Reviewer’s report

Title: Sleep Deficiency and Motor Vehicle Crash Risk in the General Population: A Prospective Cohort Study

Version: 0 Date: 15 Dec 2017

Reviewer: Andrew Vakulin

Reviewer's report:

This is a well written and interesting paper reporting the impacts of sleep apnea, short sleep duration and subjective sleepiness on motor vehicle accidents in a large prospective cohort of community men and women over 40 years old. The study shows significant association between short sleep and severe sleep apnea with motor vehicle accidents independently of day time sleepiness highlighting the large heterogeneity in self-reported sleepiness and the potential bias of self-reported symptoms and/or misperception of daytime sleepiness in the general non-clinical population. Importantly, the study suggests that it is important to treat asymptomatic sleep apnea and the need to increase sleep duration in short sleepers regardless of whether or not they report excessive sleepiness.

The main limitations of the study are acknowledged by the authors including, self-reported accidents, sleep duration and sleepiness, as well as short follow-up period in which accident data was collected. Despite these limitations the large sample size and clear findings still make an important contribution to the literature.

The only suggestion would be to perhaps add the self-reported sleepy participants in addition to the "All participants and Non-Sleepy Participants" to Figure 2 A and B to allow the reader to see the full picture of the results.

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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Yes
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