Reviewer’s report

Title: Trajectories of maternal sleep problems before and after childbirth: a longitudinal population-based study

Version: 3
Date: 7 April 2015

Reviewer: Leigh Signal

Reviewer’s report:

Major compulsory revisions:

I am comfortable with the author’s response to my initial suggestions and comments with exception of the following:

1b. I don’t feel that this is an adequate response. The numbers do not differ “slightly” but instead in some instances by over 100. For example, between time B and C it is stated in the 2014 paper that 808 questionnaires were not returned. This drops to 667 in the current paper, but the number of returned Q2’s remains at 2943. Similarly between time C and D in the 2014 paper the numbers that did not return Q3 = 427, but this jumps up to 596 for the current manuscript. In addition, the number provided at time B (in the current manuscript), minus those that were not included or did not return their questionnaires does not equal the number provided at time C. Nor do the numbers add up at time D. Please check Figure 1 for accuracy but also I believe that a clear explanation of the why there are such large differences in numbers between the different paper that use the same dataset needs to be provided and added to the current manuscript.

2. The authors have provided demographic information on the responders and non-responders based on data collected at 17 weeks gestation. However, they have not addressed my comment about providing information on insomnia, short sleep and depression at the earlier time points for responders vs non-responders. I believe this is important as there may be an over or under representation of women with these concerns at the earlier time points. It also makes Table 3 impossible to interpret as, for example, it could be that women with insomnia at 2 years postpartum have chosen not to respond to latest wave of the study – rather than the prevalence of insomnia actually declining.

3. The inclusion of depression at the earlier waves in models needs to be stated in the statistics section of the Methods (line 154).

Minor essential revisions:

Page 3, line 49: Perhaps re-phrase “Women have more Insomnia than men”. It is actually that greater numbers of women experience insomnia than men.

Page 3, line 64: Suggest sentence ends “continue beyond the first few months postpartum”
Page 3, line 69: Instead of “sustain” perhaps use “continue”

Page 3, line 71: Suggest insertion “..previous findings from the same data that is used in the current study..”

Page 4, line 93: ‘the’ missing

Page 4, line 107: suggest making last part of this sentence a new sentence

Page 8, lines 236-238: please revise as these sentences are difficult to follow.

Page 9, line 251: Why is sleep duration compared to women aged 40-44 years and not women closer in age to those in the cohort?

Page 9, line 253: Declined “by” 2 years postpartum

Page 9, line 257 and 258: Suggest providing the proportions of women experiencing insomnia in the general population and in the validation study of the BIS for comparison.

Page 10, line 284: Remove the word “sufficient”

Page 10, line 294: Perhaps use the word measures instead of registrations.

Page 10, line 303: I disagree with the statement that the response rates remained high. They were reasonable high from one time point to the next, but not relative to the number of women initially consenting to participate in the study. Also, a reference should be provided for the statement that a response rate of 50% after 3 time points in considered acceptable.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

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