Reviewer's report

Title: Chronic kidney disease among high school students of Kinshasa, the Democratic Republic of Congo.

Version: 1 Date: 28 September 2011

Reviewer: Pierre Delanaye

Reviewer's report:

We read with interest the article proposed by Bukabau and colleagues. Detection and estimation of GFR in developing countries are very important because detection of CKD is the first step of prevention. However, we have major remarks:

1) English language must be improved. The manuscript must be revised by a native English speaker.

2) We are not fully convinced by the choice of the Schwartz equation as the “reference” because the mean age remains relatively high. Even if the interest of this article is especially to compare the performance of the equations (not to know which is the best equation because GFR is not measured by a reference method), we think additional arguments must be given for the choice of the Schwartz equation.

3) There is no data on the serum creatinine measurement. It is very important because difference in creatinine calibration will have large impact on epidemiology.

4) The authors should compare their results with other epidemiologic studies in Europe and in USA [1;3]. Especially in the USA, comparison with the CKD prevalence observed in African-Americans could be of interest.

5) Are the results of the Schwartz and Cockcroft equations indexed for BSA? This must be given and discussed.

6) The differences in BMI between males and females are statistically significant but we don’t think this difference explains the difference in creatinine values.

7) Why the new CKD-EPI equation has not been studied?

8) The new CKD classification proposed by the KDIGO must be preferred (probably better than the KDOQI classification).

9) Limitations of the equations in the young subjects must be more discussed. For example, it is clear that the MDRD study equation underestimates GFR in young female subjects.

10) There are limitations in the use of ethnic coefficients for African subjects [2]. This has been debated in the recent literature. Moreover, no ethnic coefficient is applied in the Schwartz and Cockcroft equations. This should be discussed.

11) Kappa statistics are not “correlation” but “agreement” statistics.
Reference List


Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests