Reviewer’s report

Title: Association between fatigue, motivational measures (BIS/BAS) and semi-structured psychosocial interview in hemodialytic treatment

Version: 0 Date: 28 Nov 2018

Reviewer: Haikel Lim

Reviewer’s report:

Thank you for the opportunity to review this manuscript, which describes a mixed-methods investigation into fatigue and motivation of patients undergoing hemodialysis. I have a few suggestions that I hope would improve the quality of the manuscript for BMC Psychology.

The Background/Introduction of this manuscript is confusing, in part because the authors have focused both on giving an overview of mixed-methods and qualitative work and its importance (not really necessary in a Psychology journal), as well as trying to formulate a basis for their research (more essential). Unfortunately, neither of these aspects come across clearly, and as readers we are left wondering what exactly the study is planning on doing, or what lacuna it is trying to address. The manuscript may benefit from a revision of the entire introduction, and as I see it, I would suggest the following flow or something similar:

- Patients undergoing hemodialysis experience a significant amount of fatigue (it may be helpful to also explain post-hemodialysis fatigue and the hemodialysis regimen so readers get a better idea).

- Fatigue significantly negatively influences QOL and other associations, etc. The etiology of fatigue is multifactorial. (I would suggest the authors review also Joshwa, B., & Campbell, M.L. (2017). Fatigue in patients with chronic kidney disease: Evidence and measures. Nephrology Nursing Journal, 44(4), 337-343.)

- Work in other chronic conditions has suggested that fatigue can be divided into central and peripheral, and is mediated by inflammation. The inflammatory processes have also been shown to influence the basal ganglia. Therefore it may be postulated that motivation systems may underpin the understanding of (mediate? moderate?) the relationship between fatigue and its sequelae (again I would caution the authors from being definitive here because the research they are citing is purely observational and not causative, and any neurologist or neuropsychologist can tell you that motivation itself is multifactoral and may be under more frontal control than just limbically-oriented).

- If the authors have just gone on to describe the quantitative aspect of their study, this would make sense. However, given that there is a qualitative aspect, the authors need to justify the inclusion of this. In other words, it is not important for the authors to describe why exactly a mixed-methods study is better than either a quantitative or qualitative, or why qualitative interviews are important to elicit patient experiences; it is important instead for the authors to
highlight how the qualitative component fits into this idea of identifying the associations between fatigue and motivation, and what more it can contribute. What is the larger question the qualitative semi-structured interviews are actually getting at and asking, and how does it fit into this larger study? For example, it might be the case that because this postulation is new, or just based on observational data, it is important to ground the potential associations in qualitative findings. There needs to be a better theoretical foundation for this manuscript should it be published in BMC Psychology.

- The objectives of the study, and then the hypotheses, all in relation to the lacunae identified, should be clearly stated.

In light of this, the Abstract also needs to be reviewed to clearly state not only the lacuna, but also the objectives and if possible the hypotheses.

I would also recommend that the authors review the manuscript for grammatical errors; alternatively, the manuscript may benefit from proofreading by a native English speaker. I highlight some examples:

- "Quality of Life" in line 48 should just remain uncapitalised, i.e. "quality of life".

- Not sure what the authors are suggesting by using "should" in line 52; I suggest using "might" or "may", or eliminating this qualifier altogether given that past research has suggested the inclusion of both these systems.

- Removal of "evidences of" in line 53.

- Unclear what "requiring self-motivation" actually means in this context

- "On the other side" in line 66 may be better represented as "On the other hand" or something equivalent.

- Lines 78-82 are colloquial and in general can be better worded.

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

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