Reviewer’s report

Title: ADHD medication in offspring of immigrants — Does the income level of the country of parental origin matter?

Version: 0 Date: 31 Aug 2017

Reviewer: Miriam Cooper

Reviewer's report:

Manuscript Number: BPSY-D-17-00422

Title: ADHD medication in offspring of immigrants — Does the income level of the country of parental origin matter?

Thank you for asking me to review this interesting, thoughtful and well-written paper which is addressing a clinically and societally important question, namely whether the income level of parental country of origin is related to a proxy marker for consumption of child psychiatric care in Sweden, namely ADHD medication usage. This paper is a useful addition to the literature in this field and provides novel and robust information due to the strength of the large national dataset used. The rationale is clearly specified and the aims are clearly stated. The use of clearly justified covariates and interaction analyses lend strength to the results. The additional / sensitivity analyses are well thought out and relevant and provide further data to back up the main results. It is a further strength that household income and whether the child is living with a single parent or both parents was defined at age four years old to avoid reverse causality in relation to these variables. Limitations are well described.

I have just a few queries / suggestions:

Abstract background: 'Clinical studies have shown that children from immigrant families living in Sweden received less psychiatric care than those of native-born parents. However, previous studies have shown a similar prevalence of ADHD in minority and majority children in Sweden and the UK'.

I think these sentences could do with an explanatory / linking sentence between them otherwise it suggests that ADHD is the only condition children receive psychiatric care for. At the moment it is not until a couple of sentences later that the relevance of ADHD and ADHD medication in this context becomes clear, ie that it is being used as a proxy for take up of child psychiatric care.
Abstract methods:

* Exactly what the figure 1.4 million refers to needs clarifying here. I would also briefly specify what family status means at this point as it is a bit of a vague term potentially.

Methods:

* Is the household income variable based on a standard method for defining this?

Table 2:

* Why are the figures for ADHD medication higher than for ADHD diagnosis? This needs some comment.

Discussion:

* 'In families from low or middle-income countries, ADHD medication levels were higher for children in households with high level of disposable income, while the opposite was true for the children of Swedish-born parents.' I would not say that data in Table 5 backs up the first part of this statement - in all comparator household income categories for all groups defined as low / middle income groups, confidence intervals are wide and cross 1. The statement is also at odds with the paragraph spanning page 13 and 14.

Discussion:

* 'The observed pattern of ADHD medication and diagnosis by immigrant categories reflected the facilities available for child and adolescent psychiatry in the parents' country of origin.' I would amend this to '… is likely to reflect the facilities available…' as definite causality cannot be ascribed.

**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?  
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English  
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests  
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests.
I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal.