Reviewer's report

Title: Prevalence and predictors of Pap smear cervical epithelial cell abnormality among women attending gynecological examination in cervical cancer screening unit at Debre Markos referral hospital, East Gojam, Northwest Ethiopia

Version: 3
Date: 13 March 2015
Reviewer: Hannah Leslie

Reviewer's report:

I appreciate the authors' efforts to revise the manuscript and respond to the comments of all reviewers. The revised manuscript is considerably improved. I have the following remaining comments.

Major compulsory revisions

1) The authors chose not to revise their analytic strategy to reflect the sampling probabilities for HIV+ and HIV- women. The additional information on sampling percents for HIV+ and HIV- women is helpful, and it seems like it would not have been difficult for the authors to include inverse sampling weights in the analysis to make the results more representative. However, with the results as they are, the authors should note in the discussion that the results are not fully generalizable even to the population of women coming to the hospital due to the stratified sampling and unweighted analysis.

2) The new limitations section notes that the hospital population 'may' not be representative of the general population. The authors also state that 55% of women presenting are HIV+, while ~ 500,000 Ethiopian women (<2%) are HIV+. They should provide a stronger statement that the hospital population is certainly not representative given this great discrepancy in HIV prevalence.

Minor essential revisions

1) A number of English-language errors remain in the document; the third sentence of the abstract for example has words out of order. The new paragraph on the Bethesda system in the background section includes a run-on sentence on the classifications that should be clarified or broken into several sentences. The abbreviation STI is typically used for sexually transmitted infection, not sexual transmitted infection. This is not a complete listing of the errors; a comprehensive final edit is recommended.

Discretionary revisions

1) I would recommend adding a phrase on the stratified sampling by HIV status to the abstract (in lieu of the information on SPSS, which is not necessary for the abstract) and also considering adding the phrase 'non-representative' in advance of 'study' in either the results or the conclusion section.

2) It would be useful to comment on why this patient population is so different
from the national population in terms of HIV prevalence - is this region likely to have much higher HIV prevalence than others? What other reasons might contribute to such a high HIV prevalence in the hospital population?

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

**Declaration of competing interests:**

I declare that I have no competing interests.