Reviewer's report

Title: Prevalence and determinants of chronic kidney disease in urban adults Cameroonian according to three common estimators of the glomerular filtration rate: A cross-sectional study

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Reviewer: Daniel Teta

Reviewer's report:

In this manuscript, the authors report data on the prevalence of CKD from a relatively large cohort of individuals (n=500) from a cosmopolitan urban area in the economic capital of Cameroon. They show that CKD prevalence is as high as about 10% in a relatively young sample of individuals. They also reported that usual risk factors such as age, hypertension, diabetes and high BMI were significantly associated with CKD.

The paper reads well. The results may not be very original. However, the methods applied are consistent and well described, the data are credible and clearly presented and their interpretation looks correct. However, the sample size may be insufficient to identify other potential risk factors for CKD, representing thus a limitation.

I have raised the following concerns:

1. The study may be underpowered to identify other risk factors for CKD (tobacco, use of street medicine or hebal for instance). How was the sample size calculated beforehand in order for this study to be sufficiently powered.

2. The authors also use MDRD to estimate eGFR. MDRD has not been validated for eGRD > 60, the majority of individuals from this study. Can the authors justify this use? If not, MDRD estimation of eGFR may be removed from the paper.

3. Minor points and grammatical errors

Prevalence and determinants of chronic kidney disease in urban adult (no s) Cameroonian according to three common estimators of glomerular filtration rate: A cross sectional study.

Page 1 Line 3 and 4
We assessed the prevalence and determinants of CKD among adults in 4 urban Cameroon.

Comment. This study remains a cross section study and a causal inference cannot be made. Hence we may suggest using the word "risk factors" and not "determinants" of chronic kidney disease.
ref number (4). This study aimed at examining the role of pre-eclampsia and eclampsia in pregnancy-related mortality. However, it does not mention any information on the prevalence of CKD. Perhaps in the subgroup analysis, but we did not find any figures on prevalence of CKD.

Page 4 line no 19.
Reads « we carried a cross sectional study of two months duration from Mars to April 2013 »
Comment : I guess the authors meant ‘March’ instead of ”Mars”.

Page 5 Line 11
Final year’s undergraduate medical students collected data from 8 a.m to 12 a.m for participants who provided a written informed consent. 
Comment : It should read Final year. (Grammatical error.)

Page 5 Line 22
In every participant we drew 3ml of whole blood from an antecubital vein…..
Comment : it should read we drew…

Page 6 line 19. The Albuminuria was classified as ……
Comment/ suggestion : It should read, ‘Albuminuria was classified as’. Without the définite article ‘The’

Page 22 table 5
History of goute
Comment : should read ‘History of gout’

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interest