Reviewer’s report

Title: Workplace Standing Time and the Incidence of Obesity and Type 2 Diabetes: A Longitudinal Study in Adults

Version: 1 Date: 4 November 2014

Reviewer: John Buckley

Reviewer’s report:

1. Is the question posed by the authors well defined? YES
2. Are the methods appropriate and well described? YES/NO
3. Are the data sound? NO
4. Do the figures appear to be genuine, i.e. without evidence of manipulation? YES
5. Does the manuscript adhere to the relevant standards for reporting and data deposition? YES
6. Are the discussion and conclusions well balanced and adequately supported by the data? NO
7. Are limitations of the work clearly stated? YES
8. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? YES
9. Do title and abstract accurately convey what has been found? YES
10. Is the writing acceptable? YES

COMMENTS

3. Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

As the main concern is with comment category 3, at this point I will only focus here and specific to Table 2, which is the main underpinning analyses

Although the trend data aims to add precision to the baseline-follow-up measures, it is difficult to see that even after multivariate correction that the trend loses significance? It’s obvious that in the Overweight/Obesity measures that following multivariate corrections that the delta odds ratio between the Rarely Never Standing group to the All the time Standing Group had been cut from a difference of ~30% (0.94 to 0.63) to ~11% (0.97-0.85), yet the confidence intervals in the latter still do not include or cross zero, and the width of these intervals is very similar to the uncorrected values. This suggests that the 11%
change in the odds ratio is still significant. This would seem to hold true for the Impaired Blood Glucose tolerance measures too where the delta-OR is 5% yet the confidence intervals represent a significant change. Furthermore, it would be helpful to report the actual p-Values, independent to whether they are above or below the alpha of .05.

The paper is about the specific links with Obesity and Diabetes, but then the authors expand the conclusions to “Chronic Diseases” as per this statement: Our results suggest that standing time alone is not sufficient to prevent the incidence of chronic diseases.

The authors would be better to stick with relevance to the measures analysed and state: …to prevent the incidence of obesity and Type2 diabetes, which has implications for the risk of other chronic diseases

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests