Reviewer's report

**Title:** Professional training for community health care and retention in rural medical practice in Mali: a participatory action research

**Version:** 1  **Date:** 19 February 2008

**Reviewer:** Jean Macq

**Reviewer's report:**

This article reports an intervention totally relevant for many sub-Saharan countries confronted with the difficulty in stabilizing health professionals and particularly medical doctors in rural area.

The overall structure of the presentation is however not always clear to me.

I would suggest to structure much more the methods and the result, in relation with the overall hypothesis i.e. adapted training would strengthen young doctors' competence and self confidence, and contribute to long term retention.

In the method section, the authors should more clearly explain how methodologies such as action research and realistic evaluation are relevant to explore the following questions: what is adapted training (and how is it possible to develop an adapted training)? How adapted training contribute eventually to young doctors' competence and self confidence?

Results should explain the mechanisms of development (relatively clearly presented) and the content of an adapted training (relatively clearly presented), explain how training improves and eventually present evidences of improvement of young doctors' competence and self confidence (not clearly presented) as well as retention (more clearly presented)

In the discussion, besides limits of such study design, it might be structured as per conclusion sentences: The Malian experience suggests that the training scheme affected retention in rural care thanks to the interaction between three elements (1st central issue to be developed more clearly in the discussion): The self confidence acquired through these converging elements plays a significant role in this retention (second central issue to be more clearly developed in the discussion).

More specific points:

1) Methodology:

- Research team. Pp5: selection of experienced rural doctors: who selected them?
- Pp 6: Process of designing the training (should it be a result of the research action or the method??)
Evaluation part: output evaluation Seems to have focused on satisfaction of participants, when initial hypothesis concerns competences and self-confidence.

2) Results:
First para pp 8: are questions that should be linked with the hypothesis. It should be put either at the initial part of method, either at the end of intro. Evaluation methodology should explain how these questions are explored.
Pp 9: it might be interesting to better understand how the training fit into the whole quality improvement and health professionals' support process.
Pp9-10: the 'what' and the 'how' self-confidence was increased as a result of the training is unclear. Was it improved through the senior doctors' role?
Pp10: a further indicator of the relevance is the fact that the AMC decide to... Is it really an indicator of the relevance of the training?
Pp11: training needs were reformulated. What changed compared to the initial design presented in the method section (pp 6 last para)?
Pp 11: training alone improved performance in a limited way, calling for synergy with other mechanisms... Was it not the case (i.e. synergy mechanisms between training and other QI strategies as explained in pp 9)?

Discussion:
Pp12: the training was effective in promoting commitment and increase self-confidence. Can the authors be so strongly affirmative, given the evidences presented?
Pp13: The concept of reflective thinking, which is used several times in the article, might be more elaborated: what does it mean concretely?
Pp13: strong coordination mechanisms. This is not clearly presented in the results section.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions.

Level of interest: An article of importance in its field.

Quality of written English: Needs some language corrections before being published.

Statistical review: No, the manuscript does not need to be seen by a statistician.