Reviewer's report

Title: Haemodialysis Work Environment Contributors To Job Satisfaction And Stress: A Sequential Mixed Methods Study

Version: 2 Date: 2 August 2015

Reviewer: Carolyn Graff

Reviewer's report:

Discretionary Revisions:
Your interview schedule is useful and clearly addresses the content or concepts being measured by your instruments in the qualitative phase. Given the clinical experience of the lead author and the second author, an Interpretative Phenomenological Analysis approach would have been very useful for this study. The authors have not discussed how their own clinical experience may have influenced this study—not only the choice of this topic, study design, and analysis of findings.

Minor Essential Revisions:
On page 4, lines 17-18: recommend revising this sentence by dividing into two sentences; new sentence begins at Kavurmaic et al. Move “in a small Turkish study” to the end of this second sentence (i.e., “. . . levels of emotional burnout in haemodialysis nurses in a small Turkish study.”)

Page 6, lines 16-18: this sentence appears to include a direct quotation from Lazarus and Folkman but there is no page number for this quotation.

Page 7, line 2: insert period at the end of this sentence.

Page 9, line 10-13: recommend including a reference for maximum variation sampling so the reader has some idea of how you went about this.

Page 15, line 6: change “led” to “lead”.

Page 21, line 18: change & to “and”.

Pages 21-22, lines 22-1: this is a direct quotation—where is the page number for this quotation?

Page 22, lines 6 and 16: insert comma after e.g. to read (e.g., . . .).

Page 23, line 7: insert apostrophe after s in “co-workers’ support”.

Page 24, line 18: change currently to “current”.

Major Compulsory Revisions: Although the authors have addressed an important and interesting area of research in this study, the following need to be addressed:

There is no clear purpose for this study. The authors should be clear about the purpose, stating the purpose clearly early in the manuscript. Page 5, lines 1-3, seem to provide a purpose for this study but the purpose is not clearly stated.
Where are the research questions and/or aims for this study? You should include research questions and/or aims to address the quantitative phase and qualitative phase of this mixed methods study. You should also include a mixed methods research question and/or aim. The absence of these questions is a major issue for this manuscript. Although the quantitative study has been published previously, it is not available to this reviewer and may not be available to future readers of this study. It is not clear how the research questions were addressed. It can be assumed that the instruments or measures in the online survey were chosen to answer the quantitative research questions. Again, this is not clear. The qualitative phase of this research was apparently developed based on quantitative findings. I question the sentence on page 7, lines 16-19. How could you integrate the quantitative and qualitative phases at the beginning of the study? You conducted the quantitative phase first, then used the quantitative results to develop the question for your interview guide in the qualitative phase. Again, be clear about what your research questions were for the quantitative and qualitative phases and for the mixed methods phase. You have referenced Creswell (2009) and Doyle, Brady, and Byrne (2009) for your mixed methods approach. I recommend you use more in-depth references such as Creswell and Plano Clark’s (2011) text, Designing and Conducting Mixed Methods Research (2nd edition), to guide your thinking about what constitutes an explanatory design. There appears to be a one year gap between your quantitative and qualitative phases. Why was this necessary?

On page 8, lines 18-20, you indicate that participants were invited to participate in a future qualitative study. You did not clearly state how many participants in the quantitative phase expressed interest in the qualitative phase. You indicated that 50 participants expressed interest on page 9, lines 8-9. Is this the total number who expressed interest? In your maximum variation sampling of these individuals, were there individuals you invited who chose not to participate? If yes, explain.

On page 9, lines 3-6, you identify the instruments used in your quantitative phase. It would be helpful to know what concepts these instruments measured and their psychometric properties. Based on an earlier statement, I assume these instruments have never been administered to nurses working in a haemodialysis unit. Is that correct? Again, it is important to know how the instruments you have chosen help you address the aims of this study and/or answer the research questions for this study.

Attention must be paid to the issue of generalizability of quantitative findings and the transferability of qualitative findings to other haemodialysis units. The last sentence in the abstract is a major concern. This sentence needs to be revised to indicate that nurse managers should consider the findings in this study to identify issues being experienced by nurses working in the unit they are supervising. The limitations of your study not only include the sample of nurses possibly not representing the larger group of nurses working in haemodialysis units in Australia and New Zealand but also the cross-sectional nature of this study. Expecting nurse managers to use these results to develop their own staff retention strategies is not realistic. Although most of the findings from this study
may be relevant to a given unit, suggesting that a nurse manager use these findings to develop staff retention strategies seems inappropriate to me. Your findings provide insights into what is apparently experienced in the units where nurses in your study are working.

On page 10, you describe the quantitative and qualitative analysis that you conducted. This needs to tie or connect clearly to the research questions that you are asking. Since there are no obvious research questions, it is not clear if the analyses you conducted for the quantitative and qualitative phases are appropriate.

One page 10, line 16, you mention a theoretical framework but do not share what this framework is. This framework needs to be described for the reader.

Also, you need to discuss how you address credibility and transferability in the qualitative section of your data analysis. On page 11, lines 1-2, you mention separate coding of the data but do not explain this in depth. I assume you used a priori codes because you are attempting to learn more about quantitative results but your themes reflect analysis beyond the concepts or content measured by the instruments.

Did you have missing data? If yes, how was this addressed in your quantitative analysis? How might this influence generalizability of quantitative findings?

Page 11, line 5, you mention “principles of the sequential explanatory design”. What are the principles? What is your reference for this statement?

Page 11, lines 11-12, you mention that 36.9% of the nurses were over 50 years of age, yet 37.4% were 41-50. Why not include both of these values?

In Table Two, you present the sample demographics for the quantitative sample. What are the demographics for the qualitative sample?

Page 12, lines 13-20 includes findings from the structural equation model that you developed and apparently presented in an earlier article. Why not include this information here? Also, what are the fit statistics for this model? There is redundancy in this section. You include the r-square values for the effect of work environment on job satisfaction and the effect of job satisfaction on stress, then you provide the variance in lines 17-18. Recommend including the actual model in your paper.

As I read Page 19, two questions came to mind. First, how do the demographic characteristics of the quantitative and qualitative samples differ or vary? Second, were questions about nurse–doctor interaction asked?

Page 20, line 16, be sure to add explanatory to “explanatory sequential mixed methods design”. I think the verb “explore” in “to explore haemodialysis nurses’ experience” should be “explain”. Read carefully on explanatory sequential mixed methods design. If you use Creswell for your reference, make sure you use the terms he uses in describing the design you have used. That is, use explanatory sequential design instead of sequential design or sequential explanatory design.

Level of interest: An article whose findings are important to those with closely
related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.