Reviewer's report

Title: Ethnic Differences in Patients' Perceptions towards Isolated Orthopaedic Injuries: a Pilot Study

Version: 0 Date: 23 May 2017

Reviewer: Tahira Devji

Reviewer's report:

General comments:

I would like to thank the editor and the authors for the opportunity to review this interesting study titled "Ethnic differences in patients' perceptions towards isolated orthopaedic injuries: a pilot study." The authors have identified a novel and interesting question and proposed a unique study to explore whether Hispanic patients with isolated orthopaedic injuries will demonstrate different perceptions towards their injury as compared to non-Hispanic White patients. While I had no major concerns with the study design and methodology, there are a few comments and suggestions that might improve the submitted manuscript.

Specific comments:

Materials and methods –

1. The authors should explicitly identify the study design (i.e. observational cross-sectional study) in the methods section.

2. The authors should explicitly state the institution where patients were enrolled in line 130 or 132.

3. Observational studies may yield biased results if the two study groups of interest have additional differences in baseline characteristics that may lead to a different prognosis and if the analysis fails to deal with potential imbalances. Although it is clear from the Table 1 in the results section that there were no apparent differences in baseline characteristics, the investigators should consider how they would attempt to adjust for potential imbalances in confounding variables in a proposed larger study.
4. The power calculation specifies a delta based on the difference in mean QPI scores observed in the Hispanic and non-Hispanic group. This difference may or may not be patient important. It is worthwhile for the authors to identify whether a minimal important difference (MID) on the QPI exists in the populations of interest. Setting the delta to the MID will ensure that the definitive study is sufficiently powered to reliably detect important differences in QPI scores between groups.

Results –

5. How many questionnaires were completed and returned? This information should be presented clearly in the results, either written in the text or presented in a table for each patient-reported outcome measure.

6. In the context of studies evaluating interventions, interpretation of the magnitude of treatment effects, if authors present in both relative and absolute terms, is relatively straightforward for binary outcomes, and for continuous outcomes in which natural units are familiar to the target audience (for instance, length of hospitalization). For other continuous outcomes, and particularly for patient-reported outcome measures (like the ones included in this study), interpretation can be much more difficult. Similarly, in this study, without further information, clinicians and patients may find it difficult to grasp the importance of a five-point difference between groups on the QPI or physical component summary score of the SF-36. Are these differences trivial, small but important, moderate, or large in magnitude?

As the authors note, it is unlikely that this pilot study was sufficiently powered to detect statistically significant differences for all outcome measures, let alone patient important (or clinically important) differences. However, it is important that the authors consider whether improvements or worsening in the patient-reported outcomes that reached statistical significance (i.e. QPI, PCS of the SF-36) are in fact patient important. The authors should try to identify MIDs for at least the measures that demonstrated statistically significant differences to contextualize these results and enhance the interpretation of the magnitude of between group differences in these scores.

Discussion –

7. Often, the primary reason for conducting a pilot study is to demonstrate feasibility. The authors suggest "the study methodology and outcome measures used to explore the
impact on clinical outcomes were found to be feasible for a proposed larger clinical investigation" (line 256). The authors have not described measures to assess feasibility of this study in the methods, nor are results regarding feasibility presented anywhere in the manuscript. If measures of feasibility were assessed, it would be valuable for the authors to include in both the methods and results.

8. A big limitation of this study is the short follow-up time point for outcome assessment. As mentioned by the authors themselves, for a larger definitive study, they should consider conducting a longitudinal study to assess whether post-operative patient perceptions correlate with long-term patient important outcomes.

Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?
If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal