Reviewer’s report

Title: The influence of socioeconomic factors on choice of infant male circumcision provider in rural Ghana; a community level population based study

Version: 0 Date: 04 Apr 2017

Reviewer: Matthew Westercamp

Reviewer's report:
Study is a population-based cross-sectional study conducted in 2012 in rural Ghana describing the effect of family income, distance to health facilities, and cost of circumcision on provider choice. The manuscript is well written and describes issues with the potential to inform interventions with substantial public health impact. Described below are a few minor issues I suggest be addressed before publication with several additional suggestions for consideration.

Essential Comments:

1. Methods - A brief description of any eligibility criteria for the Neovita trial that may have influenced sample selection for this sub-study is needed. Relatedly, on page 5 lines 1-10 the description of the exclusion of infants over 12 weeks of age needs clarification. While the rationale for exclusion is clear, it is not clear why, given the study design, visits would occur after 12 weeks given that follow-up visits were to occur between 8 and 11 weeks. The reader questions - Are these infants essentially 'lost to follow-up' or do they represent more difficult families to locate? The proportion, 22% of those eligible, is substantial and warrants some description/discussion.

2. Overall statistical analyses are appropriate in design and execution. However, the interaction between 'distance to health facility' and 'income status of the household' should be explored. If indicated, stratified analysis by either distance or income may be informative.
3. It appears that table 2 may have an error. Results for 'distance to health facility' are provided for model 1, which is described as not including this factor, but are not included in model 2, which is described as including it.

Additional Suggestions:
1. Introduction: Suggest a brief description of the prevailing reasons parents seek infant circumcision in Ghana (e.g., religion, cultural practices, health, other). This would provide good context for your results.

2. Table 1: Suggest removing the missing data column (n=3) and finding a more elegant way to present these 3 infants.

3. Table 2 Suggest removing p-values from this table. P-values are largely unnecessarily as 95%CI are provided and non-informative as the values provided appear to represent group difference rather than for the individual comparisons being made.

4. Suggest adding a description of why infants may have remained uncircumcised. Specifically, is it possible some portion of these (n=291) represent delayed circumcisions - happening after study visit? An extension of this is describing the 'standard age' infants are circumcised in this population (e.g., within XX days of birth).

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?

If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**

Please indicate the quality of language in the manuscript:

Acceptable

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