Author's response to reviews

Title: Process and outcomes of inpatient stroke rehabilitation in Africa: Quantitative and Qualitative Findings

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Version: 3 Date: 22 December 2014

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22 December, 2014
The Editor
BMC Health Services Research

Dear Sir/Madam

Thank you for the opportunity to resubmit our article “Process and outcomes of inpatient stroke rehabilitation in Africa: Quantitative and Qualitative Findings” MS: 6037844313033117.

Comments Response
Reviewer 1
3. Are the data sound?
The key words I look for in the presentation of the data are process; outcomes; quantitative; and qualitative.

I do not have any major concerns about the qualitative data. However, the quantitative data seems incomplete relating to “process” and “outcomes”. Was the process of rehabilitation limited to physiotherapy services only? Was it possible that patients received other forms of rehabilitation services like Occupational Therapy, especially in South Africa? It may not be safe to assume that the outcomes of inpatient rehabilitation were limited to only physiotherapy.

In addition, the quantitative outcomes of rehabilitation presented were limited to “Length of stay” (LOS), and “Time since stroke onset” (TSO). The demographic data in table 1 did not indicate the range for age, LOS, TSO, and number of physiotherapy sessions received.

There was no quantitative information about the functional attainments of the participants that the reader may relate to the qualitative outcomes described.
Finally, the authors indicated under Methods to carry out a Pearson correlation between number of physiotherapy sessions and the length of hospital stay. This was not reported.

In Rwanda and Tanzania, the rehabilitation services are provided by Physiotherapists only. There are no other rehabilitation professionals such as occupational therapy (OT) or speech therapy (ST), in the research setting. In South Africa professions such as Occupational therapists and speech therapists are sometimes involved in the rehabilitations of stroke patients. This study only collected data relating to physiotherapy which is often the therapy mostly provided to the stroke patients.

The ranges were added to table 1.

As the quantitative data was collected from the folders of the patients’ functional status was not documented comprehensively for all the settings and therefore not included in this paper. This was highlighted as a limitation of the study.

P value Included see line 251-252
7. Are limitations of the work clearly stated?
Not addressed. Limitations of the study were included:
See page: page 19: line 470-475
Reviewer 2
2.1 Major compulsory revisions
I believe the manuscript might benefit from a discussion of what is currently known regarding stroke epidemiology in South Africa, Rwanda and Tanzania, as well as what has been discussed regarding the provision of stroke rehabilitation in Africa or the developing world in general. Information relating to stroke in these countries were added, see page 4: line 73-83.

More information about the communities and the hospitals would be helpful. What are the sizes of the communities, the health resources, the most common occupations and family structures and the terrain? How are health services financed?

As well, I was not completely clear on the length of time over which the charts were sampled. The research settings for the different countries were expanded. See page 6 line; 136-164

Information added on page 8 line 172-176
One of the objectives of this paper could be to simply present this data, that is, an example of the situation in three communities in three countries that could
then be discussed in terms of stroke best practices and available physiotherapy resources.

A very interesting potential topic for the discussion section could be, given current resources, how could rehabilitation services be optimized? Given that length of stay is about a week in each community, how could patients be best mobilized during this time? Would community-based rehabilitation initiatives be a priority?

This information about rehabilitation services was added to the background (page 5: line 102-114).

Also as part of the recommendations on page 20 line 485-487.

The time since stroke onset (TSO) numbers were fascinating. Are these figures the time between the stroke occurrence and admittance to hospital? If so, what is happening to patients in the meantime? TSO is the time between the date of stroke onset and the date of admission. In the meantime, the patients may be consulting traditional faith healer in some instances.

I would be interested in the standard deviations for LOS and TSO. Added to table 1.

Regarding the interview data, I’m not sure that this data is best characterized as “outcome” data, but rather, as the authors state, relate more to “challenges experienced by stroke patients while in the home or community setting.” I see this part of the paper as more of an exploration of the challenges of stroke survivors in these communities. There are quite studies addressing this type of question from North America and Europe. I believe the authors could make an important contribution to the literature by going a bit further into the analysis, comparing the difficulties by community and reflecting further on the characteristics of the communities and the challenges raised by the participants.

Furthermore, this analysis could help the authors reflect further on recommendations for stroke rehabilitation in these communities. That is, given health services restrictions and these long-term problems, what might be the best organization of services to deal with these problems?

The aim of the study was expanded to indicate that the outcomes are expressed as the challenges experienced by the individuals with stroke.

The discussion was also expanded to address this aspect, see page 17: line 421-426; page 18: line 445-452; page 19:459-461, to address this matter.

2.2 Minor essential revisions

Much of the literature review consists of an explanation of the WHO ICF model. I feel this section is somewhat lengthy and a bit unclear. I would recommend cutting much of this. The background was revised.

2.3 Discretionary revisions

Other papers that might be helpful to look at:

Lemogoum, Daniel, Jean-Paul Degaute, and Pascal Bovet. "Stroke prevention,

Norrving, Bo, and Brett Kissela. "The global burden of stroke and need The recommended references were included.

Lemogoum, et al as part of the discussion and Norrving as part of the introduction.

The manuscript was reviewed by a language editor before submission. Table 2 was deleted as recommended and table one is in landscape.

Yours sincerely

Prof Rhoda (Corresponding author)