Reviewer's report

Title: Physical activity differences between children from migrant and native origin

Version: 1 Date: 18 June 2014

Reviewer: Louise Foley

Reviewer's report:

Thank you for the opportunity to review the manuscript entitled “Physical activity differences between children from migrant and native origin” for BMC Public Health.

General comments

This was interesting study examining differences in physical activity between migrant and native Dutch children, and attempting to explain these differences. The cross-sectional design was appropriate for exploring the relationships between variables. Overall, I found questions posed by authors to be well defined. The methods were sound for assessing the research question, despite several limitations which were in general acknowledged and discussed. I think the manuscript would benefit from further proof-reading, as I found several minor typographical and stylistic errors.

Major compulsory revisions

1. General. The terms “physical exercise” and “physical activity” are used interchangeably throughout – please consider using “physical activity” only.
2. Abstract. Background. I found the first two sentences somewhat unclear “Children from migrant origin are at higher risk for overweight and obesity. As physical activity is a key factor in this risk….”. Do the authors mean physical activity is a key factor in the risk of overweight and obesity in general, or a key factor in the differences between migrants and non-migrants in terms of overweight and obesity? If the latter, it seemed as though the authors’ research question had already been answered in previous research. Therefore, I was unsure of the contribution of this study.
3. Abstract. Methods. I think it is important to mention that all of your outcomes were parent-reported.
4. Abstract. Results. Consider re-wording the sentence to read “In this sample, physical activity levels were significantly lower in migrant children, as compared to children in the native population”.
5. Abstract. Conclusions. Consider re-wording the sentence to read “…these characteristics provided only modest explanation of the differences in physical activity between migrant and non-migrant children in this study”.
6. Background. Sentence “Furthermore, childhood overweight develops into adolescent obesity”. As it stands, this sentence suggests that overweight children
always become overweight adolescents. Consider re-wording this.

7. Background. Overall, I felt the background section missed an opportunity to
discuss cultural factors and how these may contribute to differences in both
physical activity and overweight/obesity in migrant children. Does any such
literature exist? If it does not, then this is important to highlight. Your model looks
at elements of the social home environment; do the authors think the cultural
home environment might be also be an important factor? I appreciate that this
was not measured in the present study, but it may be a salient discussion point.

8. Methods. Sub-heading Study population. Please clarify who gave informed
consent – parent or child? If the parent consented, did child assent? Was it
written informed consent?

9. Methods. Sub-heading Study population. Consider explicitly stating that it was
a parent proxy-report of the child’s behaviour.

10. Methods. Sub-heading Measurements. Were the migrant classification
categories mutually exclusive? For example, if one parent was of Turkish origin,
and the other of Moroccan origin, what migrant category would the child be
coded as?

provide a reference for the sentence beginning “To assess children’s physical
activity level, we used a questionnaire that was largely based on the standard
method....”

provide some more information on this tool. For example, did it measure physical
activity across different domains (e.g., recreation, active transport), or only
across the recreational domain? Were different intensities of physical activity
considered (e.g., only moderate-vigorous)? What was the time frame of recall
(e.g., last week, last 4 weeks)?

13. Methods. Sub-heading Social environment: parental role modelling and
parental policies. Please provide some more information on this tool (see
comments in previous item).

14. Discussion. Paragraph 3. Consider re-wording the sentence to read
“Although the clear differences in levels of physical activity in our study between
children from migrant and native Dutch origin, traditional physical and social
characteristics of the home environment provided only modest explanation of the
differences”.

15. Discussion. Last paragraph. Consider re-wording the sentence to read
“However, our hypothetical model provided on a modest explanation of the
 differences”.

16. Discussion. Last paragraph. Please provide a reference for the statement
“since study from the United States suggest that in some minority groups
physical activity is considered as ‘a waste of time’ or as a luxury.”

17. Discussion. I think it is important to include comment on the limitations of
cross-sectional study designs as part of the discussion.
Minor essential revisions
1. Abstract. Sentence beginning “As physical activity is a key factor in this risk, aim of this study….”. I think this should read “As physical activity is a key factor in this risk, the aim of this study….”
2. Background. Sentence beginning “Specific symptoms….which were seen primarily in adults before..”. Suggest defining this more clearly – before when?
3. Methods. Sub-heading Study population. Sentence should be changed to “Many children from migrant and non-migrant origin attend school and live in one of these cities.”
4. Methods. Sub-heading Study population. Sentence should be changed to “Parents received an information letter.”
5. Results. Last para before the discussion section. Sentence should be changed to “…..when indicators of the social environment were added (third model).”

Discretionary revisions
None.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

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