RESPONSE LETTER to PEER-REVIEW REPORT

Name of journal: World Journal of Nephrology
Manuscript NO: 35896
Title: Awareness, Self-management behaviors, Health literacy, and Kidney function Relationships in Specialty Practice

RE: Revision of manuscript 35896.

Dear Editor,

We would like to thank the reviewers and scientific editor for their valuable time reviewing the manuscript. We have provided our responses to each question posed by the reviewers in bold below. Additionally, we have highlighted all the changes made to the manuscript in yellow within the manuscript document. These highlighted changes include revisions to the manuscript based on feedback from reviewers and scientific editor. Besides this, the following additional changes have been made:

a) All the citations in the text have been written such that the reference number comes before the fullstop.
b) Informed consent form included.
c) Table 3 revised to include odds ratio and p value (based on reviewer feedback).
d) Two additional references (reference 19 and 20) added. All the subsequent reference numbers modified therefore both in the text as well as in the reference list.
e) Added article highlights section.

We hope this satisfactorily addresses all feedback on this manuscript and look forward to hearing back about the next steps soon.

Sincerely,

Radhika Devraj, Ph.D.

Response to Reviewers.

Reviewer's code: 00503228

- Results "16 patients who agreed to participate but failed to meet screening criteria. "you'd better give detailed data how many patients were excluded due to which of the exclusion criteria. –

We have added a sentence in the Results section addressing the reviewer's question. This sentence is "Among those who failed screening criteria, majority (n=15) of the patients were excluded because they had a score of 4 or less on the six item screener (SIS), and one was excluded because they had recent acute kidney injury".

Methods: Had any of you patients been under dialysis before; on what schedule? how long? until when? –

Our study sample included only Stages 1-4 CKD patients. Hence, none of our patients were on dialysis.

I recommed to stratify your patients into diabetics and non-diabetics, and reanalyse you data comparing patients of the two groups. You know; diabetes in the single most prevalent and with most singular features in CKD. - How many of your patients had comorbidity; and how it affects your study results. I recommend a more emphasizing on most important comorbidities (CVA, cardiac, etc.) –

We found no significant difference in CKD awareness due to comorbidities (as shown in Table 1, CKD cause). Hence, we did not feel the need to stratify the results by whether they had diabetes or not with respect to CKD awareness. Nevertheless, to address the reviewer's comments about re-analyzing the data, we repeated the analyses using two groups— group 1 included those with diabetes and/or hypertension (note: we felt that since there were very few patients with diabetes alone (n=19), it might be better to group the two major drivers of CKD, diabetes and hypertension together) while group 2 included the remainder of the sample. We obtained results similar to what is presented in Tables 2 and 3, with only two items being significant. "Knowledge of BP control" (p=0.013) and knowledge about "taking my blood pressure medication" (p=0.003) were statistically significant. Only one performance of behavior item (have done the activity of taking blood pressure medications) was significant (p=0.042). As most of the results in the re-analyses were nonsignificant; because the focus of our analysis is about CKD awareness, and because CKD awareness is not associated with CKD cause (comorbidities), we feel that presenting the results based on CKD awareness rather than stratifying it by diabetes or hypertension will be most appropriate. We feel confident about our results therefore.

Result: You just say multivariable analyses were not significant. It is not the right way to present your data. You should firstly give uni- and bi-variate analyses in tables and give RR/OR(95%CI), and then you conduct your multivariable analysis one by one starting by the most important ones, in a step-wise manner; and see how the significance levels change. In a study of limited sample size like your with such a large number of variables, it is not surprising that multi-variable analysis in a pooled way returns non-significance.

We did conduct univariate analyses (frequencies, means etc) for all our variables, but typically these are not reported in most of our peer literature. Bivariate results are presented in Tables 2 and 3. Only after performing univariate and bivariate analyses, did we do the multivariate analyses. We felt strongly that only the statistically significant results be reported in tables. Hence, even though we did several multivariate analyses, as we did not find significance, we felt it did not deserve a separate table. However, we did report it in the text. Also, in the interest of presenting our most useful and important information, we decided it would be best to present results were there was significance.
We agree with the reviewer that OR would be an alternative way of presenting the results particularly for behaviors and thank the reviewer for this suggestion. Table 3 (which refers to performance of behaviors) has been modified to include two additional columns, "odds ratio and p value". Since only two behaviors were statistically significant, we have added an additional sentence to the results section in the paragraph referring to Table 3 (page 11). This additional sentence is "Specifically, those who were aware were 5.9 times more likely to perform the activity of controlling blood pressure and four times more likely of "keeping a healthy body weight" over the past 3 months". However, we do not think calculating odds ratio for knowledge assessment (Table 2) would be appropriate.

- Methods: I know you gave a reference to your method, but it still needs some expansion. It is too much concise. For example the formula you calculated the GFR and so.

We have added additional sentences to the first paragraph of the Methods section on page 7.
The additional sentences include: "Patients were excluded if they had acute kidney injury and if their medical charts showed signs of poor cognitive functioning. Cognitive impairment was further assessed using the six item screener, a psychometrically valid and reliable tool to identify patients with cognitive impairment.[19]. Patients with a score of less than 4 were excluded. Visual acuity was measured using the pocket vision screener (Rosenbaum, Graham-Field Surgical Co Inc., New York, NY, USA).[20] Those with visual acuity worse than 20/100 were also excluded. Patients were given a $20 merchandise gift card as compensation for participating, irrespective of whether they met vision or cognitive screening tests."
We also indicated that kidney function was estimated using MDRD-4 traceable to

IDMS instead of MDRD (it was previously stated as MDRD equation). We hope that this will address the reviewer's concern.

PEER-REVIEW REPORT

Reviewer's code: 02888410

COMMENTS TO AUTHORS

The manuscript offers interesting results but it needs some minor corrections. What formula was used to estimated GFR: MDRD-4 or MDRD-4-IDMS?

Thank you for the comment. We used the MDRD-4 to estimate GFR. The text on page 8 in the Methods section has been modified to address this. The revised sentence on page 8 now reads as follows: "Kidney function was estimated using the Modification of Diet in Renal Disease (MDRD) equation (MDRD-4) traceable to IDMS",

Frecuency data are transcripted without statistical significance. It must be fulfilled and the comments corrected as needed.

We are not sure why the reviewer mentioned this. We have provided significance values for frequency data in tables 1, 2 and 3.

A no awarenes proportion of 40% is to high to say: "... awareness of having CKD was high among patients in this outpatient nephrology specialty clinic". This should be modified in Summary, Discussion and Conclusions. In fact the most interesting results is the need to improve patients information in stages I and II. Discussion is too long and should be shortened. The last but one paragraph could be erased.

To address the reviewer's comments, additional information referring to the reviewer's comment has been added to the sentence starting with "The vast majority of patients…..". in the discussion section on page 13 . Specifically, the following portion was added to the above sentence on page 13-- "concern and suggests an urgent need to improve awareness and education of CKD in the earlier stages of disease." Additionally, the term "high rate of awareness" has been deleted in that same paragraph (2nd sentence). Also, an additional sentence referring to education efforts in earlier stages was added to the abstract conclusion. We have already mentioned in the Conclusion section that educational efforts should be directed to the earlier stages. As we have several socio-behavioral variables, we feel that the discussion section deserves explanations for each variable, which unfortunately makes the discussion longer. We don't feel that the limitations paragraph (the last but one paragraph) should be erased as it is an essential part of any research paper.