Reviewer’s report

Title: Cognitive, fear-reducing information or individual symptom-based physical training in chronic LBP. A pragmatic, randomized, controlled trial with 1-year follow-up.

Version: 1 Date: 4 January 2010

Reviewer: Julia Giombiewski

Reviewer’s report:

This is a well designed study of an importance in its field. The language is acceptable. The manuscript does not have to be seen by a statistician. Strength of the study are:

- Blinding the examiners
- Big sample size
- Performing an ANCOVA and correcting for baseline values
- Long-term follow-ups

I recommend accepting the study for publication after the authors have performed some minor revisions:

Minor essential revisions:

- Effect sizes: You state within the “methods” section that you estimated treatment effect size with 95% CI. Please provide pre-post effect sizes and confidence intervals at least for the primary outcome measures for both treatment conditions (e.g. for 12 months follow-up) to allow comparisons of the effect sizes with those reported in other studies and meta-analyses. You also might consider discussing the comparison of effect sizes in your study and those reported in other studies. I think since the cognitive treatment in your study was very short it would be of interest to see if it was comparable to other cognitive-behavioural treatments that normally consist of more sessions.

- ITT: I also recommend providing ITT (last observation carried forward) pre-post effect sizes for the longest follow-up. You should consider and discuss the possibility that patients who did not respond to follow-up questionnaires, did not improve as much as those who responded.

- Non-responders´ baseline statistics (Table 4): please provide statistics (ANOVA or t-tests). There might be some significant differences between non-responders and responders (e.g. concerning FABQ).

Discretionary Revisions:

- Could you give a reason for using medians and IQRs instead of means and
SDs?

- Additional treatment in the TRAIN group: as far as I understand, additionally to the “treatment beside the project” (Table 3) patients in the TRAIN group (but not in the COG group?) received medication and manipulative therapy. If you controlled for that, it would be interesting to know how many patients started taking new drugs and how the new medication influence treatment outcomes. You might consider discussing the fact that if COG patients did not receive any additional medication or manipulative therapy, the trend in favour of cognitive treatment is even more remarkable!

- Patient preference: it is strength of your study to assess patient preference. Nevertheless, since you did not find any effects I recommend deleting the table and reporting the most important results (briefly) within the text.

- Fear-avoidance research: The fear-avoidance model and exposure treatments based on this model are widely discussed across the literature. I suggest discussing similarities and differences between COG and fear-avoidance based treatments. I am interested in a discussion of the results of the three recent RCTs on fear-avoidance model based exposure treatments and your results (e.g. concerning the outcome variable “disability”).

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no competing interests.