Reviewer's report

Title: Self-management Interventions for Chronic Kidney Disease: A Systematic Review and Meta-analysis

Version: 0 Date: 07 Jan 2019

Reviewer: Dong Zhou

Reviewer's report:

Peng et al present a manuscript that systemically reviewed self-management interventions in CKD patients in the setting of a meta-analysis. The manuscript is well-written and the analysis appears to be conducted methodically. The overall results showed that self-management strategies did not reduce the risk of all-cause mortality (RR 1.13, 95% CI: 0.68-1.86) but improved a number of intermediate outcomes such as systolic blood pressure. The topic area is important, and of interest to the readership, however, several concerns should be satisfactorily addressed on below.

1. If this is a study about self-management program among those diagnosed with CKD why is the introduction considering the global capacity for CKD detection? It would be better served by defining self-management behaviors relevant to CKD, as well as program strategies that are employed to promote effective self-management.

2. In the literature searching section, the authors claimed that "Studies were first screened according to title and abstract, and the full texts of any study considered relevant according to the selection criteria were assessed for eligibility by 2 independent reviewers (JS.H and JW.H)." How were disputes handled?

3. Did the authors use the trim and fill analysis to assess publication bias? Please include an explanation since most readers will not be familiar with this method and include in the same paragraph as the funnel plots.

4. Figure 2: does "M-H, random" refer to Mantel-Haenszel method? For the continuous outcomes in figure2, does IV = independent variable? A figure legend certainly will be needed.

5. What attempts were made at collecting unpublished data? Did the authors contact investigators in the field to discover whether they may have conducted a negative study that was never published? This is the main source of publication bias.
6. The value of the discussion of the 7 self-management frameworks is unclear. There are many health behavior theories and frameworks. Studies based in theory could potentially be acknowledged as such and given higher evaluation weight, but concluding that there are 7 frameworks to be applied in CKD is premature.

7. For the supplementary materials, the self-management framework in the text does not match the table, should be corrected.

Please confirm that you have included your review in the ‘Comments to Author’ box?

As a minimum standard, please include a few sentences that outline what you think are the authors' hypothesis/objectives, their main results, and the conclusions drawn. Your report should constructively instruct authors on how they can strengthen their paper to the point where it may be acceptable for publication, or provide detailed reasons as to why the manuscript does not fulfill our criteria for consideration. Please supply appropriate evidence using examples from the manuscript to substantiate your comments. Please break your comments into two bulleted or numbered sections: major and minor comments.

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- Are the description of any error bars and probability values appropriate?

- Are all error bars defined in the corresponding figure legends?

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