Reviewer's report

Title: For more than money: willingness of health professionals to stay in remote Senegal

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Reviewer: Barbara McPake

Reviewer's report:

This is an interesting paper, containing a well-conducted study and producing plausible conclusions. My main concern is to suggest 1) a fuller literature review of what is already known about the factors affecting retention so that the findings can be better situated as themselves (as opposed to the methods used to reach them) novel, and 2) A fuller explanation of the situation of health workers in 'difficult' areas. In particular, I wanted to understand better the significance of permanent contracts that turn out to be so important. Are permanent contracts unavailable to any of the staff working in rural areas? That would seem to be the case for the responses to be so significant on this job attribute, and that begs a host of further questions about the nature of their current contracts and why they are temporary. In many settings, it is only temporary contracts that can be attached to specific duty stations and permanent contracts offer the opportunity to start negotiating a different job in an easier area - so permanent contracts may not be just about job security but be distorting the findings in an opaque way that might question the interpretation currently offered.

I was also less than fully convinced about the cultural difficulties of using a WTP approach. When the issue of 'salaries' is sensitive, it usually does only mean those parts of the pay structure that are labelled 'salary' and not those that are labelled as bonus or allowance, that are generally much more transparent to everyone. I don't know that this is the case in Senegal but have found issues of allowances and the levels of allowances not sensitive in many other African settings (while salaries can be). It seems to me a weakness of the study that the level of the rural allowance was not specified. Clearly a token rural allowance will have little impact but a large one, specified as such, might have made a much bigger difference. Hence much depends on what the respondents interpreted an unspecified allowance to amount to - my guess is that unspecified amounts might be assumed to be pretty token. I think some discussion of this among the study limitations would be appropriate.

You used two different approaches to undertake sub-group analyses - you created separate groups for physicians and non-physicians but did sub-group analyses among those two groups for gender, age etc. Why was that hierarchy of sub-groups considered appropriate? (ie. did you
think the differences between physicians and non-physicians would be larger than for gender for example?) Again, a bit of further use of existing literature about what drives these differences would add depth to this discussion. For example, I was not surprised that among physicians, there was an extreme gender divide. Physicians will almost always be the 'in-charges' in any facility and there are serious real or perceived security concerns for women being 'in-charges'.

The conclusion is that a very low proportion of staff will see out their contracts under current arrangements, but this seems somewhat confronted by the quite long periods (averaging 5.3 and 7.4 years for physicians and non-physicians respectively) that they have already served in these posts. Can you reconcile these observations? It seems to me that there has been some degree of instrumental responding - if the staff had alternatives such as those suggested, they would take them, but they don't. Can you really turn this into a likelihood of abandoning posts? And it does suggest a risk of bias that you discount when you discuss limitations. The extent to which these are people who have served long in difficult areas makes them people who cope, or have learned to cope better and they must be more likely to stay even if their list of grievances is similar to the perceptions of those working in easier areas.

On a more minor point, you claim that the method of asking about the choice between two jobs, and then the choice between the preferred and the current job enables the 3 jobs to be ranked but if I prefer Job B to both A and C(current), then you can't rank jobs A and C, can you?

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