Reviewer's report

Title: Randomized community trial on nosocomial infection control educational module for nurses in public hospitals in Yemen: a study protocol

Version: 1 Date: 14 Oct 2018

Reviewer: Nikolaos Efstathiou

Reviewer's report:

Thank you for giving me the opportunity to review this manuscript. This is an interesting topic and the protocol seems generally sound. However, there are a lot of areas that require attention and revision. I have provided some comments below to allow you to reconsider parts of the manuscript and improve it.

I found confusing the use of past tense in your manuscript, as a protocol usually reports the processes for a future study and the text should be in past tense. I understand that this is an ongoing study, but if you wish to keep the past tense then you need to report that this study is currently undertaken. Probably provide the rationale for publishing protocols to put yours into context.

In the Background, the sentence "Family and community...from admission" requires clarification. At the end of the first paragraph you also refer to intensive care units which is not entirely the focus of your study, so I would like to see a comment on this (for example that the available evidence is related to ICU and that this might be the case in other hospital areas). Explain what accreditation means in the Yemeni context. What is expected in terms of accreditation (low prevalence of in-hospital infections or staff adequately trained in infection control)? Report if there is any evidence to demonstrate that training improves prevention of infections. I would suggest to break the objectives into aim and objectives.

Under Method/Design, you report that three cities were chosen out of five. You need to provide some more context here (are these five cities the largest cities in Yemen? Was your decision based on population?). Under participants, you excluded at the initial stage nurses from other countries, I assume because they had different training, but what about Yemeni nurses who were included and had their training overseas? In terms of blinding, I would not agree that this is a single-blinded study as allocation concealment is completely different from blinding. The sample size calculation appears convincing, but my knowledge is limited in this area. The intervention is well explained as this is the variable that is tested and has to be absolutely clear (for replication purposes). The decision to link the intervention with a theoretical background is very good, but I would expect a better integration of the theory with the intervention.
elements, you could report whether the trainers will be aware of the intervention/study. You need to state who delivered the training and their qualification to do so. I would suggest to change the sentence "according to … avoid any work troubles" to 'to accommodate different work patterns'. The tools used to collect data need further discussion (development, appropriateness, validity, reliability, pilot tested).

The data collection and analysis are clear. In the discussion, you mention the inclusion of public hospitals only as a limitation. You could provide some further information here about the private sector to understand the impact of this limitation. You also mention that there is no possible risk, but it is not clear what risk you refer to. You state that no funding was received for this study, but who covered the cost of the intervention?

Careful proof reading is required to correct some grammar and syntax mistakes.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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