Author’s response to reviews

Title: A woman's worth: An access framework for integrating Emergency Medicine with Maternal Health to reduce the burden of maternal mortality in sub-Saharan Africa

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Version: 1 Date: 08 Dec 2019

Author’s response to reviews:

Alaa Oteir (Reviewer 1): Thank you for the opportunity to review the paper entitled "A woman's worth: An access framework for integrating Emergency Medicine with Maternal Health to reduce the burden of maternal mortality in sub-Saharan Africa" (EMMD-D-19-00042)

Overall the manuscript aims are very important for the region of sub saharan Africa. Some suggestions and edits are below:

Comment 1

Abstract

* a structured abstract including specific subheading may improve the clarity of the proposed framework in this section

Response 1

Though our paper is more of a commentary than a research paper, we understand the reviewer’s suggestion, and have made attempts to include relevant structures to the abstract to help guide the reader.
Comment 2

Body of the manuscript:

* I advice the authors that the background section/body of the manuscript to be divided into sections under specific subheadings such as background, methods setting, proposed framework ….etc

Response 2

We have made attempts to include relevant headings to the body of the paper to guide the reader, and welcome further suggestions by the reviewer in making such demarcations clearer.

Such additions include these subheaders to the background:

The Maternal Mortality Burden in the African region, and the Role of Emergency Care Services

Timely Access to Obstetric Care: Examining The Three-Delays Model

Situating the Three Delays within the Context of Emergency Care Delivery in the African Region

“Access”, the Three Delays and Emergency Care Delivery

Comment 3

* A summary of the project aim before going into the methodology is important

Response 3

We believe we provided that on page 3 of the manuscript as such:

In this article, we propose a conceptual framework that integrates the five aspects of access with the Three Delays Model in maternal health and emergency medicine (Figure 2). The model offers opportunities for implementation scientists to contextualize EC interventions to the specific needs of the community in which they are implemented, and institute measurable, attainable and realistic benchmarks to track the successes and failures of the interventions.
Comment 4

* Setting subheading (as mentioned) is needed to describe the EMS system as well as identifying the sub-saharan Africa are for interested readers

Response 4

We have added references to the “African region” to appropriate headers as noted:

The Maternal Mortality Burden in the African region, and the Role of Emergency Care Services

Situating the Three Delays within the Context of Emergency Care Delivery in the African Region

Comment 5

* Page 3, Line 41: "curriculums" should be spelled as "curricula"

Response

correction made

Comment 6

* The proposed curricula should also focus on the services provided for maternal emergencies

Response 6:

We do not want to distract too much from the EM focus of the paper, or re-iterate the various services (and body of research) available for maternal emergencies, some of which we mention in the paper (Page 5, “Emergency Medicine Benchmarks”: “…analgesia, forceps or vacuum extraction, and cesarean sections…”)
Thus we added the following to the sentence regarding the education curricula (page 4):

“Education curricula should cover how ambulances are alerted (toll free numbers), qualifications and training of EMS providers, types of life-sustaining care for maternal and other emergencies provided on ambulances versus commercial vehicles, etc.

Comment 7:
* More details on measuring the outcome of normalization is required

Response 7
We added the following to page 4:

A way of assessing whether “EMS normalization” has been attained will be through the use of surveys, longitudinally evaluate changes in the target population’s perceptions of and attitudes towards prehospital care services; and the number of times the EMS cascade is activated over time.

Comment 8:
* In the Reaching Care-Availability and Accommodation and Affordability section (page 3, line 56)

   • what do you mean by accommodation?

Response 8
Thank you for catch. Availability and accommodation often go together thus the original phrasing. We have updated this to read (page 4):
The availability (desired services available) and accommodation (ability to reach desired services) and affordability (ability to pay for the services) of emergency transport

The availability and accommodation (ability to reach desired services) and affordability (ability to pay for the services)

Comment 9

• I believe other outcome measures should be considered for this section such as number dispatches, type of dispatch …etc

Response 9

Included the following sentence in the “Emergency Medicine Benchmarks” section:

“Other outcomes could include number of ambulance dispatches and dispatch types.”

Comment 10

* The Third Delay (Phase III): Receiving Care-Appropriateness (Page4: line22)

o How would you measure advancement and the success in this phase?

♣ Note: this mentioned in the conceptual framework but not explicitly clear in the text

Response 10

The following has been added to the text in the “Emergency Medicine Benchmarks” section (page 5).
Sup-par outcomes in the third delay heavily influence the cyclical nature of the entire Three Delays model. Thus measurable benchmarks in this phase of the framework should correlate EMS and EM training programs with in-hospital interventions and maternal mortality metrics to ensure that there is a “fit” between the needs and expectations of the target population, and the services rendered by both pre- and in-hospital providers.

Comment 11

References:

* Please double check the style and accessibility of reference no 1

Comment 12

Thank you. We have made adjustments to the references.

Comment 13

Overall

* There are many of definitions within the manuscript (including prehospital time periods, availability and accessibility). These many definition make somehow difficult the read through. Therefore a summary table and paraphrasing these paragraphs are advised for easier reading

Kindest regards
Response 13

Thank you for the insight. We have gone through and added headers and subheaders where appropriate, removed and clarified sentences, and added enhancements to the figure 2 to help orient the figure. Additionally, we have provided Table 1, a list of key terms and definitions used throughout the manuscript.

Ahmed Belkouch (Reviewer 2): Thank you for your efforts to improve maternal health care in Africa. I am from Morocco. The biggest problem that faces African countries is financial. Proposing any organizing program is obsolete when countries like mine has an inefficient EMS because of it coasts.

In France for example, global cost of EMS is equivalent to the budget of my country.

Waiting for the effectiveness of our EMS I recommend highly the publication of you work.

Response

Thank you for acknowledging the relevance of our work, and for appreciating its importance as well.