Reviewer's report

Title: Chronic Kidney Diseases in Mixed Ancestry South African Populations: Prevalence, Determinants and Concordance between kidney function estimators.

Version: 1 Date: 18 December 2012

Reviewer: Navdeep Tangri

Reviewer's report:

Matsha et al. present a cross sectional study from a suburb of Cape Town, S Africa, and attempt to describe the prevalence of CKD and associated risk factors in an older community based cohort. The work is of potential interest given the lack of data about the burden of CKD in Africa. However, I have the following major concerns with the manuscript

1)- In the introduction, the authors comment about the lack of information about CKD prevalence in sub saharan Africa in contrast to developed nations. However, it would appear that their community based cohort in a suburb of Cape Town is also unlikely to be representative of sub saharan Africa.

2)- Their comment about the prevalence of CKD being extremely high may not be correct. In fact it is completely dependent on the ethnicity correction in the population. The prevalence is low (< 8 %) with the correction, and only high when the correction is not used. I am not familiar enough with the mixed ancestry population to recommend for/against the use of the ethnicity correction.

3)- No GFRs are measured, even in a subset....as such, determining the optimal formula for GFR estimation is not possible.

4)- The kappa/agreement analysis is unnecessary. The MDRD and CKDEPI equations use the same variables with slightly diff coefficients...As such, it is expected that they would be colinear.

5)- The cohort is predominantly female and obese. As such, the generalizibility of the CKD prevalence is unknown.

I would urge the authors to omit table 2, fig 1, fig 2, table 4, and pick an appropriate equation (with or without ethnicity correction)....and focus on reporting the prevalence of CKD and associated factors in this predominantly female S african suburban cohort.

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:

'I declare that I have no competing interests