Reviewer's report

**Title:** How are patients managing with the costs of care for chronic kidney disease in Australia? A prospective observational study

**Version:** 2  **Date:** 24 September 2012

**Reviewer:** Laura Plantinga

**Reviewer's report:**

In this descriptive study, Essue et al. describe out-of-pocket costs, the prevalence of economic hardship, and predictors of hardship associated with hardship among 247 prevalent stage 3-5 CKD patients in Western Sydney, Australia. Identifying and describing this burden---not only in Australia but elsewhere too---is important since CKD prevalence is not likely to decline and those with CKD are likely to have many comorbid conditions and also to be of lower socioeconomic status and out of the workforce. Additionally, such hardship is likely to have a negative impact on patient outcomes.

I have a few suggestions:

**Major Compulsory Revisions**

1. The authors' third aim in the Introduction (examining outcomes by hardship) is never presented in the paper (rather, QOL is used as a predictor of hardship). I would suggest deleting this aim, particularly since the authors present it as a descriptive study.

3. Self-report of out-of-pocket expenses: it is probably difficult to remember exact numbers for some of these expenditures, particularly if the questionnaire is filled out at the clinic without access to bills and records. Do the authors think they are under- or over-reported?

4. As the authors point out, the participation rate is somewhat low, at 63%. Non-response is likely related to both outcomes and to hardship, giving a potential for bias in associations. This should be stated explicitly in the limitations, as this is a separate issue from generalizability.

5. Which variables were tested for effect modification? Were there a priori hypothesis about interactions? What were the results (presumably null since no interaction terms are presented in the tables)?

**Minor Essential Revisions**

1. In the abstract it is stated that variables at the community level are examined---I didn't see this in the paper. Should this statement be removed?

2. The authors state that the questionnaire and opt-in was mailed to a “cross-section” of patients in Western Sydney. More detail is needed. How were the patients identified? Was it a random selection? How many clinics/locations
were involved?

3. Out-of-pocket costs do not appear to be normally distributed. I would suggest reporting only medians/IQRs and performing non-parametric tests to compare by groups. (Although the authors state that they present means for ease of interpretation, I think medians/IQRs are fairly well-understood).

4. Table 1 is hard to read. Please add % signs where appropriate to distinguish numbers from percentages.

5. Table 2 is probably unnecessary since it doesn’t address the study question. The potential lack of generalizability can be described in the text.

6. Figure 4: what do the bars represent? Again, I think medians/IQRs might be better here. These numbers may be easier to interpret in a table since it is difficult to distinguish the hardship/no hardship groups.

Discretionary Revisions

1. Although a conversion factor to $USD is listed in the table legend, it might be helpful to the international reader if some of the costs are presented both in Australian and other currencies (e.g., U.S. dollar, British pound, euro) so that the relative amounts are better understood. Or perhaps they could be presented as relative amounts as well (e.g., % of income).

2. Hardship was a dichotomous outcome. Was there any way to calculate a degree of hardship from the various “dissaving” behaviors? It might be interesting to explore whether there is a dose-response type of association.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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