Author’s response to reviews

Title: Evaluating patient experiences in decentralised acute care using the Picker Patient Experience Questionnaire; methodological and clinical findings

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BMC Health Services Research

Editor

Torleif Ruud

Second re-submission of manuscript: BHSR-D-16-01527-R2 Evaluating patient experiences in decentralised acute care using the Picker Patient Experience Questionnaire; methodological and clinical findings
Dear Editor and Reviewers

We would like to thank reviewer 4 for further, thorough and wise comments on our paper. Below, You will find the additional issues raised by the reviewer, followed by our response to these remarks. Changes have also been highlighted in the manuscript with track changes.

We hope You find our efforts to further improve the quality of the submitted paper satisfactory, and that You once again will consider our paper for publication in the BMC Health Services Research.

Øyvind Bjertnes (Reviewer 4)

Comment 1: I think the manuscript has improved a lot, so you've done a good job with the revision. I have the following questions and comments at this stage: - Page 9, second paragraph: Suggest to use "Questionnaire" as a sub-heading.

Response: This sub-heading has been added.

Comment 2: Page 9, line 39: You write: "Thus, the PPE-15 has a minimum score of 0 (no problems) and a maximum score of 15". For me, this seems confusing. Why didn't you include the total score ranged from 0-15 in the analysis? Both the test-retest analysis and correlation analysis would benefit from including a total score. The latter could also be correlated with the total score of the Norpeq.

Response: We thank the reviewer for this comment. We can see that this information, and why we did not include a total score in our analysis, seem confusing. The PPE-15 can be used to examine specific aspects of patients experience. We wanted to show these aspects. In addition, because no method for calculating missing items exists for the PPE-15 (and based on recommendations from statistical expertise at the Picker Institute) missing items were not included in the analysis. This is why we found it appropriate not to include a total score analysis. When conducting the statistical analysis, we used a ‘long format file’ which included one line per question per respondent respectively (see also comment 3). Hence we have chosen to remove the sentence:“Thus, the PPE-15 has a minimum score of 0 (no problems) and a maximum score of 15 (high level of problems)”.
Comment 3: Page 9, line 41: You write: "In this model, non-response was counted as a non-problem". This is in contrast with what you write on page 11 (first paragraph): "missing items were not included in the analysis". Please explain.

Response: We are grateful for this input, and absolutely agree that this seems confusing. We have chosen to remove the sentence: "In this model non-response was counted as a non-problem" (see also response 2).

Comment 4: Page 11, first paragraph, first sentence: "Because the data were not normally distributed..." - which data?

Response: We have added information in parenthesis: "Because the data (age, length of stay, comorbidity and self-rated health) were not normally distributed, the continuous variables are displayed as the median, mean and standard deviation”.

Comment 5: Page 12, paragraph about binomial linear mixed model: this part is difficult to follow. What is the dependent variable(s)? Did you conduct 15 models (for each PPE-15 item) or do you use the total score?

Response: See also response to comment 2. The data were in 'long format’, each PPE-15-item represented on line under variable 'bsp’ (hence each respondent included 15 lines in the SPSS-file). This has been included in parenthesis (see manuscript with track changes, page 12).

Comment 6: Please clarify the ICC in this context, this usually is the variation on level 2 (given 2 Levels) divided by the total variation (thus representing an estimate of the cluster effect). If this has the same meaning as your ICC - why do you report the mixed model at all? This is only relevant if the cluster effect has some magnitude, with effects on standard errors and statistical tests at level 1 (but this is not the case in your study). Furthermore, I am unsure if n=5 is enough for mixed models. I should say that I am not familiar with the binomial linear mixed model, so maybe I have misunderstood.

Response: Here, the ICC gives information about the proportion of the total variance in ‘X’ (patient experience) that is accounted for by the clustering (n=5 wards). It can also be interpreted as the correlation among observations within the same cluster. Intraclass correlation (ICC) was calculated to explore the proportion of random variation, either due to individual experiences as well as to aspects of the different locations (e.g., staffing situation and what kind of services they offer). Care wards and patients (identity) were consequently included as random effects to account for the inhomogeneity between patients and inhomogeneity between wards. In this
binomial linear mixed model n=5 is enough. The ICC is calculated manually by dividing the square of the variance due to one of the variables (e.g. individual inhomogeneity), on the square of the other (wards) + square of variance due to binomial answers (= a constant). This calculation should be familiar to those who are familiar with the binomial linear mixed model. Hence, we have chosen not to elaborate further on this in the manuscript.

Comment 7: Page 13, table 1 - is EQ5D3L the same as self-rated health in table 5? Please use the same terms across tables.
Response: Revised accordingly.

Comment 8: Page 14: table 3 shows that the Kappa for PPE-11 is 0.125, and should be rounded up to 0.13 in the text above (not 0.12).
Response: Revised accordingly.

Comment 9: Page 19, line 36: you refer to reference 54, but should refer to reference 55 (Crow).
Response: Revised accordingly.

Comment 10: Page 20, line 44-46: "Indicating a potential selection bias" - incomplete sentence.
Response: We thank You for this remark, and have revised the sentences to : ” This could indicate a potential selection bias”.

Comment 11: Table 2: why are some correlations positive and other negative? For instance, -0.45 for NORPEQ1/PPE-1 and 0.39 for NORPEQ1/PPE-1. Please explain, maybe include a footnote.
Response: Following footnote has been included in table 2: ” A positive correlation coefficient indicates a positive relationship between the two variables (the larger value PPE, the larger value NORPEQ) while a negative correlation coefficients expresses a negative relationship (the larger value PPE, the smaller value NORPEQ)”.
Concluding remarks

The comments presented in this letter are meant as complementary to the submitted revised manuscript with “Track Changes”, as well as a clean copy. We hope our further revisions are deemed sufficient by the associate editor and reviewer 4 (Bjertnes), and that the paper now will be accepted for publication in the BMC Health Services Research. If further revisions are requested, we will still be at Your disposal. Thank You for considering our re-revised manuscript for publication.

Yours Sincerely

Ann-Chatrin Linqvist Leonardsen