Author’s response to reviews

Title: The prevalence and impact of self-reported foot and ankle pain in the over 55 age group: a secondary data analysis from a large community sample

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Author’s response to reviews:

Please see Reviewer Response letter for appropriate formatting of the response to reviewers

Reviewer 1

Ref

Comment

Action

1 Abstract results, lines 39-41: the estimated percentage increased risks are sometimes rounded but sometimes not. It would be better if they corresponded more exactly with the odds ratios i.e. going up and down stairs should be 71% not 70% (OR 1.711), getting up from a seated position should be rounded up to 44% if providing a whole number without decimal places (OR 1.438), putting on shoes/socks should be 52% not 53% (OR 1.532). It would be preferable to provide the confidence intervals for the ORs rather than the p-values.

We agree this should be consistent. The estimated percentage increased risks have been amended to correspond exactly with OR and p-values replaced with CI.

2 I appreciate the authors' desire, articulated in their cover letter, to avoid undue repetition of their previous papers from this cohort in the methods. However, I feel that a little more detail about how the study population was identified and how data were collected would help the reader to interpret the data and assess generalisability. For example, participants were randomly selected from the North Yorkshire Family Health Services Authority but how were they contacted? Presumably postally? How were data collected - postal questionnaire, face-to-face assessment, or other? Pg 5 mentions a first questionnaire but other questionnaires are not mentioned. Which comorbidities were asked about?
We have updated this with reference back to the original papers and hope that this reads more sensibly. Specifically, we have

- removed the reference to the first questionnaire, as this is irrelevant for this paper
- clarified the postal element of the questionnaire
- clarified the co-morbidity question

3 Statistical analysis, pg 5: were any co-variates adjusted for in the logistic regression models? Similarly in the results tables it would be helpful to state whether the ORs are unadjusted or adjusted. This has now been described, rather than referred to from the previous publication.

4 Throughout the results and tables, comorbidities are presented as a single characteristic but the methods does not describe how this variable was derived? Is this the presence of any comorbidity? Which comorbidities were included (see point 2 above)? Given that the prevalence of comorbidities was 40%, there would be scope to investigate if any particular individual comorbidities or groups of comorbidities make a particularly strong contribution eg (cardio)vascular disease, obesity, diabetes, mental health.

We have only included a number count of self-reported, health care professional diagnosed co-morbidities. Looking at clusters of co-morbidities would indeed be useful for the data set, it would possibly be best placed in terms of all joint data. We have included this as a limitation.

5 Results, pg 5, line 51/52: how did respondents differ from non-respondents? Again this has probably been published previously but any differences between respondents and non-respondents could be summarised in a single sentence and would help the reader. This has been now included.

6 Table 2: could confidence intervals be provided for the prevalence estimates? The data suggest that foot and ankle pain was the second most common site after the knee and more common than the back and hip. This could be an important message from the paper but the confidence intervals are need to assess this. A minor point is that legend does not fit the data presented well - the legend refers to joint pain, swelling and stiffness but the table includes age and comorbidities also. A further minor point is that although the legend states that adjustments were made for age and gender presumably age was adjusted for gender only.

The legend has now been revised: we hope that this makes easier reading. We have also italicised the foot pain data in order to highlight this for the reader.
7 Results, page 6: the first complete paragraph on this page does not fit well in the results section as it attempts to explain how these analyses and manuscript differ from the authors' previous publications. I suggest moving this text to the last paragraph of the background and/or the discussion.

This paragraph has been moved to the last paragraph of the background section.

8 Results, page 6/7: there are four paragraphs in the results which provide a narrative comparison of the impact of comorbidities and pain at the different sites on standing and walking, getting up from a chair/toilet, going up or down stairs, and putting on shoes or socks, based mainly on the magnitude of the odds ratios. However, for many of these comparisons the 95% confidence intervals overlap suggesting that caution is needed when interpreting difference in magnitude between the odds ratios.

Thank-you for this comment. We had not previously considered this and have now changed the text to reflect this.

9 Discussion, pg 7: in the opening paragraph summarising the study findings, some of the results are not mentioned in the results or tables - eg prevalence of wrist/hand pain, median count of reported joint sites, combinations of pain at different sites. These are important data and should be added. Furthermore, in the third sentence in this paragraph I was unsure of the distinction between the "most common site of self-reported joint pain" and the "most common single joint presentation" - could this be rephrased?

This has now been reworded, with information removed and those data which are relevant from the previous study, clarified and appropriately referenced.

10 Discussion, pg 8: the second paragraph of the discussion states that there was a correlation between increasing number of sites of pain and functional impairment. Again, I could not find these data in this paper and wonder if this statement refers to the authors' previous published work. Could these data be added if not published previously or the distinction between the current and previous work be made clear by rephrasing? This has been removed as it focus

Minor comments

In several places, the word "data" is used as a singular item rather than a plural e.g. data "was", "has", "is"

The text has been amended to recognise data as plural
Reviewer 2

Ref
Comment
Action
1 Two key concerns are the age of the dataset and the use of interrogative secondary analysis; however, I acknowledge that these have been addressed in the limitations section. In addition, the authors should consider changing the manuscript title to include the words "secondary data analysis". It is noted that in the Author Contribution statement there is reference to an alternative title "The prevalence and impact of self-reported foot pain in the over 55 age group: a secondary analysis".

The title has been amended to “The prevalence and impact of self-reported foot and ankle pain in the over 55 age group: a secondary data analysis from a large community sample”

2 The terminology around foot data is inconsistent. The authors have stated that the data for the foot and ankle region has been combined and a single term "foot pain" has been used. However, throughout the manuscript the authors refer to "foot and ankle problems", "foot/ankle pain problems", "foot problems", "foot and ankle related pain". Please can the authors define the outcome of interest at the beginning of the manuscript and use consistent terminology through. In addition, I would argue that joint pain, swelling and/or stiffness (reported by patients in the survey) should not be collectively described as 'foot pain' as this is misleading (as stiffness and swelling aren't necessarily painful). Therefore, the term 'foot problem' may be a better option. Our apologies. This has been clarified – foot pain was the code that was used, but the data refers to foot and ankle joint pain combined.

3 The finding in relation to isolated foot pain is inconsistent. The abstract states, "1 in 11 reported isolated foot pain", the results sections states, "4.87 per 1000" and the discussion states "only 1 in 38 of those with foot pain having foot pain alone". Please can the authors clarify this finding? Apologies, this was confusing. We have now rectified this so it is clear.

4 Methods: (line 4 of the text) the authors mention collection of data relating to "dependency and disability" and refer to Table 1. There is no data relating to this. Please can the authors add this data or remove this in the methods.

Thank-you. This has been removed.

5 Statistical Analysis: The first sentence refers to previously reported work (ref 10). Please can the authors expand this to explain further as this is important to the analysis and the reader should not need to look up this reference. Further, in the sentence, "Presence of foot/ankle pain problem, comorbidities (diagnosed by a General Practitioner (GP) or specialist and self-report)..." The terminology used in the survey is "doctor or other health professional" - please
can the authors change this to be consistent with the data. Finally, four references (12-15) are probably not needed for the logistic regression. Consider reviewing.

This has hopefully been addressed with the amendments listed above.

6 Results: (line 3 of text), please define what is meant by "older people" - is this the 65-74 age group or 75+ or both? The second paragraph is unclear and difficult to determine the meaning. Please can you review. In paragraph 6, sentence "For the task most directly associated with foot problems, …"you refer to "increase the risk" - please can you elaborate? i.e. risk of what?

7 Discussion: New results are reported in the discussion section. i.e. "The median count of reported sites of pain was 4 and the most common combination of foot pain with other joints were feet and knees; feet, knees and hands; and feet knees and hips; feet and hands". Please can this be moved to the results section.

These results have been moved to the first paragraph of the results section.

8 Reference 8 is very old. Is there more up to date data on the burden of foot and ankle complaints son the health service?

A recent article reference has been added to demonstrate the consultation burden. (Ferguson, R., et al., Encounters for foot and ankle pain in UK primary care: a population-based cohort study of CPRD data. Br J Gen Pract, 2019. 69(683): p. e422-e429.)

9 Tables The title of the Table would normally be above. Table 2 includes comorbidities and hence the title should be amended to include this. Table 3 is very long and difficult to decipher. Please can this be simplified to highlight the significant results. Table titles have now been placed above the respective tables.

Table 2 title now includes comorbidities.

10 Some of the language is unclear, with some words possibly missing. Please can the authors review for readability and meaning.

The language has been reviewed and where indicated amendments have been made to improve readability.