

Elective Report

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Aims and Objectives

- To experience medical practice in a developing country
- To experience Ugandan culture and discover what impact the differences have on medical care
- To see signs and symptoms of tropical diseases and to learn to recognise more florid signs of illnesses such as TB, not regularly seen in the UK
- To be a member of the medical team with hands-on experience of managing large numbers of patients
- To accompany doctors on clinic runs to more remote areas and to be involved in health promotion activities in local villages

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Uganda surprised me even before I got off the plane! Having never been to Africa before I had no idea what to expect and all the preconceptions I had brought with me were formed from television. I had imagined vast brown, dusty plains but this could not be further from the truth, Uganda is a richly fertile country and green was my predominant first impression. This initial view from the air was to set the tone for the next eight weeks as the people, the medicine and the country surprised me again and again.

For many years Uganda was a British protectorate, gaining independence in 1964, and as a result English is the language of education. Many different tribal languages are spoken across the country and, since the troubles in the North and the Congolese border, the displaced populations have caused these dialects to be spread more widely. This means that doctors are often unable to communicate in their mother tongue and English is increasingly becoming the common denominator. This was very useful for me as I was able to converse freely with the medical staff who had received all their training in English and I was able to speak with many of the patients. I did learn a little Lusoga (the local variation!) with one of the most important phrases being, “umpola, umpola” – ‘slowly, slowly’, necessary to shout at the taxi and scooter drivers as they sped off at frightening speed!

The capital city Kampala is a fairly intimidating place where the population increases daily as people flock in from the villages. A census published whilst we were there reported that approximately 12% of the population live in urban areas. Most of these people call Kampala their home. As a result, although the medical training in Uganda is very good, their five years in the University teaching hospital in the capital does not prepare them for the reality of medicine in the villages. As we drove out from the city towards Kamuli I could see the country and the people changing. The dwellings got smaller, adverts painted on the sides of shops and houses looked older and the roads got worse! Again the lushness of the vegetation and the sheer scale of the country struck me. The sky was huge and the horizon seemed to go on forever, there is just so much more space than here in the UK.

Half way between Kampala and Kamuli is the colonial town of Jinja. This is a beautiful place on the banks of Lake Victoria and situated at the source of the Nile. I loved Jinja! Many Non-Governmental Organisations (NGOs) are based there and the supermarkets are treasure troves of salted bread, orange juice and cheese, none of which you could find on a regular basis in Kamuli! Jinja has many buildings which were obviously very grand in their day but have suffered from years of Amin and Obote and the troubles during these regimes. There are encouraging signs of regeneration and investment here however and the potential is huge. Many of our weekends were spent in Jinja, and this was also Kamuli's referral hospital for more complex cases.

Kamuli itself is a little over an hour from Jinja and another 500' above sea level (approximately 3,000' in total). As it is further from the lake it is noticeably hotter with less of the very welcome breeze. Kamuli is the administrative centre for a very large district and is home to two hospitals, Kamuli Mission Hospital (also known as 'Rubaga', which means love in action) and the local government hospital. This has recently been completely renovated with the aid of a loan from the Spanish government. This facility is now arguably one of the best in Uganda but it is currently staffed by a single Dr. and is nowhere near running at full speed.

My clinical partner and I were based at Rubaga which had been established in 1914 by a group of Catholic nuns from Ireland. The fabric of the hospital has not seen much improvement since then but by Ugandan standards the hospital is well staffed with four

Ugandan-trained doctors and many nurses; some Sisters living in the attached convent, some nurses trained in Uganda and employed by the hospital. Kamuli is also a training centre with several student nurses and midwives. They do not usually host medical students, however, and white student doctors caused a real stir, especially when we arrived for work in scrubs! Outside the hospital we had to conform to local culture and wear dresses, to show leg or wear trousers would be inappropriate and associated with prostitution. Within the hospital grounds, however, the doctors made an exception and it was permitted, mostly because we were white and therefore so obviously foreign.

The doctors at Rubaga welcomed us and gave up much of their time to teach us. They are known to their patients by their first names so are Dr Kriss, Dr. David, Dr. Mussa and Dr. Titus. I was amazed to discover they are all only two years post graduation and now they are running a 160-bed hospital with no senior support. Titus is the medical superintendent and therefore has responsibility for budgets, staffing, applying for grants, trying to stop the corruption and stealing as well as trying to keep his friends happy, do his share of the medical work and attempt to have a life of his own! Uganda won't be conforming to the Working Time Directive any time soon! It was fantastic to be included as a member of the team and I really enjoyed contributing to patient care. It was refreshing to feel useful and be included more as an equal. In the face of so many patients, we were welcomed as extra pairs of hands and an encouraging distraction.

Hospitals in Uganda are the pinnacle of the health care system. Most of the population are served by health centres which are rated between level I-IV. A level I centre will have a nurse and may dispense basic anti malarials and antibiotics, a level II centre may have an experienced nurse or midwife and some assistants, possibly nurses in training, a level III clinic may have a labour ward with a midwife and a nurse and the obligatory out patients clinic, and a level IV centre may include dental provision, two or three nurses, a small inpatient ward, a delivery 'suite' and a midwife, this level of clinic may also have a medical assistant. M.A.s have completed a three year diploma and are one grade down from a doctor, in our experience, however, their training left a little to be desired! In one rural clinic one of the Assistants I was working with prescribed 5mg Diazepam for an 18-month-old child with pyrexia. He argued that benzodiazepines work well to bring down fevers, I suggested paracetamol and brufen!

The government has a grand vision for Uganda's health care system. The buzzword in local administration is 'de-centralisation' and the policy is one of delivering care at the point of need. This means that the government have committed to every village over a certain size having a health centre and free access to basic medical care. Unfortunately they have not committed the finances to build these clinics and Uganda does not train enough health care workers to staff them! Such a commitment to healthcare does mean that access to drugs and resources is improving and in well run, accountable facilities such as Kamuli, Rubaga, basic medications are freely available.

One of the aims of this provision at point of need is that people seek medical attention early on in their illness. Currently this is not the culture – patients regularly present with florid signs and symptoms because they have waited before coming to see a doctor. This was especially noticeable in hospital. One gentleman was admitted to the medical ward in crashing heart failure. He was in his early 30s and we assumed he had valve disease as a result of rheumatic fever. He had pitting oedema up to his groin, pulmonary oedema and orthopnea from approximately 50°. When questioned he had been feeling breathless for over three weeks but had only come to seek help once he could no longer get his trousers on over his oedema. Without an echo we were unable to establish a firm diagnosis (a

recurring theme over the eight weeks!) but a course of diuretics dramatically reduced his swelling and breathlessness. His long-term care will be primitive, however. Even the university hospital in Kampala does not carry out valve replacements and chronic disease management is not a priority in Uganda. Conditions such as osteoarthritis are treated poorly with patients presenting at clinics and being given seven days of paracetamol. The principles of long-term drug therapy are alien to the majority of Ugandans.

Rubaga is a mission hospital 70% funded by the government. They charge a small fee to register and recover a percentage of the costs of tests, hospital stay and 'consumables' such as cannulae from the patients. Each patient must bring with them an attendant. This person is responsible for bathing, dressing and feeding the patient as nurses do not carry out these tasks. This is probably the single most important factor in debarring people from medical care. To bring an attendant means that not only are you, the patient, not working and earning money, your attendant is also unavailable for work. If a woman takes her sister, for instance, neither of them are able to dig the family land – a key task for the women of the family. If a wife attends her husband there are no wages being earned and no crops being tended. This is part of the reason people seek help so late and are prepared to stay such a short time in hospital.

Short stays help to make obtaining a diagnosis even more difficult as patients are unwilling to try diagnosis by elimination. Rubaga had virtually no investigation facilities, no access to FBC, U&Es, LFTs or blood cultures. The lab did have facilities for blood films and malaria screens but in reality these were often done in a hurry or the results simply made up. Patients arrive very sick and doctors have no way of discriminating between differential diagnoses. The only option they have is to treat the most likely, life-threatening problems and this regularly leads to patients being prescribed four or five IV medications. It is not acceptable to treat one diagnosis at a time in case the patient deteriorates or goes home untreated. One seven-year-old boy was admitted for a second time in a year with urinary frequency, haematuria and other systemic symptoms. Dr. Titus seriously considered a nephrotic syndrome in his differential diagnosis and treated the boy with Septrin (the standard antibiotic for UTIs in Uganda) for suspected UTI, anti-malarials and IV steroids in case his hunch was right. The child improved and went home, none of us with any idea which, if any, treatment made the difference. I found this really frustrating!

Medicine in Uganda is becoming increasingly coloured by HIV/AIDs. More and more resources are being channelled into education, prevention and treatment. Anti-retrovirals (ARVs) are emerging in Uganda and agencies are promoting so-called, 'positive living' which involves accepting your diagnosis, changing your behaviour to minimise risk to others and making proactive decisions in order to provide for your family after your death. ARVs come as part of this package and are currently only given to people with established AIDs. This was established by pathognomonic diseases (e.g. Karposi's sarcoma or pharyngeal candida) rather than CD4 levels. The programmes I saw in Kamuli touch only a fraction of the affected population and a huge number of Ugandans do not know their HIV status. Sexual behaviour is not really changing and although the statistics say that Uganda is doing a good job in comparison with the rest of sub-Saharan Africa, new infection rate is still fairly static. All this means that hospitals see a huge number of immunocompromised patients. Doctors at Rubaga estimated that 75% or more of the patients on the medical ward would have HIV/AIDs. It was certainly my experience that tests came back positive more often than not.

Medically this meant florid disease. I saw tens of cases of Herpes Zoster, patients presenting with Karposi's sarcoma and hundreds of cases of TB. I also met a gentleman

who we thought had cryptococcal meningitis. He was extremely poorly, had a fluctuating GCS of between 8 and 12 and a left VIth nerve palsy, presumably due to raised ICP. I also had the opportunity to feel lots of splenomegaly and even more hepatomegaly. I heard several murmurs and performed an ascitic tap on a man with peritoneal TB. Never a dull moment in Rubaga! My aim to see lots of tropical diseases and florid signs was certainly achieved, I became well versed in the treatment of malaria and shistosomiasis and made the most of the signs and symptoms presented to me.

Much of my time in Uganda was spent in more rural clinics delivering health care to quite isolated communities. I enjoyed this aspect of my placement but struggled with the sheer numbers of people presenting each day. We spent four nights on Bavuma, an island in Lake Victoria where there is no permanent medical facility. A conservative estimate would be that we saw 1000 patients between two medical students, two medical assistants and a nurse. Very few people came alone. The women especially brought all their children so there were regularly six or seven people in the consultation! I quickly realised three things. Firstly, the medical assistants did not examine anyone – there wasn't time! Diagnosis was based on what the patient said was wrong and a series of key words (cues!) prompted the prescription of several drugs. For example, fever equalled malaria which equalled chloroquine (despite the fact the BNF says malaria here is chloroquine resistant) and diarrhoea meant dysentery which required metronidazole. Secondly, people were not prepared to go home without any tablets. They had come to the clinic and placed great faith in the healing power of medicines. To try and send them away with no prescription just resulted in them rejoining the queue hoping to be seen by someone else next time! I found myself dispensing lots of advice about diarrhoea, vomiting and dyspepsia whilst liberally distributing multivitamins as placebo! I decided to get through the clinic and worry about the ethics later. Thirdly I realised that many of the patients we saw were not ill. At all! Many had viral illness or signs of malnutrition or chronic problems such as osteoarthritis which we determined on examination. But many had no signs at all. These people had come, mostly complaining of malaria, because there was a clinic. Their reasoning seemed to be that they may get malaria next week when there was no clinic and then they may die, so they came to stock pile drugs and the more they could get, the better. The medical assistants did not see this as a problem and, speaking with the doctors back at Rubaga, it seems to be accepted practice. My fellow student and I found this quite difficult, particularly when the patients requested antibiotics as well as anti-malarials but this was Africa and we were playing by different rules.

One of my aims was to teach some basic primary care and be involved in health promotion activities. I knew I would have the opportunity to experience life in rural Uganda and had been told that many people were still unaware of simple measures like increasing fluid intake in vomiting and diarrhoea. What I wasn't prepared for was the impact of the culture on teaching and learning. In rural Uganda the women have very little power. They are married at a young age and are expected to be subservient to men at all times. It seems that most women have very little autonomy and this manifests itself in the way they care for themselves and their children. Trying to discuss sexual health issues with these women was really frustrating and at times heart breaking. I remember one consultation in particular, the lady had presented with signs of a sexually transmitted disease, possibly gonorrhoea. I tried to explain to her the pointlessness of treating her without her husband also taking a course of antibiotics. She understood this perfectly well and gave me the impression that she had been told all this before but maintained that he would refuse to comply with treatment as he had no symptoms. I asked if he slept with other women and was told that he had two other wives and also slept with prostitutes. I advised her to use condoms but she laughed at the suggestion, when her husband came home, her

protestations would make very little difference. Both of us left the consultation dissatisfied! More frequently though, the problem was one of a strange kind of apathy. Women would rarely make eye contact with me let alone ask questions or query a suggestion I made. This was so different to medicine in the UK and it meant that I never knew if anything I suggested would be taken on board. Even simple things like asking a mum to top up her breast milk with water whilst her child had diarrhoea often went unheeded and patients seemed reluctant to try easy things. People seemed to have a, 'what will be will be', fatalistic kind of attitude, perhaps because so little of their life is under their own control.

Whilst at Rubaga hospital itself I had the opportunity to observe and assist in some surgery. Whilst being very careful due to the high prevalence of HIV I gained lots of experience in suturing and examining the acute abdomen! I saw several cases of volvulus and assisted in a laparotomy where I saw a huge colon, 12cm in diameter emerge from the abdominal cavity. It took us 10 minutes to find the twist that had caused the dilatation as the anatomy had been completely distorted. It was very satisfying to return the contents to the abdomen and watch our patient improve over the next few days. I was generally very impressed by the number of patients who recovered well from their emergency surgery. Anaesthesia was achieved with ketamine as reflexes are preserved and patients don't require artificial ventilation, no post op oxygen was available, even in theatre the maximum they could give was 50% from a concentrator. Scrubbing in was done with the same soap people use for washing and the scrubs were full of holes. The field was cleaned with savlon and cotton wool and there was nothing resembling a recovery room let alone an ICU. Despite this, the majority of patients did well whether recovering from volvulus, perforated ulcers, osteomyelitis debridement or intersusception. Maybe western medicine isn't everything! One of the keys to this success was the skill and dedication of the Rubaga doctors. Although very fresh out of medical school, their learning curve has been steep and they now feel confident to take on most problems with a pragmatic approach. My favourite example happened before we arrived. A man was brought in after a traffic accident. He was shocked and bleeding internally from what transpired to be a ruptured spleen. Knowing that the man would die if the bleeding wasn't stopped Titus carried out his first splenectomy with his colleague, Kriss, reading the instructions from the principles of surgery textbook!

In conclusion, I had a fantastic eight weeks in Uganda experiencing medicine in a developing country. I saw florid signs, strange diseases and some really peculiar practices. I met some extremely capable doctors and some practitioners who frightened me with their strange ideas! I learnt a lot about the Ugandan culture and a little about the way life works in Africa. I explored some of this beautiful country visiting health centres and holding clinics as well as indulging in safari! I was challenged in my practical skills and expected to learn quickly. I was given responsibility and felt that I was actually being useful! I was a minor celebrity in most places purely for the colour of my skin but felt safe at all times and able to travel around as I wanted. I would wholeheartedly recommend this elective to anyone looking for a little adventure who's willing to be thrown in at the deep end. I loved it and am looking forward to going back and no doubt being surprised all over again!