Reviewer’s report

Title: UNDERSTANDING GRATITUDE: THE SIGNIFICANCE FOR PALLIATIVE CARE PROFESSIONALS. A mixed method study protocol

Version: 0 Date: 23 Aug 2018

Reviewer: Marieke Groot

Reviewer's report:

Dear authors,

The study protocol you have written concerns a relevant topic in palliative care, which is also fairly unaddressed until now. Thank you for the work you intend to do in this field.

Overall the paper is well written, but at some places the text is very complex (eg page 8, line 7; page 11, line 36, 37 & 38) and/or not correct (eg page 11, line 28; advise?? or inform; page 9, line 5; repercussions??) or writing errors are found (eg page 6, line 50; page 7, line 33). Furthermore, there are a couple of topics I want to address in order to make your paper more suitable for publication in BMC Palliative Care. Below, I will describe them per part of the paper.

BACKGROUND: the background can gain strength by making more clear why this research study actually is needed. Work has being done on this topic, and you donot make clear why such a large and mixed methods study as yours is necessary. Furthermore the link between the positive effects from gratitude and their use as a source from which e.g. resilience might arise must be accentuated.

METHODS AND DESIGN: you don't make clear to me why you have chosen the order of first a quantitative part and afterwards a qualitative. In a relatively unexplored research field, the other way around is more often used and, in my opinion, also far more logical than your choice.

GOAL: I need a description of the PC situation in Spain before I can understand why respondents from PC services are the only datasource in your study. As far as I know, also in other settings and done by other professionals PC is given and I wonder if you reach full insight in the topic under study if you only study part of the professionals. I also need more insight in how PC services are organized (who works there, what their role is in PC (advisory of caregiving etc)) in order to get a full picture of the setting and to inform myself (and other readers) whether this cover PC in Spain or is similar to another country from which readers will come

POPULATION AND SAMPLE SIZE CALCULATION: What do you think is the influence of asking only one member of the team in a service to fill in the survey. I really quesion if you can reach representativity in this way.
DATA COLLECTION: you mention advantages and disadvantages of the chosen method. However, only one drawback is refuted in this part, I wonder how you'll try to overcome the other and, if this is not possible, how this might influence your data

QUESTIONNAIRE DESIGN: in this part it is not clear what the three parts of the questionnaire consists of. You explicitly mention only two of them. Furthermore I think that recall bias might be an issue in your design and I wonder how you think about that and what this means for the data. The person who fills in the questionnaire might also be not fully informed about what happens in the team; how do you deal with that? Sentence 51 - 52 (page 6) need further clarification; what have you takens into account and what does this mean to the final questionnaire? The method you have chosen at the end of the questionnaire in order to come to respondents for the qualitative part, might lead to a convenience sample. However, a purposive sample might be more suitable. What can be the consequences of this choice? And is this in line with what you describe under 'POPULATION AND SAMPLE' in the second phase (the qualitative part)

PILOT STUDY: are there any changes made to the questionnaire after the final verification with the smaller group of clinical PCHP?

SURVEY PROCESS: this is a well thought-out procedure. What gives you the feeling that this helps in gaining a higher response; the thing is that I guess also other researchers use the same methods for improving response. I don't understand the possible use of a new list of contacts (page 8, lines 41-45). From what I've read, this is not possible because you already covered all teams in SPAIN. Please explain.

SECOND PHASE
Have you thought about the non-responders and if and if yes, in what way their experiences might add you valuable data in the qualitative part?

POPULATION AND SAMPLE: I really wonder if the sample you will get is an intentional one of whether it will be a convenience sample. Futhermore, why do you only want to interview PCHP who place most-value on displays of gratitude? This will really not give a full picture I guess. What are your thoughts about reaching data saturation. Is the choice of 20 respondents based on that? I read in this part that you might want to add other contacts to your respondents; are they different from you primary group? What does that mean for your data? In this line, I also don't understand your snowball technique sampling if more participants are needed.

GUIDELINE DEVELOPMENT AND INTERVIEW PROCESS: what do the different research techniques mean for your data, what can be the consequences of this? And is it possible to minimize them? I don't understand based on what you might opt for an 'further interview' (page 10, line 14).

PILOT INTERVIEWS: how many of them will you perform? Do you integrate their data in your analysis? And are the 20 interviews including or excluding these pilot interviews?

DATA ANALYSIS: It is not clear to me if the respondents only talk about their own loved experiences or whether they talk on behalf of their team.

You have chosen a complex analysis method. Please clarify more why the two-level-micro-thematic reflection analysis is needed. Is line by line analysis combined with macro-thematically reflections not
enough?

ETHICAL ASPECTS: how can you combine anonymous questionnaire data gathering with selectively sending reminders?

DISCUSSION: In my view this part is a repetition of the introduction/background section. What I think is needed here is a discussion (as far as possible in a protocol paper) about strengths and challenges of this study.

SPANISH context

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.

Unable to assess

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.

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In a recent EU funded project (INSUP-C), I worked for 4 years with Carlos Centeno. I'm sure this has not influenced my review. Furthermore, I have no competing interests.

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