

# STRENGTHENING EMERGENCY CARE

AN INTEGRATED  
PROGRAM OF EMERGENCY  
MATERNAL, NEONATAL AND CHILD  
HEALTHCARE

EMNCH



Maternal and Childhealth Advocacy International (MCAI),  
Advanced Life Support Group (ALSG) in collaboration with  
Ministry of Health, WHO Geneva and Gambian WHO, UNICEF  
and UNFPA offices

## Strengthening Emergency Care

4<sup>th</sup> and 5<sup>th</sup> millennium development goals

- Reduce by two thirds the mortality rate among children under five
- Reduce by three quarters the maternal mortality ratio

COUNTING DOWN from 1990 to 2015

# What this presentation is about

- The country
- Gambia's health problems
- The Strengthening Emergency Care programme
- Outcomes so far
- Continuing challenges



# Geography

## The Gambia



# Economy (and peanuts)



# The Gambia

Population 1.67 million

66,000 births/year

Income US\$ 310/year

Institutional deliveries  
55%



# Maternal Mortality in The Gambia 2005

690 maternal deaths per 100,000 live births

UK 11 deaths per 100,000 live births

Lifetime risk of maternal death 1: 32

UK 1:4700

# Maternal Deaths

■ Eclampsia

■ PPH

■ Puerperal sepsis

Severe anaemia

High parity

Early pregnancy

HIV

Poverty

Obstructed labour

*morbidity*

# Child mortality rates in The Gambia Unicef 2006

- U5MR 109 (UK 5)
- IMR 84 (UK 4.5)

MDG 4 reduce by 2/3 from 1990-2015

- Each year 60,000 children are born
- Each year 9,000 children under 5 die

One under five child in seven dies

# Child Deaths

- Failure to breathe at birth
- Neonatal sepsis
- Malaria
- Pneumonia
- Diarrhea
- Major trauma

Severe anaemia

HIV

Malnutrition

Poverty

# Findings on Assessment Visit

- Emergencies were poorly managed – lack of recognition and intervention
- Nurses and doctors were demoralised and poorly motivated
- Essential emergency drugs and medical supplies, basic equipment, oxygen and basic monitoring were not available
- Frequently relatives had to buy drugs or disposables before the emergency could be treated



Examination bed

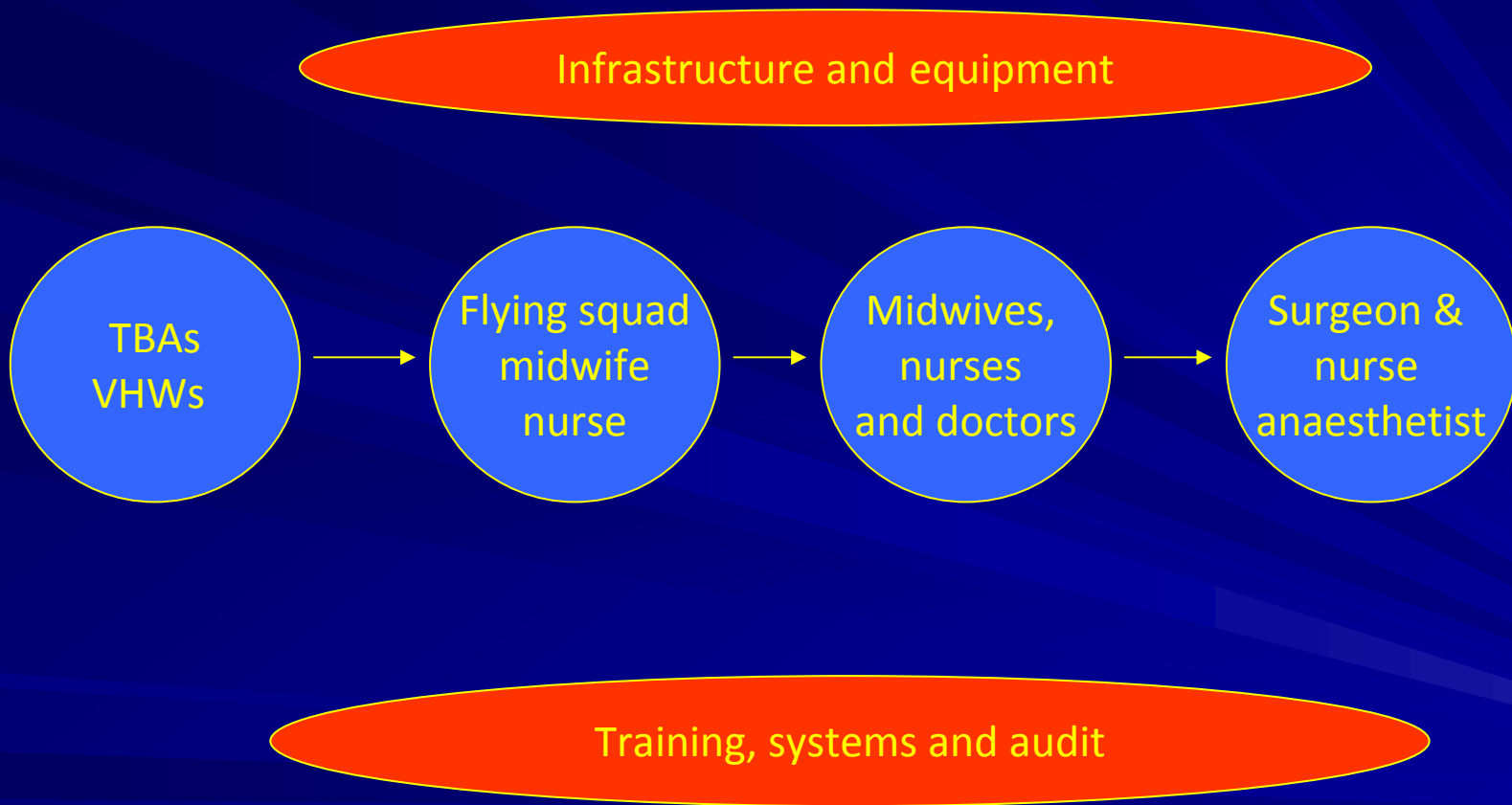
# Why Emergency Care?

- To avoid deaths, managing emergencies must be more effective
- Timeliness is a major determinant of outcome in survival and long-term damage.
- Emergency skills needed throughout the “chain of survival”



Brikama Health Centre, The Gambia

# Patient emergency chain of care



# Three delays that result in deaths

Seeking care

Reaching care

Receiving care

## Seeking care

Traditional practices mean that women cannot seek health care without their husbands permission. If he is absent or refuses, they cannot go to the hospital

We have advocated for the Traditional Birth Attendants to be empowered to transfer woman to hospital if they recognise an emergency



## Reaching care

Even with a four wheel drive vehicle, the roads are sometimes impassable and most villagers travel by donkey cart

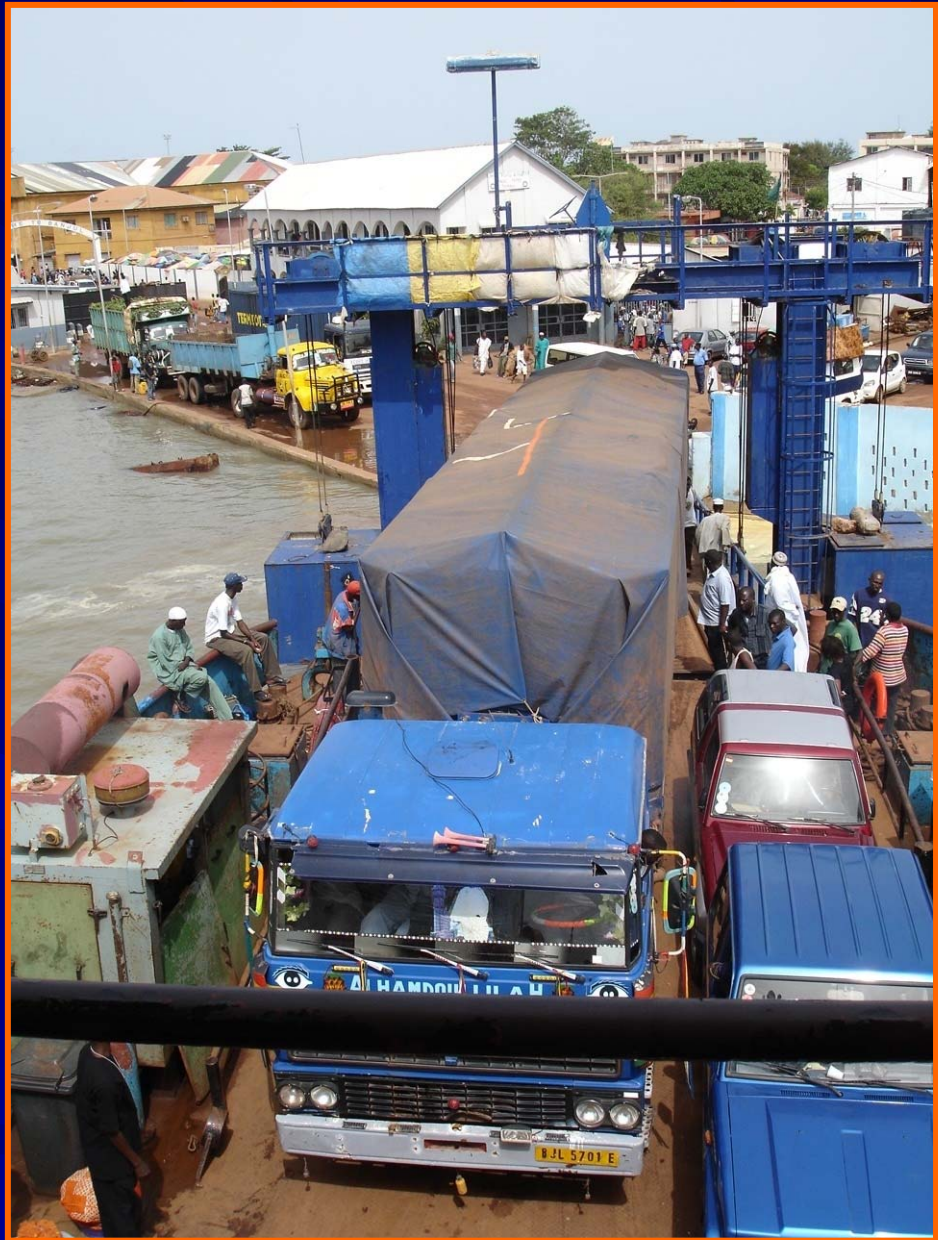
We have provided an ambulance with a midwife, drugs and equipment on board to go out to the obstetric emergencies in village women and treat them there, moving them to the hospital with treatment already started



## Reaching care

There is an enormous river running through the whole country, with one busy ferry which stops at night

We have provided a RNLI type boat to cross the river with health care staff and a woman having an emergency which needs surgery on the other side of the river



## Equipment

May be there but if it doesn't work, it's no good!

We have supplied hundreds of baby resuscitators – we know they have saved the lives of many babies who could not breathe at birth



## Building programmes

Many building programmes have started but never finished. A waste of donors' money

We don't do that, we renovate instead to make the place fit for purpose



## Reaching care

Even getting to the primary health care centre can be difficult

We are looking to provide another boat here



## Receiving care

Once at the hospital, is it clean?

Are there enough nurses?

Are the nurses trained?

Is there the right equipment?

Drugs?

Surgeon?

Operating theatre?

Anaesthetist?

It's all in the Strengthening  
Emergency Care  
programme!



## Receiving Care

We support basic renovations  
not expensive new buildings.

We partner with government  
to do this work. They do the  
work, we provide the  
knowledge and expertise



Receiving care

Hmm...

Health and Safety?

Another problem we solve!



# Strengthening Emergency Care

## Main components of the program

1. Sustainable training program (EMNCH) within the existing system
2. Sustainable supply of essential drugs, medical supplies and equipment
3. Advocacy to ensure low cost and appropriate renovation to ensure the hospital is clean and effective ( NOT new hospital buildings)
4. Strengthening of the referral system integrating home with hospital based care
5. Quality control and outcome evaluation

ALL OF THESE IMPACT POSITIVELY ON STAFF MORALE



## Operating theatre in Brikama before and after renovation



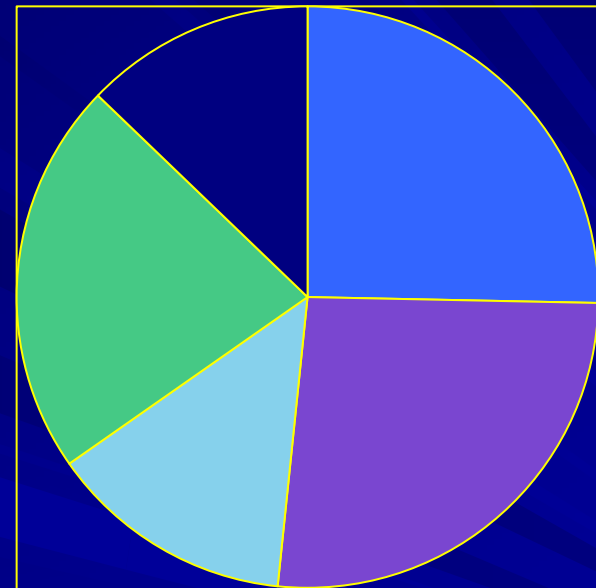
# Who and where and how to train?

■ Nurses, midwives and doctors involved in emergency care, VHWs and TBAs

■ Through

- prior preparation – manual
- lectures
- workshops
- skills training
- scenarios
- assessment of skills and knowledge
- follow up CPD

Then we train local healthworkers to be trainers too



# **Main components of the training**

## **Modular courses with local adaptation**

- i) 2 x 3 day courses for midwives, nurses and doctors**
  - ii) 2 day courses for traditional birth attendants and village health workers**
  - iii) Generic Instructor Course for local trainers**
- In house training for ward cleaners and ambulance personnel**

# Emergency Maternal and Newborn Health course



# Emergency Trauma and Child Health course





**Skill station on resuscitation of the newborn infant**



**Skill station on intra-osseous needle insertion**



**Testing station**

# Traditional Birth Attendant course



# Village Health Worker course



# First aid



# Evaluating impact

Independent report, 2009

“this is an excellent and worthwhile project.....based on a careful needs assessment.”

there is “ a good working arrangement between the four ‘provider’ parties”

“the evaluation.. strongly supports the concept of extending the project to other areas of The Gambia”

Dr A Macfarlane. *Independent international consultant in strategic planning of Maternal, Child and Adolescent health services*

# How to evaluate impact?

## Capacity

Knowledge of health professionals

Change in practice

Presence of wall charts / algorithms

Sustainability

Appropriate use of equipment

## Mortality and Morbidity

Improvements in mortality

Analysis of log books

**LOG BOOK FOR EMERGENCIES IN PREGNANCY,  
THE NEWBORN INFANT AND THE CHILD  
(THE GAMBIA)**



Log book sample Sept 2007

244 resuscitations

Overall survival rate = 94%



WHO The Gambia

THE REPUBLIC OF THE GAMBIA



Department of State for Health  
and Social Welfare

# Have we made a difference?

## Maternal Mortality

2005

- MMR 690
- Lifetime risk of death in childbirth 1: 32

2010

- MMR 360
- Lifetime risk of death in childbirth 1: 56

# Have we made a difference?

## Child Mortality

**2006**

- U5MR 109
- IMR 84

- 60,000 children born
- 9,000 children die

One under five child in  
seven dies

**2010**

- U5MR 98
- IMR 57

- 66,000 children born
- 6,000 children die

One under five child in  
eleven dies

# What next?

- Extend the SEC programme to other areas, including the Emergency Ambulance system
- Train Midwife Surgeons and Anaesthetists
- Develop High Dependency care for mothers and babies
- Implement more ECTH courses
- Install Oxygen in ambulances and secure supply in hospitals

# What would you like to support?

- Renovate another operating theatre
- Equip operating theatre
- Train midwife surgeon
- Train 24 midwives, nurses and doctors in emergency care
- Train 12 local health care staff to be trainers
- Train TBAs and VHWs in new born resuscitation and recognition of emergencies
- Equip ambulances and hospitals with oxygen

# In summary

- An integrated programme of skills-based training and health service development in maternal, newborn and child emergency care.
- Achieved by collaboration between MCAI, ALSG, MoH, WHO, UNFPA and UNICEF in country
- Local healthcare providers empowered to ensure sustainability and to embed the system into the country's health service.

