Reviewer’s report

Title: NEEDS ASSESSMENT OF EMERGENCY MEDICAL AND RESCUE SERVICES IN ABUJA/NGERIA AND ENVIRONS

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Reviewer: Winfred Baah

Reviewer's report:

1. FULL TITLE

'NEEDS ASSESSMENT OF EMERGENCY MEDICAL AND RESCUE SERVICES IN ABUJA/NGERIA AND ENVIRONS'

COMMENTS - I understand that the study was carried out in Abuja and it's environs, which are all cities/towns in Nigeria. I suggest the Title be rephrased to reflect this.

2. Abstract

Background

'Nigeria is ranked second highest in the rate of road accidents and other emergencies (Deaths, disabilities) among 193 countries of the world. Therefore the need for.....'

COMMENTS - I suggest the sentence "Therefore the need..." should read "There is therefore the need....."

3. BACKGROUND

Lines 3, 4

'There are no empirical data on the number of lives or disability-adjusted life-years (DALYs) saved through emergency medical care [14, 13, 15].'
COMMENTS - Rearrange references "13,14,15"

- Is the lack of data in Nigeria or worldwide?

Lines 8,9

'In response to this two major institutions were created in addition to the existing emergency departments...'

COMMENTS - There must be a comma between "this" and "two" to read ... In response to this, two major......

NEMA (PAGE 2)

'NEMA was established in the year 1999, it has the responsibility of managing medical emergencies such as fire outbreaks, disease epidemics, flood disasters and road traffic accidents [20, 22]'

COMMENTS - To rephrase the above statement. Either there is a "full stop" after the "1999" or sentence rephrased

- Please clarify if "fire outbreaks, flood disasters, road traffic accidents" can be classified as medical emergencies. Could it read "...medical emergencies arising from..." instead of "such as"

4. METHODS

DOCUMENTATION OF PUBLISHED AND UNPUBLISHED MATERIALS (PAGE 3)

'A literature review on relevant information on medical emergencies with a focus on low income countries.'

COMMENT - This sentence is not complete
Publications were identified through search engines; unpublished material included hospital and EMRS booklets, files and other records in the three institutions. Photos were taken during the field visits to the EMRS agencies and rescue operations.

**COMMENT** - Please review the punctuation marks in the above sentence as some of them have not been placed correctly.

**QUALITATIVE METHODS (PAGE 3)**

'Furthermore, in-depth interviews were conducted by the PI...'

**COMMENT** - There should be a "comma" after the "furthermore" to read "Furthermore, in-depth ...."

**5. ETHICAL CONSIDERATION/STATEMENT**

'The research protocol was submitted and approved by the

Ethical Committee of the University of Freiburg (approval number 171/17) which was accepted by the Nigerian authorities. Written informed consent was obtained from all study participants'

**COMMENTS** - Was there a written document from the Nigerian authorities indicating their acceptance? This must be submitted to the Journal

- 'Written informed consent was obtained from all study participants'. Is this the case for the unconscious patients? were there minors involved and how was their consent taken?

**6. RESULTS (PAGE 5)**

**TABLE 1**

'The staff numbers are highest in FRSC with 19,000 employees in the whole country most (64.7%) of them being males, second NEMA with 700 employees, predominantly males (64.7%), and third MAITAMA where most of the 762 staff were nurses (72.3%).'
COMMENT - The use of "highest", "second", "third" presupposes that you are ranking them, from the highest to the lowest but this is not the case. Please review

- 'and third MAITAMA where most of the 762 staff were nurses (72.3%).' From the table 1, females (MAITAMA) were 72.3%. Does it mean that all the nurses in MAITAMA were all females?, and that non of the non-nursing staff were females ? Please clarify

TABLE 3 (PAGE 7) Table 3 EMRS and outcomes in two weeks observation period

COMMENTS * ' COLUMN WITH NUMBER OF CALLS PER DAY' .

- How was the total number of calls (1386) arrived at since that column has ranges?
- Was the 1386 the total number of calls received over the 2 week period or for 1 day?
- The table must be well presented for clarity

* 'It shows a high workload of 1,000 calls a day in MAITAMA hospital. '
- From the table, this is not factual. Please clarify

* ' All calls at FRSC (192 per day) were related to RTIs and to a lesser extent to other medical emergencies'
- from the table, this statement is also not factual and must be presented appropriately

* 'NEMA responded to an average of 87 NCD calls per day and to fewer RTI calls.
- From the table, this is also not factual. Why the use of "average" ?

7. ACTIVITIES OF RESCUE STAFF AT SCENE OF EMERGENCY (PAGE 8)

'and the heart rate and volume are monitored using the ECG ambulance machine.

COMMENT - Please clarify what you mean by ....and "volume" monitored using the ECG ambulance machine
"ECG ambulance machine" should read "ambulance ECG machine"

8. FIGURE 2 (PAGE 9)

'Satisfaction regarding EMRS rendered by the three organizations were low for FRSC and MAITAMA, 23% and 36% respectively. However, satisfaction with NEMA services was quite high (70%).'

COMMENTS - Figure 2 was presented with absolute figures without percentages. The explanation above however was presented in percentages. Could a table showing the percentages be produced?

9. DISCUSSION

PAGE 10, LINE 3 'In this study, we distinguished between "call delay" (from occurrence of the event until calling the call centre) and "transport delay" (from receiving the call at the centre to arriving at the hospital/health care facility). The call delays were obtained through observational periods and interviews with victims...'

COMMENT - There was no data presented to substantiate the above. Please clarify

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.

Unable to assess

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 recommend additional statistical review

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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