Reviewer's report

Title: Social and cultural factors underlying generational differences in overweight: a cross-sectional study among ethnic minorities

Version: 1 Date: 12 August 2010

Reviewer: C Schooling

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Minor Essential Revisions
The 4th and 5th sentences of the introduction should be deleted because they do not follow the flow of the rest of the paragraph, which is about differences in adiposity by migrant generation, not differences between migrants (of any generation) and their host populations.

The third sentence of the second paragraph of the introduction is unclear. Do you mean that second generation migrants have lower rates of overweight or might be expected to?

Results
First paragraph:
- “marriage or family reunion” not “marriage of family re-union”.

Please update the references, and ensure that all the references are referred to consistently in the text. For example reference 3 says submitted when it corresponds to a paper published in EJE in 2007.

Major Compulsory Revisions
The introduction provides a rationale for examining whether social and cultural factors ‘explain’ differences in the prevalence of overweight between migrant generations. However, the authors have already shown in this sample that the trends in overweight by migrant generation are in opposite directions for men and women (Hosper et al EJE 2007), so they also need to give a rationale as to why these social and cultural factors would also be expected to have different effects in men and women. They should also make the findings of their previous study clear in the first paragraph of the introduction.

It would be very helpful if the authors could, with reference to other studies, explain whether the findings of their previous study (Hosper et al EJE 2007) are a general finding, in which case it is valuable to understand how they arose. On the other hand, if the findings of their previous study are an isolated finding, contrary to the general pattern of findings from other similar studies, then it might be better to examine whether their findings could be the result of some methodological problem rather than a general phenomenon with a general
explanation. The association between socio-economic position and obesity is context specific. Reference 10 says this, and this information should be reflected in the text. Socioeconomic status and obesity (McLaren L. Epidemiol Rev. 2007;29:29-48) would also be a more appropriate reference than reference 10.

Methods
Please report how the participants compared with the target population.

Please report how many heights and weights were self-reported and how many were measured.

Please report how many were missing an item on the cultural orientation scale, and then comment on the imputation in the limitations section of the discussion.

Please give a rationale for sex-specific analysis. Please also demonstrate that any observed differences of association between men and women are unlikely to have occurred by chance.

Results
First paragraph:
- Please be specific about which associations were stronger in women than men as referred to in the final sentence of the first paragraph.

Second paragraph
- Please be specific about which socio-demographic factors and socioeconomic factors were significantly associated with overweight among women not men. Ideally please also substantiate this statement with a test of effect-measure modification.

Discussion
Please compare your results with other similar studies.

Please consider whether your findings might be consistent with any other possible explanations which have recently been published, e.g. (Growth environment and sex differences in lipids, body shape and diabetes risk. Schooling CM, Lam TH, Thomas GN, Cowling BJ, Heys M, Janus ED, Leung GM; Hong Kong Cardiovascular Risk Factor Prevalence Study Steering Committee. PLoS One. 2007 Oct 24;2(10):e1070) or (A socio-biological explanation for social disparities in non-communicable chronic diseases: the product of history? Schooling CM, Leung GM J Epidemiol Community Health. 2010 Jun 1.)

Level of interest: An article of limited interest

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.