Reviewer’s report

Title: Assessment of musculoskeletal conditions and their impacts in the adolescent population: adaptation and validation of a questionnaire.

Version: 1 Date: 16 April 2014

Reviewer: Nicholas Henschke

Reviewer’s report:

The authors have presented a well written study on the adaptation and psychometric properties of a screening questionnaire for adolescent musculoskeletal injuries. I have a number of comments which should be considered by the authors and hope that further clarification of these points will improve the manuscript.

Major Compulsory Revisions

1) It is difficult to grasp the main purpose of this adapted questionnaire from the introduction. The justification for using an adapted NMQ to estimate injury prevalence is not well supported. While there are differences in the clinical presentations and causes of sports injuries and musculoskeletal symptoms (e.g. pain conditions), this questionnaire does not seem to be able to distinguish them. There is no question on how the injury/symptoms were caused, so perhaps this justification needs to be re-formulated in the introduction and discussion.

2) Similar to the above point, the words “injury”, “symptoms”, and “conditions” seem to be used interchangeable throughout the introduction and methods. It would be helpful to specify the purpose of the screening questionnaire and use consistent wording.

3) The description of the participant sample is lacking and unclear. Was there two separate groups recruited for reliability and then validity testing? Further details on the physical activity level or history of sports injuries (if available) to describe the sample(s) would be helpful.

4) The flow of patients through the study is unclear. The results for test-retest reliability states that of 55 included participants, 16 did not return the second copy. Please provide details of whether this is considered an appropriate sample size for a reliability study.

5) How many participants were included in the criterion validity analysis? Did they all have a history of injury recorded in clinical records?

6) Similarly, from the participants, what was the frequency of musculoskeletal symptoms?

7) The discussion needs to include more details on the potential implications of this study, such as when and in what context the use of this questionnaire would be beneficial.
Minor Essential Revisions
1) Both tables should report the number of participants included in the analyses
2) Table 1 should show the number of participants reporting each type of musculoskeletal symptom
3) It is not clear from Table 2 whether the numbers in the cells refers to the number of participants or number of symptoms

Discretionary Revisions
1) For clarity, it would help to have a copy of the original Extended Nordic Musculoskeletal Questionnaire (NMQ-E) available for readers. This is discussed extensively but some may not be so familiar with it. Perhaps a copy can be used as supplementary material.

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests.