Reviewer's report

Title: Metabolic syndrome in a cohort of Chinese schoolchildren: prevalence and factor analysis

Version: 2 Date: 27 August 2012

Reviewer: Constantina Papoutsakis

Reviewer's report:

All points are major compulsory revisions. These follow:

1. Revise the title to reflect the outcomes of the factor analysis. Currently the title is not informative.

2. p.4 Add the cut offs recommended by the working group on obesity in China in the text of your methods.

3. p.4 Citation for Tanner stage (20) is not appropriate. Include a citation that describes the method you used.

4. P5. Definitions. Add the specific criteria used for the IDF.

5. p.5 Include the specific criteria used for children under 10. Provide in the paper the rationale for including children under 10. As written this is still not clear in the paper.


7. P6 Provide citations for the exploratory factor analysis.

8. Discussion:
Continue to require extensive revision. There are many areas that are difficult to understand because of the poor quality of English.

9. P10 Explain more when you say: childhood MS was lack of stability…

10. P10 ‘Whether…follow-up data’: What does this mean? (Bad English)

11. P10 Factor patterns of MS (first sentence) is very difficult to understand.

12. P12 …this may implicate that central obesity…
It is not clear at all how you were able to separate the effect of central obesity form insulin resistance. How does your statistical explanation provide support to your claim? Explain better please.

13. In your data you did not find that Tanner was significant but others have! This needs to be discussed. Several papers have been published on metabolic
syndrome and adipokines in children. Authors of this paper should discuss similarities and differences with available data in their discussion.

14. One more point that was not addressed in the first review. The authors suggest adding the adiponectin/leptin ratio as one more feature of the MS in children. The authors should explain this in the discussion. With data from this paper, a waist circumference is more than enough. You may not make assumptions on what you might uncover with future data from your follow-up study. Only when this is available can you use it. At this time, it is not clear why adiponectin/leptin ratio or either one on its own would be of added value.

15. Statistical analysis: In the paper, it is not clear what adjustments took place for confounding factors. This must be included in the paper.

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

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

'I declare that I have no competing interests'