Author’s response to reviews

Title: Training for Health Services and Systems Research in Sub-Saharan Africa - A Case Study at Four East and Southern African Universities

Authors:

David Guwatudde (dguwatudde@musph.ac.ug)
Freddie Bwanga (fxb18@case.edu)
Lilian Dudley (ldudley@sun.ac.za)
Lumbwe Chola (lumbwechola@hotmail.com)
Germana Henry Leyna (gerryleyna@yahoo.com)
Elia John Mmbaga (eliajelia@yahoo.co.uk)
Newton Kumwenda (nikumwenda@jhu.medcol.mw)
Myroslava Protsiv (myroslava.protsiv@ki.se)
Salla Atkins (salla.atkins@ki.se)
Merrick Zwarenstein (merrick.zwarenstein@ices.on.ca)
Celestino Obua (cobua@chs.mak.ac.ug)
James K Tumwine (kabaleimc@gmail.com)

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Author’s response to reviews: see over
11\textsuperscript{th} November 2013.

The Editor-in-Chief,
The Human Resources for Health Journal.

Dear Sir/ Madam:

Re: Manuscript ID- 2180726141033259

Thank you very much for considering publishing our manuscript titled “Training for Health Services and Systems Research (HSSR) in Sub-Saharan Africa – A Case Study at Four East and Southern African Universities”; and for the reviewer’s comments that we received on the ??? October 2013. We found the comments very useful in improving our manuscript. Attached is the list of a point-by-point response to these comments, and have made some changes in the manuscript where we found necessary.

We are re-submitting two versions of the revised manuscript, i.e. a) the tracked changes version (red-lined), and b) the clean copy. On behalf of my co-authors, I thank you for considering publishing our manuscript. We hope that you will find the revised manuscript satisfactory for publication in your esteemed journal. Thank you very much.

Yours Sincerely,

David Guwatudde, PhD.
Makerere University School of Public Health,
Kampala, Uganda.
REVIEWER 1: EMMANUEL MPINGAKABENGELE

The authors of this study focuses on the development of health systems through training and health services and systems research. The study whose results are presented here to know in the field of the HSSR the numbers of trainees in African universities, the curricula and challenges. If the goals and motivations of are valuable, this study raises several questions:

Major concerns

Comment 1: On the epistemological level
The definition, content, limits and links of the HSSR field with other health and systems research are not clarified. (links between HSSR and Human Resources Development)
Response: We have added an opening paragraph in the Introduction Section, which provides the definition and components of HSSR (see paragraph 1 on page 4).

Comment 2: On methodological and operational levels.
This epistemological question leads to another fundamental question: Can we consider that students who spent two years studying health systems policies, Human Resources Planning, Health and Epidemiology economy as eligible for graduation in HSSR? If so, there is a big methodological bias in this study calling for its full revision.
Response: Assuming that the reviewer raises the question in relation to the “HSSR related modules” presented in Table 2, ordinarily a PhD student takes a package of modules to strengthen their knowledge base as part of their training. Our assessment identified the HSSR-related modules being offered at the four universities. We considered all modules related to health systems and services strengthening. This is explained in the methods section (see 2nd paragraph on page 7).
Furthermore, we assessed PhD level training which is the highest level existing, and takes 4 to 5 years. We view this level of training as the foundation for developing a strong HSSR capacity in a country, since we do not believe it can be based upon MSc training only. We have added a sentence to clarify this point in the last sentence of the introduction section (see page 6).

Minor Concerns

Comment 3: In the introduction of this study, the authors note: "Review of literature has reveals that little is known about the current level HSSR" Where is the reference of this review?
Response: The problem we wanted to highlight in the quoted statement is that there is no literature to demonstrate how much is known about the level of training in HSSR. There is therefore no literature to cite regarding the current level of HSSR training in sub-Saharan Africa. We have re-worded the sentence with the aim of making this clearer. The sentence now reads: “A literature search on the current level of HSSR related training within SSA institutions did not yield any published investigation in this area” – see last sentence of paragraph 2 on page 5.

Comment 4: For the accuracy of their study, the authors may be more accuracy with international development agenda by making a discussion point-in MGD and Post 2015 agenda health research recognition.
Response: We have noted in the introduction section (2nd paragraph page 4) and in the
discussion (opening paragraph of the Discussion, page 11-12), the importance of HSSR in meeting the health MDGs. We note that sub-Saharan Africa is unlikely to attain the health MDGs, and the reason could be the gap in capacity for HSSR.
REVIEWER 2: SIRIWANPITAYARANGSARIT

Major Compulsory Revisions

**Comment 1:** Data about HSSR related training in SSA institutions were only modules, infrastructure and facilities. There were no information on human resources and capacity of trainers in HSSR.

**Response:** True we did not evaluate the number of human resources and their capacity to train in the area of HSSR. We have included a paragraph in the discussion recognizing this as a limitation in our assessment – see top of page 15.

**Comment 2:** On the demand side, data were collected from current PhD students to identify motivating and challenging factors towards PhD training; however, there are potential clients that may be interested in HSSR training but were not investigated; therefore, there was a sampling bias to identify motivating and challenging factors to enroll PhD training.

**Response:** It is not clear from this comment, the potential clients interested in HSSR training that the reviewer has in mind. Recognizing that PhD training is specialized and specifically undertaken in institutions of higher learning, our objective was to assess the motivating and challenging factors towards PhD training from the trainee’s experience. We wanted to find out the challenges faced by both the institutions, and the trainees. We have added wording in the specification of this objective, to clarify this point – see the last sentence of paragraph 2, page 5-6. We have also added wording in the Limitations section recognizing that our assessment missed out on perceptions of HSSR capacity and challenges faced by other stakeholders such as donor agencies and non-governmental organizations – see top paragraph on page 15.

**Comment 3:** The statement that link the number of HSSR PhD trainees at these universities and the required critical mass of locally trained HSSR professionals to drive the much needed health systems strengthening and innovations in this region was too simplified.

**Response:** We recognize that there are a number of issues that impact on health systems strengthening, of which PhD graduates are only a small part. However, we feel that specialized PhD level research training is needed to develop skills in implementation and evaluation of research that can strengthen health systems. We therefore only considered formal education in HSSR, with the view that specialized training is needed to facilitate systems strengthening through HSSR training.

**Comment 4:** If the results provided more information on the capacity of HSSR training at SSA institutions including HSS researchers and HSSR funding, it will be possible to conclude that the current level of HSSR PhD training at SSA institutions is too low to enable creation of a critical mass of locally trained HSSR professionals.

**Response:** Assessing the number of HSSR researchers and the amount of HSSR funding, although would be an interesting perspective, this would be a different objective and outside the scope of our study. Our objective was to determine the level of HSSR training, using the number of HSSR graduates as the output indicator. This is objective a) stated in paragraph 2, bottom of page 5. We have therefore decided not to make any modification based on this comment.
Discretionary Revisions

**Comment 5:** Strength and weakness of local institutions on the HSSR training may be analyzed to provide more recommendations on the advantage role of local institutions on the HSSR critical mass building such as networking, sharing information, and transferring knowledge in addition to training.

**Response:** Similar to the preceding comment, although this would have added an interesting perspective to our assessment, it is a different objective altogether. This has been highlighted as one of the weaknesses of our analysis, and included in the discussion. As mentioned earlier, the objective was to assess the level of training and capacity—first paragraph on page 15.

**Comment 6:** Though the knowledge on the motivating factors to enroll or faced during the PhD training are quite useful but the paper lacks knowledge on the motivating factors to conduct HSSR during and after graduation.

**Response:** Information on why trainees choose HSSR as a career path was not collected. While this is important, we felt that focusing on their experiences would give us better understanding of the challenges that they face. Our objective was to assess the strengths and weaknesses of current programs, therefore, we did not focus on challenges of conducting HSSR related research after graduation, as this was outside the objectives of our assessment.
REVIEWER 3: JANETE CASTRO
The title of the article aptly represents its theme and the issues discussed. The central question is well presented and relevant to both healthcare services and universities. The method is appropriate and has been well used, providing sufficient support for the results found. The methodology is clear and enables the reader to understand how the study was performed. The authors have made it clear that the research was approved by the ethics committees of the institutions under study. The discussions and conclusions are clear; however, there are some items that can be improved.

Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached):

Comment 1: The text requires a grammar review before being published. For example, there are several instances of pronouns used (this, these) that do not agree with the corresponding verb (need instead of needs on page 11, setting instead of settings on page 12). The authors have also used some phrases that do not sound natural in English (occupies a tenuous home on page 11 – a tenuous position would be a better choice here; not able to get away from job on page 12 – unable to leave work is a more natural sounding option).
Response: We thank the reviewer for this comment. We have carried out English language editing to address this issue in the entire manuscript.

Comment 2: It is also not advisable to use contractions in scientific articles (aren’t on Page 4) suggest or repeat the same word continuously throughout the article (the word “further” is used repeatedly throughout the article, but is incorrect in this instance; the correct usage would be furthermore; however, it would be advisable to replace this in some instances with other options such as moreover or in addition).
Response: We have replaced the word “aren’t” on page 4, with the words “are not”. We used the word “further” in this manuscript 4 times, on pages 10, 11, 12 and 13. We have replaced the word “further” in 2nd paragraph on page 11 with the word “moreover”.

Comment 3: The references in the body of the text need to be reviewed. There are instances of author’s names cited without the year. For example, Bennet et al does not cite the year of reference.
Response: We have corrected this mistake – see last paragraph on page 12.

Comment 4: The authors have used two standards for the references; I suggest revising the entire text and unifying the referencing format according to the journal standards.
Response: We actually use one referencing style – the author-number (Vancouver Referencing Style). We have checked the manuscript to ensure that this was correctly applied throughout the document.
REVIEWER 4: HUGO MERCER
Suggested revisions:

Comment a): In page 8 para 3, needs to be revised
Response: The mistake in the sentence “A total of 640 PhD trainees were reported to be had been enrolled in a health science field at the four participating universities between 2006 and 2011” has been corrected to: “A total of 640 PhD trainees had enrolled in a health science field at the four participating universities between 2006 and 2011”.

Comment b): in page 11 "By any standard, the number of HSSR PhD trainees at these universities is very small”. It will be convenient to explain which are those standards. In addition, is there a possibility that the shortage could be covered with a different combination of trainees; coming from other disciplines and not only health sciences?
Response: We have decided to modify this sentence (3rd sentence of the Discussion section on page11, by removing the phrase “By any standard”. The sentence now reads “The number of HSSR PhD graduates being produced per year at these universities is very small, and may not be enough to enable accumulation of the required critical mass of locally trained HSSR professionals to drive the much needed health systems strengthening and innovations in this region”.

Comment c): Could the authors explain why the way to reach a critical mass has to be through PhD trainees in HSSR? Could it be another appropriate road for SSA universities? Are they compelled to follow the European and American experience?
Response: We focused our assessment on PhD level training because this is the major source of formal skills in HSSR and thus we wanted to assess the strengths and weaknesses of this approach. PhD level training focuses on building skills in analysis, implementation, research and evaluation, which are key skills to strengthen health systems. While other university graduates have skills to contribute to health systems strengthening, the links are unclear. Certainly this article will add to the debate on whether SSA should follow the route taken by European and North American universities to reach critical mass in this field, or an alternative approach. However, this topic is beyond the scope of our current analysis.

Comment d): The interesting findings related with administrative constraints may guide the identification of other solutions beside increasing the number of trainees.
Response: We agree with this comment. In the discussion section, we highlight some aspects that can be strengthened in order to circumvent such constraints, including expanded blended learning programmes, improved skills and availability of information technologies.

Comment e): Perhaps 24 trainees well equipped, financed and connected to the global research community could be the start of the critical mass.
Response: The magnitude of the work that is needed to drive progress on health research in sub-Saharan Africa may be too much, thus we believe 24 locally trained HSSR graduates in six years is too small at these major universities in the region. We have therefore not made any changes based on this comment.
REVIEWER 5: STEINARHUNSKAAR
This is an interesting study which concerns training and research in health services and health system analyses in Sub-Saharan Africa. The questions posed by the authors are well defined and the methods appropriate and well described.
The data are from 4 different universities in 4 different countries. This limited sample may impose bias of the results and limit generalization, but the authors have discussed this in the paper.
The manuscript is well written and adheres to the standards for reporting and data deposition in this kind of research.
The discussion and conclusions are balanced and adequately supported by the data.

Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)- None

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
Comment #1: Misspelling in Title: Health
Response: This has been corrected.

Comment #2: There were 48 responses to the surveys. How many were approached?
Response rate should be given
Response: We have now provided this information at the beginning of the sub-section titled “Motivating and Challenging Factors” on page 10.

Comment #3: The manuscript should be revised for the use of capitalizing each word in table etc. Use sentence style.
Response: This has been corrected.

Comment #4: Table 1: Number of trainees should be given by country.
Response: At the time of collecting information presented in this table, training program administrators at one of the participating universities was unwilling to participate if the number of trainees would be reported by specific university. They provided the information after assurance that the number of trainees would NOT be reported by specific university. For this reason, we have decided not to report numbers by country/ university.

Comment #5: Table 1: Sentence style for field of study
Response: This has been corrected.

Comment #6: Table 2: Sentence style. Use the word Number instead of #. The * is not found in table
Response: Sub-titles in Table 2 have been corrected to sentence style. We have decided to remove the asterisk (*) and footnote from Table 2, as the information that “Only Makerere University has a masters training program focusing on Health Services Research, with current enrolment of 10 – 15 students per year” is already provided in the text (paragraph 2,
Comment #7: Table 4: Country should be given behind university name.
Response: The country has been indicated for each university listed in Table 4.

Comment #8: Table 4: There are only 3 universities given. All 4 must be reported
Response: The University of Stellenbosch did not participate in this part of the assessment. That’s why only the three universities are indicated in this table.

Comment #8: Figure 1 should be redesigned into a column chart with one column for each year. Number may be given on top.
Response: We believe a line graph is the most appropriate to use here to, not only demonstrate the numbers trained each year, but also to show the trend in changes in the numbers being trained. For this reason, we have decided to retain the line graph, instead of a bar graph.