Reviewer's report

Title: Analysis of risk factors for T. brucei rhodesiense sleeping sickness within villages in SE-Uganda

Version: 2 Date: 25 September 2007

Reviewer: Pere Simarro

Reviewer's report:

General

-------------------------------------------------------------------------------

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Sleeping Sickness have different patterns of transmission according to: human activities, sex and distribution of daily work, environment and other factors which determine the contact within the vector and the reservoir including humans.

In some foci sex is a risk factor, where man’s main activity is either fishing or hunting. In other foci, women are the most affected group of population when their main activities revolves around washing clothes and other household chores out of the village. While in some other foci, children involved in cattle raring or water collection are more at risk etc.

As the authors themselves indicated, in other studies the proximity to cattle markets, coffee plantations, etc was also seen as risk factors

Authors have developed interesting methods to study various factors influencing HAT transmission. Nevertheless they have to provide more details regarding the area where this study took place including GIS coordinates. Likewise they have to discuss the importance of local factors in each foci and the danger to generalize finding regarding risk factors transmission from one focus to all HAT foci.

The message should be that each foci should be investigated regarding transmission factors in order to plan control activities rather that imply in the conclusion that "the analysis of both spatial and behavioural risk factors has provided within-village data at risk that can be used for the design of control and intervention programmes"

-------------------------------------------------------------------------------

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

-------------------------------------------------------------------------------

Discretionary Revisions (which the author can choose to ignore)
Background

Authors have to include Central Africa since currently it is the most affected region in Africa.

In West-Africa, some authors have published papers about the role of the animal reservoir in HAT transmission. Hence the phrase "Whereas in West-Africa HAT humans are the reservoir for the parasite" should be modified accordingly. Probably adding "humans are the main reservoir" could be enough.

Methods

This does not appear clear, what happens when in the process to identify controls, the selected household had previously had an HAT case? In this case, was the household selected and subsequently have the control included or not? Clarification needs to be provided regarding this topic.

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

'I declare that I have no competing interests'