Author's response to reviews

Title: Finger joint laxity, number of previous pregnancies and pregnancy induced back pain. A cohort study.

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Author's response to reviews: see over
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Editor in Chief
BMC pregnancy and childbirth

Dear Editor in Chief,

Re: MS: 1492894998100703.

Thank you for valuable comments. Please find a further revised edition of our manuscript with the title “Finger joint laxity, number of previous pregnancies and pregnancy induced back pain. A cohort study”.

Please find our response to the comments by the reviewer Genevieve Dumas:

Page 6, 2nd paragraph: Changed to “The questionnaire was completed in privacy with no time limit and was checked for completeness”.

Page 7, 3rd paragraph, line 7: Changed to “angle”.

Page 17, 17th reference: Changed to “pause”.

Please find our response to the comments by the reviewer Nina Vollestad:

*Regarding the properties of the abduction angle measurement.*

An analysis of the reliability is performed using coefficient of variation of the finger joint angle measurements across the study period of nine months. The intra-individual (within subject) variability across the nine month study period of 0.085 indicates there was good stability in the angle measurements. Previous study of comparable setups reporting coefficient of variation is referenced.

Page 7, paragraph 3, line 8.
Text changed to:
“The reliability of the abduction angle measurements was calculated by the intra-individual coefficient of variance. The coefficients of variance between the first and second measurement was 0.077, between the second and third 0.070 and between the third and fourth 0.071. The coefficient of variance of all four angle measurements across the nine months study period was 0.085.”

Page 14, paragraph 3, line 1.
Text changed to:
“There were several limitations of this study. Information of the validity of the used angle measurement device was limited although reassuring [28]. Stability in repeated angle measurements of the device was ascertained by intra-individual coefficient of variance between 0.07 and 0.08 in the present study. In previous studies of finger joint mobility two papers have presented reliability as coefficients of variance. In these studies lower coefficients of variance (1.5% and 3.6%) were presented with tests repeated within the same day as compared to several months in the present study [35, 36]. Also, the wide dispersion of the
time since delivery might have distorted the data, since recovery might be expected 29 weeks after delivery but not necessarily after 4 weeks. In addition, the number of women with persistent back pain after delivery was small and there was no information of socio-economic data.”

Regarding the significance of uncertainty regarding the estimates in Figure 2.

The data used to construct the figure was obtained from a linear regression analysis model, providing estimated levels for the twenty columns. Regression coefficients are rather abstract and the figure is meant as a visualization of the regression results. Error bars would be appropriate if a statistical analysis was based on the figure per se showing that the height of one bar is significantly different from the height of some other bar, but no such analysis was done. We are only visualizing the effects of the factor number of previous pregnancies and the factor joint abduction angle on back pain incidence. Error bars do therefore not serve any purpose. The purpose of illustration is spelled out at page 11, paragraph 4, line 3. In addition, the ability to use the abduction angle measurement is presented on the last paragraph at page 12.

Editors comment
The tables are included in the manuscript following the references.

Yours sincerely,
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