Reviewer's report

**Title:** Manual therapy followed by specific active exercises versus a placebo followed by specific active exercises on the improvement of functional disability in patients with chronic non specific low back pain: a randomized controlled trial

**Version:** 5  **Date:** 27 June 2012

**Reviewer:** M Cairns

**Reviewer's report:**

Thank you for asking me to re-review this manuscript. The alterations and new analysis have certainly improved clarity. There are a few typographical errors and further clarifications that I feel would further strengthen this manuscript in order to improve the readers' comprehension of this work.

**Minor Essential Revisions**

Line 345: “Moreover, one additional limitation is that the therapist, providing the sham ultrasound, could be blinded to the sham (i.e., could not know that the ultrasound was not efficient)”. ?? ?? This is not clear do you mean that the therapist in this study was not blinded and should be in the future?

Line 362: “Followed by specific active exercises, it is an effective treatment to improve functional 361 disability and probably decrease pain compared to a control group.” In a conclusion you need to state what your study found, did it decrease pain compared with the control or not?

Table 3: I have profound concerns about table 3 and how accessible it will be to many readers.

You performed the analysis with the interaction and when the effect was not significant, the analysis was repeated without the interaction. This makes sense but results in a very busy table. As it is only the ‘Intervention by time’ for immediate pain and ‘treatment by time’ for average pain and ODI that did not result in the interaction be dropped, could those results not be included in the final column and a note added to the key whether it is the result with or without the interaction?

The other issue I have with this table is actually understanding what it is trying to convey! The only way I know that the result in the first line of the table (Pain-immediate effect/intervention -0.76 [-1.22;-0.30] p=0.001 results indicates a decrease in pain after MT compared to ST is by reading line 250-252: “Independently from the therapeutic session and each session’s baseline measure, the mean pain level decreased stronger for the manual therapy intervention 251 (mean difference between interventions: -0.76 VAS units; 95% CI: -1.22 to -0.30)”. I think that line 222 in the analysis section may explain this and if it does, I would suggest that this is included in the footnotes to the table. Either way, this table as it stands is very difficult to interpret and needs revision.
Discretionary Revisions
Line 92: it may interfere on should read “interfere with”
Line 103: Patients’ should read “patients”
Line 118: patients’ should read “patients”
Line 238: is should read “was”
Line 248: to should read “and”
Line 251: decreased stronger is not clear, do you mean showed a greater decrease in pain? And if so, compared to what? ST
Line 264: is should read “was”
Line 277: functional recovery in CNSLBP patients; I wonder whether this could be more specific e.g. do you mean reduced disability
Line 330: I think it would help the reader to interpret your results if you added a qualifying statement to this statement; “As for the FABQ-wk, the present result is in agreement with the literature i.e. ……..”
Line 338: patients’ should read “patient”
Line 343: i.e., severe disabilities and long-term unemployment. These are not the only poor prognostic indicators so should read e.g.
Line 363: larger sample sizes; I would suggest changing this to either adequate or appropriate
Line 364: evidences should read ‘evidence’

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
No competing interests