Thyolo Report

In September 2013, Sara and I travelled to Malawi in order to collect data for a research project set up by a surgical Registrar in the UK. The purpose was to assess the cost effectiveness of the surgical services offered in relation to the other services provided at a district hospital in Thyolo, 40km south of Blantyre, Malawi. This study was part of a larger study looking at the cost differences between surgical services in East and West Africa.

The project had received the necessary research and ethics approval and funding prior to our departure from the UK and we had been in contact with the District Health Officer in order to hopefully make the trip as productive as possible.

Our Backgrounds:

Sara has just started her F2 year at East Surrey Hospital and is hoping to pursue a career in surgery in the future.

I have just finished my CT2 year in London and am set to start an ST3 General Surgery job in Oxford.

After 2 stops and 17 hours of travelling from London Heathrow, we arrived in Blantyre, Malawi's 'second' city. We were staying in Limbe, a small town near Blantyre and set to commute down to Thyolo Hospital each day. Fortunately, despite the travelling time, there is only a 1 hour time difference between London and Malawi so there is no jet lag to contend with!

Each morning at Thyolo Hospital we attended the morning hand over meeting. This is held in a large teaching room and all the clinical staff including nurses and students attend. The meeting usually consists of a teaching presentation given by a student along with a handover of new patients and significant events for the night before. A few announcements are made and then everybody sets off about their daily work.

The staffing set up in district hospitals in Malawi is very different from the UK. There is a DHO who is responsible for healthcare for the whole district. Thyolo district serves a population of around 620,000 and comprises one district hospital and multiple rural health centres, clinics and maternity service centres. In Thyolo Hospital there is also a DMO who runs the hospital and a DMO who runs the rural services and these positions both report to the DHO. These three personnel are the only qualified doctors at Thyolo Hospital.

Almost all of the clinical work is provided by Clinical Officers. These are non-doctors who have studied for diplomas in specific services such as paediatrics, obs and gynae or surgery for example. It is the clinical officers who do daily ward rounds, manage the wards, hold clinics and perform the surgical procedures. If a Clinical Officer needs advice, then they can ask a DMO for assistance with a problem. Complex cases are referred up to the central hospital, in Thyolo's case, this is Queen Elizabeth Central Hospital in Blantyre.

There are 6 wards at Thyolo District Hospital. These include a male ward, female ward, paediatric ward, maternity, TB ward and nutrition ward. The wards are full, often with extra mattresses lying on the floor to accommodate more patients. Each ward is essentially a large room with rows of beds, virtually no privacy for the patients and a basic supply of medical equipment such as one drip stand and a few screens. In Thyolo there seemed to be a healthy supply of student nurses, but often they congregated around the nurse's station and were not often seen actually on the ward. It was immediately very obvious that we were in rural Africa, but despite this, Thyolo has an excellent reputation in East Africa as being a well-managed district hospital.

As well as the wards, there is an A&E department, a laboratory, a radiology department and an incredibly busy outpatient clinic. On average, the hospital will see around 12,000 outpatients per month! They also run specialty clinics such as HIV, under 5s, surgical and are setting up an ENT clinic. Remember, all of these services are provided with only three doctors on site, and they have a predominantly managerial role.

It goes without saying that the hospital is extremely stretched financially and many of the centrally administered medical supplies run out early in the month. When we arrived at the hospital, all elective surgery was cancelled due to the hospital having run out of surgical gloves. The precious cargo arrived on our second

day at the hospital. The medication selection is extremely limited, if present at all, and it is a tribute to the work of the clinical officers to carry out their duties under such difficult and stretched conditions. The hospital currently relies heavily on organisations such as MSF, UNICEF and JICA to provide essential supplies and personnel to enable the hospital to function. For example, there is currently a pharmacist from Japan provided by JICA to work alongside the hospital pharmacist. Worryingly, the UNICEF and MSF contributions will no longer be available to the hospital for one reason or other. These air organisations simply cannot match the huge demand for their services and therefore it is inevitable that the vital supplies will not be forthcoming forever. When we questioned the management staff about this impending disaster, we were usually met with a shrug of the shoulders and the phrase 'things will be tough.' I honestly do not know how things will pan out for Thyolo Hospital over the next few months.

An interesting observation from our time at Thyolo Hospital was the relationship between modern medicine and traditional healers. In Malawi, there is still a strong belief in witchcraft and around 70% of Thyolo's patients have visited a traditional healer prior to attending hospital. Unfortunately, there are even some patients who attend hospital *as a result* of seeing a traditional healer. This cultural difference, and of course the limited public awareness of medical issues, often means that even some of the most aesthetically extreme pathology that I have ever seen presents very late to hospital. In summary, incredibly difficult cases are presenting very late to see moderately qualified clinical officers with minimal resources available to them. I now understand what real pressure feels like!

The above statement goes a little way to explaining why the fatality rates are so high in district hospitals in Malawi. It is not uncommon for patients to die simply because there is no blood available to transfuse following a PPH, or the antibiotics have run out in a patient with pneumonia. In fact, the concept of 'Microbiology' does not exist in district hospitals. If patients have an infection, then irrespective of the causative organism it is treated with whatever antibiotic is on the shelf…..if there is an antibiotic on the shelf. Samples are very rarely sent off to the lab as this is an expensive practice. For the same reason, it is very uncommon for biopsies to be taken pre-operatively and surgical specimens to be sent off for histopathological analysis due to cost. This may go some way to explain how virtually every lump or bump removed by a clinical officer is listed as a 'Lipoma,' and that resection margins are redundant as the operating clinician will never have a pathology report.

Although Thyolo Hospital certainly has its limitations, it is a clean environment for medical care. The hospital has good links with the local teaching hospital, in Blantyre where there are more services available. Even at this more central location however, many medical interventions that are taken for granted in the UK are not available. They haven't had a functioning CT scanner for months.

As a 28 yr old trainee surgeon, it is quite staggering to see doctors much younger than me running entire hospitals. The running of the hospital in Thyolo on a day to day basis is done by the equivalent of a junior SHO. The operations are performed by someone who has had much less formal training than I have, and with far fewer resources available to them. Having said that, they are bright and competent individuals who simply face each challenge head on and deal with difficult situations. There is not the same safety net as there is in the NHS. It was an incredibly humbling experience to witness this stark contrast to the healthcare system which I work in at home. To say it put things in perspective is a spectacular understatement.

Aside from the project, this trip offered a fantastic opportunity to experience a different culture and see a beautiful country. I had travelled extensively before but never to Africa, while Sara, though a veritable African veteran, had never been to Malawi. Thanks to the help and support of Ruth Markus from the AMECA Trust, we very quickly settled in to our temporary home and met plenty of inspiring people, both Malawian and expatriate. Being based in Limbe and commuting to Thyolo each day enabled us to take advantage of driving through some of the most beautiful tea plantations each day. Forty kilometres of rolling hills packed full of tea leaves made for wonderful bookends to our working day. As a treat on our final day, we stopped off at one of the old colonial tea lodges and enjoyed a pot of Malawi's finest whilst a green mamba snake slithered across the lawn in front of us!

Some evenings were spent relaxing in our lovely accommodation being courteously provided for by our local host John. Both Sara and I were honestly so grateful for his insurmountable generosity and five star hospitality. John's care and tireless hard work was even more remarkable when his personal circumstances became apparent. Tragically, John lost his wife and most recent baby in childbirth just a few months ago. He is now bringing up his four children by himself and maintains a staggering positive outlook on life despite his loss. Sadly, John's story is all too common amongst the Malawian population and the need for developments in the Obstetric care available to women is an ongoing issue. Other evenings were spent meeting and dining with various significant personnel in Southern Malawi, all with a common goal of providing better healthcare for the people of Malawi particularly amongst the rural populations.

All too quickly, Sara and I found ourselves facing the inevitable task of having to pack our bags again and return to the UK. Our brief but fascinating insight into the rural African healthcare system had come to an end. We both owe a huge debt of gratitude to all the staff at Thyolo District Hospital for welcoming us to their workplace with such enthusiasm and going far beyond the call of duty to help us attain the information that we needed. Particular thanks to Michael and Jones (need to check their names!), the Lab guy, Bernard in medical records, the accountant legend for all their unwavering support. Thanks also to Ruth Markus, Caris Grimes, Paul Thomas, Chris Lavy and the University of Oxford for supporting the project.