Reviewer's report

Title: Antenatal care and perinatal outcomes in Kwale district, Kenya

Version: 2 Date: 6 October 2007

Reviewer: Justus Hofmeyr

Reviewer's report:

General

The request is for quick statistical advice only, so this is not a comprehensive review.

1. I did not find obvious errors in the statistical calculations.
2. I found the reporting of a single p value for differences across 5 dispensary populations confusing.
3. The authors mention that differences in ANC attendance between women with good and poor outcomes may be influenced by the fact that women with early pregnancy loss have less time to attend ANC. The same argument applies to low birthweight, as some of the low birthweight babies would be preterm, and would be expected to have fewer ANC attendances because of the shorter pregnancy. I would regard these effects of pregnancy duration on ANC attendance so fundamental, that I would regard statistical comparisons of ANC attendance between good and poor outcome groups as misleading and best not reported.
4. Although in the results the word 'association' is used, throughout the rest of the paper the word 'effect' of ANC attendance on various outcomes is used. As causality is not only uncertain, but for many of the outcomes unlikely, I would suggest use of the word 'association' throughout.

This is a very important paper, and it's strength lies in the fact that it is a community-based study with very high response rate, giving very accurate data on what is happening in the area. My personal opinion is that much of the comparative statistics in the paper detracts from the main message, and that a simple descriptive paper on what was found, omitting the comparative statistics, would be more powerful. The important point to be made is that these data are more reliable than other non-community-based studies which found higher rates of use of health services.

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

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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)
Discretionary Revisions (which the author can choose to ignore)

**What next?**: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

**Level of interest**: An article of importance in its field

**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