**The Kambia Appeal**
**Kambia/GHNHSFT Link IHLFS funded teaching course 5-10 November 2012**

The Kambia Appeal's IHLFS (International Health Link Funding Scheme) teaching courses have been running in Kambia twice a year since 2010 when we were awarded the grant from DFID to try to reduce the very high maternal, perinatal and infant mortalities in Kambia district.

The basis of the grant application was that we would provide a series of 6-day courses to 15 CHOs (Community Health Officers), 58 MCHAs (Maternal and Child Healthcare Assistants), 40 VNAs (Volunteer Nursing Aides), theatre staff and nominated ultrasound staff over a period of three years. These courses have run twice a year, one "large" and one "small. Theoretically, the "large" course involves all the CHOs, with half the MCHAs, half the VNAs and the ultrasound students and the "small" course involves the residuum of the MCHAs and VNAs and the theatre staff. In practice the constitution of the student body has changed at the request of the Kambia DHMT (District Health Management Team) so that over the years we have also included trainee CHOs, recently qualified doctors from Freetown, SECHNs (State Enrolled Community Health Nurses), RGNs (Registered General Nurses), midwives and a selection of other hospital staff keen to improve and hone their clinical skills. To date five courses have been completed. Each has been different both in content and teaching personnel to try and keep the teaching fresh and interesting.

**Logistics**

The fifth and most recent course was not the easiest to plan or run, not only due to the number of students in Kambia, but also the composition and availability of the UK teaching faculty. The changes in the dates necessitated by the airline re-scheduling at the last minute were difficult to accommodate, but with the co-operation of the Trust Management, the families of those on the faculty and the staff at the base, (especially Morlai, our driver), the group were picked up from and delivered back to the airport so that all the flights were caught. Unfortunately the changes in the dates meant that we had to have three separate trips to Lungi in order to accommodate the required return flight re-scheduling. Whilst this increased the expense of the trip significantly the alternative was to cancel it altogether!

The 55Kg per person luggage allowance we negotiated with Kevin McPhillips (the UK travel agent for Sierra Leone) was fully utilised to take out not only our relatively small amount of personal luggage but also our teaching equipment, surplus (in date) drugs, glucometers, misoprostol, spinal needles, heavy Marcaine, ephedrine, sutures, surgical instruments and gloves, course paperwork, paediatric monitoring equipment, and footballs and football strip for Cheltenham FC (Kambia). Thankfully Kevin McPhillips allowed us to check in our luggage en masse and the Gambia Bird flight was efficient and uneventful.

The evening journey from Lungi to Kambia was the worst the organiser had experienced with the road to Port Loko severely affected by the extended rainy season. The mud and the enormous water-filled potholes made it impassable to anyone but a skilled 4*4 driver. At times the Kambia Appeal Land Rover headlights were under water and the engine was at risk of flooding. One of our vehicles became firmly embedded in mud and it was only by borrowing a chain from a passing petrol tanker that we managed to rescue it. From Port Loko to Kambia the new tarmac surface of the West African Highway made the last bit of the journey easy, and we reached the Kambia Appeal base by 23.00.

The Base staff and four current Kambia Appeal volunteer doctors at the Base made us welcome. At the base there was plenty of accommodation available as long as people were prepared to share. The Base has running water and the outdoor and indoor showers and the wash hand basin were fully operational. Charles, Abbas and Fatu cooked from before dawn to ensure that we were all fully fed. There were enough cooking, drinking and eating utensils in the base to cater for the 14 of us, and no further cutlery etc. is required at present, though future visitors might still wish to take their own drinking vessels.

All the return trips were made via Freetown as reports suggested that the Port Loko-Lungi road had deteriorated further after torrential rain. For the days just prior to the Presidential Election, Freetown was brought to a standstill by political rallies, so that getting to the Lungi ferry in time for the evening flight was a challenge. Using the (expensive) water taxi was not an option and will remain so until the Peninsula road is improved and it can then be accessed without having to cross Freetown.

Those of us who were able to stay on in Kambia for a couple of days at the end of the course spent time in the hospital, did some teaching for the volunteers (by request) and also cleared out a lot of the bits and pieces which have been brought out by visitors in the past and were either no longer required or were irreparably damaged.

The teaching equipment was refurbished and packed away in a logical manner so that it would be available for future courses to use. Most of the equipment is duplicated and available in the hospital, but is not generally well cared for and so it is best to leave a complete set of basics at the base. In the store is:

Female pelvis and manikin
Kiwi Cup
Eclampsia and PPH teaching equipment
Flip chart paper
PowerPoint projector
Cannulation teaching arm
Surgical skills equipment
Adult and neonatal resuscitation equipment and manikins

There are plenty of surgical scrubs which have been supplied by us in the past and which are used by the Kambia Appeal medical staff on a day to day basis. There is no need for further scrubs to be supplied at present.

The teaching group are indebted to the many people who have helped in the background, both in the UK and in Kambia, to ensure the smooth execution of this project. They are too numerous to name individually, but without their support the course would not have run.

On the last teaching day one of the faculty climbed onto a chair to gain the attention of her teaching group. Unfortunately as she raised her arm it was hit by one of the ceiling fans and she suffered (we now know) an open fracture of her ulna. She was in considerable pain, and although we had surgical and trauma expertise we had no x-ray facilities. When her wound was explored and bone was seen the course leader made the decision to repatriate her immediately and managed to contact our travel agent in UK and got her onto a flight that night, accompanied by two of the faculty who were already traveling back on the same flight. We are greatly indebted to Sue at Kevin McPhillips who realised the potential gravity of the situation and responded magnificently to the phone call. There was no charge for the alteration of the flight. The midwife concerned is making a full recovery, and is now back at work.

**The Teaching Course**

It is difficult to measure the full impact of the courses, but, for whatever reason, the maternal, peri-natal and infant mortality rates in the district are reputed to be falling. We should know more of the detail about this once the monitoring and evaluation team return later this month. It was hugely re-assuring to hear from the volunteer doctors who are in Kambia at the moment (and who also taught on the course) that what we had been teaching is now being used in the day-to-day running of the hospital. That in itself is a huge bonus, as leaving a legacy of improved healthcare, is the best outcome we can hope for. The feedback from the students was universally enthusiastic for us to continue these courses on at least an annual basis, and this is an idea that we should explore. An annual skills update is part of the mandatory training within the Trust, and it would seem logical that the same concept should be implemented in our Link hospital in Sierra Leone.

The timetabling of the course made it possible to give the CHOs and SECHNs the opportunity to join in with the teaching of the MCHAs and VNAs. This they embraced enthusiastically and we hope that the teaching skills and aids we have given them will be used to continue this in the peripheral health units where the majority of them work. The huge advantage of this addition to the programme is that the CHOs know the environment and skill levels of the people they teach and can present information in an appropriate language and depth. We should wish to encourage this. The Kambia Appeal's volunteer doctors also joined in the teaching. Their assessments of the local gaps in knowledge and skills were invaluable, and the timetable was flexible enough to be able to incorporate their contributions to the

teaching, within the terms of the IHLFS grant. They have also found that their association with the course has since elevated their profiles within the hospital hierarchy.

The course has to change in some way each time it is run in order to maintain its freshness and interest. This time we included a basic trauma course for the CHOs and SECHNs. The culmination of this was a scenario acted out in the hospital compound where a 4*4 vehicle packed with pregnant women was simulated to have crashed when the driver had had a heart attack and ran into a motorcyclist! Needless to say the acting was highly dramatic, but all the participants entered into the spirit of the occasion and learned from it. The post-scenario analysis revealed that a large amount of the teaching had not only been retained but was used in a "real" situation. The new tarmac road has resulted in an increase in RTAs and this scenario, unfortunately, will probably become a reality.

Every course participant undertook both a pre- and post- course assessment. The questions were compiled by previous and current members of the faculty who went to great lengths to ensure that the questions were relevant, and were written using appropriate language. However, many of the VNAs found the concept of a single statement with five related TRUE/FALSE/DON'T KNOW stems difficult to grasp, and so the marks which were obtained did not really represent their knowledge, and we would suggest that if this format is repeated it should be left to one of the local staff to explain to the students how to answer the questions before the assessment is started. The questions have been pre-printed in the past, but we have now streamlined this by putting each question onto a PowerPoint slide, and projecting each of the 60 questions for one minute as a slide show. This meant that we only had to pre-print the answer sheets, which are much more compact. The speed of reading of the questions varied considerably from student to student, but overall the benefits of this are significant. The marking of the assessments was achieved by using a pre-prepared template and a "production line" which greatly speeded up this process.

All the participants were issued with pre-printed name badges at the start of the course and a named certificate presented (along with a small gift of sweets, soap etc.) at the end of course certification ceremony. The best CHO teaching group and the best students were also given relevant medical books and teaching aids to encourage them to continue and develop their skills.

**Post script**

This was the last "big" course, which will be run under the auspices of the IHLFS. The enthusiasm of the faculty members from the UK and from Kambia has been inspirational, only matched by the enthusiasm of the students on the course. Once the last theatre and anaesthetic skills course has been run in January we will not only have fulfilled the terms of the grant, but also included teaching for many more people than we have been funded to teach. This we have undertaken at the request of the DHMT who realised that the teaching was very relevant to the needs of the

SECHNs and others as they were the people who were performing most of the deliveries in the PHUs. We have tried to be flexible in our approach to the teaching and have kept it relevant to the environment in which people work. It is essential that before future teaching courses start that the faculty are taken to a PHU to see how these work in practice.

The equipment funded by the grant has been purchased and distributed, and we saw it in the PHUs. There were several requests that we provide more re-usable Kiwi cups, and that misoprostol should be made more widely available. We still have a significant amount of equipment to transport to Kambia, including another ultrasound scanner, surgical gloves, more resuscitation equipment, balloon catheters for treating PPH and we continue to collect surplus drugs to be used at the discretion of the Kambia volunteer doctors. I would ask that anyone who is going out use their entire luggage allowance to transport some of this, and suggest that the Kambia Appeal co-ordinates this.

This is the last course for which I will have full responsibility under the terms of the grant. I am so grateful to the IHLFS for providing the grant that has privileged me to work alongside some of the most motivated and gifted students and teachers one could hope to meet. Studying and teaching in this environment is physically and mentally draining, but their enthusiasm has remained unabated. Their teamwork, knowledge, adaptability and, above all, friendship is something which will stay with me forever, and I thank them all.

*David M Holmes, Chairman, Kambia/GHNHSFT Link*