Reviewer’s report

Title: Evaluation of a bespoke training to increase uptake by midwifery teams of NICE Guidance for membrane sweeping to reduce induction of labour: a stepped wedge cluster randomised design

Version: 1 Date: 04 Apr 2017

Reviewer: Kayode Gbenga

Reviewer’s report:

Reviewer's comments

This study assessed the effect of bespoke training on uptake of membrane sweeping by the midwifery teams to reduce induction of labour using stepped wedge cluster randomized design. However this manuscript will require major revision before considering it for publication

Abstract:

1) The authors should restructure the abstract section in-line with this format: Background, Methods, Results, and Conclusions

Methods

2) The authors claimed that they used stepped wedge cluster randomized design to assess the outcome. Typically in stepped wedge cluster randomized design the recruited clusters will randomly crossover from pre-intervention phase to intervention phase. It indicates that the duration of pre-intervention and intervention phase for each cluster will not be the same except for cluster that crossed over at the middle of trial. Clusters that crossed over to the intervention phase early in the trial should have a longer intervention phase than pre-intervention phase. In addition, at the early part of a stepped wedge cluster randomized study most of the clusters will be in the pre-intervention phase while at the later part of the study most the clusters would have crossed over to the intervention phase.(1,2) Thus, this paper did not apply "stepped wedge cluster randomized design" as they claimed rather the authors applied "before and after design"

3) The authors considered two primary outcomes (proportion of women offered and accepting membrane sweeping and average number of sweeps per woman) in this study. It is important to note that intervention study should not have more than one primary outcome but the outcome can either be a composite outcome or single outcome. The reason provided by the authors that the two outcomes are highly correlated will not justify why the authors considered them as primary outcomes. Moreover the two outcomes are not the same; one is a binary outcome while the other is a continuous outcome. This issue should be addressed
4) The authors should justify why they considered number of women offered and accepting membrane sweeping and average number of sweeps per woman instead of considering the proportion of ELIGIBLE women who were offered membrane sweeping and accepting membrane sweeping.

5) The authors mentioned in their response to the previous reviewer that the primary outcome was "proportion of women offered and accepting membrane sweeping and average number of sweeps per woman" however in the abstract they reported "number of women offered and accepting membrane sweeping and average number of sweeps per woman" as primary outcome. The authors should note that the primary outcome of this study should be "the proportion of ELIGIBLE women who were offered and accepting membrane sweeping"

6) The authors stated that they followed Hussey and Hughes to estimate the sample size but they did not the intervention effect that they used. Please address this important issue.

7) The authors stated that they used mixed effects Poisson regression model to examined the difference in the proportion of women being swept in before and after the training. I will like to know why the authors considered apply Poisson regression when the outcome is not a count variable.

8) The authors claimed that they used mixed effects Poisson regression model but did not report the random effect part of the model in the result table. Kindly provide the results.

9) The authors performed sub-group analysis but did not consider it when estimating the sample size. Kindly address this issue.

References


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