Reviewer’s report

Title: Multisite peripheral joint pain: A cross-sectional study of prevalence and impact on general health, quality of life, pain intensity and consultation behaviour.

Version: 1 Date: 17 Oct 2017

Reviewer: Lise Hestbaek

Reviewer's report:

It is very annoying that changes in the manuscript are not marked. Especially since they are not quoted in the 'response to review' either, and thus very tedious to compare the first and second manuscripts. Furthermore, my concerns have only been partially addressed. However, some of it is a matter of opinion and some of it might be due my lack of understanding.

BACKGROUND

I don't buy the authors' argument about using OA as a 'selling point', but that is just my opinion, not really related to the quality of the manuscript

The authors' reason not to include the shoulder also demonstrates the discrepancy between the title and the authors' apparent focus on OA

METHOD

I still find the analysis unclear. Example: "Pain intensity was measured as a mean score across painful peripheral joint sites. Impact of pain intensity was examined through investigating associations between presence and absence of pain (and levels of pain intensity) with outcome measures.” How can the impact of pain be examined through an association between presence/absence of pain and 'outcome'?

Furthermore, throughout this section, it is never clear exactly which questions the individual analyses aim to address. Example: "Statistical examination of association was performed through unadjusted (crude) analysis and adjusted (stratified and regression based) analysis” Which associations?

Likewise: "ANOVA was used to calculate an F-statistic to determine whether there was a statistically significant overall difference between the mean scores of more than two groups and to then check for a linear trend (via linear contrasts)"
"When analysing the independent effect of variables (which variables?) on the outcome measures (SF-12 and EQ5D), mean pain intensity had a greater negative impact than four sites of peripheral joint pain on the SF-12 PCS (-0.38 compared to -0.23), SF-12 MCS (-0.20 compared to -0.14) and the EQ-5D (-0.44 compared to -0.26). Testing for an interaction effect identified that there was a compounding effect of both variables greater than the individual effects for each outcome."

I assume that you in this analysis include intensity, number of sites, age, gender, BNI and deprivation as independent variables, since you assess the 'independent' effect

"The independent impact of multisite peripheral joint pain on SF-12 (PCS and MCS) and EQ-5D scores (adjusting for age, gender, BMI and deprivation) was analysed using no sites of joint pain as the reference category. Unstandardized regression coefficients (b) demonstrated reduced and therefore poorer SF-12 PCS scores (-2.68; -5.76; -9.45; -13.89 (p=<0.001)), SF-12 MCS scores (-0.85; -2.21; -3.81; -6.45 (p=<0.001)) and EQ-5D scores (-0.07; -0.14; -0.23; -0.34 (p=<0.001)), for one, two, three and four sites of peripheral joint pain respectively. When all variables within the regression models were standardised to compare individual contributions to the SF-12 (PCS and MCS) and EQ-5D, the variable 262 most significantly associated with reduced general health and QoL was peripheral joint pain in four sites."

This appears to be the same analysis as above (albeit better described), but with pain intensity removed from the model. I don't see the point (except to prove the point that more sites are important, which was actually shown in the first analysis also.

In the response to this query in the first review, the authors write that both intensity and number of sites were included in the model - then I am more confused!

Line 289 "Odds of consulting both a GP and practice nurse increased" I assume you mean a GP or a nurse?

I don't believe that consultations to other professionals would be by direct referral from a GP or nurse.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess
Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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.

Do you want to get recognition for reviewing this manuscript? Add a record of this review to Publons to track and showcase your reviewing expertise across the world’s journals. Signing up is quick, easy and free!

No