

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

## ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Association of the Controlling Nutritional Status (CONUT) score with all-cause and cause-specific mortality in patients with diabetic kidney disease: evidence from the NHANES 2009-2018
<b>AUTHORS</b>	Zhang, Huifeng; Liu, Na; Dang, Huaixin

## VERSION 1 – REVIEW

<b>REVIEWER</b>	Ezinne Igwe University of Wollongong
<b>REVIEW RETURNED</b>	16-Nov-2023

<b>GENERAL COMMENTS</b>	<p>This is a really interesting study and you have done a great job. I have a few minor comments.</p> <p>Abstract Break up the sentence on nutrition status by group and proportion.</p> <p>Results The study outcome was mortality and association with DKD. The results section outlines three different covariates (sex, CVD, and DR) like outcomes. Was the model remodelled to make these outcomes or were the results taken from the one model? if you plan to report these as outcomes, you will need to run a new model and control for relevant covariates according to your outcome. The results of these subgroup analyses are not reported just described</p> <p>Discussion The first sentence in the discussion section should be rephrased for clarity.</p>
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<b>REVIEWER</b>	Kenneth Ralto UMass Chan Medical School
<b>REVIEW RETURNED</b>	13-Dec-2023

<b>GENERAL COMMENTS</b>	<p>Zhang and colleagues reviewed patients with DKD from the NHANES database to look for an association between a nutritional status score (CONUT) developed for hospitalized patients and mortality. Unsurprisingly, there was a higher mortality seen in patients with worse nutritional status in the setting of DKD, which is aligned with prior nutritional studies of patients with CKD from all causes.</p> <p>I would recommend reporting the unadjusted hazard ratios as well as the adjusted HRs. The discrepancy between an increase in mortality with higher CONUT score in men but not in women also warrants further discussion. Is this due to a limitation of the CONUT score's ability to distinguish between nutritional status in different</p>
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	genders? Is this a biological different between men and women with DKD?
	The text in Figure 2 is very small and might be more readable as a vertical forest plot.

## VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Dr. Ezinne Igwe, University of Wollongong

Comments to the Author:

This is a really interesting study and you have done a great job. I have a few minor comments.

Abstract

Break up the sentence on nutrition status by group and proportion.

Response: Thank you very much for your comments. We have broken up the sentence on nutrition status by group and proportion, as shown in the abstract section.

Results

The study outcome was mortality and association with DKD. The results section outlines three different covariates (sex, CVD, and DR) like outcomes. Was the model remodelled to make these outcomes or were the results taken from the one model? if you plan to report these as outcomes, you will need to run a new model and control for relevant covariates according to your outcome.

Response: Thank you very much for your comments. We have run a new model and controlled for relevant covariates according to our outcome. Corresponding revisions have been made in the methods section, results section and Table 3.

The results of these subgroup analyses are not reported just described

Response: Thank you very much for your comments. We have reported the specific results of these subgroup analyses in the results section.

Discussion

The first sentence in the discussion section should be rephrased for clarity.

Response: Thank you very much for your comments. We have rephrased the first sentence in the discussion section for clarity.

Reviewer: 2

Dr. Kenneth Ralto, UMass Chan Medical School

Comments to the Author:

Zhang and colleagues reviewed patients with DKD from the NHANES database to look for an association between a nutritional status score (CONUT) developed for hospitalized patients and mortality. Unsurprisingly, there was a higher mortality seen in patients with worse nutritional status in the setting of DKD, which is aligned with prior nutritional studies of patients with CKD from all causes.

I would recommend reporting the unadjusted hazard ratios as well as the adjusted HRs. The discrepancy between an increase in mortality with higher CONUT score in men but not in women also warrants further discussion. Is this due to a limitation of the CONUT score's ability to distinguish between nutritional status in different genders? Is this a biological different between men and women with DKD?

Response: Thank you very much for your comments. We have reported the unadjusted hazard ratios as well as the adjusted HRs in the results section, and further discussed the discrepancy between an increase in mortality with higher CONUT score in men but not in women in the discussion section.

The text in Figure 2 is very small and might be more readable as a vertical forest plot.

Response: Thank you very much for your comments. We have improved the quality of Figure 2, which has been provided as a vertical forest plot.

# **VERSION 2 – REVIEW**

<b>REVIEWER</b>	Kenneth Ralto UMass Chan Medical School
<b>REVIEW RETURNED</b>	13-Feb-2024
<b>GENERAL COMMENTS</b>	The revisions adequately addressed my prior comments with regard to the hazard ratios and concerns about the sex discrepancy between males and females based on their CONUT score.