**Reviewer’s report**

**Title:** Prevalence of attention-deficit/hyperactivity disorder symptoms and their associations with sleep schedules and sleep-related problems among preschoolers in Mainland China

**Version:** 0  **Date:** 05 Jun 2017

**Reviewer:** Per A Gustafsson

**Reviewer's report:**

The authors present a large epidemiological study of the relation between ADHD symptoms and sleep-related problems in preschool children. The large number of participants is clearly a strength, as well as the low percentage of missing cases.

What this study reveals are significant associations between being rated by the parents to have above cut-off of ADHD like symptoms and several measures of sleep problems. One possible interpretation could be that the same CNS developmental issues lie behind both types of problems. This should be clearly stated.

**Abstract**

Something is missing in the first sentence in the section "Results" "Approximately 8.6% of the total pre-schoolers and higher in males (9.9%) than females (7.2%)."

Further down in the same section sleep related problems are referred to as "risk factors for ADHD symptoms" (and in the last line "protective factor"). These are conclusions that are not possible to draw from a cross-sectional survey, what has been shown are associations, not causal relationships.

**Background**

Overall, the presentation of the literature is satisfactory.

page 4, line 12 "...ADHD symptoms are caused by a neurological dysfunction with the brain." I think that such a bold statement of causation is inappropriate, "related to" would be better.

page 4, line 42 - check the reference system, use numbers not names.
Methods

I am not sure which of the many Conners questionnaires that was used. A reference to the original publication would be helpful (not just the Chinese translation). Was it Conners' abbreviated symptom questionnaire (CASQ) that was used? (Goyette CH, Conners CK, Ulrich RF (1978). Normative data on revised Conners parent and teacher rating scales.]AbnormChildPsycho16:221-236 )

On page 9 line 48 "...clinically significant cutoff score of 15". Is that based on the Chinese study (ref 15). And is 15 one standard deviation above mean? I suppose that a cutoff score of 15 is used to categorise the children into having or not having ADHD symptoms, that has to be stated clearly. It would be helpful for the readers if the children above the cutoff score of 15 were labelled, i.e. "high ADHD symptoms". When the findings of the logistic regression are discussed on page 12 line 20 and following the wording "ADHD symptoms" could give the impression of a continuous correlation with the number of ADHD symptoms, not a dichotomised variable.

Results

As in the abstract the wording "risk factors for ADHD symptoms" are conclusions that are not possible to draw from a cross-sectional survey, such formulations should be changed. I.e. page 12 line 23 (also later in the discussion section).

Discussion

On page 12 line 57 the wording "… had ADHD symptoms…” makes it unclear if the reference is to a continuous rating of ADHD symptoms, or to the group above cut-off.

The manuscript is in need of language editing, it is sometimes hard to follow and understand.
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?  
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No

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Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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