Reviewer's report

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

**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.

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**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. Recent data have suggested a synergy between duration of HPV infection and concomitant infection with Chlamydia trachomatis and Trichomonas (see Shew ML et al Arch Pediatr Adolesc Med 160, 151-156 (2006)). One would imagine that concomitant STIs (if measured) would be common among these women.

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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).

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Discretionary Revisions (which the author can choose to ignore)

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

**Level of interest:** An article of limited interest

**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.