**Reviewer's report**

**Title:** Symptoms of depression are associated with physical inactivity but not modified by gender or the presence of a cardiovascular disease; a cross-sectional study.

**Version:** 0 **Date:** 06 Nov 2018

**Reviewer:** Janey Peterson

**Reviewer's report:**

This cross-sectional cluster RCT investigated the association between depression and physical inactivity, and whether this association differed between primary and secondary prevention patients, and men vs. women.

* The paper requires editing in English language.
* Suggest authors use term "depression and depressive symptoms" as most of the literature in this area focuses on depressive symptomatology and not depression
* Line 100: We included baseline data from the RCT [28] consisting of primary and secondary prevention patients. This sentence is unclear and would benefit from adding a reference and more details.
* Line 103: what is a cardiovascular attack?
* Lines 105-7: These 2 sentences should start the paragraph. Poor language skills should be further operationalized
* Line 120: Provide the details of the sample size and the study outcomes with references
* Lines 155-6: was multicollinearity evaluated with the interaction terms? Auto correlation is for time series not a cross sectional study. Suggest reporting ICC.
* Lines 161-2: Please clarify the interaction terms - were 2 separate interaction terms added for primary and secondary prevention?
* It would be helpful to have a consort table of the number screened, included/excluded and the reasons for the study
* Please add p values to the comparisons in table 1
* Lines 203-4: Is this data presented? Suggest presenting the entire model. Is the non-significance of the interaction terms due to multicollinearity? Report significance results for the

**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?**
If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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