Reviewer's report

Title: Socioeconomic conditions and number of pain sites in women

Version: 1 Date: 30 November 2011

Reviewer: Rebeca Rios

Reviewer's report:

Overall the manuscript represents an interesting contribution to the knowledge concerning social determinants of novel pain outcome. The cross-sectional survey design is appropriate, the manuscript overall is well-written, and the data is appropriately analyzed. Major concerns are in relation to points of clarity in describing the rationale of the study and in presentation of the results, and minor concerns are related to specific grammatical and wording issues.

Major compulsory revisions:

1) I recommend further clarification of the rationale provided for investigating number of pain sites as the pain outcome of choice in relation to socioeconomic conditions. In the first paragraph of the first section, authors state that NPS is established as a “better” measure of pain, but do not explain how it is better or why this particular dimension of pain is particularly of interest in relation to socioeconomic conditions. The authors provide relevant citations that establish an association between socioeconomic conditions and pain prevalence, severity, but some further expansion on the different aspects of pain as they relate to socioeconomic conditions would strengthen the paper.

2) Comments on results. Presentation of the results is overall logical and well-described. A) The statistical analyses section states that chi square tests and logistic regression were inferential methods used, but it would be helpful to make it clear in the first paragraph 2 and 3 of the results that chi square tests were used, and how many. Could experimentwise error be an issue here? If so, this should be commented on in the discussion. B) In the first sentence of the fourth paragraph of the results, it would help to clarify the description of the logistic regression models. It reads somewhat awkwardly. It states that co-factors from table 3 as well as age, BMI and history of gyn CA were entered, but age and CA history were included and significant variables in that table. What is meant by co-factor, and how are the variables referred to as co-factors treated differently from BMI, age, gyn CA history (explanatory vs. control variables)? C) Finally, tests of co-morbidity as a moderator are mentioned in the last sentence of the results. It would be helpful to describe here or in the statistical analysis section why they were conducted.

3) Comments on discussion section. The discussion section thoroughly describes the findings in the context of relevant literature, but just a few things seem missing. Particularly due to the cross-sectional design, the authors should
consider reverse causality. A) It is possible that greater number of pain sites, through the impact of disability on ability to work, influences her socioeconomic standing. B) The measure of socioeconomic conditions used here includes a measure of social support or social embeddedness, satisfaction with number of close friends. There are well-established linkages between social support and embeddedness with health. The measure of SCI includes social with more economic indicators; how do the findings relate to research on social support or embeddedness?

Minor essential revisions:

1) The first sentence in the abstract under methods uses the term “study” or “studied” three times. Please reword to reduce repetition.

2) In the second sentence of the introduction, is “prevalence” the correct term? I wonder if pain frequency is the intended term, since prevalence is a population characteristic and not a self-reported characteristic.

3) In the sentence in the study population paragraph under methods beginning “In total, 653 responses..” I believe the term “eligible” is the wrong word. This appears to refer to the number in the final sample rather than those who were eligible.

4) Results section, third paragraph, last sentence. This sentence reads somewhat awkwardly and could be more clearly stated.

Discretionary Revisions

1) In the methods section, study population subheading, if data is available it would be informative to provide a statement commenting on how similar the study sample’s demographic characteristics were to the general population. This then could be mentioned in the discussion as a comment on generalizability of the findings.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.