

Peer Review File

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Reviewer A

Comment 1: The manuscript ought to focus on the specific aim, i.e., “to determine the prevalence of DM with CKD and its associated factors...”. The risk factors for diabetes represent no new information, and CKD without diabetes is not the focus of this analysis. The authors may consider revising the results section accordingly, with Table 2 to include DM with CKD only; Table 1 could present characteristics overall and among those with and without DM and CKD instead.

Reply 1: We have modified our tables as advised.

Changes in the text: (Revised version) See Table 1 and Table 2 & Page 7-8, line 156-189.

Comment 2: Since Table 1 shows significant urbanicity related differences in some risk factors, the authors may consider including this variable in the multivariable model, exploring interactions with other co-variates, and if necessary, stratifying the analysis by urban/rural.

Reply 2: Yes, but we found that there were no interactions between the urbanicity and risk factors or covariates excluding age/HbA1c.

Changes in the text: (Revised version) See Table 2 & Page 8, line 171-189.

Comment 3: Also related to Table 1, please specify in the footnote what the p value stands for.

Reply 3: We have modified the footnote in Table 1 as P value stands for the significant difference over four groups.

Changes in the text: (Revised version) See Table 1.

Comment 4: In Figure 1, the age groups could be merged as 20-39, 40-59, and ≥ 60 years, since there is no additional information within these groups. Also related to this figure, the prevalence of DM with CKD is higher in women only for age 60-69, whereas for all other age groups the 95% CI between men and women overlap. If this is the largest age group in the population, that might explain the overall higher prevalence in women than men, as described on top of page 8, lines 169-170. Please address this aspect in the discussions.

Reply 4: We have merged the age groups as 20-39, 40-59, and ≥ 60 years. Age 60-69 is indeed the largest age group in the population and we addressed this issue in the discussion section.

Changes in the text: (Revised version) See Figure 1 & Page 10-11, line 213-218.

Comment 5: The authors used a broader definition for CKD, so it would be worth

indicating results for the albuminuria and/or low GFR definition as a sensitivity analysis. It may show that the additional markers of kidney damage added little to the overall results, however, it would be more comparable with other surveys.

Reply 5: We have added albuminuria and/or low GFR definition as a sensitivity analysis.

Changes in the text: (Revised version) See Table 3 & Page 8, line 183-189.

Reviewer B

Comment 1: According to the definition of KDIGO for CKD, "CKD is defined as abnormalities of kidney structure or function, present for >3 months, with implications for health," and requires one of two criteria documented or inferred for >3 months: either GFR <60 ml/min/1.73 m² or markers of kidney damage, including albuminuria. As current report is cross-sectional observation study, the diagnosis of CKD was based on a single measurement and were not confirmed after 3 months, this fact did not fulfill the diagnostic criteria for CKD by KDIGO.

Reply 1: Yes, the diagnosis of CKD was based on a single measurement and were not confirmed after 3 months in this study like most cross-sectional observation study on CKD. However, this study excluded diagnosis of acute nephropathy for patients who had clinical diagnosis record based on EHR data, which can partially control such limitation.

Changes in the text: (Revised version) See Page 6, line 128-129.

Comment 2: The calculation and definition of DM, CKD, and DM with CKD were very confusion. Of 36,077 subjects, 4,024 had DM only, 4,496 had CKD only, and 1,057 had both DM and CKD. The prevalence of DM in Shanghai was $(4024 + 1057)/36077 = 14.1\%$, of CKD and was $(4496 + 1057)/36077 = 15.4\%$. The prevalence of CKD in patients with DM was $1057/(4024 + 1057) = 20.8\%$. The overall prevalence of DM with CKD over general population was $1057/36077 = 2.9\%$. All definitions were different and should be clarified for comparison. The manuscript text needs to be revised extensively.

Reply 2: Yes, we have clarified these definitions.

Changes in the text: (Revised version) See Page 9, line 191-193.