Author's response to reviews

Title: Determinants of sexual activity and its relation to cervical cancer risk among South African women

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Version: 3 Date: 25 October 2007

Author's response to reviews: see over
Dear Dr Edmunds,

I have uploaded the revised manuscript as well as a detailed response to the second round of reviewer’s comments (below). We have made further changes in line with the reviewer’s comments and clarified issues with respect to taking specimens for HPV and have revised the manuscript accordingly to reflect this – these are highlighted with a yellow background in the manuscript for ease of reading. Thank you for your continued consideration of our manuscript.

We look forward to hearing from you.

Yours sincerely,
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Responses to second review by authors: Responses by authors are in italics

Ref: MS: 1324696400125442 (BMC, Public Health)

Manuscript Title: Determinants of sexual activity and its relation to cervical cancer risk among South African women

Reviewer's report
Version: 2 Date: 18 September 2007
Reviewer: Patti Gravitt
Reviewer's report:

General

The authors addressed the original concerns raised by the reviewers. It was not noticed in the original review, but HPV status appears to have been measured (apparently in both cases and controls) but not used in any analyses. Since sexual behavior is thought to increase cervical cancer risk through increasing risk of HPV exposure - excluding this important measured variable is a concern.

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

Look at HPV status associated with young age at sexual debut and increasing number of sexual partners. Adjust the analysis in Tables 4-5 for HPV status - one
would expect the sexual behavior associations to be significantly attenuated through this adjustment. Even if this occurs - it still shows that cervical cancer risk is increased by sexual behaviors as a result of increasing risk of HPV exposure. If the results are not attenuated; this would also be an interesting finding.

*Endocervical scrapings for HPV testing was taken from controls only. HPV specimens were not taken from cases as many were deemed to be too sick at the time (a large proportion were stages 3 and 4 cancer) to engage in invasive specimen collection. The high risk HPV status of controls only was therefore verifiable.*

This is now clarified in the manuscript and reads: “Permission was obtained from controls and endocervical scrapings taken for HPV testing at the same time. These were assayed for HPV infection using the Hybrid Capture II test for detection of high risk HPV types [7]. HPV specimens were not taken from cases as many were deemed to be too sick at the time (a large proportion were stages 3 and 4 cancer) to engage in invasive specimen collection. The high risk HPV status of controls only was therefore verifiable. “

*Hence only in Tables 2 and 3 (not in Tables 4 & 5) could the analyses be adjusted for HPV status. The analyses have been adjusted for Tables 2 & 3, the results included and commented on in the discussion section of the manuscript.*

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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)**

Page 8, 4th line - at this point in the description of the study, the age at first sex was not reported as a binary variable, but as an ordinal variable with 3 categories. Prevalence ratios may be a more appropriate measure of association for common outcomes such as those in Tables 2-3. In results, the ORs presented are from the multivariate analysis, refer to them as AOR (or adjusted OR).

All these minor essential revisions mentioned above have been corrected in the manuscript.

In addition the tables with common variables have been adjusted to reflect crude and adjusted prevalence ratios rather than odd ratios. The tables and text have been amended to reflect this. As the outcomes were not materially different, the discussion remains as it is.

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**What next?: Accept after minor essential revisions**

**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 with respect to this manuscript.