Author's response to reviews

Title: Population and antenatal-based HIV prevalence estimates in a high contraceptive female population in rural South Africa

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Author's response to reviews: see over
Dear Sir / Madam,

Population and antenatal-based HIV prevalence estimates in a high contraceptive female population in rural South Africa by Brian D Rice, Jörg Bätzing-Feigenbaum et al

Manuscript reference:

We would like to thank the editor for the opportunity to resubmit the above manuscript and the reviewers for their positive comments and suggestions for amendment. We have taken the reviewers’ comments into account and have amended the paper. Below are the reviewers’ specific comments and the authors’ response to these.

Reviewer 1

1. Methods, page 7, para 1 – Please provide reference for the population in line 2.

As the data is our own we do not believe this line requires a reference. In response to the reviewers comments we have amended the sentence as follows:

“It covers 435 square kilometres and a total resident population of 85123 (unpublished data as of January 2005).”

2. Methods, page 7 – How was pregnancy related question asked to the respondents in the population-based survey? In other words, were the respondents given an indication to report any pregnancy irrespective of whether it resulted in birth of a child or not?

During each bi-annual demographic surveillance round, the household respondent is asked to indicate for each female household member less than 50 years old whether that household member is currently pregnant or was pregnant since the last household visit. If the answer is yes a pregnancy notification form is completed, if the pregnancy outcome is not yet known (e.g. currently pregnant) then a flag is recorded against the
currently pregnant household member for follow-up during the next surveillance round.

For the purpose of these analyses a pregnancy is included regardless of eventual outcome. To indicate this, we have amended the following sentence within the next to last paragraph of the methods section to read (underlined section represents changes):

“Women reported to the ACDIS during twice yearly fieldworker visits as having been pregnant (regardless of outcome), during the period 1st July 2004 to 30th June 2005, who were eligible for population-based testing, were identified to assist comparative analyses.”

3. Methods, page 8, para 1 – Please specify if the informed consent provided was oral or written.

The population-based HIV survey seeks written consent. An eligible individual is provided with a consent form which provides detailed information relating to the survey. This information is also read out in full in the local language by the fieldworker to all eligible individuals contacted.

In response to the reviewers comments we have amended the first two sentences of the third paragraph of the methods section to read:

“Ethical approval was received from the University of KwaZulu Natal (E029/2003). All individuals eligible for HIV testing were asked for written informed consent and informed about the potential risks to becoming aware of ones HIV status, about how and where HIV test results and post-test counselling may be accessed and, if found positive, how they may be referred to a local clinic for further screening and assessment of eligibility for antiretroviral treatment.”
4. Discussion – The issue of low rate of HIV testing is now addressed in the discussion. It may be useful to address it in the beginning of the discussion rather than after discussing the study findings so that the readers have a context for the study findings.

In response to the reviewers comments the discussion now opens with the following paragraph:

“The results of this paper show population-based estimates of HIV prevalence in women to be consistently lower than ANC-based estimates. Although there are several possible explanations for this difference (discussed below), one possible explanation that should first be considered is unrepresentative testing in the population-based survey.”

The original first two paragraphs of the discussion have not been moved and are now paragraphs 5 and 6. Paragraphs 7, 8 and 9 in the previous version have been moved and now represent paragraphs 2, 3 and 4.

To ensure the remainder of the discussion flows following these changes we have restructured a few of the subheadings as follows:

Previous:

a) Explanations for differences in prevalence estimates - age, contraceptive-use and fertility (header to paragraph 5 of discussion)
b) Explanations for differences in prevalence estimates - unrepresentative reporting and under-reporting of pregnancies (header to paragraph 12 of discussion)

Now:

Additional explanations for differences in prevalence estimates

a) Age, contraceptive-use and fertility (amended header to paragraph 9 of discussion)
b) Unrepresentative selection of clinics in ANC sentinel surveillance (new header to paragraph 11 of discussion)
c) *Unrepresentative reporting and under-reporting of pregnancies* (amended header to paragraph 13 of discussion)

**Reviewer 2**

No further comments to respond to.