**Reviewer’s report**

**Title:** Is sleep disturbance in patients with chronic pain affected by physical exercise or ACT-based stress management? - A randomized controlled study

**Version:** 0  **Date:** 07 Jan 2018

**Reviewer:** Francisco Albuquerque-Sendin

**Reviewer's report:**

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The main objective of this paper, part of a previously registered RCT, is to identify the effects of physical exercise and stress management on sleep disturbance in patients with chronic pain. As previously commented, the subject is of interest, but important methodological weaknesses remain.

First, there is not an intention to treat approach. A modern imputation method of missing data would be necessary to improve the quality of the results.

Second, the three different origins of the study sample could introduce several selection biases, which reduce the external validity of the study.

Third, the Inclusion/Exclusion criteria cannot be changed after the end of the study.

Fourth, the description of the reasons for not estimating the sample size is insufficient to justify the number of subjects to be studied.

For these reasons, I cannot recommend publication of the article.

**Are the methods appropriate and well described?**

If not, please specify what is required in your comments to the authors.

No
Does the work include the necessary controls?
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No

Are the conclusions drawn adequately supported by the data shown?
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Yes

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