Reviewer's report

Title: Cross-sectional study of hepatitis B virus in rural communities, Central African Republic

Version: 1 Date: 2 April 2013

Reviewer: Josephine Bwogi

Reviewer's report:

Title:
1. Discretionary Revision.
   The title needs to be changed to show what has been studied and reported on. As it stands, it would seem as if the authors only studied the hepatitis B virus yet they also studied the Hepatitis B virus infection. I would propose change to read Cross- section study of Hepatitis B virus infection.... or another title to encompass the comments above.

Methods

Study population
2. Discretionary revision. Page 3 The description of the study populations’ sex and age could be shifted to the results section
3. Major compulsory revisions. There is a need to describe how the authors came up with the sample size of 273 and also describe how the 273 healthy individuals were selected for study.
4. Discretionary revision. Page 4 serological tests: There is need for reorganisation of statements in this section for better flow of information. Statement 2 could be no 1, followed by statement 1, then statement 3.
5. Major compulsory revision. Page 4 Clarify on what was used for DNA extraction, was it the elutes from the DBS as stated in the abstract or DBS

Statistical analysis
6. Discretionary revisions. Page 5 Could expand on what was assessed for significance.

Results
7. Discretionary revisions . Page 5 Provide interpretation of the anti-HBc antibodies tests
8. Minor Essential revisions. Page 13. Table 1 last line in table, Use HBc instead of Hbc.
9. Discretionary revisions. Page 14. Table 2 is not clear. Change presentation for clarity
10. Major compulsory revisions. I propose addition of a table showing how the different risk factors studied relate to HBV positivity.

Discussion

11. Major compulsory revision. Page 7, paragraph The authors discuss the literacy and social profiles group but these were not described in the results section. There is a need to describe these in the results section.

12. Discretionary revision-Is there any explanation for the higher prevalence of HBV observed in Ouaka?

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.