Author’s response to reviews

Title: The effect of an educational intervention to improve tuberculosis infection control among nurses in Ibadan, south-west Nigeria: a quasi-experimental study

Authors:

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Author’s response to reviews:

My sincere thanks to the editor and reviewers for their great work on the manuscript. The responses to the comments are shown below and also highlighted (in yellow) in the revised manuscript.

General comment:
Based on the design and data analysis approach, it appears that there were two study objectives: (1) evaluate effectiveness of training at 6 months, and (2) assess if there was sustained effect (or retention) at 12 months. This should be made clear in purpose and methods of the manuscript. If the first one was the only objective, the 12 month data analysis is not necessary, although it is completely understandable that the comparison group (as a waitlist group) would also receive after 6 months follow up.
Response: These specific objectives have been included (page 6, lines 6 & 7).

Comment:
Methods:
Page 5 line 24: I believe it would be better to say "with waitlist comparison group" than "with switching replication"
Response: Corrected (page 5, line 24).

Comment:
Study population and sample:
Page 7 line 3: It is a little surprising to have exactly the same number of participants (n=100) in each group (site), especially given the available number of nurses was different by site (173 vs. 217).
Response: Participation in the study was voluntary and effort was made to encourage as many of the nurses as possible to participate. Some of them could not be involved due to scheduling difficulties and since time was running out, a decision was taken to proceed to the next phase of the study after obtaining a reasonable sample size of 100 per site (page 7, lines 4-7).

Comment:
Statistical analysis:
After making your purpose clear, you can edit your analysis section accordingly. 12 months data in comparison group, i.e. 6 months after intervention (after the switch) serves a different purpose
here. This can be used as a comparison group for sustained effect at 12 months if that assessment was planned. For sustained effect, one could compare 6 months vs. 12 months within the intervention group. However, since there was a parallel comparison group, it makes more sense to use that 12 months data for sustained effect analysis.

Response: Thanks to the reviewer for this observation. As noted by the reviewer, 12 months data comparison between both groups was done (page 12, Table 2).

Comment:
Page 9 line 7: remove the word significant, we would only know significant or non-significant after a statistical test, so "… test for differences ..."
Response: Corrected (page 9, line 11).

Comment:
Results:
Given the sample size change over time, I recommend that you do one of the following:
(1) Present baseline data only for those that had 6 months data, this will be an analysis of completers (complete-case analysis with n of 82 and 80), or
(2) Impute missing value at 6 months so that your original sample size of 100 per group is maintained, and you will have full sample size for analysis.
Also explain reasons for missing data.
Response:
(1) Analysis (1) above has been included (page 9, lines 11-13; page 12, Table 2; and page 13, lines 3-5).
(2) Reasons for attrition (missing data): Some of the nurses that dropped out of the study at months 6 and 12 complained of busy work schedules. Moreover, some of those in the intervention group claimed that there was no need to continue since they had already benefited from the training provided to the group after the baseline data collection, despite encouragement from the study team for them to complete the process (page 10, lines 10-14).

Comment:
Page 11 line 4: Just say mean knowledge was not significantly different between the groups To me, scores were very similar (68.6 vs. 67.7), so no need to say they appeared to be different and the test was not significant.
Response: Corrected (page 12, lines 5 & 6).

Thanks once again.