Reviewer's report

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

Version: 1 Date: 17 September 2007

Reviewer: Khalil G. Ghanem

Reviewer's report:

General

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

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

1. To determine prevalence, per se, you don’t need a sample size calculation. The sample size calculation is used to determine the degree of uncertainty surrounding the prevalence estimate; for example, a prevalence of 35% +/- 5% vs. a prevalence of 35% +/- 15%. In other words, the authors need to describe why they came to choose 1000 participants: they obviously had a pre-study estimate of prevalence based on their hospital data; what degree of uncertainty were they looking to achieve with the sample size they chose?

2. STATISTICAL ANALYSES: “we assessed self-reported previous adverse pregnancy outcomes as a probable indicator of previous syphilitic infections for women with a prior pregnancy” It is unclear what that means exactly. The authors need to expand on that. It is impossible for me to judge whether that is reasonable or not. I guess what they meant to say was: “we assessed self-reported previous pregnancy outcomes for possible association with a current diagnosis of syphilis”. Were these women really able to give the investigators data that would allow them to differentiate different pregnancy outcomes?

3. The authors don’t mention a significant problem with G-based assays: the potential for false positives, especially in low prevalence areas (but even in higher prevalence areas-especially overseas) and potentially in non-US-based settings where the cutoffs for a true positive have varied. This is problematic especially since they did not confirm their positive results (or a subset of these positive results) using the more specific Western Blot. This is a real limitation that needs to be addressed (of note, using positive and negative controls from the commercial assay does not necessarily address the issue of false-positives).

4. The Discussion could be shortened significantly; I suggest a maximum of two paragraphs. I am not sure the risk factors are worth going into with as much
detail as they don’t offer much new information that has not been detailed elsewhere.

Discretionary Revisions (which the author can choose to ignore)

**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:** Needs some language corrections before being published

**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