Reviewer's report

Title: Profile of patients with end stage renal disease in a referral hospital in Cameroon

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Reviewer: ernest Sumaili

Reviewer's report:

Dear Editor,

I just read this paper. Here are my comments.

Title: PROFILE OF PATIENTS WITH END STAGE RENAL DISEASE IN A REFERRAL HOSPITAL IN CAMEROON.

Overall comments

I think this manuscript provides interesting information about CKD in the Cameroon. The increasing burden of ESRD patients and the limited opportunities to treat some of them are striking, and regrettable. The authors have worked hard to study characteristics of their patients in terms of eGFR and potassium measurements. Unfortunately, the study is limited to patients admitted to one nephrology unit of the Cameroon. The distribution of patients is dominantly in stage 5, reflecting the understandable late referral of patients to the unit. This excludes many more patients in the population who need to be screened for earlier CKD using creatinine, proteinuria and eGFR measurements to give a truer picture of the serious problem of CKD in the Cameroon.

1) Abstract. Data regarding epidemiology of ESRD in SSA are not really scarce (compulsory revisions). There are several published (N Engl J M 2006, 354: 10, Nephrol Dial Transplant 2007, 22: 332-335, BMC Nephrol 2009; 10: 18 and Nephrol Therap 2010 (6): 232-239 from the neighboring country of Cameroon, the DR Congo). However, the data concerning CKD and hemodialysis are sparse. Abstract should be rewritten and the aim of the study clearly defined. The background nephropathy in this study is probably not true. Hypertension could be associated to ESRD but not the causes? What was the definition of ESRD? What was the formula used to estimate GFR?

2) Introduction is good, and succinct. But, in view of the issues of validity of eGFR and its uses in HIV population or African population, I think this should also be briefly discussed in the introduction as well in discussion (compulsory revisions). Data concerning ESRD from SSA, particularly in neighboring country such as DR Congo should be added in the introduction as well in discussion.

3) Methods. Authors must clarify which formula Cockcroft- Gault or MDRD study equation has been used in their study i.e. serum creatinine values used, were standardized to Cleveland study (Levey et al. Ann Intern Med 2006; 145: 247-254) or not? (Levey AS et al Ann Intern Med 1999; 130: 461:270, compulsory revisions). The formula (C-G, MDRD?) as well the method of the measurement of serum
creatinine (Jaffe? Enzymatic method?) should also be described. The authors could also indicate the importance of this in discussion and or ‘limitations’ section (Delanaye P et al Nephrol Dial Transplant 2006; 21:1130, compulsory revisions). The operational definitions of the following terms should be also clarified (compulsory revisions): ESRD, glomerulonephritis, HIV nephropathy, Charlson comorbidities score (plus reference). This is not clear (K/DOQI definitions and classifications of CKD) in their paper. Furthermore, hypertension is probably not a clinical signs of Uraemia as it is stated in the operational definitions. I think it will be convenient to point out that the presence of at least one of the following clinical signs: anemia, asthenia, anorexia…. etc.

4) Results. Table 1 and 2. I think the salient points from these tables could be written as text. It is not necessary to have such a long and complicated table which does not add much to the results. Perhaps just significant points can be extracted from this table (Compulsory revisions). Some results in the both table are redundant i.e. background nephropathy (in table 1 versus table 2). Any data on the kidney function? Why authors did not illustrate the data concerning eGFR from the creatinine? Distribution of proteinuria across categories of eGFR can be quite informative and will improve the overall value of the manuscript. In their study, why serum creatinine decreased significantly with age (p < 0.001)? This result should be discussed. I think figure 1 is not relevant and can be left out.

5) Discussion. This section is slight relevant. Comparison with paper published concerning ESRD (clinical characteristics, RRT affordable) in SSA (central Africa) (i.e. DR Congo or other neighboring countries) should be added. Authors have not addressed the decrease of creatinine with age encountered (discretionary revisions). Authors should mention as discussed earlier limitations of Cr based eGFR without validation or standardization in main discussion and its implications. Limitations to using an invalidated eGFR, clinical definition of HIV or glomerulonephritis etc. must be mentioned. Authors can add the importance of early detection of CKD and risk factors in order to reduce the burden of CKD in their country.

Finally, I think this paper needs some corrections before being published.

Best regards,

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

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