Reviewer's report

Title: Association of Kidney Disease Quality of Life (KDQOL-36) with Mortality and Hospitalization in Older Adults receiving Hemodialysis

Version: 0 Date: 26 Sep 2017

Reviewer: Elodie Speyer

Reviewer's report:

This paper is to report the association between quality of life and clinical outcomes (mortality and first hospitalization). The topic is interesting and clinically important.

The aim of the study is simple, clear and relevant. This is an interesting study, and the manuscript is really well-written; greatly enjoyed reading this and hope you find my suggestions helpful for your consideration.

Major comments:

1. Please consider deleting "score" in the title as well as in different part in the manuscript when authors are mentioning the association between quality of life and outcomes. These analyses were performed to study a potential association between the concept of quality of life and clinical outcomes.

2. Authors should attenuate their conclusion. Indeed, only the physical dimension seem to be associated to a higher risk of mortality.

3. Page 6, line 74: I would delete the word "longitudinal" in this sentence, which is a little bit confusing since authors have collected only once measure of the quality of life, and then they look at the outcomes later.

4. Page 6, line 57-58. Authors should be more precautious when they state that no prior studies have examined those associations. Please consider some of the references below.


5. Page 6, line 80: Authors should write more details about the follow-up: When the follow-up ended? Reasons of end of follow-up? Is there an end date (if no event occurred)?

6. Page 6, line 88-89: Why did authors exclude as they were missing information on at least one of the 36 items on the KDQOL. Indeed, to the best of my knowledge, the calculation of dimension score is taking account the missing items (imputation methods). See the manual of scoring. Please consider rewriting it if applicable.

7. Page 7, line 97. The calculation of the 5 dimensions from the KDQoL is recommended in the manual of scoring, and it is not because authors wanted to be consistent with prior studies. Please consider rewriting it.

8. Page 7, line 105: what do you mean by "proximate to the date"? x weeks/months at the maximum before or after the questionnaire completion? Is it similar for all covariates?

9. Page 9: in order to obtain the adjusted HR for death (in table 4), did authors incorporate all HRQOL dimensions in an unique model? if so, how did they take account the collinearity between all dimensions?

10. Page 10 line 159: 95% of patients were receiving HD! What were the other options (home-HD, PD, other?)? Should authors consider to exclude patients weren't receiving HD from their analysis?

11. Page 10: Author have reported that 60% and more of patients were hospitalized at least once. Reader might wonder about some characteristics of hospitalization: cause of hospitalization? long or short stay)? Duration? Number of hospital stay per patient?
12. Page 14, line 243-244: what do you mean by "a single LDO". How many do LDOs exist within the US? How are they different from the others?

13. Page 12, line 209: The DOPPS has also used the KDQoL-36, but it is possible they have just presented the PCS and MCS in the cited reference. Also, what do authors mean by "younger cohort"?

14. All associations reported in this study may be biased due to unmeasured confounders or measurement error. This point should be more acknowledge to my mind.

Tables/ Figure:

15. Table 4: what about all the others covariates? Nothing is presented or explained in the text about that.

16. What does the figure add to the results of table 4? Authors may keep only the figure by adding the HR (95% CI) for each quintile.

Minor comments:

17. Page 7, line 45. Can you please provide additional detail regarding how Charlson Comorbidity Index was defined, and also insert an adequate reference? It would be helpful to the reader to provide this additional information here.

Best regards.

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

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.
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 am able to assess the statistics

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