Enhancing Training of Clinical Officers and Appropriate Technologies for Mothers and Babies in Malawi

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Background

Midlevel provider training and deployment: Brief history

- 1875 Dr. Robert Laws - Cape McClear
  - Medical Orderlies and Hospital Assistants
    - On the job training
- 1894 Formal pre-service training
  - Both male and female
- 1949: Midwifery
- 1961:
  - Medical/Laboratory Assistants & Midwives (Blantyre)
  - Medical Aides (Lilongwe)
  - Health Assistants & Nurses (Zomba)
- 1976 Malawi Government
  - Clinical Officers

Absolute numbers of different cadres (2 years ago)

- Doctors (Specialists) 36
- Doctors (Non-specialists) 143
- Clinical Officers/Medical Assistants 1519
- Nurses/Midwives: (Registered/Enrolled/Technician) 4361

As a matter of interest

- First Malawian Doctor: Dr. Daniel Malikebu
  - Graduate of Meharry College, USA
    - Returned at Port Herald by Colonialists 1920
    - Deported to Liberia
- Second Malawian Doctor:

  Dr. Hastings Kamuzu Banda 1937

Maternal Mortality Ration-Malawi

Demographic and Health Survey	No of maternal deaths per 100,000 live births
1992	620
2000	1120
2004	984
2012	675

Type of study

- Programmatic
- Randomised

Randomization of Central and Northern Districts into Intervention and Non-Intervention areas

No	Intervention Districts	No	Non-Intervention Districts
1	Chitipa	1	Dedza
2	Karonga	2	Dowa
3	Kasungu	3	Mchiji
4	Lilongwe North	4	Nkhatabay
5	Mzimba	5	Nkhotakota
6	Ntcheu	6	Ntchisi
7	Rumphi	7	Salima

Method

- Training programme is the intervention (elaborated below)
- Data collection:
  - Baseline at project's start
  - 12 and 24 months from project's start
  - Data analysis:
    - STATA for quantitative data
    - NVIVO for qualitative data

Training programme set up

- Cohort of 12-14 (total 50) from different districts
- At a facility away from normal working place
- Theory and demonstrations for one week
- Examination – baseline knowledge
- Sent to their facilities with a new skills-kit and a number of tasks
  - Auditing birth problems, deaths (maternal & neonatal)
  - Cascading the new skills to the EmONC team
- A report book – luck of drugs, equipment, etc and how they solved these problems

Module 1 (done May 2011)

- Most common killers of mothers:
  - Haemorrhage
  - Sepsis
  - Hypertensive disease in pregnancy
  - Abortion complications
  - Obstructed labour
- Most common causes of perinatal death
  - Prematurity
  - Sepsis
  - Birth asphyxia

Teaching Techniques

Module 2 (done Nov. 2011)

- Leadership and team work

Module 3 (to be done Nov. 2012)

- ”Born too soon”

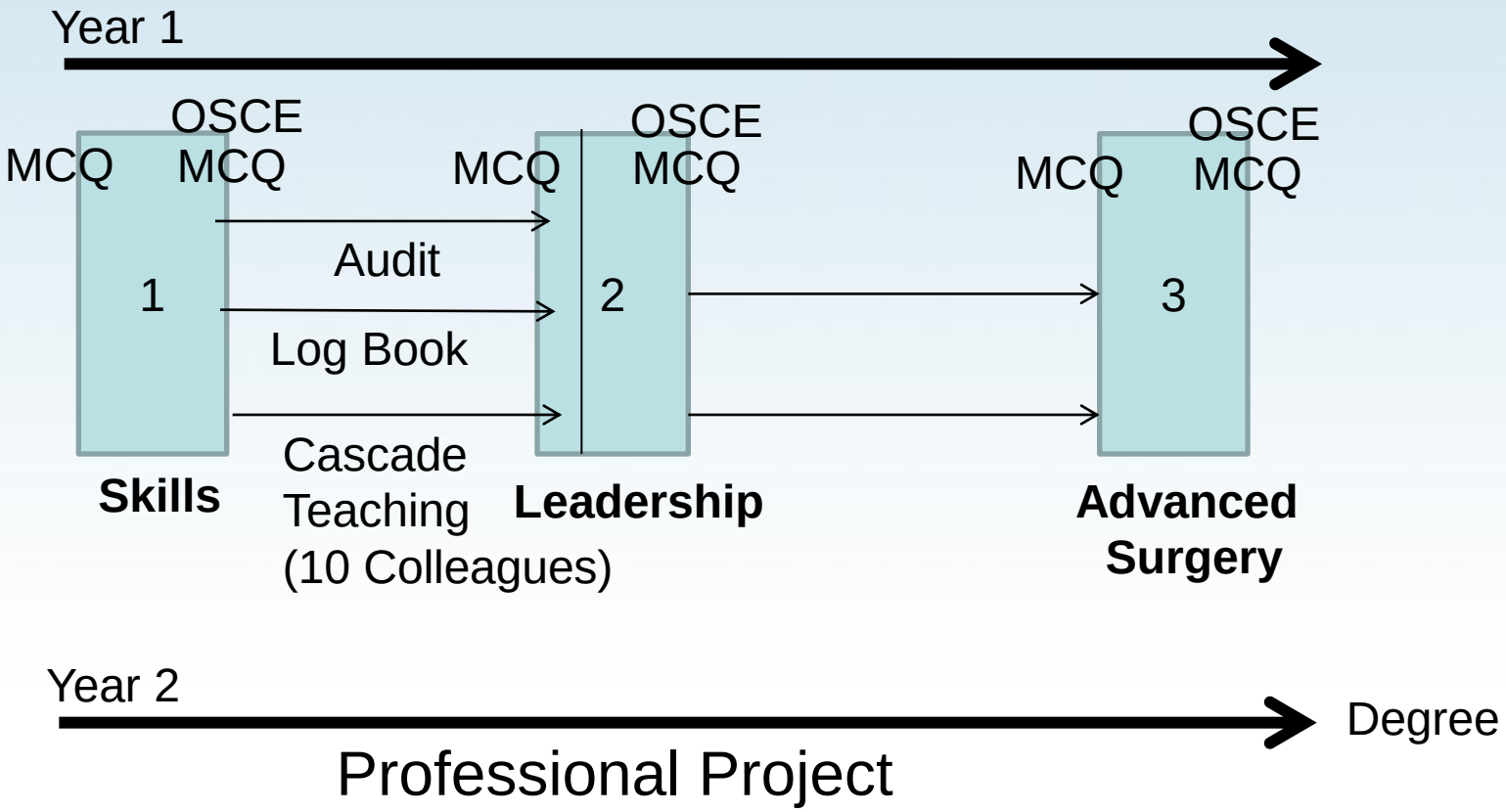
Data collection

- Baseline data at the start of project
- Impact data at 12 and 24 months from start of project

Type of data to be collected

- Perinatal mortality (defined as fresh stillbirths and neonatal deaths before discharge from the health care facility)
- Maternal death rates (case specific);
- Recorded data (e.g. still births, Post-Partum Haemorrhage, C Section, Eclampsia, Sepsis, Neonatal resuscitation);
- Availability of resources (e.g. are drugs/blood available);
- Use of available resources (e.g. drugs).
- Use of the partogram

Course Structure



Expectations

- Reduction of Maternal and Perinatal Mortality
- Establishment of BSc. Clinical Medicine in:
  - Anaesthesia
  - Internal Medicine
  - General Surgery
  - Obstetrics and Gynaecology
  - Paediatrics and Child Health
  - Trauma

Partners

1. Obstetrics and Gynaecology Dpt., College of Medicine, University of Malawi, Blantyre, Malawi

2. The Reproductive Health Unit, Ministry of Health

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Thank you