Reviewer’s report

Title: Treatment Outcome and Its Predictors among Patients of Acute Heart Failure at a Tertiary Care Hospital in Ethiopia A Prospective Observational Study

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Reviewer: Joe Gallagher

Reviewer's report:

The aim of this study was to evaluate treatment outcome and determine factors that predict poor treatment outcome in acute heart failure at a hospital in Ethiopia. It provides an interesting view of heart failure and shows a rising HF-PEF and female population.

At one point they state "Out of the total 169 AHF patients echocardiography measurement was assessed for 74" and later in the results state "Findings for chest X-ray, electrocardiogram and echocardiography were obtained for 42 (25.0%), 109 (64.5%) and 83 (49.1%) of the patients, respectively". Please reconcile the numbers for echocardiography

How were the reasons for ADHF decided?

29 (17.2%) patients had poor outcomes at discharge - poor outcome as defined in this paper is an unusual variable as it include death and self discharge against medical advice with no improvement. These are very different outcomes and the authors should justify why they have been grouped together. It may be worth considering using death alone and if not the number of deaths should be given separately

Pulmonary hypertension - how was this diagnosed and was a cause identified i.e. was this related to long standing left heart failure or primary pulmonary hypertension?

Inappropriate dose: defined according to European Society of Cardiology management of AHF in the first 48 hours used as a reference - can the authors clarify that dosing they are using and of what medications they are referring to from these guidelines

Since there is no established treatment for HF-PEF could the authors comment on this in the manuscript and the need for a focus on preventive therapies.

In table 3 describing hypertension as stage 1, 2 etc in a ADHF is not appropriate as this relates to stable patients only

In table 6 11% of patients with ADHF are described as having a normal ECG - this appears unusual and perhaps the authors could comment. Is this related to the time the ECG was taken?

For chronic rheumatic heart disease the authors should describe how this was diagnosed and give an overview of the valve lesions involved.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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