Reviewer's report

Title: Association of physical activity with blood pressure and blood glucose among Malaysian adults: a population-based study

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Reviewer: Anthony Laverty

Reviewer's report:

I have some concerns and questions about this manuscript:

• I am not sure why the authors have used ANOVA rather than the more standard linear regression to examine the association of PA and these continuous outcomes
• I am also unsure why the authors only present these stratified analyses – they do mention that interaction tests indicated this to be a valid approach, but then running all of these analyses separately results in smaller N and power. A full analysis of all ages alongside these would be preferable. Also it is more usual to stratify by sex than age groups.
• It would also be informative to see results from unadjusted analyses
• I am also a little confused about how they have treated the construction of undiagnosed conditions – from the description of results on pg 14 it seems that the control group here is those with diagnosed HTN? This isn't I think the most relevant question to be asked of this data (among those with HTN are they less likely to know about it if they are more physically active?)
• The results section was quite short and should stick to either p values or CIs. Also rather than stating results are not significant, actual results would be better
• In the discussion the authors say that the possible lower BPs are not clinically significant – but really I would say that this study is more public health focused and would benefit from discussion in these terms
• The authors bring up their differing categorization of PA in the discussion but this should be set out in the methods
• Also the suggestion that more education is needed among the HTN and diabetes pop are needed is not well grounded in data for two reasons – one this study didn’t find much in the way of association, and two there is no discussion of whether education is the best way to achieve more PA in populations (in fact I would argue that structural changes are much more likely to be effective)
• Aside from these statistical concerns the very curious thing about the writing of this manuscript is that although the authors don’t find much the discussion is about the benefits of PA found from other studies – much greater attention needs to be paid to why the results from other studies have not been replicated here
Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

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