

## **Author's response to reviews**

**Title:** Contextual influences on health worker motivation in district hospitals in Kenya

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## **Authors responses to reviews of "Contextual Influences on Health Worker Motivation in District Hospitals in Kenya".**

Authors: Patrick Mbindyo, Lucy Gilson, Duane Blaauw & Mike English

### **Reviewer# 1**

1. The paper aims to explore the issue of health workers motivation and its influence on changing clinical practice. The question posed by the authors is of relevance to many developing countries. The title and abstract are both reflecting issues addressed in the paper. The discussion section is well balanced and supported by evidence.

Response: Thank you

2. In paragraph 4 of Background section, there is one reference which is not consistent with the rest of the article (Mbindyo, submitted)is written in Harvard style while the rest of the document is using Vancouver style of referencing. This particular reference also needs to be included in the list.

Response: We have corrected the references in text to the journal style of referencing and have included all references in the paper's reference list.

3. In the result section, authors seem to have used many quotes, literally for each of the theme they have presented. Although these quotes are illustrating important points, I wonder whether the authors could consider reducing the number quotes and instead paraphrase them and incorporate the views of different respondents in the findings. They could use selected quotes at strategically selected moments to support and illustrate the findings.

Response: As much as possible, we have reduced the number of quotes either by deleting them or by paraphrasing these and incorporating them into the paragraphs. As these changes are really very extensive we do not list them here but they are highlighted in the manuscript text.

4. In one of the quotes, the authors quoted Acting Hospital Matron. As there are not many acting hospital matrons, I wonder whether this would compromise anonymity. I suggest they revisit this.

Response: We have dropped the word 'acting' which we believe further reduces the possibility of identifying the particular respondent.

## Reviewer# 2

1. This is an interesting study of health worker motivation in Kenyan district hospitals. The quality of care in Kenyan hospitals has already been shown by the same group to be disturbingly poor.

Response: Thank you.

2. The second and third paragraphs in the background suggest that this study will differ from others in relating motivation to the effect of an intervention; while this may be the case within the context of the group of papers being presented from this work it is not really the case for this particular paper that provides more of a baseline assessment without reference to current performance or response to the intervention.

Response: We agree with the reviewer that this paper presents more of a baseline assessment of motivation prior to implementation of the intervention and have therefore adjusted the text to make this more clear:

Para 3 – Introduction:

One topic of focus was, therefore, hospital staff motivation. We reasoned that exploration of motivation even if only at baseline would provide us with an improved understanding of factors that might affect the intervention's eventual success.

3. The methods are generally clear. Qualitative data were collected using notes and tapes (although its not stated which was used for which type of data) and later analysed using thematic codes.

Response: In many instances, health workers felt uncomfortable with the use of a tape recorder instead preferring notes to be taken. This was attributed to residual concerns about the response of the government to the health workers strike that had taken place a year before commencement of this study. We were careful to write up notes of the interviews immediately after the interview sessions. Where possible tape-recordings were also made.

Para 3 – Page 5

In response to some sensitivity about tape-recording detailed notes of interviews and group discussions were the primary data record with tape recordings used to supplement these where possible (in fewer than 20% of interviews).

4. Language and translation are not mentioned, presumably all in Swahili?

Response: all interviews were conducted in English as all health workers speak fluent English, negating the need for translation. This has been mentioned in the revised paper as follows:

Para 1: Page 4

A convenience sampling approach was used to select participants to be interviewed who were all interviewed in English (the language of all primary, secondary and tertiary education in Kenya).

5. The lead author conducted the interviews, small group discussions and FGDs and was responsible for the coding although its not stated if a sample of data was independently validated by a second researcher.

Response: We have now clarified the role of a second, independent reader.

Page 5: para 4

Results from the three processes combined with views of a second, independent reading by a second investigator (ME) of more than half of the transcripts, and insights from on-site observations were reviewed and used to derive relevant major thematic categories.

6. The sampling strategy was convenience which I think is appropriate.

Response: Thank you

7. In the results the numbers of FGDs and KII are shown but it would be helpful to see the categories of staff interviewed as there is a tendency for nurses to be more available than other staff.

Response: We have shown in the text the numbers of respondents by cadre, which correlates well with findings of a human resource mapping exercise undertaken by Kenya's Ministry of Health in 2004.

Page 6: para 1

A total of 185 staff comprising of hospital directors, matrons and administrators (n=19); nurses (n=92), doctors (n=13), pharmacists (n=4) and clinical officers (n=36); and other paramedics comprising of laboratory, dental, orthopaedic and pharmaceutical technologists (n for group = 21) contributed data (Table 1). Overall, the majority of respondents were female which concurs with the findings of the 2004 MoH Human Resource Mapping exercise which found more female workers (52.7%) than male (47.3%) in Kenya's health workforce [27].

8. Also I think it would help to see a summary of the themes identified for each category of staff to give a more quantitative feel for the findings although I understand that this is being done in a separate paper.

Response: We feel it would be inappropriate to attempt a quantitative summary of this qualitative data, particularly as we did not set out specifically to explore variation in motivation between cadres. This is a finding that perhaps warrants further exploration in its own right rather than attempting to provide a possibly inaccurate interpretation based on our current data.

9. Given what's known of Kenyan hospitals and African hospitals generally its unsurprising that morale seemed to be low and the authors have taken care to present a balance of positive findings (e.g., examples of good communication or management).

Response: Thank you

10. Early in the results its stated that staff reported being generally motivated by altruism and professionalism but few or none of the quotes seem to confirm this (e.g. nobody said 'its tough and the pay is bad but I still love my job...').

Response: We now include brief illustrative quotes to support this point:

Page 6: Para 1

'I like nursing because it is a helping profession, just like being a Pastor in a church'

11. The theme of disillusion re-emerges under 'unmet expectations' with older staff reporting deteriorating conditions and loss of idealism and younger staff appearing cynical or resigned from early in their career. It's a worrying finding but I wonder how much is based on salary and how much on other issues. Is there any evidence that healthworker pay and conditions have fallen behind other groups in the last 10-20 years in Kenya? The information may not be easily available but some background on salary and staff levels either in the methods or early in the results would be useful.

Response: We thank the reviewer for making these suggestions. We have now provided a brief description of the clinical officer cadre at the start of the results. We also think that health workers in general believe that their pay and conditions are poor when compared to other similar government employees and have now been able to include this idea in the discussion.

Page 6: Para 1

In Kenya clinical officers are a form of substitute physician undergoing a 4 year academic and internship training. They are twice as numerous as doctors in the health system, being major providers of clinical services in rural hospitals. Their pay is comparable to that of nurses and usually less than 50% of that of even junior physicians.

Pge 13: Para 5

In Kenya's health sector, this is perhaps exacerbated by feelings of unfairness. Within the health sector, and as described above, doctors have been receiving a number of allowances aimed at improving their recruitment and retention rates while COs and other paramedics have not received such financial incentives. In addition, comparisons with other non-health government employees, such as those in the uniformed forces or teachers who also offer essential services but have had their salaries increased, are unfavourable perhaps further contributing to feelings of injustice.

12. A number of quotes suggest that motivation might have varied quite a lot between different grades but this is not specifically referred to in the results or discussion. The different perspective of COs and MDs seemed particularly striking (COs feeling downtrodden, undervalued and with poor career prospects). In the results its difficult to see how many MDs were included in the study and whether they were generally more optimistic or satisfied with their position. Quotes from the COs suggest they might well be. I think the points about lack of career structure for COs are highly relevant and concord with studies in Tanzania (Chandler et al, submitted 2008).

The theme of 'justice' is included as a subheading and also emerged strongly under other headings (MDs getting higher transport allowance for the same journey, MDs getting paid not to do private work, hospitals generating income but still providing poor conditions for staff, salary rises favouring senior staff etc) but receives little attention in the discussion. Without seeing the original data its hard to make a judgement but I wonder if this theme deserves more space. A sense of injustice seems likely to cause resentment even if pay or conditions have improved overall.

Response: we thank the reviewer for making these interesting observations. Motivation does appear to vary between COs and doctors with the COs feeling that they do the burden of work in Kenyan hospitals but do not receive the recognition and appreciation (monetary or otherwise) that their colleagues (doctors) receive. We have included some text pointing to the notion that injustice may be an important demotivator for certain cadres and feel that this too is an area worthy of further, specific investigation.

Page 13: Para 4

On the other hand, if the health system appears to 'favour' a certain cadre through provision of incentives in order to retain them, it is likely that feelings of injustice by other cadres will emerge leading to demotivation. This in the Kenyan system is apparent between doctors (who have numerous allowances and clear career prospects) and COs who, as substitute physicians, have significantly lower levels of pay and benefits.

Page 13: Para 5

In addition, comparisons with other non-health government employees, such as those in the uniformed forces or teachers who have had their salaries increased, are unfavourable perhaps further contributing to feelings of injustice.

13. I think the authors have done well to tease out issues that can be separated from pay and conditions as (at least in my experience) financial issues tend to dominate interviews with health staff, itself evidence that a sense of work pride and professionalism may be missing. The motivational effects of management, leadership, communication and career structures are well made in the discussion and are areas where improvements can be made without large salary increases.

Response: Thank you.

14. Overall I think this is a well written paper that makes a significant addition to this important and neglected subject.

Response: Thank you.