Reviewer’s report

Title: A cross sectional study: Latrine coverage and associated factors among rural communities in Bahir Dar Zuria, Ethiopia.

Version: 3 Date: 20 November 2012

Reviewer: Paul Emerson

Reviewer’s report:

General comments

1. The author should be congratulated on a very well written paper.
2. The authors have selected a stratified sample design. Because the selection of clusters for inclusion in the survey is not random for the whole woreda the estimate for the woreda must be weighted by the probability frequency for each strata. The coverage estimate for the whole woreda will be biased towards the central stratum at the moment. If we assume that the woreda is a circle (which I know it isn’t) and the cluster are selected on concentric circles with radius 10, 20 and 30 km then the land area for each successive strata will be approximately 3 times that of the central stratum. Each cluster in the second stratum will have three times the weight, approximately, and each cluster in the third stratum will have nine times, approximately, the weight of the central stratum.
3. It would be instructive for the authors to compare the coverage found in their survey against the latrine coverage reported by the woreda administration.
4. The authors should refer to the paper recently published by Rachel Ross et al. in Tropical Medicine and International Health which looked at actual latrine coverage and reported coverage in a woreda in East Amhara.
5. The discussion is currently thin and warrants additional flesh.

Specific Comments

ABSTRACT
The meaning all functional should be explained in the abstract.

METHODS
1. Under study design replace the word “community” with “district (woreda)”.
2. Please insert National in Amhara Regional State.
3. Please give a reference for the study used to determine sample size.
4. Please describe the systematic sampling method used.

OPERATIONAL DEFINITIONS
1. Under item 5 the authors mention “no observable fresh feces through the squat hole”. This does not seem consistent with satisfactory utilization.
2. In items 6, 7 and 9 please remove the phrase “for supportive supervision by health extension program workers”. The health extension workers are based at the 32 health posts the distance from the district health office is immaterial.

RESULTS
1. The authors should avoid using words such as “only” and “just”. These words are pejorative and load the reader with bias.
2. The authors should define what they mean by dwelling, and the significance of the location also the latrine being less than 6 m from a dwelling.
3. The authors should make it clear whether only one option was available to respondents for the question of “who provided advice to build a latrine”. I would assume it would be possible for more than one person to give advice on latrine building.
4. From my reading of the results latrine coverage was higher in the clusters further from the city, 65.4% compared to 55.4%. Not higher as is stated in the text.

DISCUSSION
The findings cannot be generalized, as they are, to the whole woreda unless they are weighted by the sampling probability. The findings can certainly not be used to make assessments on progress towards the national target. The sample was selected to provide a latrine coverage estimate for one woreda only there are 700 woredas in Ethiopia.

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 have no competing interests