IHLFS: FINAL EVALUATION

INTERVIEWS WITH KAMBIA CHOs AND MCHAs
Plus UK HPS Volunteers

December 2012

The Kambia Appeal – Improving health in Sierra Leone since 1992

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IHLFS Final Evaluation

Strengthening Maternal and Newborn Health in Kambia District, Sierra Leone

The interviews presented here were recorded as part of the research in December 2012 to assess the effectiveness of The Kambia Appeal's IHLFS project in tackling the 'third delay' that contributes to maternal and neonatal morbidity and mortality - the delay caused by inadequate provision of skilled care.

The IHLFS project provided 6 week-long training courses between February 2010 and February 2013 for the key district staff - Community Health Officers (CHOs) and Maternal and Child Health Aides (MCHAs) and Volunteer Nursing Aides (VNAs) at the district hospital. Over the course of the project these groups of staff were also joined by State Enrolled Community Health Nurses (SECHNs), State Registered Nurses (SRNs) and qualified midwives, thereby expanding the scope and benefit of the project. The training was delivered by groups of UK volunteer health workers from Gloucestershire Hospitals NHS Foundation Trust.

The Project was managed by The Kambia Appeal and funded by UK DFID via The Tropical Health and Education Trust (THET).

The Interviews

During the Final Evaluation visit semi-structured interviews were conducted over three days with:

- 1 SECHN at Kambia District Hospital
- 1 Midwife at Kambia District Hospital
- 3 CHOs at PHUs
- 4 MCHAs at PHUs

The PHUs visited during the evaluation were chosen on the basis of accessibility, travelling out from Kambia Town. 9 PHUs were visited in total, but 2 of these PHUs did not have IHLFS-trained CHO/MCHAs on duty on the day of the visit. Interviews were also conducted in Kambia Town with two Kambia Appeal UK HPS volunteer doctors and one VSO midwife based at Kambia District Hospital to provide their feedback on the effectiveness of IHLFS training on local staff.

The interviews with Kambia staff included key questions:

- Have you taken part in IHLFS training over the last 3 years?
- When was the last training course you attended?
- What were you taught on the course?
- Have you used what you learned on the courses in your work at the PHU?
- Can you give examples of cases where you put your learning into practice?
- Do you have equipment at the PHU provided by the IHLFS project?
- When did you last use this equipment?
- Can you give examples of using this equipment?

The interviews are presented here as narrative accounts with accompanying photographs of the interviewees. Names of patients mentioned in case study examples have been changed.

Kambia District Hospital: IHLFS Staff Interview 1:
4 December 2012

Suad Koroma – SECHN, **Maternity Ward**

I attended IHLFS course in November 2011. I learned how to resuscitate a baby, and **I have used these skills since then to help newly delivered babies on the maternity ward**.

On the course you have to pay attention. We learned the ABC method: check that the airway is clear, that the baby is breathing, and that circulation is good. You watch for the colour of the baby. If it is going well the baby turns pink. I learned that as soon as the woman delivers, you wipe the baby's face; you clear the airway; you check for the pulse; you make sure that the baby cries to supply oxygen to the brain.

The training was useful to me. The trainers were easy to understand. I worked in a little group of six colleagues with the UK trainer, and this small group made it easier to understand. One week is enough for the length of the training; this is a good time. I would want to attend another course. I want to learn more.

Kambia District Hospital: IHLFS Staff Interview 2:
4 December 2012

Fatmata J. Momodu – Midwife, **Maternity Ward**

I have been in post at Kambia District Hospital since August 2012. I attended the IHLFS training course in November 2012.

The training was educative. I came top in the neonatal resuscitation session. It was a refresher course to remind us of past training. **There is no refresher training given in Kambia to midwives once they are qualified other than this Kambia Appeal training**.

This training is needed because here in Sierra Leone the main problem is that women do not like to deliver at the hospital. They prefer to deliver at home, but things go wrong and they seek care too late. This then makes our job too difficult to save them. One woman has just arrived here at the maternity ward. She came to the hospital with a fever, but we found that she had a ruptured uterus. If she had come to us sooner it would have been easier for us to help her, and the outcome might have been more positive.

On the training course the UK trainers were easy to understand and the teaching was good. We were given handouts at the end of the training and there were practical learning sessions. We did pre and post training tests, and the scores increased after the teaching. My scores increased from 213 to 218, so I am very pleased. This was all refresher training, helping me to remember my basic training as a midwife. In the future, I would like a higher level course, because I always like to strive higher.

Fatamta J. Momodu reported two Patient Journey Case Studies
(Patient names have been changed)

Case Study: Patient Journey 1 - Mabinty Kamara (38ys)
Patient referred from Kokuna Village PHU, 40 miles from Kambia. Admitted on 29 Nov 2012.

Mabinty attended Kokuna PHU because she was in pain and bleeding. The PHU nurse in-charge was absent, but the volunteer assistant called for the hospital ambulance and called the Kambia hospital to give a verbal referral. When she arrived here in Kambia, the hospital staff diagnosed APH, and treatment began. Then the pain reduced, so they suspected placenta previa. An ultrasound scan was done at the hospital that showed that Mabinty had Type 2 placenta previa and showed that there was a live baby. Staff in the maternity ward advised her to have bed rest and she was kept under close monitoring and observation.

At 33 weeks pregnant this mother is not yet at term (40 weeks). As this mother had APH she is at a high risk of PPH. This is her ninth pregnancy and she has had 8 previous pregnancies, with 6 of those children alive.

This shows the health system here is working well as there were no delays in her coming from the PHU to the hospital and the patient was lucky that the ambulance was available and that the ambulance had fuel and was working. The patient is now stable and the relatives have been informed and reassured. As the patient is 33 weeks pregnant she can leave the hospital and will be advised to come back to the hospital to deliver her baby. She will need a blood transfusion and the hospital will keep a litre of blood back for this.

Case study: Patient Journey 2 - Isatu Bangura (25ys)
Patient referred from Mapotolon Village, 42 miles from Kambia on 1 December 2012.

The midwife on duty at the Maternity Ward told us about the patient:
(4 December 2012)

This patient [photographed above with her parents] has one child and this was her second pregnancy. She came into the hospital with a high fever. She went to the PHU because she was having difficulty breathing, and the PHU called for the hospital ambulance and she was brought to the hospital. The hospital did investigations and confirmed that she has malaria.

After 2 days at the hospital the patient went into labour and had a premature delivery. The baby weighed 1.8kg, because of the high fever caused by malaria, and died during the night on Monday 3 December. The baby died because we do not have a Special Care Baby Unit at the hospital. **The patient should have gone to the PHU earlier**. The patient did go to an antenatal clinic at the PHU, but the patient's mother was then away from her village for 2 weeks and in this time the patient was at home with a high fever until her mother returned. It was only then that the mother took her daughter back to the PHU. We have prescribed the patient with a blood tonic and she is being treated for malaria and anaemia. This is a very sad case.

Kambia District PHU: IHLFS Staff Interview 3:
11 December 2012

Anita Kamara, MCHA - **Modia PHU**

I have not attended the Kambia Appeal training this year because I am alone here in the health centre, so I cannot leave the centre for a week-long training workshop. In 2011, I did have Kambia Appeal training for a week. It was very useful and educative. The training covered resuscitation, safe delivery and hand washing.

I am able to put this training into practice in the PHU. We have resuscitation kits [photographed above] and delivery kits supplied by the Kambia Appeal, and I use them in the PHU. I have been working in Modia for nearly 4 years. I have no problems here because I have a good relationship with the local community.

I had 7 deliveries in November, and there have been no maternal deaths. I do make referrals to the district hospital. For example, for excessive bleeding and eclampsia I call the ambulance and it always comes. The training from the Kambia Appeal has allowed me to deal with more cases at the PHU and I feel more confident doing my work, but I need more training as there is always more to learn.

There were a few language problems with the UK trainers, but not many. We were taught in small groups, which means we can pay more attention. I have used the infant resuscitation kits several times. We have 566 Under 5s in the PHU catchment area, and the total population is 3,197.

Kambia District PHU: IHLFS Staff Interview 4:
11 December 2012

Terena Tholley – CHO, **Mile 14 PHU**

The neonatal resuscitation kit given by The Kambia Appeal is very useful. The last time I used it was the last week in November. It is very helpful, especially for delivering twins.

I attended the training in November 2012. This was my third training workshop with The Kambia Appeal. This training has greatly helped me. It has really helped me do neonatal resuscitation and twin delivery, and I am putting this into practice and training volunteer health staff at my PHU. The Kambia Appeal training has helped me to treat severely ill children, and we have the equipment to put things into practice. Last month I had 7 deliveries at my PHU.

Watch a film version of Terena's interview at: https://vimeo.com/60561761

Case study – Mile 14 PHU: Adult and neonatal resuscitation

The ambulance was called from the district hospital to go to Kamawah village to take a pregnant woman to the hospital for a C-section. On the journey the patient became very distressed, and so the ambulance stopped here at Mile 14 so that I could try to help her. The ambulance driver knew that there was a CHO at Mile 14 who would be able to look after the patient. I was able to assist with the delivery here at the PHU without the need for the woman going to the hospital for the c-section. However, both the woman and the baby needed to be resuscitated and I used the neo-natal and adult resuscitation kits supplied by The Kambia Appeal for this. The baby was 4.2kg - a very large baby. The mother and baby are both fine and everybody was so happy. The father even came to the PHU from Freetown to thank me.

Kambia District PHU: IHLFS Staff interview 5:
11 December 2012

Rebecca Samura – MCHA, **Sella Kafta PHU**

I have been an MCHA for 3 years. I was not called for the 2012 training, but I last attended Kambia Appeal training in May 2011. They taught us about delivery and resuscitation. I have been able to use this in my job here. All our deliveries here are successful, including twin deliveries. Every month someone comes from the hospital to collect the PHU health statistics, taking information from the attendance registers. I now need refresher training again on using the resuscitation kits provided by the UK.

We need to teach TBAs to bring women to the PHU to deliver, because many women do not come for our help.

Case Study – Sella Kafta PHU: Ruptured Uterus

A recent patient, a pregnant woman, had been with a TBA for two days. The TBA brought her to the PHU along with her ten relatives. She came at 6.30am. She had complained of abdominal pain, a full bladder and could not pass urine. I tried to help her with a catheter, but she still could not pass urine. I identified that she had a ruptured uterus, so I called the ambulance and she was taken to Kambia District Hospital where she had a c-section. This woman came to the PHU too late. The TBA should have brought her to me sooner. This is a very common problem in Kambia.

This patient story was verified by inspection of the referral note and entry in Maternity Ward Register at the Kambia District Hospital.

Kambia District PHU: IHLFS Staff Interview 6:
11 December 2012

Joseph A Kalokoh – CHO, **Maselleh PHU**

I have attended all the IHLFS training: one course in 2010, two in 2011 and two in 2012. I received two prizes: one for my presentation on eclampsia and one on malnutrition. The CHOs were responsible for training the MCHAs on the last course, which was a good thing, because I love to teach. The MCHAs at PHUs are seeing the pregnant women and Under 5s; they can pick up any problems promptly and tell CHOs of the problems.

MCHAs in Kambia graduate with limited practical skills, so they lack the real skills to resuscitate babies, which is why this training is so important and needed. From the Kambia Appeal training, MCHAs now get practical training, and the infant mortality rate has dropped because MCHAs now know how to resuscitate babies. The donation of basic medical equipment, like the Ambu bags has also helped.

I have seen that the maternal mortality rate has dropped significantly. This is a result of the improvement of health worker skills – particularly MCHAs and CHOs – and the vacuum extraction kits (infants used to die in utero), but this new equipment can safe the lives of the babies and the mothers.

Free health care for mothers and babies is making a very positive difference, especially for women needing c-sections, but the free drugs are not always available at PHUs.

There is a problem with reporting maternal death. There is an under-reporting of deaths in the community, but at PHUs maternal deaths are being reported. At Yelibuya island PHU (where I worked previously) there were no maternal deaths under my care. Improved

training is making antenatal clinics more effective in identifying problems during pregnancy earlier. I can keep a close eye on pregnant women if they attend my antenatal clinics.

Case Study: Masselleh PHU 1:

I used the neonatal resuscitation kit last week. It was a prolonged labour. The patient was from Matedineh, 10 miles away from the PHU. She came here by motorbike taxi with one family member. Other family members came later.

She was here for 2 days before she gave birth. When the child was born it was very weak and floppy and did not cry immediately, but there was a heartbeat. The MCHA summoned me and I then used a resuscitation kit on the baby. It started to cry. The outcome was good and I felt so happy. I am happy to have the skills to save lives from the training. The people in my community appreciate that the Kambia Appeal is giving equipment and improving skills to save their lives.

Case Study: Masselleh PHU 2:

I remember a case where a woman came to the PHU with a baby that was half way out already, but it was stuck, and we couldn't convey her to hospital. There was no way to extract the child, so the child died. The mother survived, but I did not feel good about this outcome. This was before we received the vacuum extraction kit from the Kambia Appeal.

Joseph Kalokoh presents the extraction kit and the resuscitation kit provided as part of the IHLFS project.

Watch an extract of the film version of Joseph's interview at: https://vimeo.com/60565588

Kambia District PHU: IHLFS Staff Interview 7:
11 December 2012

Abioseh Bangura – MCHA, **Katherie PHU**

I attended the Kambia Appeal training in November 2012. They gave me a certificate at the end of the workshop. They taught us how to stop and control bleeding of pregnant women. I used this when a woman came to my PHU who had many pregnancies. The training was very helpful. I can now manage breech birth and resuscitation of adults and babies. We were given a resuscitation kit and a delivery kit. This is my fourth year at Katherie PHU. The catchment population is 3,364. We have not had any maternal deaths since I have been here, and this is due to the training I have received. The TBAs were here this morning, but now they are out harvesting their rice.

Kambia District PHU: IHLFS Staff Interview 8:
13 December 2012

Rugiatu Kamara – CHO, **Gbalamuya PHU**

I have attended the Kambia Appeal training twice, most recently in November 2012. I was due to attend the HPS Special Resources Training in December but I was away looking after a sick relative.

The training was very useful. I learned how to do a breech delivery, and I remember Dr Holmes saying "Hands off for a breech". I also learned about kangaroo care for the newborn, life-saving skills and how to resuscitate a newborn baby that does not cry straight away when born. I am motivated. I am able to do a god job as a result of the training. **The number of cases that I refer to the hospital is reduced as I can do more at the PHU.**

TBAs are giving us problems. We talk a lot but they don't listen. One TBA is very good and works well with us. We give her 5,000Le for each pregnant woman who she brings into the PHU, and we have given her a key to the delivery room. There are 8 TBAs in the PHU catchment area (3,781 people). Because we are very close to the border with Guinea, 55% of our patients are from Guinea.

Teenage pregnancy and early marriage is a big problem for us here. For pregnant teenage girls, I do a vacuum extraction delivery using the kit from the Kambia Appeal, because the girls are not fully mature physically. I perform an episiotomy and a vacuum delivery when there is no full second stage. I use the vacuum kit on average for one delivery out of eight. I last used it in November 2012, but it is now spoilt and needs to be replaced.

Rugiatu gave us three case study examples of how she has used skills learned from IHLFS training:

Case study: Gbalamuya PHU – Twin Delivery:

Last week I delivered twins successfully. At 6am a woman was brought to the PHU. I did my examination and using my knowledge from the training course, I discovered that it was twins. I had learned that I can work out if there are twins by listening above and then below the umbilicus. And how to detect if a baby is cephalic or breech. I know that with a twin delivery, I may need to resuscitate a baby, so I get my nurse ready. At 12.30pm the woman is 6cm dilated but her bladder was full, so I inserted a catheter. The first baby was a normal delivery and it cried immediately and there were no problems. The second baby, as it was coming, I could see its anus, so I knew it was breeched. I remember the advise of "Hands off the breech", and the baby was delivered. I had to resuscitate the baby using the kit given by the Kambia Appeal.

Case Study Gbalamuya PHU – Post Partum Haemorrhage:

A woman came to the PHU, she already had 7 children, this was her 8th pregnancy. I did my examination and delivered the baby safely. Ten minutes later PPH occurred. I was given misoprostal at the IHLFS training in November 12, so I inserted 4 tablets into the woman's anus and this arrested the PPH. I kept the woman in for 2 days for observation and then discharged her. Without the IHLFS training I would not have been able to do anything, but I have the skills and equipment now and I use them and I succeed.

Case Study Gbalamuya PHU – Retained Placenta:

After the IHLFS training in November I went back to my PHU and a woman came in from Framoia town in Guinea. The woman had a full bladder. I was straight from the training. I examined the woman- temperature, blood pressure and pulse- these were all stable. I remembered that on the training they had taught us "vital signs are important- they can speak". I diagnosed that the woman had a retained placenta. I felt that I could deal with this case at the PHU and I did not need to refer the woman to Kambia District Hospital. The nurse inserted a catheter, we gave a Noralgene injection to relax the muscles and opened an IV line and 10 minutes later we delivered the placenta. I observed the woman for 24 hours and then discharged her home.

Kambia District PHU: IHLFS Staff Interview 9:
13 December 2012

Isatu Koroma - MCHA, **Tawuya PHU**

I have been here at this PHU for 2 years. I have taken part in the IHLFS training twice - in 2011 and November 2012. I have never had a maternal death or an infant death. On the IHLFS training Dr David taught us about family planning, labour and delivery, resuscitation, sutures, hand washing, breech presentation, normal delivery. I have had 8 deliveries in November.

Yes I have been able to put the training into practice, but most of the time we have normal deliveries. For a breech delivery I know that I should be "hands off" and when the head is stuck they showed us how to manipulate the head, but when the baby comes out I know that I should be "hands off" until the body appears. If we have a difficult case we refer to Kambia District Hospital. Difficult cases are teenagers, breech delivery if discovered during the ANC, multiple pregnancies. We identify the at risk cases during the ANC and I refer to Kambia District Hospital with a referral letter. In 2013 I will record the referrals that I make to Kambia District Hospital, this is not a government initiative, it is just something that I have chosen to do, I think it is a good idea. We have about 20 women coming for the ANC, but it depends month by month. TBAs bring the women to the PHU. I have a TBA who is based here, and I have 20 TBAs in total. I have a catchment area of 22 villages. The total population is 4,712.

Interview with UK HPS Volunteer: Dr Natasha Kay
11 December 2012.

Maternal deaths at Kambia District Hospital

I do three to five ward rounds on the maternity ward per week, and I spend 2 afternoons per week assessing new maternity patients. I am working more on the maternity ward than the other long-term volunteers here as I have more experience of obs and gynae in the UK. Yes, there have been maternal deaths since I've been here - definitely four, and maybe six.

Recently, I came in one morning, and there had been two maternal deaths over night. The staff on the maternity ward were worried because of these deaths being flagged up to more senior members of staff. They were worried about an investigation. There were 3 maternal deaths in November and 1 in October. The October one was due to a reaction to a blood transfusion. One of the November deaths (during the IHLFS training visit) was a result of the patient taking native herbs causing liver failure, which led to DIC. This means the blood can't clot, so the patient bled to death. The other two November deaths were after the training visit. One was due to a PPH. The lab is not open over night, so a blood transfusion could not be given. The other death – the patient had a seizure at home. The baby was half delivered. She travelled 40 miles in a Land Rover with the baby's head already out, and she died from eclampsia.

When I arrived, I felt Kambia District Hospital had a bad image in the press. It was seen as a bad place. I feel the IHLFS training has had an impact. For example, in the week of the two November deaths, the CHO (Isatu) knew what to do and she felt empowered that she could at least try to save the women's lives. But obviously it varies; some people are better learners than others.

The main improvement at the hospital would be strong leadership from the senior hospital management. The Kambia Appeal cannot do any more, but need to continue doing what

they are doing. The leadership and mentorship programme has been interesting; **it's very important to train current experienced staff to take on roles as trainers.**

The one person trained in using the Ultrasound has now left the hospital, so ultrasound scans were not happening after July 2012, and he took the log book with him. During the last IHLFS training in November 2012 more staff were trained to use the Ultrasound Scanning machine. The nurse anaesthetist and a midwife are now doing the scans but they need a log book to report the scans.

Interview with UK HPS Volunteer: Dr Kate Wilkinson

13 December 2012

HPS Long-term volunteer since July 2012.

There haven't been many maternal deaths at the hospital since I have been here. I know of the deaths, my colleague Dr Kay has spoken of, and I am not aware of any other deaths.

I feel that the IHLFS training has been useful because it was focused on the district as a whole, so CHO and MCHAs together with hospital staff benefitted, and their feedback has been very positive. I have seen hospital staff doing neonatal life-support (NNLS) as it was taught at the training. **Before the training in November this NNLS was not happening**. Also, the CHOs' teaching the VNAs has given the staff impetus to seek out training opportunities. I found the training useful. I attended the PPH training, so I remembered all the things that may be causing PPH. I remembered the 4 Ts as taught by Dr Swingler.

The management and administration of the hospital – there are duplicated roles, it's very heavy with middle managers; the problem is with supply lines. The majority of staff are unpaid and untrained volunteers.

Interview with VSO Holland Midwife: Guusje Van Dooren
13 December, 2012

Worked at Kambia District Hospital April – December 2012

I observed the IHLFS training at the end of November. I have worked a lot with CHO Mohamed Kamara, who was the local partner coordinator and participated in all Kambia Appeal training sessions. He has now left for a surgical training qualification. It was a pleasure to work with him as he was well trained, motivated and well skilled. He had been trained to operate the ultrasound scanner.

From the last IHLFS training in November 2012, midwife Salamatu and DMO Dr Tom were trained to use the ultrasound scanner in CHO Mohamed's absence. The Ultrasound scanner is used on average once a day and it really helps to diagnose patient's problems on the maternity ward. Local staff will need further training in using it, as you need prolonged practical experience to become proficient.

The IHLFS teaching groups were very good for the Skills Drills, eg: how to manage bleeding, breech delivery and resuscitation. Year on year, the training covers the same topics because staff need these skills reinforced constantly (as they are in the UK and Europe as part annual Life Saving Skills refresher training).

For the VNAs it has had less effect. I feel that for the VNAs they need holding by the hand and showing. The training by the Long-term Volunteers on the ward may have more impact here as they are training the VNAs every week and they know the staff well. It may be that the IHLFS training in resuscitation is too difficult for VNAs.

Maternal mortality rate: They do report every patient into the maternity ward register. They do this strictly. They do try to hide a maternal death, but they can't hide it because they do not happen that often, so everyone at the hospital knows about them. I have seen 5 to 7 maternal deaths since I have been here (April – December 2012). **They don't have any deaths at the PHU because they refer them "half dead" and they die on the way to the hospital, and so the deaths don't appear in either sets of records.**

Infant mortality rate: The infant mortality rate is high. At least 5 babies die per week. This is definitely under reported. This is caused by late referral from the TBAs to the PHUs and on to the hospital, so by the time the baby is delivered at the PHU or the hospital it is often asphyxiated, and so is too weak to be saved. At the hospital, newborn babies are not checked regularly enough, so they die. In the last month I have introduced a routine of checking new-borns more regularly and I have seen less babies dying since. Care of the newborn needs to be a major focus of subsequent training programmes. There are simple measures that can be implemented easily in Sierra Leone that result in an 86% reduction in infant mortality. These measures are: checking their temperatures, kangaroo care (thermal blankets and skin-to-skin) and encouraging breast-milk feeding every two hours. There needs to be an antibiotic protocol, a step-by-step guide to what to give mothers and new-borns.

IHLFS Partners:

- The Kambia Appeal
- Kambia District Health Management Team
- Gloucestershire Hospitals NHS Foundation Trust
- The Tropical Health and Education Trust (THET)

Further information:

The Kambia Appeal

http://www.kambia.org.uk/international-health-link-funding-scheme/overview
https://www.facebook.com/kambiaappeal
https://twitter.com/kambiaappeal

Watch films about the IHLFS training trips in Kambia at:
https://vimeo.com/kambiaappeal

The Tropical Health and Education Trust

http://www.thet.org
https://www.facebook.com/TropicalHealthandEducationTrust
https://twitter.com/THETlinks

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