Reviewer's report

Title: Prevalence and Associated Characteristics of Recurrent Non-specific Low Back Pain in Zimbabwean Adolescents: A cross-sectional study

Version: 3 Date: 15 September 2014

Reviewer: Nicholas Henschke

Reviewer's report:

The authors have presented an interesting study on the prevalence of NSLBP in adolescents in Zimbabwe. There are a number of points which need to be addressed before this manuscript is suitable for publication. In particular, the discussion should focus more on the methodology used, as well as the strengths and limitations of this study in comparison to other studies, rather than simply comparing estimates of prevalence. The authors should also exercise some degree of caution with regard to the conclusions as this study is not large, nor representative of the population, and this should be recognised.

Major revisions

1) Background (line 10): the sentence that "the prevalence of NSLBP in the young population has increased dramatically" is incorrect. While the amount of research highlighting the prevalence in this age group has increased, the prevalence has not shown to be increasing. Please revise this sentence, or provide references to studies showing an increase in prevalence.

2) Table 1 is not an exhaustive list of prevalence studies for NSLBP and does not add to the rationale for the study. It should be removed and replaced with a reference to a systematic review of prevalence such as that by Hoy et al.

3) Questionnaire: despite reporting that one limitation of previous prevalence studies is the use of variable methods to assess prevalence, the authors do not provide any information as to the questions asked in the current study. There should be a description of the questions asked, or the questionnaire provided as an appendix.

4) Results: the age of onset of NSLBP is reported however it is unclear how this was obtained. What question was asked here to determine the age of onset?

5) Results: the results for health seeking behaviour are unclear. It is reported that there is a significant difference in pain intensity among those who sought treatment and those who did not. However figure 4 appears not to show any significant difference. Please clarify these results and explain how the health seeking behaviour was assessed.

6) Discussion: While the prevalence results are comparable to one or two previous studies in other countries, it is not clear what this section adds to the
manuscript. The discussion should focus on the strengths and limitations of the methodology rather than the estimates obtained. Where comparisons are made to previous literature, these should be comparable in terms of the methodology used.

The authors should revise the discussion and rather than use other literature to support the findings of their study, they should be more critical as to the nature of their findings in such a small sample size. Their conclusions regarding recurrent NSLBP are based on a sample of 153 adolescents and cannot be considered to be a "large" study with regard to identifying population prevalence estimates.

7) The conclusion (also in the Abstract) that there is need to implement spinal health educational programmes in schools to improve awareness of the condition is not supported by any of the data provided in this study and should be removed. There is no evidence to suggest that spinal educational programs will reduce the prevalence of NSLBP.

Similarly, the conclusion that NSLBP is unlikely to lead to severe disability in the majority of adolescents is also not supported by any of the data in the study. This should be removed and the conclusions revised.

8) Table 2: it is unclear from the methods how these Kappa values were obtained. There is no information regarding the sample and the methodology used to assess the reliability of the questionnaire. Please include this information or remove this table.

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

**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.