Reviewer's report

Title: High prevalence of hepatitis B and poor knowledge on hepatitis B and C viral infections among barbers: a cross-sectional study of the Obuasi municipality, Ghana

Version: 2
Date: 3 September 2015

Reviewer: Anjali Pai

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Summary

This is a small cross-sectional study to determine the prevalence of Hepatitis B and C infections in barbers in a Ghanian town. Hepatitis B and C infections are important issues that can pose a threat to the health of the public.

The title and abstract accurately express the main findings of the study. The literature review, although relevant and gives context to the study, is limited to two studies conducted only in Africa. The objective of the paper is clear and methods used are appropriate. Some clarifications are needed as mentioned in comments below. The discussion would also benefit from some amendments but the limitations are clearly stated.

Overall, this paper has been presented well with a good structure and formatting. Professional language editing is recommended. It can be accepted for publication after revisions are made.

Minor issues not for publication

1. Please edit the manuscript to ensure professional language is used throughout
2. Under ‘Background’, first paragraph, HBV abbreviation is first used without defining.
3. Under Methods, first paragraph, line 19 would better read: ‘Obuasi is a major gold mining town’, OR ‘Obuasi is the main gold mining town…’
4. Under Methods first paragraph, it would be consistent to change the reference for the population of Obuasi to a numerical reference.
5. Minor formatting change – currently it appears as though headings ‘statistical analysis’ and ‘results’ are sub-sections of the Methods section.
6. Under Results, first, second and third paragraph small grammatical errors – ‘have had’ to ‘had had’ (lines 9, 17, 23)
7. Under Results fourth paragraph and Under Discussion first paragraph; it should be ‘…barbers who were single…’
8. Under Results fifth paragraph, it should read ‘Majority of the participants had heard of HBV infection…’
9. Under Conclusion first paragraph, in line 21 ‘were’ should be deleted to
‘…barbers respectively’. Also in the same paragraph, it should read ‘…prevalence of HBV was found among barbers in their third decade of life…’

Minor Revisions

10. Under Statistical Analysis, and results third paragraph, it would be more appropriate to use ‘multivariable’ instead of ‘multinomial’ or ‘multivariate’ logistic regression.

11. Under Methods, second paragraph ‘Study Population’ it is not clear why 180 has been mentioned as the number recruited when 200 has been taken as the total number in calculations. This is the same for first paragraph under Results (line 9). Please clarify.

12. Under Methods, second paragraph ‘Study Population’, was the survey questionnaire piloted (Is that what is meant by ‘pre-tested’?). It would also be useful to know whether the interviews were carried out before or after blood collection, which may introduce bias to survey responses.

Major Compulsory Revisions

13. In the background section, it would be useful to include similar studies conducted elsewhere outside Africa for comparison in addition to those mentioned.

14. Under Methods, second paragraph ‘Study Population’, it would be useful to explain how the barbers were recruited. Was it a representative sample?

15. Table 4 has missing data under HCV columns – particularly for 95% CI – only a single figure is presented rather than upper and lower limits, OR are not presented for all variables and p values are presented inconsistently. Please complete. As only one participant was positive for HCV, the association to working experience to HCV should be considered with caution.

16. It is also unclear how the association between being single and HBV infection is statistically significant as the 95% CI for the Odds ratio is wide and includes 1. Please confirm this finding.

17. Adjusting for all the risk factors, is the association between barbers and HBV and HCV infection low? This is not mentioned in the discussion and should be particularly because the proportion of barbers who have had unprotected sex is fairly high.

18. It would be useful to mention the limitations of a cross-sectional study in deducing causation.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

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