Author's response to reviews

Title: Gendered dimensions of obesity in childhood and adolescence

Authors:

Helen N. Sweeting (helen@msoc.mrc.gla.ac.uk)

Version: 2 Date: 27 September 2007

Author's response to reviews: see over
Gendered dimensions of obesity in childhood and adolescence – response to reviewers

Thank you for giving me the opportunity to revise this paper. This proved quite a difficult task, because the reviewers had rather different opinions, however I hope that the revision will be acceptable. I have also taken the chance to add to and update the literature where necessary.

In the remainder of this document I note the comments from each reviewer and my responses to them.

Reviewer: Marie-Laure Frelut

This paper aims at understanding if obesity differs between boys and girls, whether for biological or for social and psychological reasons. A review of reviews from the literature is presented. However, such a procedure, although a broader search is presented by the authors as a seemingly impossible task, leads to major bias and unlikely answers. (At end of comments) Altogether, this interesting paper needs further work and a change in search strategy. By remaining very general, it brings disappointing sets of information while the discussion lacks consistency.

• To address these two points together, I think that any attempt at a broad coverage of the literature on obesity in childhood and adolescence, needs to adopt some sort of strategy to manage the vast number of papers on the topic. One such strategy is to include only papers published in the past 12 months, however this may result in bias or exclusion of certain issues. I decided to focus mainly on previous reviews although, as I acknowledge in the Introductory section, one problem with a review of reviews is that it may reproduce errors or bias. Reviewing always involves selection and summary; reviewers write for different audiences and different purposes. I think it is almost impossible to know the extent of any bias in my review, but have throughout tried to present and discuss the issues in a clear and consistent way. From the outset, it was clear that in order to present results from individual studies of rates among particular groups, papers and reports presenting original research, rather than reviews, would have to be searched. The extent of this material (mainly presented in Table 1) has been increased in the revised version which now includes around 200 references. I hope that those readers with a particular interest may be able to work back from these to the source papers in that area, that those who wish a more general overview will find my review helpful, and finally, that it may stimulate a greater interest in gender and obesity.

Most studies reported were performed in developed North American and European wealthy countries, in which differences between sexes, in terms of lifestyle are changing at a high rate and tend to disappear. It would be of interest to bring in information issued from South Mediterranean countries, Middle East, China or South America to improve the conclusions which so far do not seem to reflect the mere reality.

• Thank you for this suggestion. Table 1, which provides examples of international obesity rates for males and females at different ages and using different definitions, has been substantially expanded, and now includes figures from countries in North and South America, Australia, and countries in Europe, Africa and Asia. The text now notes that although international patterns of either a male or female excess are, in general, difficult to discern, within Asia a male excess may exist in Korea, Taiwan and China, in contrast to a female excess in Middle Eastern countries, and discusses whether the male excess in China may result from the one-child policy (p.10).
A long chapter about definition of obesity is largely out of the scope of this paper. A misprint ‘body mass instead of ‘body mass index’ (sentence with ref 14) leads to understand that children lose weight while growing.

- The section on definitions has been reduced somewhat. However, as an author who still remembers coming new to this literature, I would argue that it is important to retain some of this information in order to help new readers understand why, for example, different definitions (resulting in different rates) continue to be used, or why North American literature which appears to be referring to obesity might use a definition termed ‘overweight’.
- The reference to ‘body mass’ has been amended to BMI (p.6)

Little is reported about the quantitative aspects of either decrease in time spent in vigorous activities, nor the ages at which changes occur, differently in boys and girls, nor on other quantifiable aspects such as muscle mass, energy expenditure etc. Many aspects are simply quoted but without giving quantitative notions or stressing the relative importance they may have.

Difference in energy requirement would be interesting to remind as well in order to put the problem into perspective.

- In response to both these points, the use of review papers means that only such figures as they include could be incorporated in the paper. However, the ‘Behavioural Causes’ section of the paper now includes a number of additional references and points from these and some of the original papers, including: an example of the small energy imbalance which may result in obesity (around 2%, which is the equivalent of around 30 calories or 15 minutes of tv instead of play a day); US guideline calorie requirements for males and females at different ages; girls’ daily total energy expenditure (in kcal) at ages 5, 6 and 9 in order to demonstrate an increase from 5-6, but a drop, associated with a 50% drop in physical activity from 6-9; the results of a UK study of minutes in self-report daily activity causing at least slight breathlessness among males and females at ages 11 and 18; percentage annual declines in physical activity for males and females between the ages of 10 and 17; the fact that one study has suggested that approximately 17% of early adult overweight may be attributable to watching tv for two or more hours daily in childhood; and percentages of males and females watching tv for more than four hours a day, and playing video games for more than four hours a week (pages 13-16).

The chapter on adiposity is presented after considerations on SES while it may precede the discussion on BMI.

- The first section has now been rearranged, and begins by covering adiposity. This is followed by paragraphs on BMI and definitions, then the discussion of Table 1, rising rates etc, then differences according to gender, ethnicity and SES. Thank you for this suggestion, as the order now makes more sense.

No information is given about the way obese adolescents may search for help or diet.

- The original version included a paragraph on gender differences in weight control methods which noted greater use of extreme methods and disordered eating among females, and among more feminine males and females (pages 21-22). Unfortunately, searches for papers on child, adolescent or youth self-help for obesity, weight-control or diet failed to yield a useful literature. The section on Interventions now includes a paragraph which notes the lack of studies to evaluate the efficacy of popular weight loss approaches, and highlights the potential of the internet as a tool for obesity intervention, particularly with adolescents (p.24).
Reviewer: Carolanne Nelson

This is an interesting review with a novel focus on the differences between gender in obesity risk factors and predictors. The paper is well written and is comprehensive in its treatment of the topic.

On page 3, the last paragraph, the phrase “... and seems to duck the issue” occurs. I would encourage the author to find a more appropriate word than ‘duck’ as it is too colloquial for a scientific review.

- This sentence now reads ‘... and fails to address the issue.’ (p.3)

On the top of page 5, first sentence after the title “Measurements and definitions”, the author needs to convert “defined as a” to defined as an”.

- This sentence has now been slightly altered, following removal of parentheses, and the relevant section reads ‘defined as a pathological …’. (p.4)

On the bottom of page 5 is a small typo – the sentence currently reads “the resulting lack of consensus in respect of which cut-off to apply ..”. I believe the author meant to say “respect to which cut-off to apply ...”.

- This phrase now reads ‘lack of consensus with respect to which cut-off to apply’. (p.7)

Page 8 – the sentence in the middle of the 2nd paragraph – “Obese children are now more obese than they were”. Please be more specific – what is the date comparison the author is referring to, 10 years ago, 50 years ago, etc.

- This sentence now reads ‘Comparisons of survey data collected in the 1970s and 1980s with figures obtained more recently show that obese children are now more obese than they were’. (p.10)

Page 9, 2nd para – the statement “... one study of 11-13 year olds found higher BMIs among both groups ...” Higher than who or what? Be specific.

- This sentence now reads ‘found higher BMIs among both groups than in their white, Indian, Pakistani, Bangladeshi or mixed ethnicity peers’. (p.11)

I suggest the author reduce the number of side comments that appear in parentheses. The use of parentheses should be rare, but it appears to be used as a substitute for commas. It is quite distracting as it is being used in many cases to insert additional thoughts and results in a convoluted sentence.

- I think this is probably a bad habit of mine! I have gone through the paper and removed / reworded the majority of these brackets.