

Evaluating the benefit of training Non-Physician Clinicians for Maternal and Newborn Care

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1. Introduction

- Sub Saharan Africa (SSA) contributes 56% of the global burden of maternal deaths¹
- Ironically the region has the slowest progress towards achieving MDG 4&5^{1,2}.
- In Tanzania about 8,000 maternal deaths occur annually mostly from preventable causes. Women from poor families and rural areas constitute the majority. The figure in Malawi stands at about 2,600^{3,4}.
- A significant perinatal loss parallel these maternal deaths^{1,4,5}
- In SSA, there is a serious shortage of physicians and midwives. The few available are more concentrated in urban areas. These cadre of staff require a relatively longer period of training but are poorly retained⁶.
- Non physician clinicians on the other hand require a shorter training time and majority are willing to work in rural areas.

- However the basic training for NPCs does not equip them with all necessary skills needed to manage complications of pregnancy and childbirth⁶.
- Through ETATMBA project, Non physician clinicians (NPCs) from selected districts in Malawi and Tanzania have been trained on advanced neonatal, obstetric care and leadership skills. A follow up is being done in both countries aimed at mentoring trainees and collecting data.
- It is expected that trained NPCs will not only provide better clinical care, but also improved leadership in their facilities. In addition they will cascade training to other health care providers.
- Consequently this will lead to a sustained improvement in maternal and newborn health outcomes. Dissemination will ensure sharing of lessons learnt.

2. Aim and Objectives

Aim

To evaluate advanced clinical obstetrics and leadership training for NPCs and its effect on their retention, roles and performance in sub Saharan Africa

Objectives

1. To describe training models available for NPCs in SSA
2. To assess effectiveness, suitability and sustainability of the available training models
3. To evaluate change in retention and assigned roles among NPCs following training
4. To evaluate clinical performance among NPCs after training
5. To evaluate organisational performance in terms of leadership and logistics
5. To assess maternal and newborn health outcomes in the target districts
6. To assess patients/clients and health care providers satisfaction for maternal and newborn health care in the target districts

3. Methods

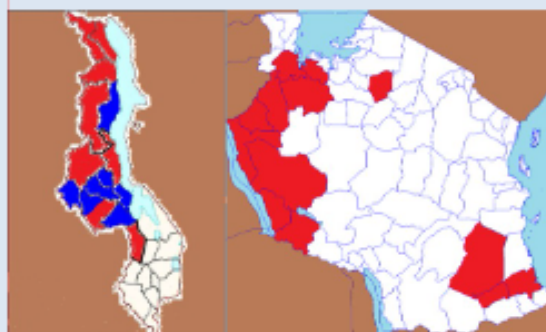
- This is a longitudinal follow up study. Mixed methods will be used to collect data based on methods employed in the ETATMBA study
 - A Qualitative approach will involve interviews with key informants, health care providers and clients/patients. Focused group discussions will also be done.
 - Quantitative data will be collected from facility registers and NPCs logbooks
- Basic research questions**
1. What models for up skilling NPCs are available in sub-Saharan Africa (SSA)?
 2. Are these methods appropriate (fit for purpose), feasible and sustainable?
 3. Does this training result in improved individual NPC and facility functionality?
 4. In the long term, does it result in improved maternal and newborn health outcomes?

Figure 2
NPC training in Malawi

Photo by David Davies
University of Warwick

4. Project Description

Figure 2: ETATMBA project target districts in Malawi and Tanzania



A total of 100 NPCs have been trained, 46 in Malawi and 54 in Tanzania.

Training was organised in modules which addressed the following key areas:

1. Emergency obstetrics and neonatal care in resource limited settings
2. Principles of leadership and service improvement
3. Basic principles of scientific research methods
4. Analysing scientific evidence and critical appraisal of a published articles
5. Essentials of clinical training in obstetric and neonatal care in a low resource setting
6. Field work, mentoring and supervision

Collaborators: University of Warwick, UK. University of Malawi, Malawi Ministry of Health, Ifakara Health Institute, Tanzania. Karolinska Institute, Sweden. GE Healthcare, UK

[ETATMBA Project \(www.etatmba.org\)](http://www.etatmba.org)

5. Plans & Perspectives

Tentative Plan in 2014

- June/July 2014 - Orientation and planning visit, Tanzania
- August/September - Initial reading, write up, registration
- October - First Batch BSc graduates, University of Malawi
- October - Orientation and planning visit, Malawi
- November/December - Literature, tools, ethics.

6. Acknowledgements and References

Acknowledgements

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