Reviewer's report

Title: Thoracic spine pain in the general population: Prevalence, incidence and associated factors in children, adolescents and adults. A systematic review

Version: 4 Date: 25 March 2009

Reviewer: karen grimmer-somers

Reviewer's report:

1. Pge 5: Line2: The evidence that the incidence of spinal pain among otherwise healthy adolescents is increasing is not clear cut. The collection of data on spinal pain amongst adolescents gained prominence from the 1980’s and therefore I believe, it is still too early to draw conclusions. Hakala et al’s (2002) study was focussed on questionnaire surveys carried out from 1985 through to 2001 in Nordic countries (Norway, Finland, Sweden, Holland). This study identified an increase in prevalence of reported spinal pain in adolescents from 1993/94, to 2001, Unfortunately similar epidemiological studies have not been undertaken on adolescent spinal in other countries to identify if this trend in reported pain is an international phenomenon. Alternatively it may be that the increased reporting of spinal pain in adolescents is a result of a more health conscious population (Sweeting and West 1998). I would say the evidence ‘suggests’ an increasing incidence, but it is by no means clear at present.

2. Pge 6: Line 1,2: “that TSP is prevalent among healthy individuals and does impact on function” Please reference.

3. Pge 8: Line 15 to 17: I would suggest that this sentence be deconstructed for clarity. i.e. it currently suggests that cross sectional studies are an appropriate study design for investigating risk factors. This is obviously incorrect, but I think it just needs to be reworded to clarify this.

4. Pge 13: Line 5 – 10. I am concerned that whilst appropriate population characteristics were defined in the inclusion criteria (i.e. Pge 8:Line 1-7) to ensure no specific athletic/occupational groups etc., a number of the studies involved back pain specifically related to an activity i.e. carrying a backpack (12.1%) or pain after work (3%). The fact that the backpack study led to a point prevalence of 72% suggests that this group may not be typical of the community population. I would remove these from the study.

5. Pge 14:Line 19-20. The description of TSP as a discrete and important clinical condition is, I feel, difficult to make without consideration of how the reported TSP was related to other spinal reports. If the prevalence and incidence of TSP was always or very highly associated with LBP or Cervical pain then its importance as a discrete clinical condition is questionable.

In answer to the specific questions
1. Is the question posed by the authors well defined? Yes
2. Are the methods appropriate and well described? Yes
3. Are the data sound? Yes
4. Does the manuscript adhere to the relevant standards for reporting and data deposition? Yes
5. Are the discussion and conclusions well balanced and adequately supported by the data? I have some concerns about some of the statements made, from the level of evidence presented, and these are highlighted above
6. Are limitations of the work clearly stated? Yes
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
8. Do the title and abstract accurately convey what has been found?
   Yes
9. Is the writing acceptable? Yes

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