Reviewer's report

Title: Pubertal stage: Prediction of cardiometabolic risk by BMI and waist circumference

Version: 3 Date: 12 October 2014

Reviewer: H. David H McCarthy

Reviewer's report:

Report - discretionary revisions

This study was designed to evaluate the association between stage of puberty and cardiometabolic risk factors in Hong Kong children, and how the stage of puberty influences the predictions of cardiometabolic disease risk by WC and BMI. Essentially the findings of the study revealed that pubertal stage has a modulator effect on the prediction of cardiometabolic risk by WC and BMI in boys and to a lesser extent, in girls.

Overall the content if the study is adequately reflected in the title of the manuscript and the methodology, results and discussion are clearly summarised in the abstract. There are some minor typographical errors but generally the manuscript is well written and concise.

The authors have adequately defined the research question, drawing upon relevant evidence in the literature to set the foundation for their ideas and proposed course of research. The background is sufficiently concise and adequately referenced. This stand alone study draws upon data collected as part of a larger cross sectional study. The study is appropriately designed to answer the research question. The authors acknowledge that the number of children with clustering of cardiometabolic risk factors is small and was a limitation of this study. Despite this issue, the data are robust enough to draw conclusions for the study. Furthermore, the authors have adequately addressed the additional limitations of the study. The findings are not over-interpreted and the authors correctly indicate that few anthropometric references are able to account for pubertal stage and suggest how their findings may have practical implications for clinical practice. Overall these discussion points are supported by the data.

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: Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:

I declare that I have no competing interests