Reviewer's report

Title: High burden of hepatitis B infection in Northern Uganda despite nine years of childhood hepatitis B vaccination: results of a population-based survey.

Version: 2 Date: 26 February 2013

Reviewer: Paul Hewson

Reviewer's report:

Major Compulsory Revisions

To my mind, various issues relating to the science of Hep B have been better dealt with by the other referees who have more subject matter knowledge than I have. Therefore, my two concerns are (a) the gender mismatch and (b) the small numbers in key groups on which prevalence estimates are based.

I appreciate that this is a report of a substantial piece of work and accept why we have a gender mismatch. However, I think this needs to be carefully acknowledged in the abstract - in the patients and methods section. You do mention that your target population is the "at home during the day" population - I think this needs to be clearly set out in the abstract for the benefit of systematic reviewers and so on.

Secondly, I think the actual numbers (numerator / denominator) need to be quoted in the paper in conjunction with the percentages.

Thirdly, I do wonder whether we have clustered sampling here, or entirely random sampling.

For what it's worth, I entirely agree that you should retain non-statistically significant predictors when calculating adjusted odds ratios - again the sample sizes are maybe too small for statistical significance to be declared but the odds ratios still get adjusted for the partial effects of these theoretically important predictors. What I don’t understand is why you don’t use logistic regression here to produce adjusted O.R.s (although I appreciate you don't have many positive responses on which to build these models).

Discretionary revisions

I think the English is acceptable, but could be improved slightly which would help other people read and refer to the paper.

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

Quality of written English: Needs some language corrections before being published
Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I have no competing interest