Reviewer’s report

Title: Sleep quality, weight status and depression in young adult twins and siblings

Version: 1  Date: 13 September 2015

Reviewer: Mansi Chopra

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PEER REVIEW REPORT

The peer review is for the article entitled “Sleep quality, weight status and depression in young adult twins and siblings.”

Authors: Sawyer A, Fisher A, Llewellyn C, Gregory AM.

1. Is the question posed original, important and well defined?
   The question posed by the authors is easily identifiable and well defined.

2. Are the methods appropriate and well described?

   Minor Essential Revision: Under the subheading ‘weight status,’ the category of obese is written as BMI 30-30.9, thus the category needs to be modified, as this range is incorrect.

   Discretionary Revisions:
   1. Other factors like measurement of circumferences, body composition analysis or skinfold measurement if included could have strengthened the results. Research has shown that use of only BMI cut offs to classify subjects according to weight status are not reliable and other measures need to be added. Not only the total amount of fat, but the distribution of fat is also coming out to be a major factor influencing sleep duration and quality and thus obtaining information on these would have given a complete picture, as the study title includes the term weight status.
   2. Also, a lot of other factors like facilities at home, diet (snacking pattern, eating fried/ fatty foods, skipping meals, especially breakfast, eating out pattern etc), physical activity (expenditure) and lifestyle affect sleep quality and duration and obtaining information on them becomes important.

3. Are the data sound?

   Major Essential Revisions: Studies have shown that a lot of factors are linked to sleep quality and as the study aims to examine the role of weight status on sleep quality, hence, self reported height and weight, to calculate BMI, isn’t a valid tool, and measurements by trained personnel should have been conducted for reliable results. Though the aim of the study is to see the effect of variables on sleep quality as an outcome, but information on sleep duration and using this
information with sleep quality would have added to the overall study results.

Discretionary Revisions: Information on ‘covariates’ is also self reported and thus the data obtained may not be reliable and would have affected the obtained results. Information on various variables like lifestyle, diet, physical activity, occupation and socio-economic status should have been collected as studies have shown that these factors are also linked to sleep quality and duration apart from weight status, depression and anxiety, the factors that this study looked into.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?

Minor Essential Revision
1. The manuscript has some grammatical errors (unclear statements, units not mentioned). The manuscript should be checked and modified.
2. Some information about the methods used, has been written under the background section, hence, that should be corrected.
3. The list of abbreviations is not complete and should be checked and revised.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
The interpretation of data has been supported by other studies and relevant references have been used.

6. Are limitations of the work clearly stated?
The authors have listed the limitations of the study, though as these factors have been used for analysis, hence these limitations should have been considered.

7. Do the authors clearly acknowledge any work upon which they are building both published and unpublished?
The authors acknowledge their work with respect to studies done elsewhere.

8. Do the title and abstract accurately convey what has been found?
The abstract and title accurately convey the results of the study.

9. Is the writing acceptable?
The writing is acceptable. Certain grammatical errors are there in the manuscript that needs to be checked and modified.

Peer Reviewer: Ms. Mansi Chopra

Level of interest: An article whose findings are important to those with closely related research interests

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.