Reviewer’s report

Title: Iodine nutritional status and risk factors for goitre among schoolchildren in South Tajikistan

Version: 3 Date: 2 September 2013

Reviewer: Christina Bamia

Reviewer’s report:

Major Compulsory Revisions

The authors have addressed most previous comments by the Reviewer. However there is a pending issue regarding one of my previous comments (comment 4) that was done with respect to the variables included in the model and, in specific, with respect to the parametrization of these variables. For some variables the authors report the association of one of the categories as negative and the association of another category positive but no reference category is mentioned. More specifically:

In Table 2 the list of variables included in the logistic regression models, as well as the accompanying odds ratios and 95% CIs are shown. Most of these variables are categorical, therefore, an odds ratio of 1 corresponds to the reference category. However, with respect to variables “Salt bought from:”, “Type of salt package:”, Frequency of buying salt:”, “Quantity of salt bought last time:”, and “Storage of salt:” there is no indication about the reference category. This presentation gives the impression that each of these categorical variables was considered not as one variable, but as a set of dummy variables which is clearly not correct. In addition, the interpretation of the odds ratios in the manuscript regarding these variables is supportive of the latter (not correct) scenario.

Of note is that three of these variables are statistically significant in the multivariate analysis and, thus, they are the main findings of the analysis. Given the above, it is very important that the above issues are clarified.

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