Reviewer's report

Title: Factors underlying surrogate medical decision-making in Middle Eastern and East Asian women: a Q-methodology study

Version: 0 Date: 28 Apr 2020

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Review of manuscript number: PCAR-D-2--00068
Title: Factors underlying medical surrogate decision making in Middle Eastern and East Asian women: A Q-methodology study

Review Date: April 27, 2020

Main Impressions
Overall strengths of manuscript: The study addresses an important topic. Loved ones are often asked to participate in treatment-related decision making, especially at or near end-of-life or in advanced illness. It is challenging for clinicians to assist surrogate decision makers without an accurate understanding of the factors that influence decision making. Similarly, there is a dearth of literature on non-Western viewpoints, which again makes it difficult for clinicians to be inclusive.

Overall weaknesses of manuscript: There is too much going on in one manuscript. Not entirely clear whether the main objective was to compare 2 different methodologies (averaging analysis vs. Q-methodology), to compare EA and ME women's perspectives or to identify the most salient factors influencing non-Western surrogate decision makers. The results and methods sections are not well-organized.

Title
The title is an accurate depiction of the study.

Abstract
The abstract was difficult to follow. Even after reading 3 times, I am still not clear on the purpose, methods or most salient results.

Introduction/Background
The background or introduction section is missing a clear problem statement, leaving the reader to assume the research problem or question. It seems that your (the authors') problem is that we do not have a clear understanding of the factors that influence female surrogate decision makers from Middle Eastern and East Asian cultures. If this is so, you should provide some background as to how this came to be (i.e. the prevailing model for surrogate decision making is "substituted judgment", which is a uniquely Western concept and may be a poor fit for other cultures) and the adverse consequences of the problem. Once you have a clear problem statement, you can state your aim, which would be to describe the most important factors in surrogate decision making in ME and EA women acting as surrogate decision makers, and whether these factors are consistent with larger societal norms and between groups. You need to better explain the 3 perspectives and
how you arrived at them. Your background section should end with some sort of significance statement. Why is it important that we understand this phenomenon? In addition, later on in the manuscript you discuss comparing Q-methodology to averaging analysis. Was this part of your purpose as well?

Methods
Key information is missing from this section, especially concerning Q-methodology. I recommend that for clarity you use subsections to organize the Methods section. Please see below.

Design
You need to describe Q-methodology, justify why you chose it and provide a reference in case readers want to learn more.

Sample/Setting
Authors need to identify their target sample (who; inclusion/exclusion criteria); how they obtained sample (sampling strategy). The setting and how participants were enrolled is not adequately described. How did you determine that participants could adequately understand study aims and procedures? Had participants ever had experience acting as surrogate decision makers? Why were only women involved?
The final sample is described and represented in a table.

Protection of Human Subjects/Ethical Considerations
The authors adequately addressed.

Data Collection
There are issues with this section that need to be addressed. The section is not well organized for the reader. You may want to begin with a better description of the Q-sort tool. You should clarify that participants completed 3 survey parts, the respondent characteristics, social value questionnaire, and the statement sorting. Then describe each one, spending the most time on the sorting sheet.
You do mention that the items (representative statements) were taken from previous work and the literature and underwent pilot-testing. This is excellent. Follow this up with a brief explanation of each of the 8 domains and the ranking criteria, in words and numbers (e.g. from 1, representing very strongly disagree or not at all important to 9, which is strongly agree or vitally important). This will help the reader grasp what you did.

Data Analysis
The information on data analysis was complete. My only recommendation would be to add some "lay person" language. Begin with a brief explanation of what a Q-sort model is and that you used specific software to achieve. Chi-square and Fisher's appropriate for categorical variables; ANOVA and t-test appropriate for continuous level variables. Significance levels included which is good.

Results
Your main findings are lost. The results section needs to be substantially revised so that it is more concise and easier to follow. Much of the information presented in tables is also presented in narrative form. This is too repetitious. Begin each subsection of results with a narrative summary of the results then support as needed with statistics. Present the most salient findings in tables and provide only brief narrative in body of the manuscript.
Discussion
The discussion needs to be reorganized to begin with a recap of the main study findings, followed by situating these study findings in the extant literature. Because many of the readers are clinicians, I suggest including clear sections on implications for practice and education. You do address in conclusion but recommend moving up.

Conclusions
Well stated.
Note to authors: I realize the critique may seem harsh and hope you will not be disheartened. You have very likely conducted a high-quality study. However, that is not accurately reflected in the current manuscript. Please consider rewriting the manuscript taking this and the feedback you receive from others into consideration.
Recommendation: Resubmission with major revisions.

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
**Declaration of competing interests**

Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

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