Reviewer's report

Title: To bite or not to bite! A questionnaire-based survey assessing why some people are bitten more than others by midges

Version: 1 Date: 14 March 2010

Reviewer: Nabie Bayoh

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Major Compulsory Revisions
(Option)

Minor Essential Revisions
1. The conclusion drawn relating to malaria should be toned down to “…..tropical areas of the world where biting insects are prevalent and some of which can transmit disease”.

In as much as the study shows factors that some adults are more attractive to midges than others the implication of malaria mosquitoes whose attractiveness story outlined in the Background section of the paper (that is, preference to feed on adults, larger people, males and pregnant women) together with data of conflicting studies showing no relationship whatsoever makes the parallel drawn in the conclusion an over statement. Also what the results of this study show are more in line with the “lack of relationship” when you consider the factors linked to malaria mosquitoes.

2. The distribution of the factors that did not influence bite among the population eg. Consumption of flavoured food, Alcohol consumption, smoking, diet, oral contraceptives, stage of menstrual cycle should be provided. This can be in the form of a table. (Consider adding on to Table 1 but this may make Table 1 a very large table, so maybe a paragraph on how the various levels for each of these factors were distributed among the population).

3. Figure 1 should be deleted and the data included in Table 1. It will be nice to see the variation in residence alongside the other characteristics of respondents provided in Table 1.

4. Since bite did not seem to have a relationship with sex, it will be nice to provide statistics on the effect of height and BMI on the population with both sexes combined.

5. Further analysis of the hereditary data is necessary. Could it be that the residence of the parent had an effect on rate of biting on the child? Since the only factors among the parents that affect bite were height, BMI and residence, could you tease out what hereditary traits you think are already manifest in the child that could be responsible for attractiveness.
6. Editorials:
Line 273 delete repetitive text “this area”
Line 296 Insert name of author at citations 33 and 34
Discretionary revisions
7. In the literature review, it will good for the authors to provide some information on the biting behaviour and biting habits of Culicoides impunctatus and also the known methods of protecting against the bite of this insect.

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

Quality of written English: Acceptable

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