Reviewer's report

Title: An Appropriate Interval of Pap Smear Screening Protocol for HIV-Infected Women: A 5.5-year Cohort Study

Version: 1 Date: 18 August 2010

Reviewer: Yasmin Adam

Reviewer's report:

- Major Compulsory Revisions

1) In the “Results section”; the number of participants’ that were followed up at each Pap smear is not clear. Out of 821 women originally eligible 444 women who had a first Normal Pap smear had repeat Pap smears- and only 15-16% of 821 should have been excluded, this loss to follow-up should be explained.

2) What was the follow-up time? This is important. When did the incident abnormality occur? At the first, second, third follow-up Pap smears. What is the median follow-up time? What is the range of follow-up time? It is important to say when the first abnormality after a normal Pap smear was detected as this would indicate when the first follow-up should be. What was the mean/median number of pap smears per patient?

3) The authors conclude that 3 and a half years of follow-up is necessary, however with the attrition of patients over time, their conclusions after 2 years cannot be valid.

4) In the discussion, paragraph 7 it states that there was only one patient with tissue diagnosis of CIN11-111, and yet there were 19 women with colposcopic diagnosis of CIN 11-111. The fact that they are from a low-socio-economic background and cannot have a biopsy does not make sense. So are these women treated without histological diagnosis? What about the one patient with invasive carcinoma, was this diagnosed by tissue diagnosis?

5) It is important to bring to the reader that even though the incidence of abnormal lesions is high, these are mainly low grade lesions.

- Minor Essential Revisions

1. In the Abstract, under methods “associating” should be changed to associated.

2. In the “Methods” section- paragraph 2; the abbreviation VCE should be explained.

3. In the “Methods” section paragraph 2; The current recommendations are that all women who are HIV infected with an ASCUS or more on cytology should be referred to colposcopy. The authors should explain why colposcopy was not offered to all women with an abnormality

4. In the “methods” section-paragraph 3, one of the variables used is “assumed
duration of HIV infection” this should be explained- so that the reader understands the robustness of this measure. Similarly “lowest cd4 count” should be explained. Is this the lowest recorded and how many measures did the women have? Is it for eg the lowest of 3, 4 etc measures.

5. Could the researchers have the Pap smears for the one patient with HSIL which turned out to be malignant reviewed?

- Discretionary Revisions

None

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**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.