Reviewer's report

Title: Influences on Eating and Physical Activity Behaviors: A Qualitative Study of Adolescents in a Periurban Area in Lima, Peru

Version: 2 Date: 29 October 2015

Reviewer: Amanda Salis

Reviewer's report:

This is a very well written and informative manuscript that uncovers – using qualitative research methodology – important new information about the factors that influence food intake in adolescents in periurban Lima, Peru. The information in this manuscript will inform future research in this area, as well as informing the development of interventions to improve the diet of such adolescents. While my research expertise is in quantitative research of physiological and psychological factors controlling food intake, and as such I cannot comment on the methodology used in the current manuscript, I do have some comments that could further enhance this manuscript.

MAJOR

1. Why were female participants who were or who had been pregnant excluded from the sample? I feel that the reason for this decision needs clarification in the text. Given the high rates of adolescent pregnancy in the area, it would seem that excluding this population could render the interviewed population non-representative of the actual population.

2. Would 4 adolescents from the total sample be enough to obtain a comprehensive list of all the foods commonly consumed by adolescents in that area? Is there literature to support this number of participants for generating a list for a pile sort activity? Similarly, the pile sort activity involved a list of 30 commonly consumed foods. Is this enough of a list to enable groupings of foods? Perhaps an additional reference or two around this point would allay any potential questions in prospective readers’ minds.

3. While there is literature to suggest that samples as small as 12 can be sufficient to reach saturation of concepts in qualitative research, was there any evidence in the current sample that saturation of concepts had been reached prior to the last interview(s)?

4. The adolescents’ view on meat (“favorite, fatty, contain hormones”) is fascinating considering the high incidence of anaemia in this population. Can the Authors discuss this finding, in line with the availability of safe meat in the area? Could this seemingly negative view on meat consumption in this population be contributing to the high incidence of anaemia? Were there any major events in the area that rendered meat unsafe to eat for a period of time in the past, thereby fuelling negative views on meat?
5. The Figure would benefit from a legend with explicit explanations on how it was generated and what it means. The Figure should also be translated into English.

6. In reading the Results section, I feel that the manuscript would benefit from some degree of quantification of the findings. For example, various influences over eating having been mentioned, but it could be helpful if some numbers were provided to show how many of the total sample experienced each of those influences. Was it 1 of the 16 participants, or all but 1 of the 16, for instance?

MINOR

7. On line 180-181, how was randomness or representativeness of this small poll of adolescents at the vaccination clinic assured? For example, were these consecutive patients? Or all of the patients on the clinic records?

8. On line 186, what is meant by a ‘purposeful random sample’? This needs clarifying.

9. On line 198, the meaning of ‘written assent’ is not immediately apparent. Can more common words (or an explanation in parentheses) be used to describe what is meant here?

10. On lines 268-269, does ‘categories described previously’ refer to a previous publication, or previously in the text of the current manuscript? This needs either clarification or a reference if referring to a previous publication.

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.