

Strengthening Emergency Care

An approach to reducing maternal, neonatal and child mortality & morbidity rates



MCAI | Maternal & Childhealth
Advocacy International



Our **Strengthening Emergency Care programme (SEC)** is a sustainable whole system programme for the emergency care of pregnant women, newborn infants and children in countries where there is extreme poverty.

Partners

It has been developed by two UK charities with extensive experience in their own fields:

- Maternal & Childhealth Advocacy International (MCAI), an NGO with fourteen year's experience of delivering healthcare programmes in countries where there is extreme poverty
- The Advanced Life Support Group (ALSG), a medical education charity that has over 19 years' experience in the development of training packages and education systems in the UK and in 25 countries around the world

There is also a four way partnership supported by a Memorandum of Understanding (MOU) between the two charities, MCAI and ALSG, and the in-country Department of Health and the World Health Organisation in that country.

How the programme began

The programme was originally started in the Afghan refugee camps in Pakistan and has subsequently been developed in Pakistan and incorporated by the Pakistan Ministry of Health into the mainstream of national Maternal and Child Health policy 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 a second, rural area of The Gambia, in the Upper River Region.

Concept behind the programme

Whilst acknowledging the importance of maternal and child health care improvements through primary prevention, inevitably emergency situations will arise that may be poorly managed, especially in the early hours of their presentation, leading 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.

SEC addresses these issues by:

- establishing a **sustainable training programme** for health care professionals and community workers in emergency care for mothers, neonates and children. This is a clinical training programme as a public health intervention strategy. The training course is called EMNCH - Emergency Maternal, Neonatal and Child Healthcare
- ensuring the **availability of essential drugs, medical and surgical supplies and equipment, renovating** existing hospital premises and
- making the "emergency chain of care" functional by developing **communication and transportation** for the critically ill or injured.

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.

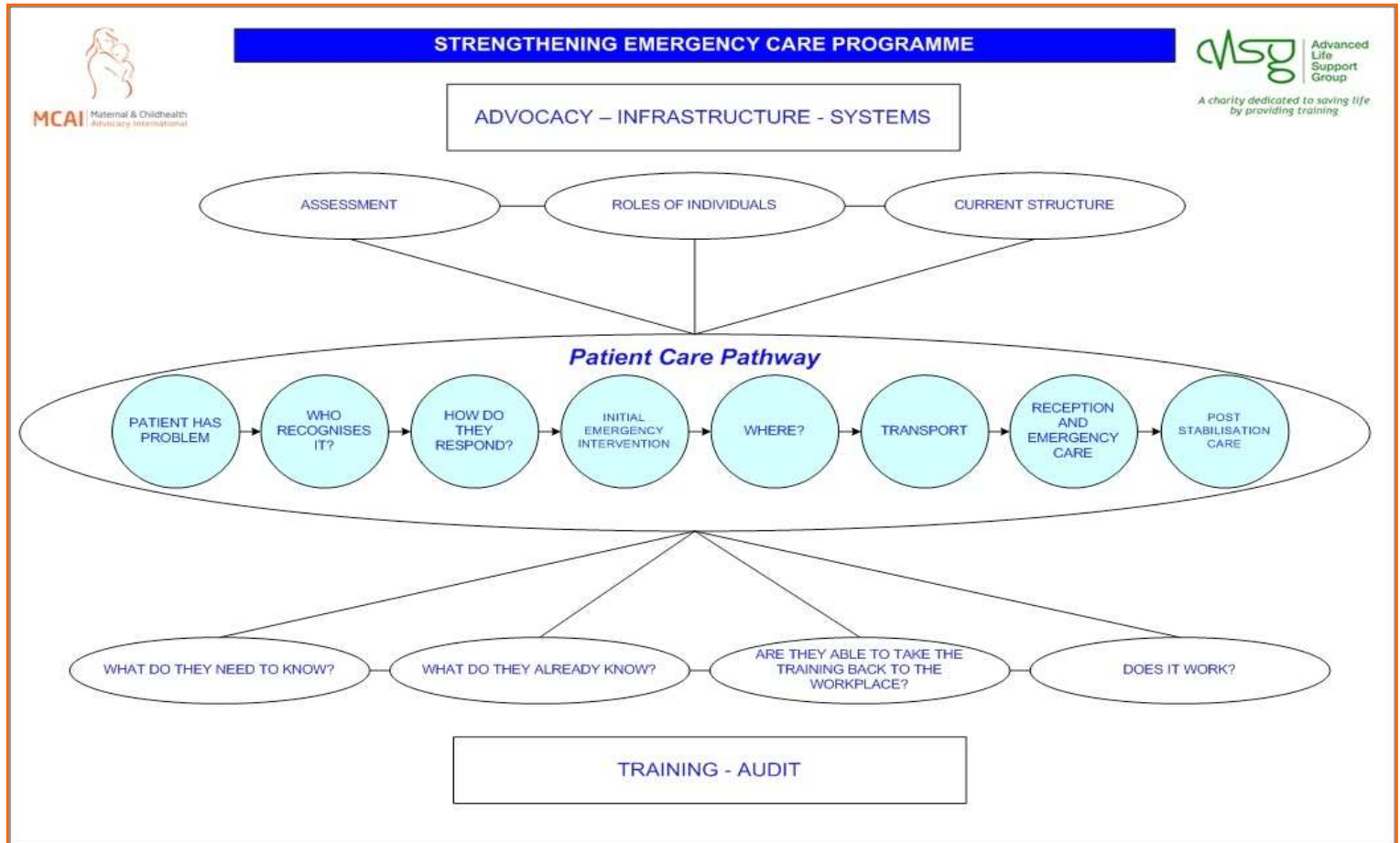
Sustainable training programme

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

In addition follow-on ward based training programmes in the management of the three major causes of mortality (failure to initiate breathing at birth, post partum haemorrhage and severe pre-eclampsia) are underway.



Train the trainer

The training programme is sustainable as local health care workers have been trained as Instructors to extend the programme across the country. In The Gambia, the programme is integrated into the Gambian Department of Health’s Reproductive and Child Health training. A new training course for hospital cleaners has also just been prepared.

Availability of essential drugs, medical and surgical supplies and equipment

The Ministry of Health participates in the programme by ensuring that essential drugs and supplies required for emergency care are consistently made available and by undertaking basic renovations to ensure a clean and functioning environment for emergency care such as plumbing, electricity and decoration. We have worked with the Ministry of Health in The Gambia to ensure the provision of Misoprostol at the two major health centres we are working in.

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 from ex UK National Health Service supplies and delivered by a UK based medical equipment charity.

Communication and transportation (emergency ambulance service-“Flying Squad”)

This programme focuses on Traditional Birth Attendants, not as a means to deliver skilled health care themselves, but to recognise, early on in the birth process, that problems are arising and to access immediate skilled midwifery support for the mother. In addition Village Health Workers are trained to deliver first aid to emergencies and trauma patients and to recognise which patients need hospital treatment. After training, TBAs and Village Health Workers are supplied with mobile phones with which they contact the on-call midwife/nurse 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. The esteem in which the TBAs are held locally means that families are confident to follow their guidance. By this means, early recognition of the problem during the birth process, communication and transport issues and the presence of a skilled birth attendant at abnormal or complex births is thus ensured. The effective area covered by the system is up to a 30mile radius around the community hospital.

Community sensitization

In The Gambia we have worked very closely with the Department for Reproductive and Child Health. They have been delivering community sensitization sessions in villages to raise awareness of the SEC programme and to encourage more use of the healthcare facilities.

Assessment of the programme

Evaluation of key indicators such as maternal, neonatal, infant and under 5 year mortality rates are now needed to determine whether or not this programme has impacted on the MDGs. This is far from straightforward as record keeping has been poor in the past and is still difficult, largely due to low staff numbers.

To give us an indication of how well emergency care is being undertaken we ask each candidate to complete a logbook in which they catalogue data about each emergency they manage after training. This includes conditions that would likely lead to death or severe brain damage in six hours if not given immediate and appropriate emergency treatment. We also monitor data collected from the Flying Squad.

An independent assessment was carried out earlier in 2008, 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”

Future plans

This programme has been developed so that it can be scaled up and replicated in other countries. The programme is structured to make this possible and its component parts are flexible.

We are now looking for a supporting partner who has the same ambition as us to reduce maternal and child mortality and morbidity rates.