



MCAI | Maternal & Childhealth
Advocacy International



Advanced
Life
Support
Group
*A charity dedicated to saving life
by providing training*

Strengthening Emergency Care for mothers, babies and children



Strengthening Emergency Care (SEC)-or Essential Surgical Skills -Emergency Maternal, Neonatal & Child Healthcare (ESS-EMNCH) is a sustainable system programme for the emergency care of pregnant women, newborn infants and children in poorly resourced countries. To implement the SEC programme there is a four way partnership supported by a Memorandum of Understanding (MOU) between the Ministry of Health of the country, two charities, MCAI and ALSG, and the in-country World Health Organisation-WHO.

It has been developed by two UK charities. Maternal and Childhealth Advocacy International (MCAI), a charity for maternal and child healthcare in war-torn and extremely poor countries and the Advanced Life Support Group (ALSG), a medical education charity that has extensive experience in delivering training courses in emergency care in well-resourced countries. The programme was originally started in the Afghan refugee camps in Pakistan and has subsequently been developed in Pakistan with assistance from the local offices of the World Health Organisation (WHO) and UNICEF. In 2007 it was successfully introduced into the Brikama district of The Gambia following a recommendation from WHO Geneva and is now being implemented in three other regions of The Gambia.

Whilst acknowledging the importance of promoting maternal and child health through primary prevention, inevitably emergency situations will arise that if poorly managed, especially in the early hours of their presentation, lead to avoidable maternal and child deaths. In an emergency, time is vital and access to health care is often impossible from isolated villages with no proper roads and often only donkey carts for transport. If the mother, baby or child reaches the local hospital, often health workers lack the skills and knowledge to deal with the emergency effectively and, in addition there can be frequent failures of the supply of essential drugs, medical supplies and oxygen.

It is also apparent that many children become pregnant and more frequently suffer emergencies related to their pregnancies and deliveries.

Strengthening Emergency Care addresses all of these issues by:

- establishing a **sustainable training programme** for health care professionals and community workers in the emergency care for mothers, neonates and young children
- **renovating existing hospital premises** and ensuring the **availability of essential emergency drugs, medical and surgical supplies and equipment**,
- making the "emergency chain of care" functional by developing **communication and transportation** systems for critically ill or injured patients.

Sustainable training programme

A range of teaching methods utilising the latest techniques in education and involving combinations of lectures, workshops, scenarios and skills training with manikins are used to deliver a curriculum that is fully consistent with the content of existing WHO/UNICEF training materials

The curriculum includes:

- Triage and life support
- Emergency skills
- Medical emergencies during pregnancy and labour
- Managing the complications of labour and delivery
- Recognition and management of serious illness in mothers, babies and children using a structured approach
- Major trauma and burns in all age groups
- Child abuse and domestic violence
- High dependency care: that is monitoring, fluids, drugs, blood transfusion, pain control *in the pregnant woman, baby and child*

The training programme is sustainable as local Gambian health care workers have been trained as Instructors to extend the programme across the country and it is integrated into the Gambian Department of Health's Reproductive and Child Health training. Traditional birth attendants (TBAs) and Village Health Workers (VHWs) are already undergoing training in the recognition of emergencies-see picture below. New training courses for hospital cleaners as well as courses in the use of morphine and in child protection are being prepared.



A TBA receiving training in how to breathe for a baby at birth who needs resuscitation

Renovation of Maternity and children's departments in hospitals



Operating theatre before and after renovation

Availability of essential drugs, medical and surgical supplies and equipment

The Ministry of Health participates in the programme by ensuring that essential drugs, medical and surgical supplies required for emergency care are consistently made available and by undertaking basic renovation to ensure a clean and functioning environment for emergency care such as plumbing, electricity and decoration.

Medical equipment for the delivery of emergency care (for examples oxygen concentrators, monitoring equipment, resuscitation equipment, delivery beds, theatre equipment etc) is obtained by MCAI, some new and when appropriate some second hand from former UK hospitals and delivered by a UK based medical equipment charity.

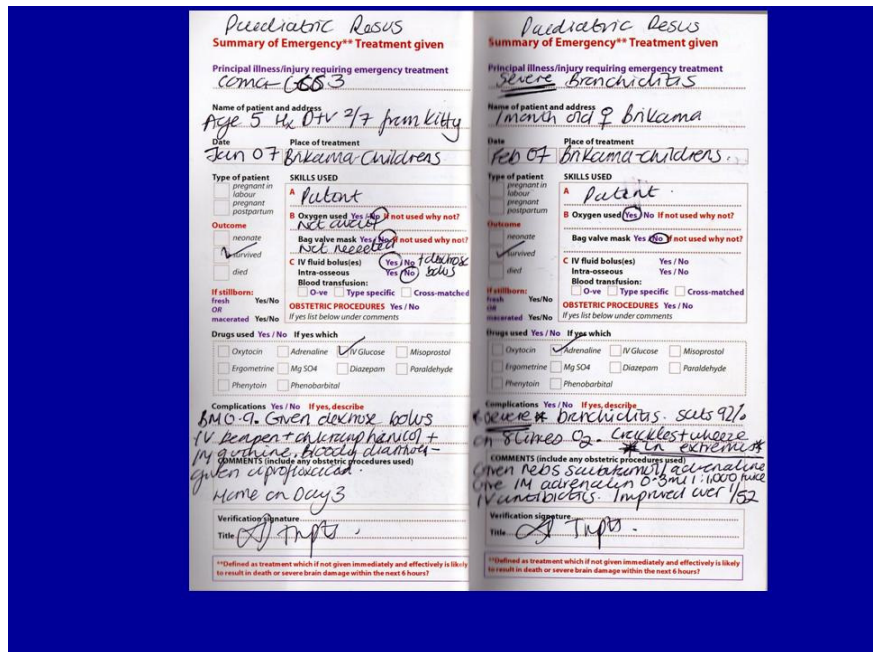
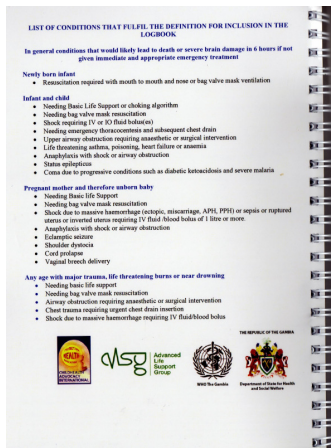
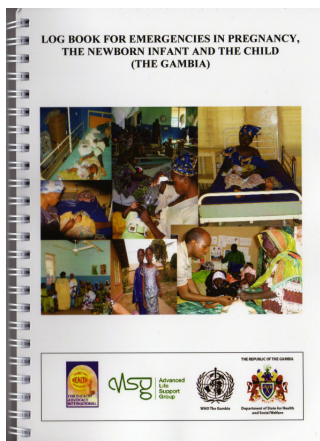
Communication and transportation (emergency ambulance service-the "flying squad")

Traditional birth attendants (who deliver about half the babies in the mother's home) have been trained to recognise emergencies and provide immediate basic resuscitation, including the ventilation of newborn infants who do not breathe at birth. They have been supplied with mobile phones with which they contact the on-call midwife at the local hospital. He/she then travels out immediately to the village in a well-equipped ambulance to use skills and drugs to stabilise the mother and bring her back to the hospital for further care such as emergency Caesarean section if required.

Assessment of the project

An independent assessment was carried out in the second year of the project. It is too soon to see any statistical changes in mortality country wide but all trained health workers have kept log books of emergencies treated and the assessment found: "This is an excellent and worthwhile project" *"evidence from the flying squad data for the Brikama District for 14/5/07 till 22/3/2008 clearly demonstrates that both maternal and infant lives were saved by the project."*

"The results of the evaluation would strongly support the concept of extending the project to other areas in The Gambia and elsewhere in Africa"



Pages of the logbooks completed by each provider of emergency care