

Experiences of Transfusion in a Low Resource Setting



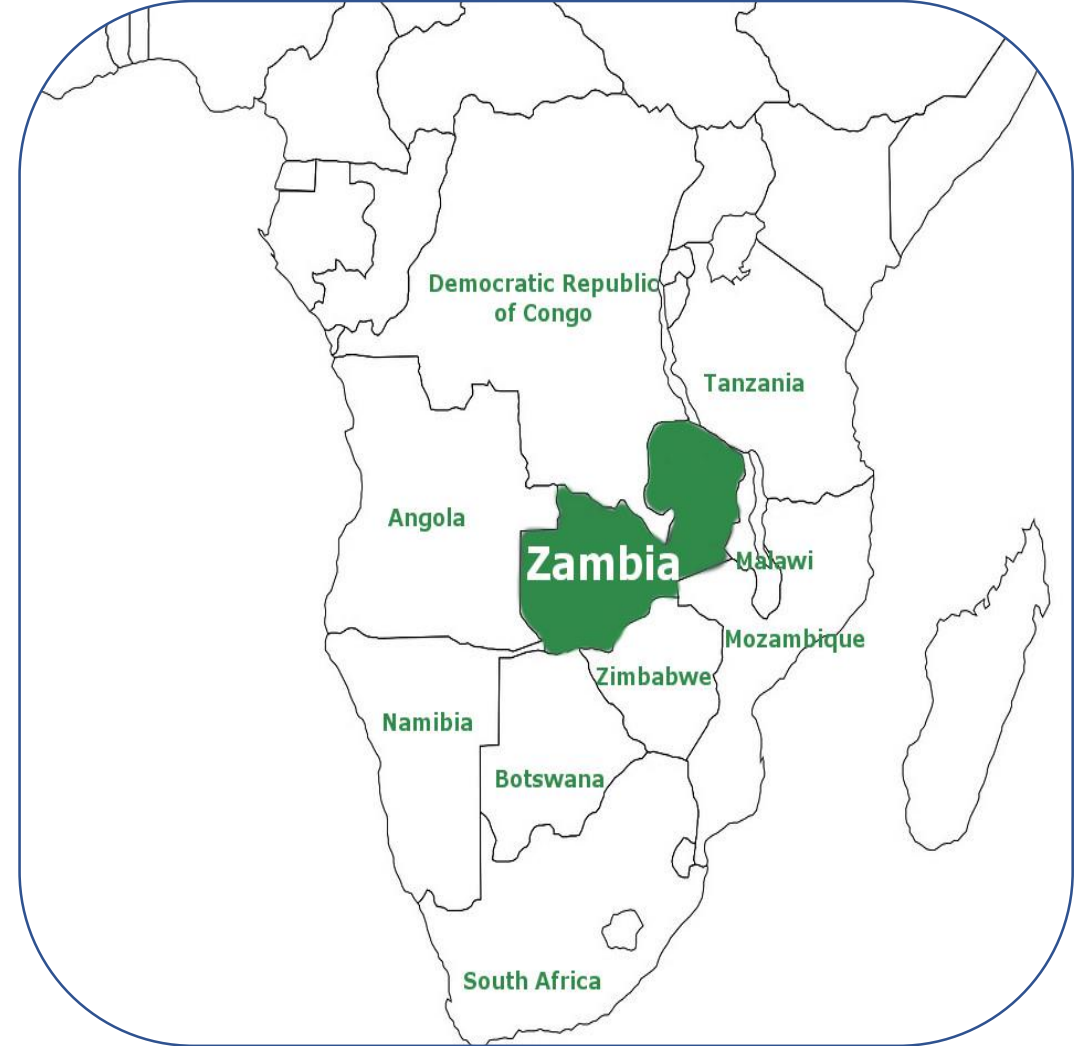
Dr Chris Timmis, Fellow of Zambian Anaesthetic Development Programme

08/03/2019 South East Meeting

Outline

- **Zambian Anaesthetic Development Programme (ZADP)**
- Collaborative Training
- Research
- Encouragements

Zambian Anaesthetic Development Programme (ZADP)



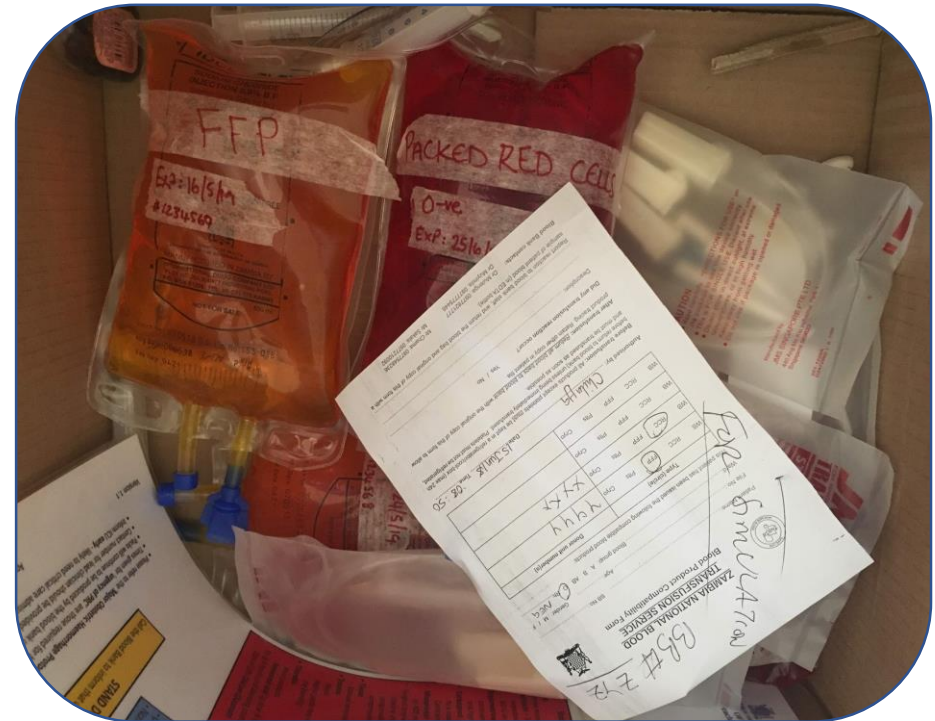
Collaborative Training in Maternity

Maternal Resus Workshop



Maternity

Maternal Resus Workshop





Adult Major Haemorrhage Protocol

ACTIVATION REQUIRED FOR:

- Over **1.5 litres** blood loss
- Ongoing **haemorrhagic shock** (systolic BP <90mmHg) despite resuscitation
- **4 units** packed red cells (PRC) or whole blood transfused
- Senior clinician discretion

ACTIVATE THE MAJOR HAEMORRHAGE PROTOCOL (MHP):
'Activation of MHP for name, age & location'
Send doctor urgently to blood bank with blood specimen

Phone numbers: (in order)

[1] Dr Mulenga: 0977821777 [2] Mr Chama: 0977548236 [3] Dr Muyinda: 0977775446 [4] Mr Sakala: 0977210092

Phone then SMS patient details

Stop the bleeding:

- Haemorrhage control - direct pressure & tourniquet
- Involve surgeons & **consider theatre early**
- Hypotensive resuscitation until haemostasis achieved *
- Specialty specific: damage control laparotomy, Caesarean hysterectomy, fracture reduction...

* = see notes

Drugs

- **Tranexamic acid (TXA):**
 - 1 gram over 10mins IV (= 2 vials neat)
 - then infusion of 1 gram over 8 hrs *or* 1 gram 8 hourly
- **Calcium (Ca²⁺):**
 - 10mls of 10% gluconate or chloride IV over 5 mins
 - repeat after every 4 units PRC

MAJOR HAEMORRHAGE PACK ONE

- 4 x packed red cells (PRC)
- 4 x fresh frozen plasma (FFP)

10mls Ca²⁺ gluconate

Tranexamic acid 1g

MAJOR HAEMORRHAGE PACK TWO

- 4 x packed red cells (PRC)
- 4 x fresh frozen plasma (FFP)
- 6 x units platelets (PLT)

10mls Ca²⁺ gluconate

MAJOR HAEMORRHAGE PACK THREE *

- 4 x packed red cells (PRC)
- 4 x fresh frozen plasma (FFP)
- 6 x units platelets (PLT)
- 2 x units cryoprecipitate

10mls Ca²⁺ gluconate

Repeat bloods:
FBC, coag, U&E's

Consider urgency of PRC: *

- Group O blood (**immediately**)
- Type specific (**15mins**)
- Full crossmatch (**60mins**)

- Call for **HELP** - consultant required
- **ABC** - consider early intubation
- **Oxygen** & measure **temperature**
- **Intravenous access**: 2 x large bore (grey/orange) or central line
- **Bloods**: FBC, coag (inc. fibrinogen), G&S
- **Haemacue** (Located in Obs/ICU/Phase 5)
- Place of safety: theatres, ICU
- Assign **roles**: lead, porter, communicator
- Avoid excessive IV crystalloid

BEWARE:

- **Hypothermia**
 - Warm all fluids

Research

- Contaminates
- Waste

Encouragements

- Recent Meeting
 - Transfusion Committee
 - Extra government funding for blood donation

