Reviewer's report

**Title:** Preventive physiotherapy interventions for back care in children and adolescents: A meta-analysis

**Version:** 3  **Date:** 4 April 2012

**Reviewer:** Jesús Seco

**Reviewer's report:**

This manuscript addresses an important and timely topic. The review is technically well performed and well written. The statistical analyses and their results are adequately described. The question posed by the authors is well defined. The methods are appropriate and well described. The manuscript adhere to the relevant standards for reporting and data deposition. The discussion and conclusions well balanced and adequately supported by the data. The limitations are of the work clearly stated.

**Major Compulsory Revisions.**

Although this manuscript addresses an important and timely topic, these authors would greatly benefit from a most recent source: The search period extended only to February 2010. The searches are quite out of date. The most recent searches will be at least 2 years old by the time of publication and some of the older ones will be 3 years old. Based on Shojania's work in Annals of Internal Medicine many journals have (rightly in my opinion) adopted a policy of requiring searches to be conducted within 1 year (or close to it) of publication--otherwise the risk of having an outdated systematic review at the time of publication is quite high.

Recently (Kovacs et al, 2011[SPINE Volume 36, Number 8, pp E505–E512]), has been reported that the positive effects of education were attributed to direct promotion of physical activity and increased knowledge of evidence-based methods to prevent and manage LBP. Therefore, it is likely that this increased knowledge has positive effects also in young schoolchildren, most of whom had not undergone LBP and were likely not to have strong previous beliefs on how to prevent or manage it. Short education programs and campaigns that correct erroneous beliefs are effective for prevention and treatment of low back pain (LBP) among the general population. Current evidence-based guidelines for prevention and treatment of LBP recommend such programs. The Back Book is a short booklet designed for this purpose. Suffering from back pain in childhood or adolescence increases the risk of having it as an adult, and some risk factors associated with back pain in childhood have been identified.

There is no description in the methods of attempts to address publication bias. Although funnel plots and statistical methods for assessing for publication bias (or rather, small sample effects) aren't possible given the heterogeneity in outcomes and small numbers of studies, attempts to look for unpublished trials
(through trial registries, searching abstract databases, contacting authors, etc) would have been possible. If the authors didn't attempt to do any of these, they should explain why.

Minor Essential Revisions

In page 19, you says “It has been demonstrated that the effect sizes obtained are higher when they include the figures of parents and teachers as co-therapists.” Please reference

In page 20, you says “Regarding the date of publication, the best results were obtained in the most recent studies.” Please reference

**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.