Reviewer's report

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

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Reviewer: Bernard Jaar

Reviewer’s report:

I read with interest the manuscript by Halle et al. In their manuscript, the authors describe the profile of patients with end-stage renal disease treated on hemodialysis at the Douala General Hospital in Cameroon, a tertiary referral hospital, between January 2002 and December 2012.

Overall, the manuscript is well written and of interest since there is a paucity of such data from this part of the world. Please find below further comments:

Background: no comment.

Materials and Methods:

- Please provide the prevalence of ESRD in Cameroon. Is this data available? This reviewer is trying to understand if this population dialyzed at the Douala General Hospital is representative of the whole hemodialysis population in Cameroon.

- Overall during this time period, how many patients with ESRD were referred to the Douala General Hospital?

- Please provide insurance information? How many patients had insurance at start of dialysis? What type of insurance?

- Importantly, for a better understanding of the delivery of care to hemodialysis patients in Cameroon for the international readership of the Journal, please provide the following information:
  o Update patients characteristics with presence or absence of cardiovascular comorbidities such as coronary artery disease, congestive heart failure, arrhythmias, …
  o Provide information on medications in use (oral and IV) such as phosphate binders, vitamin D, erythropoietin stimulating agents, blood pressure medications, …

- Clarify the number of participants in the study. In the methods, the authors stated that “842 patients were included in the final analysis.” But in the results section, the authors stated that 863 patients were included as also described in table 1 and table 2.

- Were there any kidney biopsy reports available even for a small sample of this population? This may be important to validate the etiology of kidney disease in this population. Otherwise, please clarify how the etiology of kidney disease was
assessed and add this to the methods section.

- Do you have longitudinal data on vascular access? For example, after patients have been on hemodialysis for 3 or 6 months, how many of them have an arteriovenous fistula or a graft?

- Very importantly, it would be important to provide data on mortality rate. If cause specific is not available then provide all-cause mortality. Again, this information may be important for an international readership to have a better understanding of hemodialysis survival in this population.

- Similarly, it may be interesting to provide data on hospitalization rate and quality of life if available.

Results:

- In the results section, the authors use the Charlson score but this nowhere to be found in the methods section. Please describe the process of using the Charlson score in the methods section and add the reference. Which variables were included in the score?

- Importantly, has the intake of hemodialysis increased over time? It may be important to show a figure with number of patients starting hemodialysis by year (2002-2012).

- In Table 1: please add serum bicarbonate level. Important to understand the level of acidosis in these patients.

- In Table 1 and figure 1: under quartiles of age, please show the median and interquartile ranges.

- In Table 1: add comorbidities such as hypertension, diabetes, coronary artery disease, … This is in addition to the cause of ESRD. Not all patients with diabetes and diabetes as the cause of their kidney disease.

- Were there any cases of genetic kidney disease such as autosomal dominant polycystic kidney disease?

- Table 2 does not add much to the discussion and can be deleted.

Discussion:

- When defining end-stage kidney disease, please only use one abbreviation: ESRD. Avoid using ESKD such as in line 181 of page 8.

- What is the actual cost of hemodialysis per year in Cameroon? Is all the cost out of pocket or is there some government support?

- There are a few typos in the manuscript. For example:
  o Page 9, line 196 and page 10, line 222: ERSD should be ESRD.
  o Page 9, line 205: explained should be explain.
  o Page 10, line 221: most men should be mostly men.

I hope that these few comments will help the authors improve on their interesting manuscript.

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

Quality of written English: Acceptable

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.