Reviewer's report

Title: The Rising Overweight-obesity Rate and Its Socio-Demographic Correlates in Addis Ababa, Ethiopia

Version: 1 Date: 2 March 2014

Reviewer: Hélène Delisle

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• General comments:
This is an interesting paper as it addresses the double burden of underweight and overweight, a little documented phenomenon so far which results from a rapid nutrition transition in low-income countries. Although it is primarily descriptive, the study suggests than in low income countries such as Ethiopia, overweight/obesity is increasing much faster than underweight is declining in women, which is a real health issue. The discussion, however, would require strengthening and the conclusion would have to be clearer.

• Specific comments:
1. The title does not describe the content of the paper very well. Why not ‘The double burden of underweight and overweight in Ethiopian women’.
2. In the abstract, the 43% increase in urban obesity among women appears dramatic unless the (low) prevalence rates are also given (3.0%, 4.3%).
3. The conclusion is far from clear in the abstract. Among others, it is not the ‘nutrition transition of the double burden’ but rather the nutrition transition which explains the double burden.
4. It is not clear why the wealth index was not used, which is unfortunate. Even if all study participants were in the highest category, differences in the score may be of interest.
5. How can exposure to media be qualified as ‘satisfactory’ or ‘unsatisfactory’? Satisfactory if the respondent uses one media at least once a week? Less judgmental labels are recommended.
6. Only 20% of subjects provided valid information on partner’s educational status and on place of delivery, which is extremely low and requires a caveat in the discussion.
7. Not only binary, but multiple logistic regression models were constructed.
8. Table 2: Why there are missing data in several places should be explained.
9. The authors do not describe and discuss some changes over time in the association of some determinants with outcomes. For instance, it is emphasized that higher education was associated with significantly higher likelihood of overweight/obesity. However, looking at Table 2, we note: 1) no data are available on education and underweight except in 2011; 2) in 2011, education...
level is significantly associated with neither underweight nor overweight. Regarding overweight/obesity, only age and education were significant (and only in 2000 and 2005). Therefore, some of the statements should be attenuated.

10. In the discussion, the issue of BMI cut-offs associated with increased health risk in various population groups should be brought up. There has been a great deal of discussion in several papers showing that the best survival was observed in the BMI range of overweight. However, a recent paper dismisses this, although in an Australian population (Joshy H et al, 2014).

11. The absence of data on cardiometabolic risk factors and on behaviours and lifestyles is a major limitation of the study, to be mentioned along the low rate of valid data. A paper by Zeba A et al in Burkina Faso investigated the ‘double burden of malnutrition’ in adults in connection with the nutrition transition and examined biological and biochemical correlated: Zeba A et al 2012.

12. Poor access to drinking water may be regarded as an indicator of low socio-economic status and this should be mentioned.

13. On P. 2, line 4, hypertension is repeated twice. It should read diabetes.

14. The first time an abbreviation in used, it has to be defined (see SSA on p. 3; ICF on p.5).

15. P. 4, paragraph before last: last 2 sentences should be moved with the objectives paragraph on p. 5.

16. P. 10: a ‘visible’ difference: not scientific. It is either statistically significant or there is a trend.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

No competing interest to declare