

Maternal and newborn life saving skills course, Juba, November 2013

South Sudan has the unenviable reputation of having one of the worst rates of maternal deaths in the world. The challenge for everybody is to reduce this horrific loss of valuable lives and reduce the high levels of morbidity in mothers and the newborn. At least 80% of all maternal deaths result from five complications: haemorrhage, sepsis, eclampsia, obstructed labour and miscarriage (abortion). There are relatively inexpensive, effective, evidenced-based interventions for the management of these conditions which can be readily used in low resource regions with appropriate training of staff.

Since independence and the establishment of the Republic of South Sudan much excellent work has been done to develop medical services and to extend the services to the whole community. A lot of equipment has been donated, purchased and arrived. The Aid agencies and the Ministry of Health have worked tirelessly at developing and rolling out health care programs. Training programmes have been developed for nurses, midwives, clinical assistants and doctors. A notable success has been the establishment of the Juba College of Nursing and Midwifery (JCONAM), which has now produced its first tranche of graduate midwives with more on the way.

Developing and Ensuring Essential Life Saving Skills

Ensuring that all health care staff have high standards of clinical skills, are up to date and undergo regular professional development is essential to good quality health care and outcomes. Often Governments and NGOs have concentrated on providing facilities and equipment and overlooked the importance of proper training, and maintaining the training, for staff who are needed to make these facilities effective. In many developed countries all

medical, nursing and midwifery staff undergo basic and advanced life saving skills courses relevant to their area of practice. The best of these courses use evidence-based

adult teaching methods with interactive teaching sessions, scenarios and drills and the courses are repeated on a regular basis. Such courses include: - ALS – Advanced Life Support, ATLS – Advanced Trauma Life Support, and NALS – Neonatal Advanced Life Support.

In obstetrics and gynaecology the courses are: – ALSO (Advanced Life Support Obstetrics), and PROMPT (Practical Obstetrical Multi Professional Team) courses. The Royal College of Obstetricians (RCOG) and the Liverpool School of Tropical Medicine (LSTM) cooperated to develop and promote a modified course suitable for training staff in low resource countries. This has proven very successful in many countries in Africa. So far LSTM has not found it possible to run such courses in South Sudan.

The Team and JCONAM

In November 2013 a team of facilitators / trainers from the UK and South Sudan ran the first Essential Obstetric Care and Newborn Care Intensive Course at JCONAM. The team included:

- A consultant obstetrician, midwives, a neonatal nurse specialist and specialist nurses from Northern Ireland, UK,
- A midwife from St Mary's Hospital, Isle of Wight, UK,
- Dr Graham Poole, a GP/obstetrician working in Yei, and
- Dr Jenny Bell, a GP / Medical Education Specialist who had been working in Bor trying to establish a medical training facility.

All were volunteers (i.e. non-paid and self-funding). The course was held in the Juba College of Nursing and Midwifery, which was very generously made available by



Figure 1 Participants and trainers: Maternal and Newborn Life Saving Skills Course, JCONAM (credit Paul Weir)



Figure 2. Adult CPR training (credit Paul Weir)

the Principal Ms. Petronella Wawa. JCONAM is a superb, high quality venue in which to run such an intensive and practical course and, without doubt, its availability was crucial to making the course a success.

The Course

The course covered the major causes of maternal death (hemorrhage, sepsis, eclampsia, obstructed labour and miscarriage), maternal resuscitation, newborn resuscitation, basic surgical skills and the management of miscarriage (abortion). The course uses a mixture of adult learning techniques in a 'skills and drills' training format. These included lectures, interactive scenarios, and practical skills teaching.

The programme covered

- Resuscitation using ABC process – **A**irway, **B**reathing, **C**irculation.
- Shock.
- Resuscitation of the Newborn.
- Severe preeclampsia.
- Partograms and obstructed labour.
- Sepsis.
- Assisted vaginal delivery.
- Management of miscarriage (abortion).

Although the programme was intensive and challenging both for the facilitators and the trainees, it was successful and well received. Feedback from the participants was positive; they felt that the programme was relevant to their day-to-day professional needs and skills.

Participants

Twelve participants enrolled for the course, five midwives, a clinical officer, four midwifery tutors and two doctors. On the first day all appeared anxious and uncertain of the new experience, but by the final day all were relaxed, enthusiastic and involved in the teaching programme. This change was remarkable and the willing involvement of the participants was great to see. A pre-course and post-course knowledge and skills assessment was carried out.

This demonstrated that the participant's knowledge and skills significantly increased over the course, on average scores for the knowledge and skills doubled.



Figure 3. Newborn resuscitation (credit Paul Weir)



Figure 4. Hands on training for vacuum assisted delivery (credit Paul Weir)

One notable success was the session on assisted vaginal delivery. The initial assessments at the start of the session indicated that assisted vaginal delivery (vacuum extraction) was rarely performed and indeed there was doubt whether the necessary vacuum extractors were available within the hospitals. Following the course, feedback from the doctors indicated that vacuum extractors were available within the hospitals and indeed they had started to use them. The correct use of Kiwi vacuum extractors would have the ability to successfully assist difficult vaginal deliveries and therefore avoid some caesarean sections and the associated complications and difficulties for future deliveries.

A major aim of this programme of developing essential skills training is to identify and promote trainers from within the region. One of the highlights of the November 2013

course was the fact that at least five of the participants showed all the abilities and aptitudes to become facilitator / trainers for future courses. This would mean that there is a strong potential for this course to become fully delivered by facilitators based in South Sudan with minimal outside support. To achieve this would be a great success.

The Future

In recent months South Sudan has undergone difficult times with political instability, conflict and loss of life resulting in large numbers internally displaced persons. Despite these massive problems the Directorate of Reproductive Health, Department of Health is continuing to develop its programmes of maternal and child health care and many NGOs have re-commenced operations. Against this background of re-establishing health care systems the Essential Life Saving Skills for Africa training team is intending to hold another course in December 1-5th 2014. If you would like to register for this course please email Dr Paul Weir: p.weir11@ntlworld.com or contact Judith Agwer at JCONAM or email: agwerjudith@yahoo.com