Reviewer's report

Title: Population-based seroprevalence of HSV-2 and syphilis in Andhra Pradesh state of India

Version: 2 Date: 12 November 2009

Reviewer: Deborah Watson-Jones

Reviewer's report:

However a few new errors have appeared in the revised manuscript. There needs to be a grammar and punctuation check.

The references also need checking as they seem to have gone out of order and several are missing.

Background, para 1.

Sentence beginning “Despite a large…” Should state “Despite two recent large randomised controlled trials.

The references for this section seem to be incorrect and should be:


The numbering of other references will need to be checked once this is corrected. This reference could be added into the discussion on STI trials that have had setbacks.

“HIV prevention interventions based on syphilis and other STI control have also led to disappointing results”. This is not strictly the case since one trial has shown a significant impact of STI treatment on HIV incidence so perhaps the authors could say something like “With one exception (and cite the Lancet Grosskurth trial in Mwanza, Tanzania), HIV prevention interventions based on syphilis and other STI control have also led to disappointing results”

Materials and methods

1st para, 3rd sentence; suggest add “….was done to select households in order to get 200-230 eligible persons aged 15-49 years.”

There are 2 full stops just before ref [11]. One could be deleted.

Ethical issues: I am still not quite clear what the participants were told prior to informed consent. Were they aware that their samples were being tested for HIV and syphilis? Were they offered an opportunity to get the results of the study lab
tests. What steps were taken to ensure facilitate referral to centres that can offer these tests? HIV VCT centres often do not test for syphilis so essentially it seems at the moment that participants who were syphilis seropositive diagnosed by the study were left untreated.

Results
Under Risk Factors for women I am inferring from the men that this is a history of transfusion, any recreational drug use, ever chewed tobacco

Risk Factors, 2nd para. Typo for OR related to only current tobacco use in men (2.07 not 2.07.97)

Typo under 3rd para risk factors for women - HIV (OR & 95% CI repeated twice).

Tables

General comment
I am still concerned about the analysis. I think there needs to be a more detailed explanation on how adjusted HSV and syphilis rates were calculated (Table 1). Should this not be adjusted HSV-2 prevalence? Not sure information on design effect is needed.

Factor name above HIV ½, HSV-2 and syphilis (seroprevalence) is not clear. “Other STIs” might be clearer.

Minor grammatical suggestions
Consistency in whether commas are as 1000 separators in numbers.

Background, 1st para.
Suggest start 1st sentence with “Overall 12,617 persons…”

Background. The comma between “…linking HIV to HSV-2, continues to support research” could be removed.

Results

2nd sentence, Suggest “Of the final 12,617 participants who provided…. .”

Same sentence The word “were” should appear before “women” and before “<25 years of age”

Discussion
“Herpes and syphilis treatment and suppression as an HIV prevention intervention have received some setbacks”.[33, 34] – there is no syphilis suppression. I think the authors mean Syphilis and Herpes episodic and suppressive therapy. Not clear what “some setbacks” means. Could mean treatment is unavailable or did not work.

“However, additional examination of this HIV prevention strategy continues given the strong relationship between these sexually transmitted infections
and the predominant practice of syndromic management in India.” This sentence is not clear. Do the authors mean relationship between these STI and HIV?

“However, there may be specific situations where this strategy is used for HIV prevention such as during pregnancy, as well as with preventing the devastating potential sequelae of neonatal herpes infection or intrapartum syphilis infection.” What is the evidence that this strategy (not clear which strategy) will work for HIV prevention in pregnancy? Generally I found this paragraph rather unclear and am not sure what point is being made exactly. This also goes for the sentence on “Additions to government STI syndromic management algorithms could include a longer duration and increased doses of penicillin in HIV infected persons, for example” which does not seem to follow the previous sentence.