Authors state that neuropsychological symptoms persist in patients treated with antiretroviral drugs but at 6 months, the prevalence of depression is similar in HIV-infected patients and controls (30% and 24% respectively, p= 0.21) and the prevalence of cognitive impairment is even lower in HIV-infected patients compared to controls (if the prevalence in controls is true…). Authors should check if results in controls are truly those shown in table 1 and if yes, they should check the validity of the conduction of the study among controls. If results are true and valid, they should rewrite the last paragraph of the results section and mitigate their discussion (page 9) about the persistence of depressive symptoms in HAART-treated patients.

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

Quality of written English: Acceptable
**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.