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Introduction

This was a challenging and unforgettable visit to HRRH (Hoima Regional Referral Hospital). In two weeks 155 women delivered but there were five maternal deaths. One 25-year-old man died after being given the wrong blood and two babies in the neonatal unit died one night from hypoxia and hypothermia after a power failure occurred with no nurse on duty to switch on the generator. The number of anaesthesia providers at this district referral hospital had decreased in the past year from six to only three with potential serious consequences.

The Teams (fig 1)



Obstetric (fig 2)

Dr Natalja Kalashnikova, consultant obstetrician from Latvia,

Dr Diana Buchova, trainee obstetrician from Latvia.

Dr Jenneh Kpakiwa, trainee obstetrician from Germany (born in Sierra Leone)
Ms Eve Fox, midwife Guildford,
Mrs Ruth McCulloch, midwife Guildford.



Anaesthetic (fig 3)

Dr Keith Thomson, consultant anaesthetist, Basingstoke *Dr Sarah Davidson*, ST3 anaesthetist, Southampton *Dr Jo Masters*, ST3 anaesthetist, Watford

Paediatric

Dr Ros Jones, consultant paediatrician, Wexham Park, Slough Mrs Karen Norton, neonatal sister, Wexham Park, Slough

Others

Dr Geof Maidment, retired physician, Wexham Park
Mr Duncan Sherlock, trip organiser,
Miss Katherine Dennys, writing a report for Duncan on the Mustard Seed
orphanage, Duhaga boys school, Azure Clinic and HRRH



Day 1 + 2

The team met at 0930 at Heathrow Terminal 5 to check in extra bags of donated medical equipment thanks to a special deal for charitable organisations provided by *Key Travel*. After an uneventful flight we landed at Entebbe Airport at midnight and from there were transported to the Boma Hotel (fig 4).



The drive in two minibuses via Kampala to Hoima the following day took four hours, during which I watched the recent Panorama

documentary about the LRA leader, Joseph Koney suggesting that 2012 was the year he would be captured. We were met at the Crown Hotel by Dr Amy Keightley, an ST3 in obstetrics from Manchester, who was spending six months at HRRH sponsored by the UK Uganda Hub with money from DFID. We then visited the hospital passing en route a disused skip surrounded by storks (fig 5).



Amy took some members of the team on a guided tour of the hospital while

Duncan and I met the Executive Director, eye surgeon Dr Francis Mulwanyi. Sadly he was recently involved in a terrible car crash in which his son and niece were killed. Their vehicle was hit by an unlicensed taxi going too fast on a narrow road. Dr Francis seemed to have an almost impossible job because all staffing decisions at the hospital are made at the MOH in Kampala and he has no authority to hire or fire anyone. He informed me about a 'cleft camp' being done by a visiting plastic surgeon from Mulago Hospital he said he would be pleased if my team could support the local anaesthetic officers.

Day 3

The number of anaesthesia providers at HRRH had decreased from six the year before to only three. Dr Estella had moved to St Mary's Lachore Hospital near Gulu.

Caroline has gone to medical school, Edward had transferred to Mbale. This left only anaesthetic officer Eunice who had been at the hospital for 14 years, Theopista who had recently qualified but had two young children and was only able to work part-time which did not include night work (fig 6).



As well as Eunice working nights there was Mkize, brought back from retirement who covered one or two nights each week but did no day time work. Eunice, the senior anaesthetic nurse, had 5 children the eldest of which is 32 although she is only 48 years old. She is paid the equivalent of USD 230 per month. Theopista had just finished a two year training programme in Kampala, the cost of which for year 1 was Ugandan Shillings 1.25M and 0.8M for year 2. This included food and accommodation. (£1 = 4000 UGS)

During that day I helped anaesthetise five children with either cleft lip or palate (fig 7), the youngest of which was only three months old.



I was supervising an intubation by Theopista but when the oxygen saturation fell to 73% I removed the tube and mask ventilated the patient back to 98%, Eunice successfully intubated the child. I mentioned the old maxim 'if in doubt take it out.' There were no RAE tubes available. The anaesthetic technique for the children was gas induction with halothane in O₂ followed by 0.1mg atropine, even though the heart rate

in some children was already 160. Suxamethonium 1mg/kg was used to facilitate intubation and then antibiotics and an appropriate dose of rectal paracetamol (the only size of suppository was 240 mg which was trimmed when necessary) were administered. An appropriate volume of Ringers lactate + a few ml of 50% dextrose were given. The anaesthetic machine was a Penlon Prima SP2 which worked well but only after the visiting plastic surgeon Dr Edris (fig 8)



had organised the purchase of a cylinder of oxygen – there had been none available in the theatre for the past three months. The situation reminded him of a past incident at Mulago Hospital when the oxygen supply had run out and 30 children who had been admitted with various respiratory problems had died.

The post-operative recovery situation was worrying. The only monitor was the presence of the mother. If the baby or child came out of theatre crying it was handed to the mother who was instructed to take it back to the ward unaccompanied by any medical staff. If the baby was breathing but unconscious it was wrapped in a blanket and placed on a trolley. The mother was asked to stand beside her child but was given no instruction as to how to monitor it. This encouraged my anaesthetic team to develop a protocol for monitoring by relatives which included listening to the breathing (fig 9), watching the





movement of a piece of cotton wool placed beside the nostrils (fig 10) and the use of a LIFEBOX (fig 11). This was presented at the CME meeting on our final day.



Before supper Joe and I went for a 30 minute run (fig 12) which was made more challenging by the altitude, the hot and dusty atmosphere and a herd of long horn cattle



After supper I set up a laptop and projector to show the excellent movie about Idi Amin, *The last King of Scotland*, starring Morgan Freeman and James McEvoy.

Day 4

After an early morning swim and breakfast I arrived in the theatre to be informed by Eunice 'we have failed intubatio..'

On the table was a 2 week old baby with a unilateral cleft lip and a receding lower jaw. With the help of my McGrath video laryngoscope I successfully intubated the baby after insisting that suction was made available. Luckily the baby was easy to mask ventilate and the pulse oximeter was working.

The list was interrupted that day for a general surgeon to operate on a 6 kg child with a gangrenous bowel. He performed a resection of the distal small bowel and an ileo-transverse anastomosis. The child did very well, although it may have problems in the future due to vitamin B12 status. In the obstetric theatre Dr Joe was experiencing some difficulty with assisted ventilation because the Heidbrink valve would not close properly. He managed to solve the problem by wrapping a rubber glove round the valve and cutting a hole in one of the fingers, pinching which prevented a leak during positive pressure ventilation. Dr Sarah meantime had gone to the Azur clinic by motor bike taxi to perform a spinal for a caesarean section.



That afternoon we met Sr Betty at the Hoima School of Nursing (fig 13) to discuss the following week's teaching programme for the student nurses. Unfortunately we forgot to inform the hospital theatres that the visiting anaesthetic team would not be immediately available after lunch – this caused some temporary



problems but they accepted my apologies. Later that afternoon I was involved in a two hour laparotomy for repair of a ruptured uterus under GA using ether. The surgeons Dr Natalja (fig 14) and Dr Amy did a great job.

Day 5

Another five clefts were performed by Dr Edris who was an excellent surgeon. The general surgeons performed a laparotomy on a young man after a three hour delay while a sterile surgical gown was found. Dr Edris commented that he never wears gowns to operate on cleft cases because they are often unavailable, he just puts on a sterile pair of surgical gloves. That evening we all went out to a bar called the Extreme Up situated on the 4th floor of a local hotel. The décor was interesting, there were two chairs in the shape of giant red hands (fig 15).



The menu had some interesting choices of cocktail but our order took over an hour as they had to find someone who knew how to mix them.

Day 6

It was good to see that the 26-yearold woman who had the ruptured uterus two days before stable and recovering. By now most of the team were finding the working conditions at the hospital emotionally draining and were looking forward to the following day's trip to Murchison Falls and Paraa Lodge.

Day 7

The drive to Murchison was uneventful and relatively fast being completed in less than four hours with the occasional stop for a 'short call' (fig 16).

After a swim in the Paraa Lodge hotel pool (fig 17) followed by an excellent buffet lunch the team went on a boat





trip up the Nile to see the spectacular Murchison Falls.

We saw many hippos (fig 18),





elephants (fig 19), a large crocodile



(fig 20) and many species of birds. After reaching the Falls we disembarked and Taban our guide led us along a track with vantage points which provided the opportunity for some spectacular photographs (figs 21,22,23).









That night at dinner (fig 24), after a few drinks, Natalja recounted the story of her first night with Karen at the Boma. She had the double bed and Karen the single one but she had had some vague memory that in the middle of the night Karen had tried to join her but she actually wasn't sure if this was true or a Lariam induced illusion. The story became more elaborate as the evening wore on and the truth even more blurred.

Day 8

Some of the team went on an early morning game drive but failed to see any big cats. Others preferred to see animals without leaving the hotel (fig 25).



During a morning session in the swimming pool a crazy or very inebriated gentleman from New Delhi jumped fully clothed into the swimming pool clutching his phone, cigarettes and lighter. On the previous afternoon he had also been on the river cruise, apparently very drunk, chatting up young African boys. He was eventually escorted away by hotel security after Sarah complained about his behaviour.

The highlight of the excellent early evening safari was the very handsome young male lion which hawkeyed Sarah spotted lying behind a bush with just his right ear visible. After being under close scrutiny for a few minutes he stood up, wandered around for a few seconds, during which some excellent photographs were taken by Joe (fig 26) before he returned to his lair.



Natalja commented 'he got up, saw us, said to himself *f---ing muzungus* and then went back behind the bush! (muzungu = white man in Swahili). We travelled sitting on the roof of the vehicle on a mattress (fig 27), which Natalja had successfully managed to persuade the hotel staff to lend us.



Apart from the lion we saw elephant, Jackson hartebeest (fig 28), Ugandan



kob, giraffe, buffalo and many species of birds. We also stopped beside the Nile at a resting place for many hippos who were communicating with each other by sound, a dramatic audible experience. I took a photo of one of them with its mouth wide open and teeth visible (fig 29).



We all enjoyed an excellent dinner at the hotel that evening, the food was amazing compared to the daily diet of chips, 'Irish' potatoes and various fried meats that we ate every evening at the Crown.

Day 9

Some of the party went on the 6 am game drive and were privileged to see three more lions. After breakfast we loaded up the minivans, crossed the Nile on the ferry and drove back to the Hoima where we met London based trainee anaesthetist Dr Christine who had arrived on Sunday to experience the challenges of providing anaesthesia in an African hospital after attending the Developing World Anaesthesia Course in Kampala.

That evening we prepared talks for the first teaching session the following day at the Hoima School of Nursing. We discovered there had been two more deaths in the Maternity Unit at Hoima Hospital, making a total of 4 so far. Dr Diana felt that working at Hoima could be a psychological disaster for the young FY1 equivalent doctors.

To attempt to do challenging caesareans with no proper training was bound to lead to deaths, which she felt could mentally scar some for life but then commented 'perhaps they just get used to growing their own personal cemeteries!'

Earlier that evening while out jogging I met a group of local runners who were members of the *Oil Fields Hash Harriers*. They said that three days later they were planning a party to celebrate the 100th run of this particular Hash and would be delighted if I joined them with any of my colleagues.

Day 10



That morning a patient with eclampsia (fig 30) was transferred from the Azur Clinic. She was stabilised with magnesium sulphate and hydralazine. I asked one of the student nurses to measure the blood pressure and she made it 140/80 when in fact the systolic was over 280. The baby was delivered after multiple attempts with a suction cap and misoprostol was given. Only then it was discovered that she actually had twins. Luckily the second baby was also successfully delivered. They were 1.5kg and 1.2kg and did remarkably well in the special care baby unit. The mother took some time to wake up as she had also received several doses of diazepam but by the next day she was awake and orientated. Elsewhere in the hospital: a baby on the special care baby unit had a cephalohaematoma inappropriately drained by one of the junior paediatricians, Dr Ros thought that the baby would probably die. A 25-year-old patient on the medical ward whose blood group was A+ was given a fatal transfusion of B+ blood.

Dr Christine and I went to Azur for a caesarean section. I performed the spinal and she resuscitated the baby (fig 31).



That afternoon all team members were involved in training at the Hoima School of Nursing. This session was very efficiently organised by Dr Sarah. The group, consisting of third year student nurses, was divided up into four separate skill stations which rotated every 45 min, the topics covered included major obstetric haemorrhage (fig 32),





shoulder dystocia (fig 33), airway management (fig 34),





neonatal resuscitation (fig 35) and



pain in the abdomen (fig 36).

That evening we sat down and marked the essays that the students had been given the previous week, the topic of which was 'if you were a patient on the ward write an essay about the characteristics that you would like the nurse who was looking after you to have'.

Day 11

Instead of breakfast at the Crown we had excellent pancakes at the home of Thad Cox, an American missionary, who works for the local diocese under the auspices of Bishop Nathan. While we were there I visited the headmaster of the nearby *Duhaga* boys school, to see if he wanted one of four laptops that I had been given from a charity in Edinburgh called *Re-using IT* to be distributed as I felt fit. The others were given to anaesthetic nurse Eunice, Dr Francis and a member of the Bishop's staff (fig 37).



That morning in the obstetric theatre two patients underwent surgery simultaneously. While two caesarean sections were done under spinal anaesthesia the obstetric consultant performed a McDonald suture and an MUA on the adjacent table (fig 38). Luckily I had not lost my 'touch' with spinals, being successful on three occasions after others had failed. That afternoon a-17-year-old patient with post-partum eclampsia which



was admitted from another hospital. I had to use my 'personal' supply of hydralazine and magnesium suphate as there was none available. The team returned to the school of nursing and did workshops and lectures (fig 39) for the 2nd year



At the end of this I gave a brief presentation on my experiences on board the *Mercy Ships* which was well received. *(www.mercyships.org.uk)*

Day 12

student nurses.

I met Hospital Director, Dr Francis to discuss the issue of the lack of anaesthetic provision. He was aware of the problem and told me that two more anaesthetic officers had been allocated but they had not yet arrived and both had their mobiles switched off. I suggested and he agreed that I write a letter which could be sent from the BHPH chairman to the Ministry of Health in Kampala. He also wanted me to mention in the same letter the issue of a middle grade Ugandan obstetric registrar who was currently working at Kibogo Hospital but wished to be transferred to Hoima to work with Dr Amy before she returned to the UK. I also voiced my concern at having discovered some empty pethidine ampoules in a drawer in the doctor's room in the maternity theatre area (fig 40). He did admit that he thought that there was some abuse going on in the hospital. Another fact which must put him under a great deal of pressure was illustrated by a note on a



wall near his office door apologising that no staff had actually been paid for the past two months.

Geof and Jenneh did an excellent job that morning teaching about 150 first year nursing students students about symptom based diagnosis. This was followed by me giving another lecture on my experiences on the *Mercy Ships* with additional slides about Maternal Mortality issues. The essay prizes were then awarded.

That evening Joe and I joined the Oil Fields Hash Harriers for a 6 Km run prior to the 100th run celebratory party. I was issued with a T-shirt for the occasion with my hash name Keith the gas on the back. Joe and I returned to the hotel to have a shower and collect Sarah. There were about 40 people at the party and they were a very sociable and friendly group. What was slightly embarrassing was that as the three of us were the honoured guests we were given vouchers for free food and drink all evening. The man who was acting as the MC asked everyone to guess how old I was. The guesstimates ranged between 36 and 68. He was very complimentary when he said that he hoped that he could run as well as I could when he eventually reached my age.

I then asked him if he knew the film The last King of Scotland? When he replied yes I said that we had a young lady here from Glasgow in Scotland and perhaps she was the Last Queen of Scotland? This caused some mirth among the assembled company. Poor Sarah was then summoned to do a dance in front of everyone but she did extremely well and someone in the audience awarded her a well-earned case of vodka based 'alcopop' which contained 25 bottles. Joe also showed off his dancing prowess and was given the hash name of

no-name Joe. After a very enjoyable evening we were kindly driven home by a man whose hash name was Arsene Wenger after the Arsenal coach.

Day 13

The CME meeting was well attended. Presentations were given by Ruth (Obstetrics), Ros (Paediatrics) and Keith+ Sarah (Anaesthetics). The last presentation was based on the idea of encouraging relatives to monitor patients in post-operative recovery by watching the movement of a small piece of cotton wool beside their nose (see videoclip on www.africansmiles.co.uk under Uganda)

The team all went to Bishop Nathan's house for lunch and then that evening played some raucous card games including 'Irish snap.'

Day 14

The three hour drive to Kampala was accomplished without incident although we passed some interesting vehicles en route (fig 41).



After a visit to the craft market the team had lunch at a restaurant above a shopping arcade where several waiters each with a different menu were competing with each other to serve their particular ethnic delicacies (fig 42).



After lunch we drove to the Boma Hotel in Entebbe where due to some mix up over the bookings, four of the girls had to share a room, so it was a second night together for Natalja and Karen in a double bed!

We all spent the afternoon by the swimming pool (fig 43) and had an excellent dinner.



Day 15

Duncan organised for four of us to go to the Watoto Church in Kampala. After coffee at the *Thousand Cup Café*, we attended an excellent hour and a half service where a choir of 100 children performed a Nativity play and sang carols (Fig 44).



Then it was back to the Boma for lunch, sunbathing, swimming and for me a 40 minute run, before the short drive to the airport. En route we had to leave the vehicle at the security barrier and go through an X-ray machine while some armed police searched our vehicles for what?

Unfortunately the flight was delayed by over three hours but some of us were able to access the Club Class lounge where there was free food and drink, a snooker table and a massage chair (fig 45).



We arrived at T5 the following morning at 9.30am, still three hours late but with all our bags - always a relief when returning from Africa. After saying good-bye we all went our various ways.

I feel none of us will ever forget what had been a remarkable trip, we should feel privileged to have experienced the challenges of how medicine is practised in a typically under resourced African hospital with limited facilities, staff, drugs and equipment.

This was my 5th visit to Uganda and I'm not sure the situation for patients at HRRH has improved much over the 4 years that teams representing BHPH have been visiting. It is very important to do what we can to encourage the local staff and not say how bad things are. As one local consultant said to a member of the team – please come back but remember to teach us not whip us.

Epilogue –

words from an African team member living in Europe who was very affected by her experiences at HRRH.

'Medical teams from Europe or elsewhere doing sporadic 2 week 'teaching' trips to Hoima hospital effect very little change... and frankly, the ones of us who have done the trip more than a couple of times should by now have realized this fact. So this is where one must ask oneself, why do we do it...? The cynic in me comes up with all sorts of suggestions as to our whys...; is it boredom...? it does make for interesting small talk and it sure makes an impression in a job interview...is it some form of atonement..? or slightly more complex; maybe we need to groom our superiority complexes...and nothing works so well as when we go out to witness the jungle ..live..to give them our aid and try to gently prod them in the right direction...try to get them to be more human...which is kinda hard cos they are after all a little like monkeys when you try to teach them...Or maybe it really is altruism..?Looking at the bigger picture, one must have long realized that chronic aid.. is never of any long term good to the recipient... it cultivates a culture of dependency...always taking, you lose your sense of pride..it's hard to keep your head up when your hands are permanently outstretched..palms up..History has taught us this.. psychology teaches us this.. and I personally suspect we all have intelligence levels higher than the average monkey so it should be easy understanding this...'