Author’s response to reviews

Title: Risk factors for neck pain among forklift truck operators. A retrospective cohort study.

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Author’s response to reviews:
Second response to reviewers, version 20171031

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Risk factors for neck pain among forklift truck operators.- A retrospective cohort study.
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Thank you very much for the additional comments on our manuscript. We have made new analysis, made changes according to your suggestions, added new reference and responded to your comments below. We are very pleased that the manuscript has improved further. Previous changes are marked with yellow in the manuscript. For the additional changes we are using track changes.
Response to reviewer 1, K Walker-Bone:
Comment 3, by reviewer 1, on neck and shoulder pain is not answered by the authors. Adding an analysis of a combined outcome of neck and shoulder pain is requested and not addressed. Please, do this analysis.

Respons Comment 3: we have performed new analysis where we have combined neck and shoulder pain, see table 2. However, since our primary focus is neck pain, we have not performed further analyses on shoulder pain in this paper. We have added new text in the section of statistics: page 6, line: 18-19. In the section of results: page: 9, line 2.
And finally in the discussion, page: 16, line: 3-14.

Comment 4, by reviewer 1, is closely related to major revision comment 3, by reviewer 2. These comments asks the authors to define the outcome variable/variables in the study, which is not done in the revision. This needs to be done. A clear definition of the questions used, but also the variables used in the analysis (how they were based on the questions).

The author should also state a theoretical definition or frame work on what, in this study, is meant with neck pain, both regarding bodily region and whether the target is f.ex. "pain perceived as musculoskeletal" or some other definition. Please, write this in the manuscript.

Respons Comment 4: We have now defined the outcome variables in the manuscript. We have added a clear definition and what variables are used in the analysis. This is done in the method section “The Questionnaire” in red text (page: 5, line:12-18) and in the section “Statistics” (page: 6, line: 15-19). We have also made changes in Results (page 7, line: 19-20, and page: 8 line: 19-21) and in “Discussion” subheading “Methodology”. See page: 15, line: 15-25 and page: 16, line 1-3 and page 16, line 16-25, and page 17, line 1-4.

Anna Grimby-Ekman, PhD (Reviewer 2):
Major revision comment 5, reviewer 2. This comment contains several comments and what I want to point on here is that the confounder selection is not described in the manuscript. Please
add to the methods section both a clarification on what variables are seen as potential confounders and how the confounders included in the regression models were chosen.

Respons comment 5 by reviewer 2: We have added some text discussing confounder selection in the final part of the “Statistics” section: page 7 and line 6-8, and in the Discussion sub heading “Methodology”: Page: 16, line: 9-14.

Major revision comment 10, by reviewer 2, on possible collinearity and how this is checked, is not addressed. Please add this to the manuscript under the methods section.
Make sure that the text to the tables are consistent with the text in the methods section concerning confounders and what is adjusted for in the regression models. This is not the case now.

Respons comment 10:
To avoid interference between correlating predictors, the multiple regression analysis is done in three steps adjusted for different categories of work related exposures. We have added text in the statistical section page: 7, line 6-9.

Comment 13, by reviewer 2, is about sample size. The authors answered this comment with "Study design and number of participants were great enough for the regression models used." Please, give an explanation including a methodological reference on this and add this to the discussion.

Response comment 13 by reviewer 2: We have added text on this topic in the discussion, page: 17, line: 8-15. The sample size in this retrospective cohort has enough power for statistical tests at 95% confidence level. Both exposed and unexposed group is represented for the outcome. The exposed group is also greater than 30% which is recommended for a retrospective cohort. See the reference that we have added:

Karimollah Hajian-Tilaki, Sample size estimation in epidemiologic studies