Reviewer's report

Title: Correlates of sitting time in adults with type 2 diabetes

Version: 1 Date: 14 April 2015

Reviewer: Mitch J Duncan

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Correlates of sitting time in adults with type 2 diabetes
The study seeks to identify correlates of sitting in a sample of adults with type 2 diabetes. It focuses on socio-demographic correlates which are the most widely examined domain of correlates, thus even though the population is somewhat novel that findings are not. The selection of potential correlates is unclear.

Major compulsory revisions
The description of the analysis is unclear and the criteria used to infer importance or conclusiveness of the differences is not reported. This limits the interpretation of the results.
Although the authors refer to the longitudinal nature of the data this uniqueness is ignored in the analysis or at least in their presentation of it. It appears as though the data from all four periods were pooled for analysis.
The use of self-reported sitting compared to step counts is a major limitation of the objective to examine correlations between the two measures.
The conclusions regarding lack of variation over seasons being related to the correlates does not appear to be supported by the data.

Line 22. This statement is too strong particularly in light of some evidence on the topic http://www.ijbnpa.org/content/10/1/55

Minor Essential revisions
abstract - please define what is meant by clinical factors?
Line 29 – what is the time differences between administrations?
Line 29 – total sitting time or domain specific?
Line 33 – this information about participant demographics seems misplaced when located here.
Lines 34-37. Should the text refer to the comparison group?
Lines 34-37. It is unclear why these factors were adjusted for and not explored as potential correlates?
The rationale for examining the correlation between steps and sitting is unclear particularly when such information has been shown previously http://www.ncbi.nlm.nih.gov/pubmed/15657022 and similar observations with accelerometer determined activity.

Line 38. This refers to important correlations but no context is given as to what is
required for an association to be important?

Line 39-40. This conclusion doesn’t seem to be tied to the results presented

Line 62. This seems to omit reference to this study


line 62-66. Please clarify the rationale for how knowing if high sitters and also low stepers is useful for intervention development?.

Line 74 – typo “and if there was a similar across seasons’ variation.”

Line 79- please clarify if the assessments for each person were taken in consecutive seasons within a year

Line 83. At this point in the manuscript it is unclear what is meant by this statement “The present analysis included data on 198 participants with at least one 84 self-reported value for sitting. does this refer to one of the four assessments ?

Line 92-94. So the average values from the one or more assessments was calculated and used to classify people as prolonged sitters? What was the purpose of this? Why not classify at each time point ?

Also I'm not sure that prolonged is the correct term. It implies uninterrupted sitting time, yet the instrument assesses only the duration with out any assessment of patter.

Line 96-99. The rationale for differences between self-report and objective measures is not appropriate. One measure assesses self-reported sitting, the other assesses objective measures of ambulatory activity.

Line 101. So they were instructed not to wear the third unit? How was this unit differentiated compared to the other units?

Line 105-108. Were these categories how the data were assessed or was this how the categories were classified for analysis. If it is how it was classified the original categories should be reported.

Lines 109. The classification of seasons is for the northern hemisphere. Please clarify this point.

Line 112-113. Given vehicle access was assessed at mid way through data collection is it really appropriate to use it as a potential correlate? After all ownership status may have changed over time.

Line 122- it isn’t clear from the methods that these seasons were collapsed.

Line 128 – is the final model the fully adjusted model?

lines 126. The description of the analysis is unclear. Weren’t sitting times averaged over all time periods? If so how were these used to assess changes over time?

What covariates were included in partially adjusted models?

Line 130. On what evidence were these factors determined to be important?

Line 139- were any statistical methods used to determine the variation or lack of
across seasons?
Line 149- Given the small number of people that reported on car ownership how meaningful/useful are these relationships? Were there differences in demographics between those who reported car ownership vs no owning?
Line 152 – which model?
Line 167-169. This statement does not make sense. Please clarify. Do you mean sitting is related to screen based activities in the listed domains?
Line 183 – this statement is not supported by the results. Differences in the correlates of these behaviours were not tested. Accordingly, correlates of reported sitting time differ from those associated with steps
Lines204-208. Did the authors test to see differences between immigration status and occupational status or any other indicator of SES ?

Level of interest: An article of limited interest

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’