Reviewer’s report

Title: Asian-White Differences in Short Sleep Duration by Industry of Employment and Occupation in the US: A Cross-sectional Study

Version: 4  Date: 8 May 2014

Reviewer: Sara E Luckhaupt

Reviewer’s report:

I am still concerned about some of the numbers in Table 1.

I don’t think that Simpson’s paradox applies to these results. It’s my understanding that Simpson’s paradox only applies when you are comparing data trends within subsamples to the trend within the overall sample, and it happens because the relative importance (weight) of each subsample changes over time (or some other variable). In Table 1, the authors are presenting the point prevalence of short sleep duration among White workers living in poverty (32%) to the point prevalence among Asian workers living in poverty (35%) and the point prevalence among White + Asian workers living in poverty (37%). The point prevalence for the whole sample (Whites + Asians) should fall between the point estimates for each of the groups.

I looked back at the original version of the manuscript that I reviewed, and noticed that in the original version, the point prevalence of short sleep duration among White workers living in poverty is listed as 37% rather than 32%. The estimates for Asians (35%) and White + Asians (37%) are the same in the original version and the revised versions. The number in the original version makes more sense because Whites make up a large proportion of the group Whites + Asians, so it makes sense for the vales for Whites and Whites + Asians to be very similar. There is a similar discrepancy between manuscript versions in the results for Whites with Household Income <$35,000 and in a few other estimates: All Asians, Whites with diabetes, Whites with heart disease, and Whites with cancer.

Please re-check the numbers in Table 1 again. If you still believe that the numbers in the revised version are correct, and that this can be explained by Simpson’s paradox, please provide a reference/s.

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

Quality of written English: Acceptable

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.