Reviewer’s report

Title: Helicobacter pylori infections in Ethiopia; prevalence and associated factors: A systematic review and meta-analysis

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Reviewer: Jen-Hao Yeh

Reviewer's report:

This is a systematic review and meta-analysis to infection rates of Helicobacter pylori among different areas and populations in Ethiopia. In this article, the authors found several risk factors, such as alcohol consumption, absence of hand washing, and presence of GI symptoms were associated with higher infection rate.

Although this is a comprehensive review, several points need to be addressed.

1. The authors provided the search strategy and keywords. Using this strategy on Google Scholar, there is 436 records; and this seems not consistent with the PRISMA flow chart in Figure 1. In addition, I can not find some unpublished articles in the reference (such as Alemayahu, 2011). I would like the authors provide the sources, and may consider if these unpublished studies should be present in this meta-analysis.

2. In the results of risk factors of H.P infection, the authors stated: "Even though not significant; male participants (OR =…) and urban residents (OR = …) were more likely to be infected …". In my opinion, this was not an appropriate statement because both results were statistically significant, and the pool OR can favor either side merely by chance. A more conservative and solid inference is recommended.

3. In table 1., Serology test is apparently associated with higher infection rate compared to stool antigen test. Since stool antigen is a relative new method, it is possible the trend of declined infection rate by time is confounded by the test method. I suggest the authors can analyze the effect in the stool antigen group additionally (e.g: infection rate among 2008-2013 vs. later).

4. The authors stated "participants with gastrointestinal (GI) symptoms were 2.2 times more likely to be infected with H.pylori …". It might be true with risk ratio, but this is not the case for odds ratio.
5. This review included a large number of studies, therefore more delicate and representative analysis may be carried out. For example, 10 studies were noted to have multiple tests for validation of infection; how about the pooled results of these studies?

Minor points:

1. The search process should be done with independent reviewers to minimize bias and missing data.

2. The form of tables might revise to fit for formal publication form (Only bottom frame lines should be present).

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

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

Unable to assess

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