Reviewer's report

Title: Effects of aerobic exercise on pain and disability in patients with non-specific chronic low back pain: a systematic review protocol

Version: 0 Date: 05 Dec 2018

Reviewer: Rosemary Wilson

Reviewer's report:

I think this will be a very interesting review! Some comments for your consideration.

Kinesiophobia is an unusual outcome for chronic pain patients - perhaps something more commonly used in physiotherapy? Many trials and non-experimental studies in chronic pain use the outcomes from IMMPACT - I apologize if I have missed it but I don't see any references to that set of documents in your protocol. Might you consider also looking at antalgia as a related outcome to kinesiophobia?

You say: "If the outcomes are evaluated by different scales, they will be converted to a common scale ranging from 0 to 100." Most of the measures in studies of chronic pain patients generate ordinal data that is treated as interval data (you likely know this!) - in many cases though, it would be inappropriate to convert the scales to something as granular as a 0-100. Doing so may well render the outcome either inaccurate or increase the magnitude of the skew that is common in these measures. Please be careful with this - I suggest that you consider only converting 0-10 - VAS-type scales as a result.

The paragraph relating to the GRADE approach - lines 17-30 following the GRADE table is very confusing - please consider rewording. As well, your synthesis section is limited to a discussion of GRADE and related procedures. If the measures are heterogeneous - as I imagine they will be - you will need to do some sort of narrative synthesis to add to whatever meta-analysis you perform. I would suggest that the narrative component will add significantly to your statistical work.

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