Reviewer’s report

Title: Understanding the factors affecting the attraction and retention of health professionals in rural and remote areas: A mixed method study in Niger

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Reviewer: Jitske Both-Nwabuwe

Reviewer's report:

The aim of the paper is to understand the factors that influence the retention of health professional working in rural areas in Niger. The authors conclude that local environment, social factors, working conditions, lack of financial compensation and individual factors influence attraction and retention. The paper suggests that policies should be intersectorial to improve living conditions and public services. That feminization influences the efficiency of policies.

Although I applaud the authors that they argue for an interesting point of view in on the issue of retention of health professional, I have some majors points of concern I would like to address:

1. The foci of the introduction and conceptual framework are on retention factors. The feminization and policy implementation gap is only discussed after the results. This makes me wonder about the main message of this article. If the authors would address the feminization and policy gap I recommend that the authors write about these specific items as part of one or more dimensions of the Lehmann model and address the issue more in their introduction.

2. The authors argue that feminization of the medical profession has started but its extent remains relatively small (line 12/13, page 18). They further explain that, in the context of the current study, midwifery students were chosen for the concept mapping exercise because the problem of the deployment and retention of healthcare professionals in rural areas concerns midwives. (Lines 44/45, page 9). I wonder -however- in which sense feminization of the medical profession really plays a role for midwives. Feminization of the medical profession mostly concerns doctors, as jobs as nurses and midwives are traditionally been filled in by women. I therefore doubt if the issue of policy implementation is feminization of the workforce but rather gender (in)sensitive policies.

3. Concerning the critical shortages of human resources in health, this issue is not only affecting low- and middle income countries. Most Western European Countries are also facing or already experiencing nursing shortages. These shortages have an effect on the human resources in African countries through brain drain. I therefore feel that the international environment from the Lehmann model should be included and not excluded as argued by the authors.
4. Following up on the above comment, in the first paragraph numbers from 2006 are cited. I think in 10 years times a lot has changed. Furthermore, this first reference is not to the original article, rather it refers to an article in which this original article is cited.

5. The authors refer to multiple studies which have studied the attraction and retention of health professionals in rural areas in low- and middle-income countries. The authors should however, more sufficiently state why their study contribute new insights. The authors themselves state in line 48/49 page 16 that their results are consistent with the conclusions of previous studies. The authors state in line 30/31, page 4, that little research is available on francophone African countries. In what way does Niger and francophone African countries differ from Asian countries and Anglophone African countries in which the previous studies have been conducted? What is new? Furthermore is Niger a representative country for other francophone African countries? What are their similarities and differences?

6. Does Niger has a maldistribution of human resources problem or a scarcity problem in general? From the data on page 5 it looks that Niger has a scarcity problem in general, which also influence retention but this is not addressed by the authors.

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