

PEER REVIEW HISTORY

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ARTICLE DETAILS

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| TITLE (PROVISIONAL) | Patient and Caregiver Preferences for Home Dialysis – The Home First Study: A Protocol for Qualitative Interviews and Discrete Choice Experiments |
| AUTHORS | Walker, Rachael; Morton, Rachael L.; Tong, Allison; Marshall, Mark; Palmer, Suetonia; Howard, Kirsten |

VERSION 1 - REVIEW

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| REVIEWER | Rosemary Masterson Department of Nephrology Royal Melbourne Hospital Australia |
| REVIEW RETURNED | 12-Feb-2015 |

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| GENERAL COMMENTS | <p>The Home first study aims to assess the key factors that influence patients and their caregivers in their decision making and preferences for mode and location of dialysis i.e home vs satellite dialysis. These authors have previously published papers using discrete choice experiments (DCEs) to look at factors influencing Dialysis modality preference of patients with CKD (AJKD 2012;60:102-11). In this protocol they outline how they will acquire the data to inform the design of the DCEs which will then be used to quantitatively assess patient preferences for mode of dialysis. I think it would be of greater interest to publish the protocol when they have got to the point having established what DCEs will be used, which will also incorporate the methods they have outlined in this manuscript.</p> <p>They propose only studying a population in one region of NZ. Given the high prevalence of home dialysis uptake in NZ, I am not sure how applicable the results of this study will be to patients in other countries. It might be of greater relevance to extend the study to centres in a few different countries e.g Australia and UK where a number of the authors are based.</p> |
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| REVIEWER | Paul Komenda University of Manitoba Winnipeg, Canada |
| REVIEW RETURNED | 26-Feb-2015 |

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| GENERAL COMMENTS | <p>Walker et al. present here a protocol for qualitative and DCE study examining patient and caregiver preferences for home dialysis.</p> <p>The study question is of important public policy concern to help explain the major centre and country level variability in home dialysis</p> |
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| | <p>uptake despite the clear health outcomes, quality of life and economic benefits of home therapies for ESKF. The results of this study will inform patient oriented research priorities in optimizing the use of home therapies.</p> <p>The qualitative methodologic approach appears to be sound in designing the DCE portion of the study.</p> <p>I have a few small suggestions in collecting complete baseline data to help characterize better the patient population and assist in generalizability and thematic analysis:</p> <p>Consider collecting at baseline the following:</p> <ol style="list-style-type: none"> 1. Dialysis Vintage and whether an individual has been on another modality previously 2. Education level 3. Some measures of frailty (SPPB, grip strength, depression index, etc..) 4. Health Literacy measure (there are a few standard tools on knowledge of dialysis modalities at baseline vs. if an individual can read a food label etc as a surrogate for health literacy). <p>This is a well designed protocol and should be published.</p> |
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VERSION 1 – AUTHOR RESPONSE

Reviewer #1:

1. In this protocol they outline how they will acquire the data to inform the design of the DCEs which will then be used to quantitatively assess patient preferences for mode of dialysis. I think it would be of greater interest to publish the protocol when they have got to the point having established what DCEs will be used, which will also incorporate the methods they have outlined in this manuscript.

We thank the reviewer for this perspective but respectfully disagree. We would prefer to publish a protocol for the complete project that encompasses development of the attributes for the DCE, right through to the methods of the DCE survey as this is the standard approach (1,2). However we have added a sentence to suggest possible attributes that may be included in the DCE, based on previous DCEs in dialysis patients (Page 12, paragraph 2 – marked copy).

2. Given the high prevalence of home dialysis uptake in NZ, I am not sure how applicable the results of this study will be to patients in other countries. It might be of greater relevance to extend the study to centres in a few different countries e.g Australia and UK where a number of the authors are based. Our explicit aim is to describe the experience of patients and caregivers in New Zealand and thus it would be beyond the scope of this study to include countries outside New Zealand. We also note that previous international studies have reported similar themes and findings to those observed in New Zealand within the home dialysis context. This commonality in themes in existing research indicates that findings from New Zealand are likely to be transferable to other countries (3-5).

Reviewer #2:

1. Consider collecting at baseline the following:

- a. Dialysis Vintage and whether an individual has been on another modality previously
- b. Education level
- c. Some measures of frailty (SPPB, grip strength, depression index, etc..)
- d. Health Literacy measure (there are a few standard tools on knowledge of dialysis modalities at baseline vs. if an individual can read a food label etc as a surrogate for health literacy).

We clarify that dialysis vintage, current and previous dialysis modality data and education level will be captured within the demographic data collected in this study (Page 11, paragraph 2).

We agree that frailty is an important consideration that may influence dialysis modality choice, in part as frailty acts as a proxy for physical capability. However, currently accepted measures of frailty (6,7) and the measures suggested by reviewer 2 are clinician assessed; As the DCEs will be self-completed not administered in a face to face interview, it will not be possible to collect these clinically determined frailty measures. We have however, included the SF12 questionnaire, (within the KDQOL survey) which estimates both a mental component score and a physical component score. We are confident that the physical component score from the SF12, and the responses to the relevant domains on the EQ5D (as well as the final utility score) will provide ample data for consideration of physical function as an additional explanatory variable when analyzing patient choice.

We agree health literacy is also important, and will include a self-reported health literacy measure – Short Test of Functional Health Literacy in Adults (STOHFLA) in the demographic questions within the DCEs (8) (Page 11, paragraph 2 – marked version).

References:

1. Jan, S., Usherwood, T., Brien, J. A., Peiris, D., Rose, J., Hayman, N., ... & Patel, A. (2011). What determines adherence to treatment in cardiovascular disease prevention? Protocol for a mixed methods preference study. *BMJ open*, 1(2), e000372.
2. Howard, K., Jan, S., Rose, J., Chadban, S., Allen, R. D., Irving, M., ... & Cass, A. (2011). Community preferences for the allocation & donation of organs-The PArADOx study. *BMC public health*, 11(1), 386.
3. Walker, R. C., Hanson, C. S., Palmer, S. C., Howard, K., Morton, R. L., Marshall, M. R., & Tong, A. (2015). Patient and Caregiver Perspectives on Home Hemodialysis: A Systematic Review. *American Journal of Kidney Diseases*.
4. Morton RL, Tong A, Howard K, Snelling P, Webster AC. The views of patients and carers in treatment decision making for chronic kidney disease: systematic review and thematic synthesis of qualitative studies. *BMJ* 2010;340:c112.
5. Tong A, Lesmana B, Johnson DW, Wong G, Campbell D, Craig JC. The perspectives of adults living with peritoneal dialysis: thematic synthesis of qualitative studies. *American Journal of Kidney Diseases* 2013;61(6):873-888.
6. Alfaadhel, T. A., Soroka, S. D., Kiberd, B. A., Landry, D., Moorhouse, P., & Tennankore, K. K. (2015). Frailty and Mortality in Dialysis: Evaluation of a Clinical Frailty Scale. *Clinical Journal of the American Society of Nephrology*, CJN-07760814.
7. Fried, L. P., Tangen, C. M., Walston, J., Newman, A. B., Hirsch, C., Gottdiener, J., ... & McBurnie, M. A. (2001). Frailty in older adults evidence for a phenotype. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, 56(3), M146-M157.
8. Chew LD, Bradley KA, Boyko EJ. Brief questions to identify patients with inadequate health literacy. *Fam Med*. 2004;36(8):588-94.