Reviewer's report

Title: A community-based cluster randomized survey of noncommunicable disease and risk factors in a peri-urban shantytown in Lima, Peru

Version: 5
Date: 3 March 2014
Reviewer: José E Hagan

Reviewer's report:

Again this is a well done manuscript describing an important and under-studied public health gap in marginalized slum populations. The revised manuscript is strengthened by the use of statistical survey methods to adjust for the household clustered sampling design and bias due to non-response of males in the eligible study population, as well as the inclusion of a broader range of potential confounders in the adjusted analysis.

The authors have adequately addressed the most important revisions I recommended in my initial review.

*Minor Essential Revisions*

In the Methods section (Line 238), the authors mention a range of potential confounders that were considered for inclusion in the adjusted models, however it is not clear by what process and criteria the final adjusted models were selected. This should be specified.

In the Results section (Lines 297 and beyond...), the authors describe the results of "adjusted" models for age and gender differences in prevalence of the NCD diagnoses and risk factors of interest. However, it was not clear from the manuscript which variables were included in the adjusted models, and whether the same variables were included in the adjusted models for each for the outcomes of interest. This should be clarified.

In the legend for Figures 1 and 2 and/or text references to these figures, it should be specified more clearly that the asterixes referring to significant differences between age or gender groups and the various outcomes of interest reflect univariable comparisons using a logistic regression model, rather than multivariable adjusted models as might be otherwise assumed.

*Discretionary revisions*

Although it can be argued that the bias due to nonrepresentative participation in the study was adequately adjusted for by the use of sampling weights, it would be interesting to see a brief discussion of the author’s assessment of why there was such unequal participation between genders, and possible strategies for improving participation among males, as it may be relevant to the design of other studies in this or similar populations.
Level of interest: An article of importance in its field

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.