Reviewer's report

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

Version: 2 Date: 4 January 2015

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Article analysis

“Profile of patients with end stage renal disease in a referral hospital in Cameroon” by Marie P Halle and coll:

Is an interesting paper regarding the epidemiology and management of ESRD in a referral hospital in a developing country with limited resources. Nonetheless, there are major issues that should be addressed in order to accept it for publication.

- The title is somehow vague.

Authors should specify the assessed profile in this study (clinical, biological, demographic, epidemiological, management.....)

- Regarding the authors affiliation, we noted that none of the participants is a nephrologist. Is there some explanation to it?

- In the introduction, we propose that the authors add a small paragraph summarizing the characteristics of Cameroon (population- GDP- health system budget and priorities, number of nephrology units- dialysis centers and nephrologists) to have a clear image of the constraints and obstacles they reported throughout the manuscript.

- Methods: the authors performed a monocentric retrospective study based on medical files over a period of ten years. A multicentric and/ or prospective study would have been of a greater strength in terms of results. At the end of 2012, the unit was operating with one nephrologist. What about the preceding years?

The unique identifier that is assigned to the referred patients was it a nephrologist or did other practitioners contribute to these patients management?

The reported number of included patients is 863 both in the abstract and in the result part of the main text, while in the methods section the authors report 842 patients. Which number is right?

-Regarding the etiology of ESRD, were all of them presumed? what about renal biopsies and other methods of confirmation of kidney disease; this issue needs to be clarified.

-Dialysate characteristics and hemodialysis parameters were not assessed.
- Methods did not include elderly and children definitions in this study: from what age a patient is considered old and until what age a patient is still considered a child?

- Emergency dialysis was performed in life threatening circumstances. Please do clarify these circumstances as well as the kind of temporary vascular access used.

- Statistic analysis: what about student test or Mann Whiteny test for comparison.

- Results:

  - The etiologies of ESRD need to be more detailed.

    What kind of glomerulonephritis did lead to ESRD? Focal segmental glomerulosclerosis (FSGS) and mesangiocapillary are known to be prevalent in subsaharien patients, what about the included patients?

    It would be interesting and informative to add the percentages of the various diseases underlying kidney failure in this study.

    Diabetes is noted among the etiologies. Is it diabetic nephropathy? Isolated or associated non renal disease in diabetic patients?

    Please specify for HIV, did all your patients present with HIVAN or did some of them present with other renal diseases related to HIV?

- Some parts of the results are presented in a non informative way, since the reader must refer very often to the tables in order to get data. The information should be added in the text in lines 127-128.

  Lines 129-130 are useless, thus, they should be deleted.

- In ESRD, urea, creatininemia are high and the great majority of patients present with hypocalcemia and anemia. It would have been more interesting to present the mean hemoglobin level and the other features of anemia in these patients as well as the other complications of ESRD (cardio-vascular, mineral and bone disease, nutrition, infectious status especially hepatitis B and C).

- Hemodialysis sessions should also be detailed (vascular access, weekly number of dialysis sessions, weekly number of dialysis hours, hemodialysis complications, quality of dialysis Kt/V- URR).

- The percentage of patients that underwent unplanned emergency dialysis before starting chronic dialysis.

- The authors did detail and emphasize the age quartiles analysis, which did not add major information to the results. We recommend to reduce and rather summarize this part of the results.

Discussion:

Some data need to be reported and discussed:

- The prevalence of ESRD in Cameroon?

- The age range of CKD and ESRD patients?
- Are there available results regarding these settings from previous studies in Cameroon or some of the neighboring countries?

- Hemodialysis is the only renal replacement therapy (RRT) used in these patients. Why aren’t others RRT techniques such as Peritoneal dialysis (PD) for instance used? Since PD is known to be less expensive than HD.

- Then, what about renal transplantation, is it performed in Cameroon? From living or deceased donor? What is the number of transplanted patients so far?

Figures and tables
- Figure 1 could be deleted and replaced by a small paragraph
- The tables are uneasy to read with condensate data, especially table 1 with the quartiles analysis. We recommend that the authors avoid displaying the whole data in tables in order to make them clearer.

Language
The paper is written in a correct English, and therefore doesn’t require language revision.

This manuscript is interesting but need major compulsory revisions before publication

Level of interest: An article of importance in its field

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