Reviewer’s report

Title: Timing of antenatal care for adolescent and adult pregnant women in south-eastern Tanzania

Version: 1 Date: 16 November 2011

Reviewer: Rachel Rowe

Reviewer’s report:

Major Compulsory Revisions

1. In the Background section on p. 6 the authors refer to a number of “exploratory studies”. I am not clear about the status of these studies. They appear not to have been published so some more information here would be useful.

2. Methods

   a. Data collection: Would it be possible to give the questionnaire used in an appendix?

   b. Data analysis: It is not clear how the multivariate regression model was constructed. Some more information on the criteria used to determine whether factors would be included in the model and the order in which factors were added to the model would be useful. Please also give the rationale for the choice of reference category for regression analyses. For one or two comparisons the reference category is very small, which is much less efficient statistically.

   c. Please give a brief statement about how missing data were handled. Generally this appears to be low, but I am not clear why it is so high for “perceived service quality” and “perceived ANC timing”. Is missing data the explanation for why the sample size for the multivariate model is so much smaller than the overall sample size?

   d. The authors have chosen to use gestation age in months as the measure of when ANC attendance was started. I am curious as to why they chose months, rather than weeks, as the latter is more widely used and may be easier to interpret. Just for clarity, is a gestational month four weeks or a calendar month?

   e. With regard to ethnicity the authors have chosen to compare the Sukuma group with women from all other ethnic groups, presumably partly because of the exploratory studies to which they refer. This should be clarified, along with whether there were any other ethnic differences in attendance.

3. Results

   a. In my view, the authors’ reference to “early and late” ANC attendance, e.g. in the results section, but also elsewhere, is confusing. This suggests that some categorisation of ANC attendance was used whereas in fact the study explores the “timing” of attendance and very few women attended “early”. It may be more appropriate to use the words “timing” and “earlier” and “later” attendance. It would also be helpful to give an explicit definition of “late” attendance (e.g. after
the gestation recommended in WHO guidelines) and therefore only use the word “late” when referring to this.

b. In Table 1, or in another separate table, it would be helpful to add descriptive statistics about the timing of women’s attendance for ANC. This is referred to in the text in the section entitled “Timing and reasons of ANC enrolment”, but it would be better to also see these presented in a table.

c. In Tables 2 and 3 it would be better to see exact p values rather than references to <0.10 etc.

4. Discussion

a. On p. 14 the authors discuss possible explanations for their finding, which runs contrary to evidence from other studies, that adolescent women did not attend ANC later than adult women. As part of this discussion they suggest that this may be explained by much higher levels of primparity in adolescent women. Since the multivariate regression model adjusts for parity, this does not seem a plausible explanation.

b. The authors correctly state that one limitation of this study was that they were unable to obtain information on women’s overall attendance at ANC, only their first attendance. A further limitation, that should be discussed, is that presumably there are some women who do not attend ANC at all, who would not have been captured by this study. Is there any evidence from other studies of the prevalence of non-attendance for ANC?

c. In the first paragraph on p.16 the authors refer to nurses “creating threatening informal rules” and “rude behaviour” by nurses. This is strong language for which there doesn’t appear to be much evidence and therefore appears rather speculative. Please consider toning down the strength of these assertions.

Minor Essential Revisions

1. Results:

a. In Table 1 in the adult women column, the figures for the n and % for the two categories of abortion/stillbirth appear to have been transposed vertically. The same appears to have happened in the ethnicity group in the same column.

b. In Table 1 on p. 26 there is a superscript a next to “Money” with no corresponding footnote.

c. At the bottom of p. 11 it states that “primiparous women first visited ANC 0.89 month” earlier whereas in Table 2 the figure given is 0.87. One of these figures needs correcting.

d. In Table 2 under “Knowledge of services” the “High” category is shown as the reference category whereas it looks as if this should be the “low” category.

e. The sentence in the second paragraph on p.15 that begins “Knowledge about available services...” is unclear – please reword.

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.