Reviewer's report

Title: Seroprevalence and estimated incidence of maternal Herpes Simplex Virus Type 2 Infection in semi-urban women in Kilifi, Kenya

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Reviewer: Marshall Munjoma

Reviewer's report:

This manuscript examines the prevalence and predictors of HSV-2 and goes on to estimate the incidence of HSV-2 infection and potential risk of neonatal HSV-2 infection among semi-urban women in Kenya. The results are interesting and potentially important but I have one major compulsory revision as well as several minor areas where the authors might wish to make revisions to improve the manuscript.

• Major Compulsory Revision

1. The only major compulsory revision I wish to make departs from the fact that two distinct populations were used for this study, i.e. the DSS study population and the VCT population. These two different populations cannot be combined to give a common HSV-2 prevalence of 36% given in the abstract. This also applies to all the demographic characteristics in the first paragraph of the results section. In my humble opinion these two populations must be described separately as was done in the second paragraph of the results section.

• Minor Essential Revision

1. The title has completely ignored the predictors (risk factors) and estimated maternal incidence of HSV-2 and neonatal herpes which appear to be important components of the manuscript. I therefore humbly suggest the following title: "Prevalence, risk factors and estimated incidence of HSV-2 infection and neonatal herpes in semi-urban women in Kilifi." The authors can use any wording they prefer but must mention risk factors (predictors), estimated incidence and risk of neonatal herpes in the title.

2. Background, second paragraph, second sentence – Most (80%) of neonatal herpes infections arise from primary genital herpes infection acquired late in
pregnancy [3,5,6,15]........

3. Methods, 1st paragraph – Kilifi is now described as a "largely rural district in coastal Kenya. This contrasts the term semi-urban that is given in the title. The authors must define their populations accurately to give their readers a clear picture of what population is meant by semi urban in a largely rural district.

4. Methods, 2nd paragraph – The women are now from Kilifi and Mtondia towns! Does this make them urban and not semi-urban dwellers as stated in the title? Accurate description of populations is essential for other scientists to be able to make correct inferences.

5. Methods, 3rd paragraph – In the last sentence "pregnancy" was spelt wrongly.

6. Results, Table 2 – Marital status is grouped into never married (ref), married monogamous, married polygamous and “was married”. What type of women is meant by the “was married” group? Is it divorced and widowed women? Please clarify. Do the authors mean “ever married”?

7. Discussion, paragraph 3 – The article by Kapiga et al (Reference 27) was restricted to a high risk group (female bar/hotel workers) thus making it not so relevant a reference for the population under study. The authors may want to look for an appropriate reference, there are many.

8. Discussion, last sentence - remove the first word “while”.

**Discretionary Revisions**

1. Results, 1st paragraph – you may remove this paragraph because it is giving summary statistics for the 826 women and yet they are made up of two distinct populations i.e. 563 women recruited from DSS and 263 women recruited from the VCT. Instead start by giving summary statistics for each group and then make comparisons referring to table 1.

2. Results, Table 4 – You may want to consider removing table 4 completely. However if table 4 is absolutely necessary then the ages may better be presented as compressed age groups e.g. 15 – 19, 20 – 24 etc as this has an added advantage of defining the women into broader definable age groups such as teenagers, young adults etc.

3. Discussion, paragraph 6 – The authors may want to rephrase the 2nd sentence as follows; “HIV uninfected women with HSV-2 infection have an increased risk of acquiring HIV and therefore HSV-2 infection may remain a driving force behind the HIV epidemic in this semi urban population.”

**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.