Reviewer's report

Title: Night work duration and body mass index among registered nurses from eighteen public hospitals in Rio de Janeiro, Brazil

Version: 2 Date: 29 April 2014

Reviewer: Paul J Nicholson

Reviewer's report:

Major Compulsory Revisions
1. The text in the results section does not make clear the level of impact by years worked. On trying to gather this information from figures there are inconsistencies between tables and graphs and lack of transparency in graphs. The tables show that duration was defined by 3 groups <1 yr; 1-9; 10+ years, yet the graph has a scale of 0/10/20/40 and no discrete data points on the graph lines.

Minor Essential Revisions
2. I think the term 'duration' is confusing in that it can be interpreted as 'length of shift' of 'years worked'. I think 'years worked' is a better description.
3. The discussion is much longer than the results giving the impression that more effort has been invested in reviewing other papers than presenting the data of this study. I think there could be a better balance to emphasize the results with more detail and clarity.
4. What is an alcohol 'dose'? Needs defining.
5. What good reliable evidence is there for the statement "shift work and atypical working hours has increased substantially"?

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

Quality of written English: Acceptable

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