Author’s response to reviews

Title: "Doctors ready to be posted are jobless on the street…” the deployment process and shortage of doctors in Tanzania

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Author’s response to reviews:

Reviewer 1

Comment #1:

The study addresses the issue of the shortage of doctors in Tanzania in a specific perspective: workforce deployment process. This approach contributes to the discussion of the topic, since this is a dimension that should be strongly considered when elaborating public policies for the provision and fixation of physicians.

Response: Thank you very much for the compliment

Comment #2

The limitations of the study are clearly described, and efforts were made to ensure the reliability of the findings.

Response: We appreciate the compliment
Comment #3
The discussion is well structured and using relevant references.

Response: Thank you for the compliment

Comment #4
The findings do not go beyond the scope of the study, and the authors still recommend a complementation of the research in order to obtain a more comprehensive view of the subject

Response: Thank you for the compliment

Comment #5
It's a good article

Response: Thank you very much

Reviewer 2
Comment #1
The research and discussion presented in this paper are useful, topical and of public health importance.

Response: Thank you for the compliment

Comment #2
The paper is long and could be cut by at least 30%. Many of the repetitions throughout the paper could be removed to make the paper tighter and more readable, and for the key points to stand out more (for example lines 70 and 81 are repetitions, also lines 157 and 169, among others). The
language could be condensed significantly with sentences made shorter with fewer extensions. The relevance of lines 101-107 is not apparent. The section on study setting repeats what is in the introduction, when this should be strictly about the setting the 20 respondents were based in, where they were working (public or private sector, urban or rural) and what specialities they worked in, if any.

Response:

We have gone throughout the whole paper and try to shorten it by avoiding repetitions. We have shortened the main body from 6756 to 6369 words. Although we cut many sections significantly, some comments required additional text. We feel that cutting further the text would alter the intended message.

In cutting for instance,

i. Lines 64 to 66 and part of 67; 85 to 86; 118 to 123; 200 to 208; 210 to 213; 235 to 237; 303 to 304; 320, 325, 329 to 330; 430 to 437 have been removed.

ii. Lines 101 to 107 have been replaced by text describing the health sector organization in Tanzania. And thus the study setting in the methods section has been reworded and limited to where the informants were based.

Pages: Pg 4 line 68 to pg 25 line 550

Comment #3

Some sentences are hard to follow and require re-reading several times. For example, line 89, the phrase "among other health workers" is not clear.

Response: General editorials, rewording and reorganization has been done throughout the paper

Pages: Pg 2 line 23 to pg 25 line 550
Since this is a journal for an international audience, some brief background on human resources in the Tanzania health system is necessary. For example, readers may not understand how a District Medical Officer does not have a degree or the kind of cadre an AMO is, since they also called medical officers.

Response: Orientation to the reader on the human resources health in Tanzania has been given at the background section to include a brief description of the Assistant Medical Officer cadre. The AMOs have been at the districts for many years and in some places as there are no MDs they hold many managerial positions.

Pages: Pg 5 line 92 to line 102

Comment #5

Study design line 166: the interviews were carried out with doctors who are the subjects of the study. Key informant interviews would have been with policy makers, HR managers and so on, people who have specialist insights of the situation. It would have been useful to interview key informants from the MoH for explanations on points raised - are there publications that could be referred to on this? For example, line 141 refers to implementation of retention strategies having failed - is anything known about why they failed?

Response: Although it is true that the policy makers and HR managers is an important group in understanding the deployment process, this paper specifically wanted to shade light on the lived experiences of the doctors. The HR managers and Policy makers have featured in other separate studies that complement this study. One of those studies is about retention of doctors at the district level published in BMC Health Services (Sirili N, Frumence G, Kiwara A, Mwangu M, Anaeli A, Nyamhanga T, Goicolea I, Hurtig AK. Retention of medical doctors at the district level: a qualitative study of experiences from Tanzania. BMC health services research. 2018 Dec;18(1):260.
Comment #6

Line 193 - the abstract states sampling was done by snow balling, while the data collection section states chain referral, so terminology needs to be consistent.

Response: The word chain referral sampling has been used throughout in referring to the sampling strategy.

Comment #7

How did the interview guide address each stage of the conceptual framework, ie the pool of available staff, recruitment and placement?

Response: The section on conceptual framework has been removed and the figure has been taken to the background to showcase the definition of deployment as used in this paper. The figure was aimed to visualize the deployment process.

Pages: Pg 4 line 72 to line 82

Comment #8

It is not apparent what the advantage is of Table 1 when the content is repeated in the text following it, and which explains the situation more clearly.

Response: Table one has been removed

Comment #9

Synchronization, line 286: This idea is not clear. Presumably the intern posts are needed for the next batch of interns, so what kind of posts would be filled by synchronization of internships with new appointments? Are there a limited number or could all interns move into such posts? Is this a first come first served situation? It is not clear how this would be a solution for more than a
few doctors, unless they are linked to specialist training, in which case some kind of selection process would be applied.

Response: The concept of synchronization has been explained.

‘..in some places planning in advance by the hospital administration made it possible for the doctors to go directly for employment after their internship. Terming the later as the synchronization of the internship and first appointment, while referring to their own experiences, some informants explained how the synchronization helped them to be employed immediately in their places of first appointment.’

Pages: Pg 13 line 275 to line 279

Comment #10

What proportion of medical doctor posts are vacant in regional and district hospitals?

Response: According to another study that complement this, the number of doctors available in the country forms around 40% of the required doctors in the country (Sirili N, Kiwara A, Gasto F, Goicolea I, Hurtig AK. Training and deployment of medical doctors in Tanzania post-1990s health sector reforms: assessing the achievements. Human resources for health. 2017 Dec;15(1):27.)

Comment #11

Who are the employers? What is the role of local government in these hospitals?

Response: The main employer in Tanzania is still the public sector (government).

The role of local government is to carry out need assessments and incentivize the posted health workers to their jurisdictions.
Comment #12

Were the respondents expecting incentives similar to or above what their colleagues get in central hospitals? Is there a government policy on this?

Response: Although not explicit, from the findings of this study and the previous study on retention, limited economic opportunities in the regions put these doctors in economic disadvantages and they expected to receive some forms of allowances that would compensate for the opportunity cost of taking up posts in economically disadvantaged areas.

To our knowledge there is no written policy specifically for incentives to a specific cadre or geographical location rather than a general National incentive policy that apply to all cadres in all sectoral ministries.

Comment #13

In some countries mid-level workers are treated as substitute doctors and have been running the peripheral health services for a long time, often without recognition. It may be disruptive to have relatively junior doctors coming for a year or so and then leaving, to be replaced by another junior person. Changing these relationships would need more than deployment, including some consideration of the relative skills mix of the MDs and AMOs.

Response: Thank you for this valid observation

Comment #14

The methodology used does not speak to the conceptual framework, though it provides some understanding from the respondents' point of view what some of the barriers to deployment are, specifically for recruitment and placement. It is difficult for the reader to assess these factors. The person quoted who has stayed in his/her preferred place for more than 10 years was a specialist in a consultant hospital (line 340) which is somewhat different from being in a rural hospital.

Response: The section on conceptual framework has been removed and the figure has been taken to the background to showcase the definition of deployment as used in this paper. The figure was aimed to visualize the deployment process.
Comment #15

In relation to the pool of available doctors and employment opportunities, what data was collected on this? The proportion of vacant posts in urban and rural areas is not provided. Is the problem the shortage of posts rather than shortage of doctors, or is it the preference of doctors to be in certain areas?

Response: This was a study on qualitative experiences of doctors on deployment experiences. It emanated as a result of another study that showed an increased number of doctors graduating but no corresponding increase in number of doctors employed in the public sector (refer the two papers mentioned in my previous responses).

In general, none of the regions in the country has attained the minimum threshold of doctors to population ratio as recommended by the World Health Organization. (Sirili N, Kiwara A, Gasto F, Goicolea I, Hurtig AK. Training and deployment of medical doctors in Tanzania post-1990s health sector reforms: assessing the achievements. Human resources for health. 2017 Dec;15(1):27.)

Comment #16

Perhaps the MoH is deploying doctors to areas of greatest need which are not the ones the doctors selected for themselves?

Response: This could be true in some cases, but building on this would mean that the advertisement should mention specific areas for work destination, which in this case was not done. Again some of the areas that were opted by the doctors had critical shortage but still they were not posted there. The question that comes in mind is how efficient is the selection process.

Comment #17

If parts of the conceptual framework (the pool of available staff) were to be addressed from findings of previous studies (line 423), this should have been part of the methodology (ie literature and document review). One possible source of data that was not mentioned is the regulatory body that registers doctors as qualified professionals.
Response: The conceptual framework has been removed and the figure has been taken to the background to showcase the definition of deployment as used in this paper. The figure was aimed to visualize the deployment process.

Pages; Pg 4 line 72 to line 82

comment #18

The readers have not been provided with information on the 20 interviewees other than approximate age, gender and that 14 out of 20 graduated from the same institution, so it is difficult to assess credibility (line 536).

Response: As this is a qualitative research and some of the places had only one doctor who graduated in that particular period, we feel that further description on the details of the informants may breach their confidentiality that we promised to take care of. Credibility of the findings of this study is enhanced through the description of the study setting, taking a wide range of experience from the doctors involved (i.e graduated between 2003 and 2009), triangulation of researchers and study settings and well formulated research questions and data collection approaches.

Comment #19

Lines 541 and 542 are not clear. What does "thick description" mean?

Response: Thick description in this qualitative study refers to detailed information on the study question, study setting, contexts, methodology and the study informants.

Comment #20

This is a qualitative study with interviews of 20 doctors, so only represents their views and cannot be seen as representative of the wider medical profession in Tanzania, though it provides ideas which could be followed up using other research methods. The reader is also only given one side of the story.
Response: Thank you for this comment. In general, qualitative studies do not aim at representation but rather understanding of a particular social phenomenon in its real context. In this case the focus was to understand the experiences of the doctors on the deployment process.

Comment #21

A weakness of the study is the absence of key informant interviews on government policy, or interviews with other cadres as to how they perceive the role of doctors in district and regional hospitals.

Response: This study is a compliment to other studies that looks at a terrain from the training, deployment and retention of doctors in Tanzania. Combining all aspects and all viewpoints in one article would rather make it difficult to follow. Therefore this study was limited to the experiences of medical doctors on the deployment experience.

Comment #22

The paper would be stronger if the findings, which identify some of the problems, were directly linked to meaningful and sustainable solutions. Short-term, mid-term and long-term strategies should include how to achieve the suggested changes. Perhaps part of the problem is that doctors are going into rural hospitals at a junior level without the management skills needed to be team-leaders, and are providing services at the same level as AMOs, which leads to some territorial conflict.

Response: Thank you for this very valid point. As noted earlier the paper reports findings of the experiences of the doctors and points out plausible solutions on what worked and what did not. For instance, the paper points that consideration of family ties is important issue for picking up particular posts, teamwork is necessary and some rural attachments are needed during the medical training for these doctors to be prepared for rural posting.

Comment #23

For example, the lack of teamwork was identified as a problem; what suggestions do the authors have on how this can be improved, based on evidence from the literature of methods of creating teams among different cadres of health professionals?
Response: Team building as suggested although is crucial, the concept of team building has been included in the paper.

Pages: Pg 22 line 485 to line 489

Comment #24

Who performs caesarean sections in rural hospitals in Tanzania? Also Family Medicine as a newer speciality for doctors, providing a specialist qualification as well as a career path for doctors working in rural areas, and now established in many African countries, could be referred to, with its emphasis on leadership skills and oversight of primary health care (provided by mid-level health workers).

Response: Although this was not the focus of this paper, both AMOs and doctors perform caesarean section at the district level and now the new staffing level places the AMOs at the health center.

Thank you for the valid suggestion about Family medicine. Although it is true that family medicine is crucial as it builds leadership skills, being a specialty that is in infancy in Tanzania, it still faces many challenges including not being recognized in the scheme of service. Therefore, we feel that many has to be done at the level of physicians (general doctors) to ensure that their deployment is improved as the main challenges as seen in this study are from the National level and to the district level. We take this advice for further workup to lay ground for advocating for Family medicine specialty in Tanzania.

Comment #25

The authors could refer to the significant literature on incentivizing health professionals to work in less advantaged areas and the role of rural attachments (community based education) in medical education.

Response: This has been dealt with in the study on retention of doctors in Tanzania (Sirili N, Frumence G, Kiwara A, Mwangu M, Anaeli A, Nyamhanga T, Goicolea I, Hurtig AK. Retention
of medical doctors at the district level: a qualitative study of experiences from Tanzania. BMC health services research. 2018 Dec;18(1):260.).