Reviewer's report

Title: Trends and prevalence of overweight and obesity in primary school aged children in the Republic of Ireland from 2002-2012: a systematic review

Version:1 Date:14 August 2014

Reviewer: Ingibjörg Thorsdottir

Reviewer's report:

The aim of the paper is to compile and synthesize all available information on the prevalence of overweight and obesity in primary school aged children in ROI.

Minor Essential Revisions

Line 99: Instead of using flattened it would be better to use reached a plateau or stabilized.

Line 156: Include how many criteria were used, even if it is in the appendix it is helpful to know out of how many.

Line 188: Who identified the limitations, are they identified by the authors of this study?

Table 2: Hollywood et al, F and plane is missing in Frankfurt position.

Major Compulsory Revisions are discussed in the order of the manuscript.

Abstract:

1. The authors mention that little is known about recent obesity prevalence trends but in their analysis they include recent numbers from WHO childhood obesity surveillance initiative. This requires rephrasing, the authors are compiling knowledge from various studies in an attempt to describe the obesity and overweight trends from 2002 to 2012.

Background:

1. Line 96: Obesity prevalence rates have both stabilized and decreased in many countries. In this context the authors should also discuss overweight rates since this might not be interlinked, obesity might decrease and overweight rates increase. The background should also include morbid obesity to some extent.

Methods: Overall the methods are well described.

1. One thing that needs a little clarification is how the obesity experts where identified?
2. Line 161: Zbmicat in stata, this needs to be clarified.
3. Why trends were assessed separately, this needs to be justified for the reader.

Results:
1. The authors mention that findings require cautious interpretation of the results and that they have limited comparability. This begs the question of why the authors are doing a statistical analysis.

Discussion:

2. It is not clear why the authors are discussing socio-economic status and disadvantaged schools to such detail. This is not included in the background nor is it a research question. I suggest skipping the detailed discussion of this since it is not directly related to the study question.

3. A detailed discussion on the problems and intervention of overweight and obesity are unnecessary. Line 294-316 this could be condensed since it goes above and beyond the scope of the research.

4. Line 321: What do the authors mean with increased transparency on the methods used to take measurements?

5. What was the importance of the critical appraisal tool in data analysis?

Tables:

Table 2: Response rate not adequate. What is considered to be not adequate? Are these limitations identified by the authors of the manuscript or authors of the published papers?

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

**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.