Reviewer’s report

Title: Whole body vibration exercise improves functional parameters of individuals with metabolic syndrome: an exploratory study.

Version: 0 Date: 26 Jul 2018

Reviewer: Darryl J Cochrane

Reviewer’s report:

This is an interesting study and as the authors have noted as a limitation that there was no control group. Therefore, the title of the study may be changed to indicate that this is an exploratory study.

The current study provides new insights to using WBV for individuals with metabolic syndrome. The current WBV protocol is line with other studies have have investigated compromised health populations it would be interesting to know what the rationalization was in selecting 5 weeks, 10 sessions of WBV. The type of medications taken by participants warrants further explanation. In the discussion there is a lot of emphasis placed on why the tests were selected, this could be redirected to the methods section and for the discussion an explanation/speculation to the possible physiological reason(s) for an improvement in handgrip strength, flexibility, gait speed and sit-to-stand. Additionally, to determine that WBV was the casual parameter that elicited the changes in functional performance rather than the participants improved due to becoming familiar with the tests. Thus, it would be useful to report the reliability of the functional tests by indicating the intraclass coefficient and/or coefficient variation.

Other comments

Throughout the manuscript "WBV exercises" please deleted exercises

Pg 5

In 53 replacr might with can

In56 replace 'Attention must be taken on like' with 'Other prescriptive factors of WBV include...'

In 58 delete 'the' ...peak acceleration

pg 6

In1-12 very long sentence, this needs to be rewritten

In 19 delete "The'...WBV
In 19-20 replace with the following '.....clinical conditions to our knowledge investigating MetS individuals is yet to be determined'

In 29-31 replace and with 'that can be complemented .....'Pg 7

Pg 7

In 1-2 This is a repeat from the previous paragraph, I suggest that it be deleted.

In 5 what do you mean by 'useful'?

In 7 the abbreviations of the functional tests are confusing especially those with more than three letters i.e., DBTFF - could this be rewritten as trunk flexion (TF) and FTSTS - this could be rewritten as STS (sit to stand)

Pg 8

In 7 replace 'get' with 'determine'

In 49 reword i.e., In an interview each participant was asked about....

Pg 9

In 7 replace 'done' with 'performed'

In 31 replace 'in' with 'on'

In 36 replace 'better' with 'best'

Pg 10

In 2 delete 'of', replace 'considered' with recorded

Ln 29 - how much rest was given between each of the functional tests?

Ln 46 replace 'in' with 'over'

Ln 50 - replace 'with' of

Pg 11

In 19 replace 'same' with 'similiar'

In 27 replace 'was bare feet in a stand' with 'were barefooted in a standing..'

In 34 replace 'put' with 'positioned'
In 41 what do you mean by 'one more was added'?

ln49 replace 'to' with 'for'

ln59 replace 'done' with 'calculated'

Pg 12

ln2 replace 'due to WBV exercise' with 'from WBV.'

ln34 spelling enrolment

Table 1 insert brackets i.e., (percentage)

Pg 13

ln45-50 - rewrite this sentence

Pg 14

ln52 'whole body vibration exercises' replace with 'WBV'

Pg 15

ln34 replace 'would' with 'can'

In 44-46 - this could be deleted - see previous comment about expanding on what the physiological underpinning may be causing the improvement in handgrip.

Pg 16

ln 1-2 needs rewriting.

Pg 17

ln 2 replace 'would' with 'could'

ln 34 delete 'So, one may say that' replace with Thus, the metabolic....'

ln 39 replace 'might be' with 'could be'

ln44 replace 'Putting together' with 'Therefore...'

Pg 18

ln5 delete 'the WBV exercise' with 'WBV'
Ln 17 delete 'some confounders, that may affect replace with ' Firstly, ...'

Ln 22 'properly investigated' replace with "controlled for'

Ln 22 Secondly, no long-term....'

Ln24 Thirdly, this study...

Ln 27 Finally, the external....

Ln 31 replace 'is' with 'was'

Ln 56 replace 'aid in the' with 'gaining new'

**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.

No

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

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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

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