Reviewer’s report

Title: Anxiety and depression in children and adolescents with obesity: a nationwide study in Sweden

Version: 0 Date: 27 Sep 2019

Reviewer: Aviva Must

Reviewer's report:

This is a solid study that takes advantage of the stellar health data systems in Sweden that make large epidemiological studies possible. There are some important study design and generalizability issues that need to be more clearly communicated, as articulated along with some other minor comments below.

Major issues:

1. The inability to remove youth with obesity from the population comparison group is a major limitation of the approach. Even though the rate of obesity is low, their inclusion muddies the comparison. The lack of the information should be presented in the methods section (in the paragraph that includes lines 88-94) to make clear that the population based data lack information on weight status. The figure might be revised to make this clearer by labeling the "obese" group as Obesity treatment and adding a footnote to the comparison group that indicates "obesity status unknown"

2. The issue regarding how youth who present for obesity treatment make differ from obese youth who do not deserves more primacy in the discussion of limitations. In the US, at least, we know there are strong selection factors at work. If present, these issues undermine the generalizability of the findings.

3. The selection of tables for the main paper vs. the supplementary ones seemed quite odd. A classic table 1 is important here— to get a sense of how variable not matched on differed in the 2 groups.

Minor issues

4. The paper is well organized and well-written by and large. However, there are some odd word choices and a few grammatical errors. Copy editing by a native speaker of English is encouraged if the journal doesn't provide this service. One specific term identified is "register"— I think the correct term would be registry. Figure 2 title — consider removing "belonging"
5. Line 71 — "this group" is ambiguous, several groups are described in the paragraph—which group is referred to?

6. Line 89 - how was living area defined or characterized?

7. Is it really heredity that one is controlling for, or family history— one doesn't know if it genetics or shared environment, or both that are at play here.

8. Presumably only participants who provided data on "heredity" (if that term is to be retained) are those with information from a biological parent.

9. Lines 281-2. That statement is highly debatable at least in the US.

10. Reference 39 appears to be incomplete.

Are the methods appropriate and well described?  
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?  
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?  
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?  
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