

**From "On the Job" training  
in Surgery**

**towards a**

**Bachelor of Science  
degree course**

**for**

**Clinical Officers  
in Malawi**









**16 m. 3% yearly increase, double in 15-20 yrs**

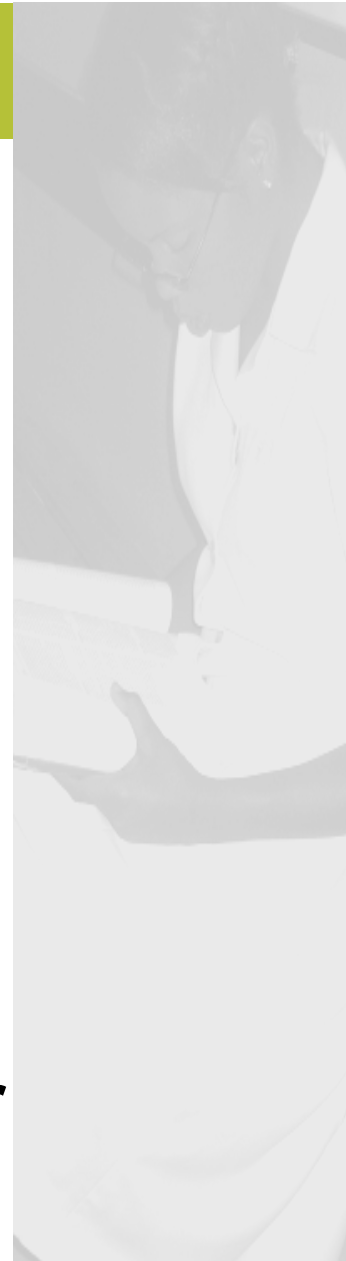


## More about Malawi

- **The nr 9 poorest country world**
- **11% HIV pos**
- **1 Doctor for 50.000 inhabitants**
- **Few Malawian specialists**
- **Braindrain**

**CNN documentary:**

**“More Malawian Doctors in Manchester than in Malawi”**



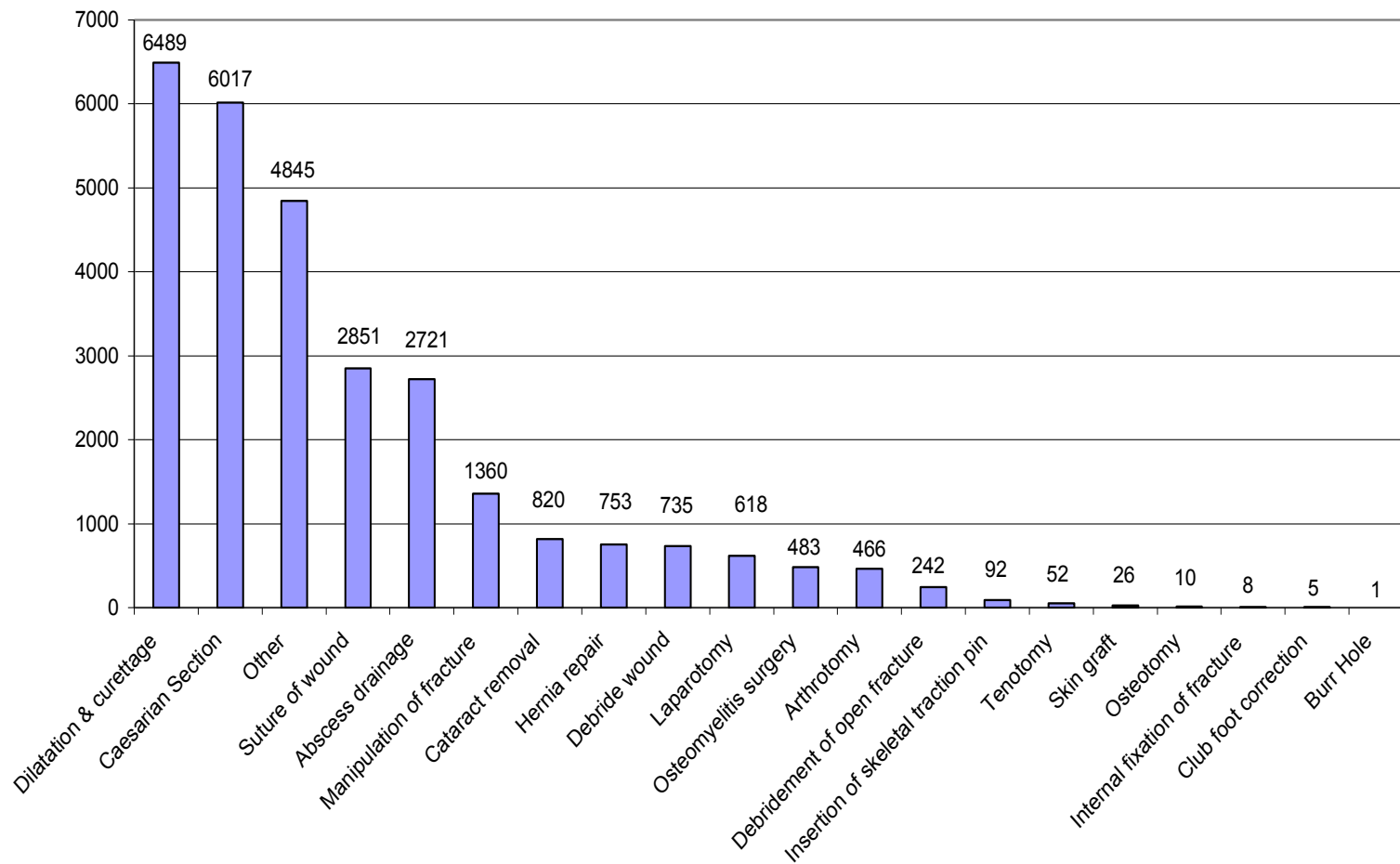


# DOS: Please train COs in surgery



# Why? Surgery by COs in the DHs: **only 3%**

Operations in District Hospitals in Malawi in 2003 (total = 28594)





# COs and why to train in surgery?

- Due to lack of Doctors, COs are the **BACK BONE** of health care
- Training COs is basic:  
3 + 1 yr intern ship
- COs lack surgical skills and gain little surgical experience in hospitals
- Consequently surg. patients referred to Central Hospitals
- The 4 CHs: overloaded



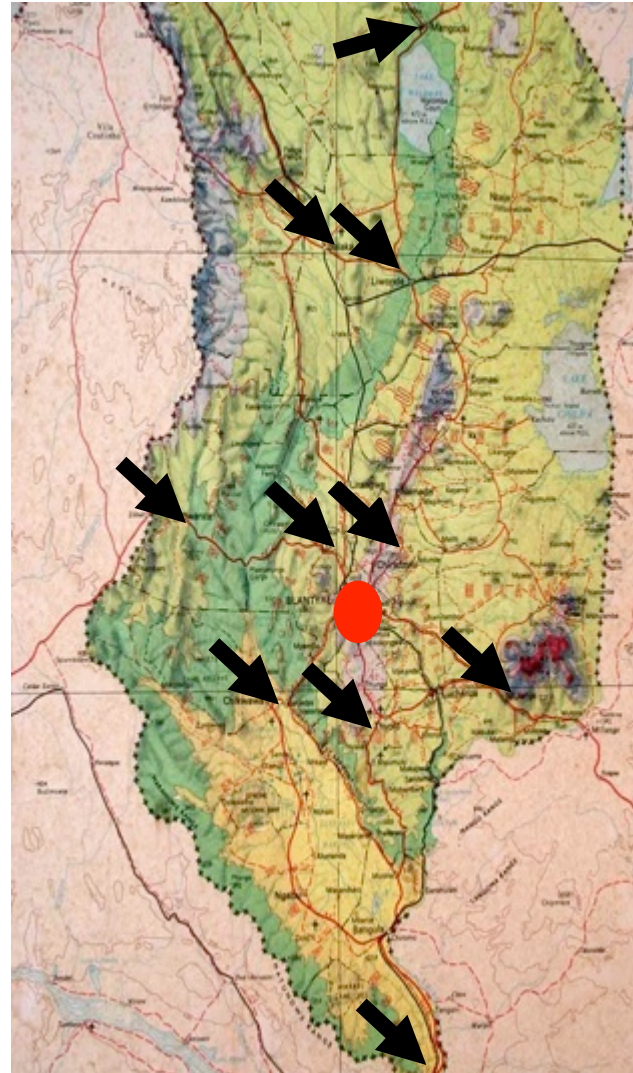
## 2005 Start COs trainings project

### ON THE JOB.

- Why?  
Dr Lungu will tell  
(some handouts)

### PROGRAM

- **2 years** training for
- 2 selected COs per hospital
- First in the SR, later NR
- Trained 45 COs
- In (17/11) 28 Hospitals





## Goal CO training

- **Upgrade** surgical/ obstetrica/ gynaecological **knowledge and skills**
- Care for **Trauma patients**
- **Safe practice** of **common** surgical and obstetrical procedures in DH/MHs
- To standardize and implement **similar** surgical protocols (suture mat, antibiotics, pre-op pat.care, aseptic techniques in theatre et
- Less referrals to CHs

# Teaching Program in 2 years

- **HOSPITAL VISITS**

Every 3-4 weeks, lasting 1-2 days  
by (expatriate) surgeons / 1 gynecologist

- **ATTACHMENT WEEKS**

for Extra Theory and Skills in

- General Surgery
- Obstetrics and Gynecology
- Trauma and Orthopaedics
- Resuscitation
- Surgical ENT, Dermatology. Ophthalmology
- Pathology (technique FNA, biopsies)
- Basic Ultrasound course

**Teachers Att. wks from CoM**



# Program training is structured

## First day

- Morning: Out Patient Department (OPD)
- Afternoon: Ward rounds

## Second day

- 7.30: Attending “Hand over” staff meeting and Presentation surgical topic
- Theatre
- Discuss outcome visit with Hospital Director

# Day 1: OPD, selected cases only, plan

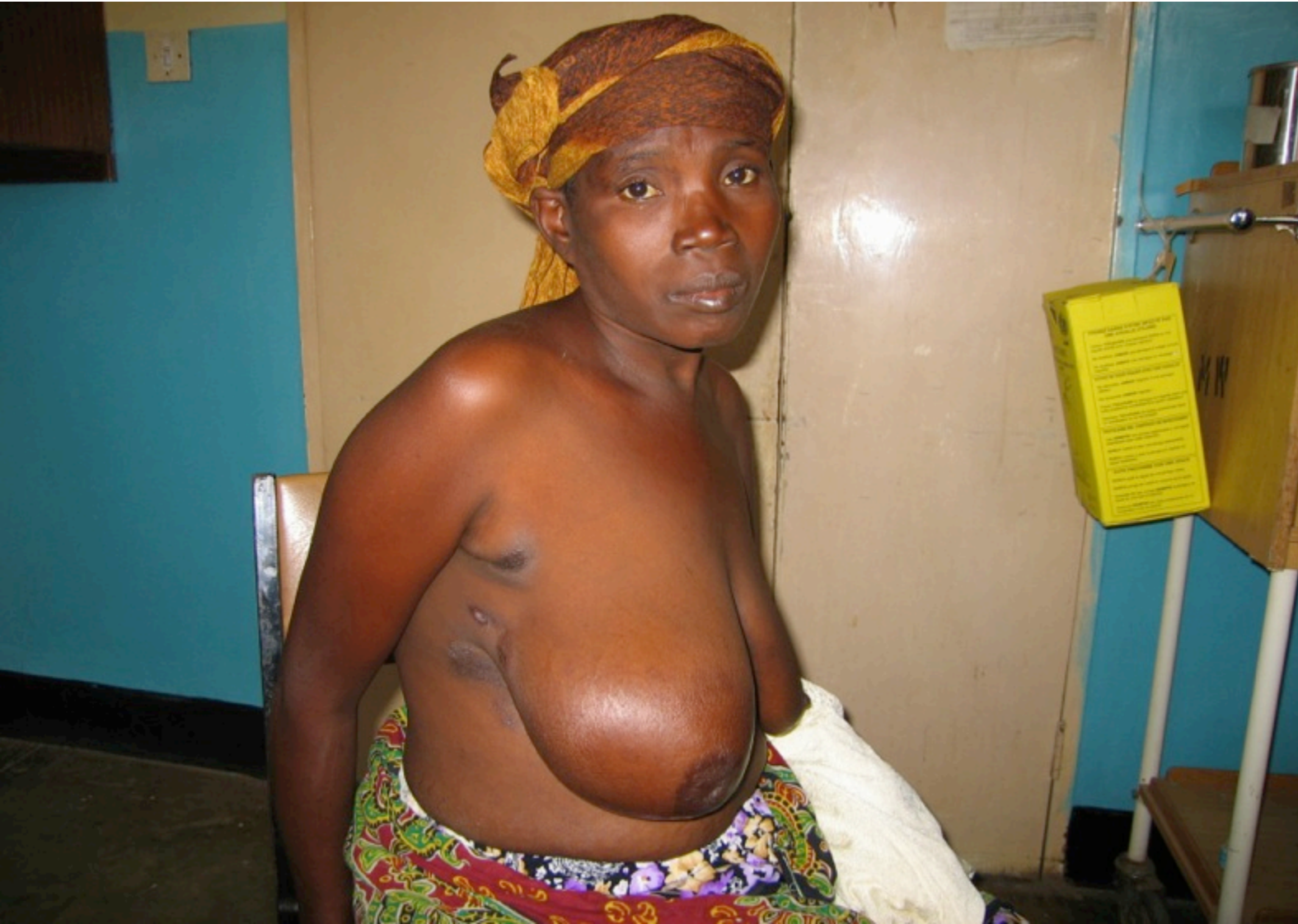




# OPD: which hernia to operate?



## OPD: dd Breast tumours. Cancer?





# Ward Rounds: **All** surgical patients





# To be presented by COs, bed side teaching



# Diagnose? Treatment?





**Diagnose? Safe surg.proced. at DHs. Advice?**





# Snake bite. Danger? Treatment?



# Ward rounds: also Trauma patients





## DAY 2: Teaching hospital staff





# THEATRE: the whole day











# DHO: the outcome of hospital visit



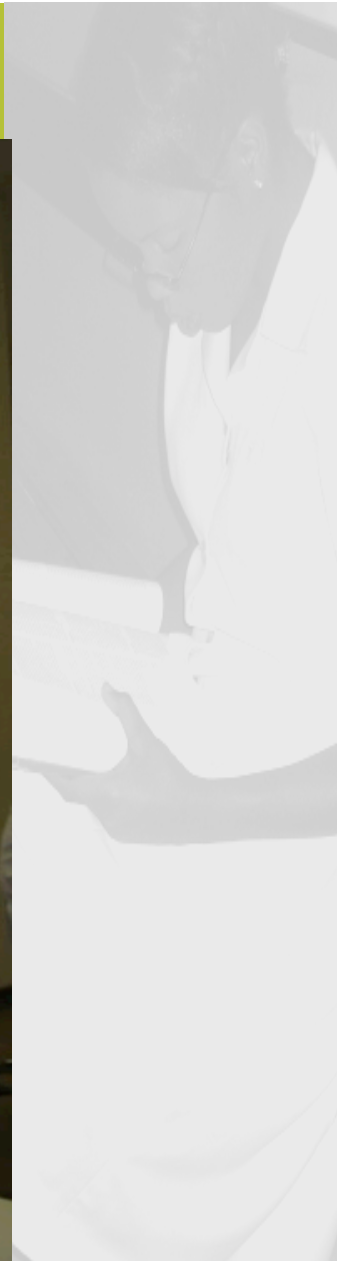
# 6 ATTACHMENT WEEKS

Extra  
Theory  
and  
Skills  
practicing





# Bowel anastomosis, ileo/colostomies





# Inserting Thorax drains, Skin grafting



# Pin traction in fracture treatment





# Primary Trauma Course



# Training in Obstetrical emergencies





## After 2 years: program **Review** by CoM

**Prof Bowie, England**

### **Outcome**

Quote:

- **CO skills have improved**
- **Patients and Hospital benefitted**
- **Overwhelming support in and outside Malawi**

## Was it useful ?..... Prove it!

**2 studies published:** both retrospective

Study 1: after already **1** year training

- **Reduction Post Op. inf.** inguinal hernia patients

**21% - 8,7%!!**

Study 2: **1** year **AFTER** the 2 yrs training

- **More MAJOR** surgical operations: **8,4 - 17,8%**

- **Less REFERRALS** to CHs, but not statistically sign.



## Any Problems?

**YES..... some DROP OUTS of COs!**

**Why ?? Not interested.....**

**Why ? NO CAREER PERSPECTIVE OFFERED  
(no increase in salary)**

**Why ? MoH did NOT allow a “course”**

Certificate of attendance only!

**Why ? MoH: no money paying higher salaries to COs.**

**Considered training Doctors (in those days) more important.**

# Meeting with MoH, Teaching Inst, Med Council

**Dec 2010: “THE DECISIVE MOMENT”**

**Presented:**

- **Complete Plan BSc course in Surgery**
- **Plus Curriculum, and a Budget**

**Duration Program: 3 years**

- 18 m “On the Job” training
- 18 m in Central Hs



## TOLD MoH what is known in lit. about COs

### Studies from MOZAMBIQUE (hand outs)

- No difference in surgical outcome Drs and TC(COs):
- For 1/4th of the training costs for Doctors
- For LESS hospital costs per Patient
- For LESS costs per Patient
- For A salary 1/10th of the Doctor
- While TC STAY in the rural hospitals and are NOT leaving the country
- While ALL Doctors have left DHs... within 7 yrs!
- Gen. opinion: Drs not trained/skilled for work in rural hospitals!

Studies from TANZANIA: Assistant Medical Officer (AMO) Able to work in all wards. But perform minor surgery only.

## Response MoH.....

**“We should have started  
this program 5 - 10 years ago”**

**6 months later: June 2011**

**Malawi Government requested CoM to create  
“SPECIALIST CO clinicians” by offering **BSc**  
**courses in:** 1. Surgery 2. Obst/gyne 3. Medicine  
4. Paediatrics 5. Orthopaedics and 6. Anaesthesia**



# Comments Dr Lungu



# Surgery in Malawi

- 1995 - District Medical Officer - Kasungu
- IMF Structural Adjustment
- Major constraint to District hospital
- Needed to know how to do emergency surgery
- More than just a scapel blade





# EHP in Malawi

- HIV/AIDS/STI
  - Malaria
  - Maternal Health
  - TB
  - Cancers
  - NTDs
- ARIs
  - Diarrhoeal Diseases
  - NCDs and Trauma
  - Malnutrition
  - Vaccinations
  - Eyes and Ears Inf

# Why “On the Job” Training ?

- Not to **further reduce** COs in the Hosp
- **Improve quality of care** - CPD
- **Supervision** provided by teachers
- **Cost Effective**
- Encourages **innovation** - use of what is available
- Effective use of short timers





## On the Job training

- **TELL ME AND I FORGOT**
- **TEACH ME AND I REMEMBER**
- **INVOLVE ME AND I LEARN**

Benjamin Franklin, 1706-1790



**Friday 31rst Oct 2014**

**A historical moment for Malawi,  
as the **very first (46) COs****

**received a **Clinical Officers Specialist BSc degree**  
in**

**Acute Obstetrical and Neonatal care.**

**Trained “On the Job”**

**by Warwick University**







”KWACHA”

means

“the sun is rising”

for the COs in Malawi,

to the benefit of the patients

Thank you

SYMPOSIUM  
SURGERY IN LOW RESOURCE SETTINGS  
NOVEMBER 14TH–16TH 2014

WHAT  
IS YOUR  
ROLE?

