Reviewer’s report

Title: Implementing a novel strategy for multidisciplinary medication review using collegial mentoring and systematic clinical evaluation in nursing homes (COSMOS)

Version: 0 Date: 26 Sep 2018

Reviewer: Mauro Di Bari

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BGTC-D-18-00387

The manuscript by Gulla et al. is part of COSMOS, a cluster randomized trial that evaluates the effects of a complex intervention of interprofessional medication review in nursing home (NH) residents. In this particular study, only nurses and physicians of the 36 NH randomized to active intervention were considered, to understand how NH staff received the intervention, to what degree the medication review was implemented successfully, and what barriers and facilitators could be identified for implementing medication reviews in NH. A total of 105 staff attendees received the educational program, which was applied in 92% of NH residents. The intervention was received with enthusiasm and improved communication among nurses and between them and physicians. Interprofessional dialogue facilitated the decision-making process pertaining to treatment levels. Perceived barriers to medication review were lack of time, low engagement of all nursing staff and physicians, and ethical dilemmas.

General comment.

1. The topic of the study is of major importance and fits perfectly with the characteristics of the journal.

2. Regretfully, the study appears as a sort of chimera, as it combines different aspects, aims, and methodologies. On one hand, it describes in details the procedures applied to perform the medication review, which is the intervention being tested with the classical approach of a randomized trial. In agreement with this approach, most of the Methods section is dedicated to describing patients' selection, characteristics of the NH and their staff, and the content of the intervention. Details on data collection and analysis are provided, just as in a typical RCT. Along the same path, the first part of the Results section reports the quantitative characteristics of the participants (i.e. NH staff and patients) and several process indicators. Then (page 11, from line 8), there is all of a sudden a gearshift towards a qualitative research approach, when barriers and facilitators for implementation are reported, with text quotations. Unfortunately, the methodology for this qualitative research expansion / extension of a typical RCT has not been rigorously reported.

3. As a result of this chimeric nature, as it is the paper is fairly confused and difficult to read through.
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.

Unable to assess

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

No

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.

Not relevant to this manuscript

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

Needs some language corrections before being published

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