Reviewer's report

Title: Helicobacter pylori infection in pregnant women in four districts of Uganda: role of geographic location, education and water sources

Version: 1 Date: 28 May 2014

Reviewer: marion rowland

Reviewer's report:

This is a very interesting manuscript and highlights the declining prevalence of H. pylori in less developed regions of the world.

Major points

1. The study included 500 women but it is unclear what percentage of the total attendance at antenatal clinics during the time frame this represents.
2. It is unusual that the prevalence of H. pylori declines in older women 16% compared to 53% in the youngest age group. Similarly the prevalence increases with increasing parity.
3. While the authors did not consider PPIs when enrolling participants, they should state the proportion of women taking PPIs in the study. Could this explain the unexpected low prevalence in older women.
4. Similarly the highest wealth quintile has the highest prevalence of H. pylori and this is also unexpected, as most infectious diseases are more prevalent among lower socio-economic groups. Is education a better marker of income than wealth index used in this study in Uganda.
5. In a multiple logistic regression model all factors in the model should be included simultaneously in the final model. It appears from Table 3 that each characteristic is examined individually using logistic regression. This reviewer feels that further analysis is required and the final model should include the numbers and the unadjusted odds ratios.
6. The differences in the type of water supply should be clarified as this reviewer cannot fully appreciate the difference between a public tap and a public well; a river or a spring/borehole.

Minor

While this work is very well referenced the list of references could be more focused.

Level of interest: An article of importance in its field

Quality of written English: Acceptable
**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

No Conflict of interest