Surgical training for Dutch residents in a low-resource setting

a personal experience in **Blantyre, Malawi**

Manuel Koppe

September – November 2010

- 3 Months of surgical training in 5th year of residency
- Facilitated by Radboud UMC Nijmegen and Rijnstate hospital Arnhem
- Family (wife, three children 2-4-8 yrs)
- Impressive and instructive

Scope of this talk

- Dutch regulations → surgical training abroad
- Experiences. What did I learn?
- Necessary preparations

Malawi

- In between Tanzanya, Mozambique and Zambia
- British colony
- Independent since 1964
- English and Chichewa

- Very poor
- No minerals
- Little industry
- Tea, tobacco, sugar
- <2 USD/day for 90% Malawians

Crude figures

	MALAWI	NETHERLANDS
Surface area (km^2)	118.000	45.000
Inhabitants	15.000.000	17.000.000
Life expectancy (yr)	50	>80
HIV	930.000 adults (11.9%)	25.000 (0.15%)
Orphans	500.000-1000.000	34.000
Annual income ($/person)	328	45.000

RGS terms for specialist training abroad

1. It should have a well described goal that fits the training plan
2. The level of clinical training has to be similar of better than that in the Netherlands
3. The hospital should be qualified for specialist training and education
4. The registrar should be supervised on a regular basis
5. The registrar must be licensed to work as a doctor by the local authorities

Mijn RGS knmg
Registratiecommissie
Geneeskundig
Specialisten

Queen Elizabeth Central Hospital

- Affiliated with University of Malawi
- Many different specialties

- 1000 beds, 1200 patients
- Mortality 1%/day
- 30% patients HIV ‘reactive’

- No emergency department for adults
- Emergency department for children: 100.000 admissions per year

- 359 PubMed hits past 5 years (13 Lance

Department of Surgery

- Nine surgeons (Malawian, American, German)
- 3 Clinical officers
- 4-6 Registrars
- 4-6 Interns

- Men's ward (50-70 patients)
- Women's ward (50 patients)
- Burns unit (20 patients)
- Pediatric ward (80 patients)
- Orthopedic ward (80 patients)

Prof. Borgstein and …?

Operation theater

- 10 ORs over 4 departments
- Only 3 ORs available for general surgery and trauma in 2010
- 4 ICU beds, 2 with ventilators

Surgical pathology & procedures

- Impressive pathology; some locally advanced tumors, many acute abdomens, ultrasound available, no CT

- 124 surgical procedures
  - Inguinal hernias or hydroceles
  - Acute laparotomies (bowel strangulation, typhoid perforation, sigmoid volvulus)
  - Limb amputations

- 94 operations alone or under supervision
  - New bowel anastomosis techniques
  - New techniques for repair of inguinal hernias
  - Self-confidence

HIV and surgical risk reduction

- Several means to reduce the risks for health care personel
  - Wear protective glasses
  - Double gloves
  - Handing scalpels in a kidney-bowl
  - Using diathermia instead of scalpels
- Rapid blood tests may be available
- Post-exposure prophylaxis

Family

- Me (surgical registrar)
- Laura (anesthesiologist)
- Michael (8 yrs)
- Susanna (4 yrs)
- Sarah (2 yrs)

Family matters

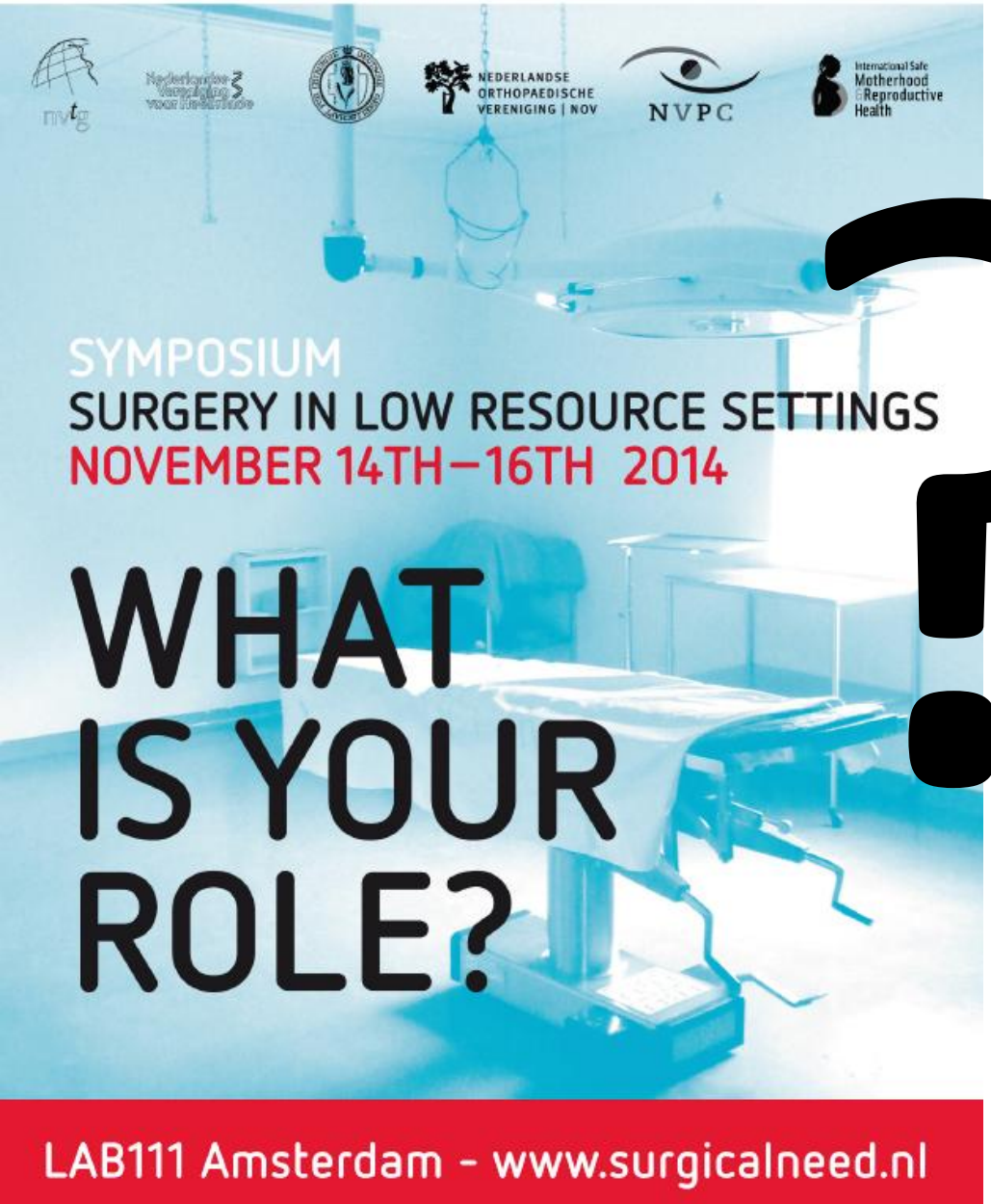
1. Medical
   - Malaria prophylaxis
   - Vaccination against hepatitis-A/B, rabies, typhus
2. Schooling for children
3. Local security
   - Housing should be arranged before arrival
   - Security guards may be necessary
   - Car is necessary

Conclusions & THM

1. Surgical training in a low-resource setting is possible, and will be a life experience not to be forgotten
2. The primary purpose should be to learn, not to teach the local doctors or clinical officers
3. Good preparation is essential, especially when taking one's family with you

NETHERLANDS SOCIETY FOR INTERNATIONAL SURGERY

Deutsche Gesellschaft für Tropenchirurgie



AHP
AFRICA HEALTH PLACEMENTS
WWW.AHP.ORG.ZA

NYIP
NYENBURGH INVESTMENT PARTNERS

va. communication by design

ThesisApps
VERSPREID JE PROEFSCHRIFT ALS MOBIELE APP

REDERIJ DE NEDERLANDEN
BELEEF AMSTERDAM