Reviewer's report

Title: Home-based voluntary HIV counselling and testing found highly acceptable and to reduce inequalities

Version: 3 Date: 29 April 2010

Reviewer: Alistair W Stewart

Reviewer's report:

Thank you to the authors for the clarifications made in their paper. However, I have still struggled to understand the analyses. I've suggested below that making the 5 definitions clearer may help the understanding of the results.

The authors focus on their ‘after’ classification where I think that their ‘uptake’ category is the appropriate category when there are comparisons with before yes/no.

Presenting a table as above in the manuscript would be very beneficial to many readers so they could more easily understand the 5 definitions.

It can be seen that AFTER must be the same or greater than BEFORE and that any comparison as to whether they are different is not valid or sensible. By definition, if either N5 or N6 are not zero then AFTER must be greater than BEFORE (regardless of what any statistical test might say). If no statistical testing is done, then presenting AFTER and BEFORE together (as in Figure 1) may be informative. For any statistical testing, comparing UPTAKE between BEFORE and NOT BEFORE is a valid comparison and of interest.

Table 3 (will become Table 2) (the large Table) is complex and doesn’t seem to show what is described in the legend. It also contains the AFTER category for which it is invalid to compare (statistically) with BEFORE. This table focuses on the variations in HIV testing by age, marital status, sex and education where as the title implies it focuses on BEFORE and AFTER. The legend needs to describe accurately what is presented in the table.

Minor Essential Revisions

Table 1: none of the subcategories add to the total rows. The percentage acceptable for 15-24 in the not ever tested category has a total percentage that is inconsistent with the men and women values. (The total value must be between the others.)

In the Abstract:Results the P value for the difference between 18% and 38% is based on an invalid test and not reported elsewhere in the paper.

AOR needs to be defined in the methods
In paragraph 1 of the results an AOR value is given 0.5 but its CI 31.7-67.9 is wrong.

The spelling of “Intention “ needs to be corrected in a number of places.

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