Reviewer’s report

Title: Communicating projected survival with treatments for chronic kidney disease: patient comprehension and perspectives on visual aids

Version: 0 Date: 10 Jul 2017

Reviewer: Peggy Sekula

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Communicating projected survival to patients is always difficult - but just not limited to understanding. Therefore, to optimize way of presentation is surely of great interest.

The study is nicely conducted. Still, I would like to get some further informations:

I am aware on how GFR is estimated in Europe or in US but how is it calculated in your population (NZ).

Similarly, how is ESKD defined? I am used to ESRD (R=renal, KDIGO) instead of ESKD. Obviously, there is no common denomination.

Table 1: You probably mean “Cause of CKD” and not “Cause of ESKD”

How were data on comprehension collected? Did the participant complete a questionnaire or did the “member of the research team” record (standardized?) participants' answers?

Was it always possible to distinguish correct from wrong answers? I could imagine that this is not always clear. How did you deal with ambiguous answers?

As described, graph types were randomly assigned to scenarios per patient, so each patient received all four graph types. What about distributions per graph types (equally distributed per scenario, same number assessed overall)?

In Europe at least, we avoid red and green in graphs because of red-green color blindness. Please comment.

Is there any standard reasoning behind 5% difference in sample size calculations? Please specify details for sample size calculation (test, software).

Please be more explicit as statements like “Age >65 was associated with a lower frequency of correctly interpreting the histogram (p=0.008).” are somewhat unclear. Please specify such phrases and also in table 2 to what you compared to?
Table 2: please add absolute frequencies and explanation(s) on what hypotheses were tested in footnote.

Table 3: Please refine presentation to make clear that this is a presentation in the overall cohort of 177 patients by, for example, adding another column for unemployed and another row with totals

Table 4: Please add explanation(s) on what hypotheses were tested in footnote.

An angle that would nicely add to this study is to also assess understanding and ability to explain graphs by treating physicians themselves. Did you consider that? In my experience there is often a lack. It may worth discussing that.

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.

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 am able to assess the statistics

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

Acceptable

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