Author’s response to reviews

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

Authors:
Ulf Flodin (ulf.flodin@regionostergotland.se)
Bo Rolander (bo.rolander@rjl.se)
Håkan Löfgren (hakan.lofgren@rlj.se)
Blerim Krapi (blerim.krapi@regionostergotland.se)
Fredrik Nyqvist (fredrik.nyqvist@regionostergotland.se)
Charlotte Wåhlin (charlotte.wahlin@regionostergotland.se)

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Dear editor and reviewers,
Thank you very much for the positive response. We are pleased that our manuscript has potential to be acceptable for publication in BMC Musculoskeletal Disorders. We are grateful for the input that we have received from you. This has really improved the manuscript. We have responded to your comments below and added additional text in the manuscript to clarify. We have also, once again, sent the manuscript to review and improve the english language by a professional language editor.

Editor Comments: The paper is now revised almost to all reviewers satisfaction. Only a few minor revisions are still need.
1. The authors write in the methods section: "To avoid interference between 7 correlating predictors, the multiple regression analysis is done in three steps adjusted for 8 different categories of work related exposures.". The reviewer asked for collinearity checks. That is commonly done either by checking spearman correlations between all pairs of covariates included in the regression analysis or by looking at the VIF entity in the regression analysis.

Response 1:
Collinearity check was performed in a nonparametric Spearman’s rank correlation test for all 8 predictors included in the multivariate regression models. As expected, some correlation was shown among the work tasks/ exposures related to work tasks. Strongest correlation coefficients were shown for heavy workload- hands over shoulder work and monotonous work tasks- hands over shoulder work. (r=0.42, r=0.55). These results do not influence the results of the regression model in table 3. Clarification is added in the manuscript, see in methods, page 7, line 7-8.

2. When discussing sample size the authors write "Thus, the statistical significant tests resulted 5 in the lower 95 % confidence intervals exceeding the null for a large part of the associations." Be careful with mixing statistical testing and confidence intervals. The reviewer, when asking for more elaboration around sample size, meant discussion about power or sample size calculation and also the mentioning of recommended number of events per estimated parameter in the regression analysis.

Response 2:
Thank you for the clarification. The sample size calculation was performed for a dichotomous endpoint in a two independent sample study. Incidence for respective groups was calculated for 29% among office workers and 49% for the fork lift operators. Alpha (p-value) were set to 0.05 (95% confidence interval) and beta=0.2 with a power level at 0.8. Recommended sample size showed 184 subjects which are fewer observations than analyzed in our cohort. See text in the discussion, under the methodological discussion, page 16, line 19-23.