Reviewer's report

Title: High prevalence of HSV-2 among rural pregnant women in Tanzania

Version: 2 Date: 3 October 2007

Reviewer: Jerome LeGoff

Reviewer's report:

The authors describe the syphilis and HSV-2 seroprevalence in rural areas in Tanzania. The title does not fit with results, since the global prevalence of 20% of HSV-2 infection cannot be considered as high as compared to other regions in Tanzania or in Africa or even in some of industrialized countries. In addition, the results of the study do not allow to conclude about the revision of guidelines for genital ulcer management or HIV prevention. The only interesting feature of the study is the relative low prevalence of HSV-2 infection compared to those observed in other Tanzanian settings which would deserve further analysis.

- Major Compulsory Revisions
  The authors should reconsider the title and their interpretation about the level of HSV-2 prevalence. The authors should emphasize their results with the confrontation of results from other publications on HSV-2 infection in Tanzania.
  The authors do not provide any data allowing to test the potential association of HSV-2 or syphilis infection with HIV prevalence or new infections and should avoid any indiscriminate extrapolation.
  The storage of serum samples must be detailed. Have the samples been stored for 4 years at 4°C. Serum samples are usually stored at minus 20°C for serology testing. This point needs to be clarified, since inappropriate storage could impair the detection of HSV-2 and syphilis specific antibodies.
  The authors should mention the p value of OR given in results and in tables.
  The discussion needs to be shortened.

- Minor Essential Revisions
  Abstract
  Conclusion. HSV-2 infection in HIV seronegative individuals increases the risk of HIV acquisition. Thus please change facilitating HIV transmission for facilitating HIV acquisition.

  Background.
  There is no clear evidence that male circumcision prevents from HSV-2 infection.

  Methods.
Could the authors give the reason for the delay between the initial study and HSV-2 serology testing?

The calculation of sample size should be clarified.

Data collection…

Please revise the construction of the third sentence. A verb is missing in the last sentence page 4.

The method used for HIV serology should be given.

Statistical analyses

Please clarify the method of comparison between HSV-2 and syphilis prevalence with HIV prevalence.

Results

Page 6, last paragraph: The OR of HSV-2 infection in the different clinics do not make sense. Why the clinic in Bastou is chosen as reference? Is there any interpretation explaining such differences?

Page 7, second paragraph. P values of comparison of frequency are missing.

Discussion

The HSV-2 prevalence should not be considered as high. Thus, potential consequences on HIV acquisition or transmission to the neonate should be interpreted cautiously (page 9). Please clarify the sense of the last sentence.

Conclusion

HSV-2 infection in HIV seronegative individuals increases the risk of HIV acquisition. Thus please change facilitating HIV transmission for facilitating HIV acquisition. The suggestion about revision of current GUD treatment algorithm is not supported by obvious arguments.

- Discretionary Revisions

Please carefully check the manuscript typing (dot, coma).

Page 11, first paragraph, last sentence, revise the sentence.

Please carefully check the abbreviations.

References

Meta-analyses from Wald et al and Freeman et al on the impact of HSV-2 infection on the risk of HIV acquisition should be mentioned.

Publications from other groups on HSV-2 infection in other Tanzanian regions should be cited (in particular studies conducted by the London School of Hygiene and Tropical Medicine).

The reference 11 is repeated.

Please check the layout of references (ref 26).
What next?: Reject because too small an advance to publish

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests