Reviewer’s report

Title: Frequent nocturnal awakening in children: prevalence, risk factors, and associations with subjective sleep perception and daytime sleepiness

Version: 3 Date: 2 June 2014

Reviewer: Sarah Honaker

Reviewer’s report:

This is a resubmission of a study examining factors associated with frequent nocturnal awakenings (FNA) in a larger cross-sectional sample of Chinese school-aged children. Reviewer suggestions included editing for grammar and style, additional limitations for discussion, and some changes in the way variables were dichotomized and/or described. Edits to the manuscript have addressed some but not all of these concerns. While the writing is improved from the first draft, continued editing is needed and some concerns pertaining to the classification and analysis of variables remain. Overall, this study addresses an important area, includes multiple domains, and has an impressive sample size. Please see additional comments below.

Major Compulsory Revisions:
1. Editing for grammar, style, and clarity
2. As noted in the initial review, use of the 50th percentile as a cut-off for the three psychosocial functioning scales should be changed or justified. Unless half of the population surveyed is functioning poorly, referring to responses below the 50th percentile as “poor psychosocial functioning” may not be valid.
3. Several factors in your model (overweight/obesity, ADHD, mental and emotional functioning) are described as risk factors and present with odds ratios, but cannot necessarily be conceptualized as such given the transactional nature between sleep and these factors. Indeed in the discussion section overweight/obesity is discussed in the context of a consequence of poor sleep. Unless you provide clear justification for considering these factors in one particular direction, it would be more appropriate to analyze these variables in the context of associations with FNA rather than risk factors.

Minor Compulsory Reviews
1. The literature review would be enhanced by adding a paragraph discussing pediatric night wakings more specifically, particularly prevalence and outcomes. You discuss FNA in adolescents and adults nicely in the first paragraph, but in the 3rd paragraph (focusing on children) you give prevalence rates and consequences for insomnia more generally and not FNA. I would either add an additional paragraph giving specific information about FNA in pediatric populations or revise your existing paragraph to discuss night wakings specifically rather than insomnia more generally.
2. In describing how sleep quality is measured, the items quoted do not match the items in the supplement (S1), and are also not grammatically correct. For example, item 17 should be described in the text as “Child’s sleep quality is good” rather than “how often does your child’s sleep quality is good enough?”

In discussing the relationship between obesity and sleep, the phrase “get fat” should be replaced with “become overweight or obese,” or similar.

Discretionary Revisions:
1. For the Children’s Psychological Screening Scale, 3rd domain may be better described as “Relations with Parents,” rather than “Parenthood.”

**Level of interest:** An article of importance in its field

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.