Reviewer's report

**Title:** Socioeconomic status, financial hardship and measured obesity in older adults: A cross-sectional study of the EPIC-Norfolk cohort

**Version:** 1  **Date:** 7 September 2013

**Reviewer:** Rita McWilliams

**Reviewer's report:**

- Major Compulsory Revisions
- Minor Essential Revisions

**METHODS**

1. Measures
   Paragraph 1: Please state why “Responses ‘always’ and ‘often’, or ‘great’ and ‘very great’, were combined for analysis.”

2. Socio-demographic variables
   Reproductive data was collected by EPIC, was parity ever considered as a confounder for central adiposity? It is associated with socioeconomic factors and with central adiposity. It may explain the gender difference in the results and the subsequent discussed finding that “independent associations were strong for central obesity in women”. At the very least, its absence should be mentioned as a limitation.

**DISCUSSION**

1. Methodological considerations
   Paragraph 1: …although income was recently shown to have no impact on weight in older adults,[35] and may not reflect available resources since seniors use savings to fund expenses. Don’t seniors use their pensions to fund expenses as well as savings? Further, other studies have seen a gender difference in the impact of income on weight in adults (Yoon YS, Oh SW, Park HS. Socioeconomic status in relation to obesity and abdominal obesity in Korean adults: a focus on sex differences. Obesity (Silver Spring). 2006 May;14(5):909-19.) and there is much work being done regarding food insecurity in seniors.

   Paragraph 2: “Thus, there may have been misclassification of exposures stemming from changes to participants’ hardship levels in the interval between assessment of financial circumstances and anthropometric measurement. Such misclassification would be non-differential since it was unlikely to have been related to our outcomes and hence would have biased results towards the null.“ In general, do hardship levels increase or decrease as people in the UK age?

2. Relationship to previous work
Paragraph 2: Need to specify the odds of self-reported BMI otherwise the sentence is not understandable. “The Helsinki Health Study of middle-aged employees, mostly women, reported increased odds of self-reported INCREASED? HIGHER? BMI (OR range 1.32—1.62) for frequent financial hardship independent of conventional SES and early life factors.”

Paragraph 2: “The Helsinki Health Study of middle-aged employees[8], mostly women,” is not comparable with this study population. “The Whitehall II study of financial hardship and coronary events in middle-aged men” is also not comparable with this study population.

Paragraph 3: “…social class of women in EPIC-Norfolk was based on their partner’s except when the partner’s social class was unclassified, missing, or they had no partner.” This statement throws the results of the tables into some confusion. How can you explain the difference between men and women in central obesity when the social class value for some percentage of the women was taken from the value for the men? This has to be clarified.

- Discretionary Revisions

ABSTRACT

1. Comma needed Methods: Data from 10,137 participants...

2. Results: It is difficult to distinguish the 3 types of financial hardship; it would be helpful if they were set off from the rest of the text so that the reader knew that the sentences included them: e.g. using italics or quotation marks

3. Results: It would be easier to read and understand if the odds ratios and confidence intervals were presented as (OR 1.83 [CI95:1.34 - 2.49]) instead of (OR 1.83, 1.34 to 2.49).

BACKGROUND

1. Paragraph 2: "A limitation with conventional SES indicators is that they do not fully capture people’s material circumstances and spending power," Can you please provide a reference for this statement?

DISCUSSION

2. Methodological considerations

Paragraph 3: … and so findings could be generalised to other white European-origin older adults. Are white Europeans that much like white residents of the UK?

Things to think about:

1. What was the age distribution for employment in the UK at the time of the study?
2. For particular age groups, Social Security/Pension provides an income stream.
3. Is the lack of a male gradient due to small numbers in the highest exposure level?
4. Parity

**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.