Reviewer’s report

Title: Trends and barriers of Emergency medical service use in Addis Ababa; Ethiopia.

Version: 1 Date: 30 Aug 2018

Reviewer: Jeremy Abetz

Reviewer's report:

Dear Authors,

Thank you for submitting this manuscript to BMC Emergency Medicine. The trends described and barriers to use of EMS in any area is of great import in improving the health of the population.

Overall this manuscript still needs English language editing, with multiple spelling and grammatical errors repeated throughout.

The methodology is good overall and appropriate to the questions being asked and the suggestions raised in the discussion are appropriate.

A few minor points that I believe need to be addressed are below.

Methodology - Please make reference to the rates of languages spoken in Addis Ababa in the "setting" section so that the reader can compare the actual rates of EMS use to the underlying rates in the community.

Please give more details of the descriptive statistics performed (i.e. when a mean vs. median was used, which statistical tests were used for comparison of variables).

It is usual for all data to be kept in a secure file for 7 years after the conclusion of the study. Elaboration as to why this was not done for the qualitative data is merited.

Results - The methods mentioned a process for minors to be collected, however; Table 1 indicates no participants < 18 years old. They are then mentioned later in table 2. Please clarify this discrepancy.

Why were the cut-offs for monthly income used? Do these represent income quartiles?

In stating that a lower proportion of medical illness arrived by ambulance compared to trauma, some form of statistical test and p-value would be appropriate.
More details are needed regarding the logistic regression analysis. Was it a univariate analysis, or a multivariate analysis?

Discussion:

Line 40 if the majority waited longer than the mean time for ambulance arrival, it is likely that these data are skewed and therefore a median (IQR) may be more appropriate.

Limitations - sites were specifically selected based on having high car accident rates. The present study may therefore have over-represented the burden of motor vehicle accidents/trauma.

Participants presented to hospital in the present study. It may be worth surveying the community at large to identify those who do not attend the hospital at all.

**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:

Not suitable for publication unless extensively edited
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