Author’s response to reviews

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

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NEEDS ASSESSMENT OF EMERGENCY MEDICAL AND RESCUE SERVICES IN ABUJA/NGERIA AND ENVIRONS" (EMMD-D-19-00026R1)

Authors Corrections/Rebuttal

1. 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.

ANSWER: We discussed the observation(s) if the title is longer than necessary it will make it clumsy. “Environs” covers/captured all cities.

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....."

ANSWER: Now changed.
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?

ANSWER: Now re-arranged as suggested. 13, 14, 15 and clarified that lack of data in Nigeria (refers to Nigeria).

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....

ANSWER: Fixed as suggested

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]'"
- 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"

ANSWER: In the literature, the above are all medical emergencies. The sentence was changed as suggested

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DOCUMENTATION OF PUBLISHED AND UNPUBLISHED MATERIALS (PAGE 3)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

ANSWER: The is sentence is 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Publications were identified through search engines; unpublished material included hospital and EMRS booklets, files and other records in the three institutions.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.

ANSWER: Rectified as suggested

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 ...."
ANSWER: Fixed as suggested.

4. 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.

ANSWER: The research study was conducted in compliance with the ethical principles of the Nuremberg Code and the Declaration of Helsinki (BMJ, 1996; WHO, 2001). The research protocol was submitted and approved by the Ethical Committee of the University of Freiburg (Written approval number 171/17) which was accepted by the Nigerian authorities after presenting the research protocol at the MoH and the participating institutions.

- '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?

ANSWER: As described in the Methods section (the section captured all of the above queries) we interviewed:

1. Head of participating agencies

2. Relatives of victims (very few of whom had been unconscious but were already awake when the interview was started)

3. No interviews with minors

5. 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

ANSWER: In the table we were simply presenting the gender distribution in the 3 organizations under scrutiny. “NOT Ranking”

- '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 none of the non-nursing staff were females? Please clarify

ANSWER: Yes the nurses were all females (as in most West African countries)

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?

ANSWER: The numbers in the table refer to 14 days observation period. Now clarified
1386 calls were recorded during the 14 days observational period, the ranges are/were mere comparison of what calls were received per/by the day.

* 'It shows a high workload of 1,000 calls a day in MAITAMA hospital.'
- From the table, this is not factual. Please clarify
ANSWER: From the total number of calls per day at MAITAMA, we calculated the average per day which is about 1000. Now clarified in the text. MAITAMA is one of the biggest hospitals in the city of Abuja with a lot of medical consultants; therefore the high workload.

- '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.

ANSWER 1: The key tasks of FRSC agency have been explained earlier in the manuscript body. Scantiness and meagerness of resources brings about the magnitude of the above outcome(s).

- 'NEMA responded to an average of 87 NCD calls per day and to fewer RTI calls.'  
  ANSWER: As above, the main tasks of NEMA have been explained earlier too. With this information we interpreted the numbers/results from the table. These are facts.

- From the table, this is also not factual. Why the use of "average"?

ANSWER: It is probably easier for readers to grasp and understand daily averages than events/activities over a 14-days period. Therefore we preferred to use daily averages.

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"
ANSWER: ECG machine in the ambulance, now corrected.

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?

Answer: This has been clarified.

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

ANSWER: Table 4. Shows the different data.

Many thanks for the useful comments.