AMECA Trust Elective Report

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This report details my experiences during the elective period of May 1st 2017 to June 2nd 2017. I undertook my medical elective at Thyolo District General Hospital, Malawi. During this report I will highlight some of my key experiences, review some notable cases and relate this back to my own self-generated learning objectives.

Background

Malawi is a landlocked majority Christian country with multiple ethnic groups. It has a population of roughly 18.5 million and spends roughly 11.4% of its GDP on Healthcare. In 2012 this was slightly more than Australia and slightly less than the UK. The average life expectancies for men and women are 59.2 and 63.2 respectively. It is one of the poorest countries in the world with over 90% of people in Malawi work in agriculture. As such this population is rurally distributed and their health is very dependent on the climate.

My primary destination in Malawi was Thyolo District General Hospital, an incredible hospital with a very dedicated team of staff. For 5 weeks, I worked the busy Emergency Room living on-site at the hospital. All the staff in the hospital were keen to show us their work so we could view and participate in activities in the labor ward, outpatients, general medical and surgical wards as well as in the operating theatre itself. The Government District Hospital is in the picturesque surroundings of the tea and coffee plantations of Thyolo, situated in the Shire highlands about 34 Km from Blantyre in one of the most fertile areas of Malawi. Once a former colonial area, Satemwa Tea Estate now owns most of the surround areas. One afternoon we took a minibus out into the hills to walk through the estate. We met with local workers on the estate who let us try our hand at cutting and carrying the tealeaves.

The romanticized pictures on the Satemwa website don't illustrate how grueling the work actually is, it also doesn't show the workers living quarters which engender a forced labor camp atmosphere rather than the sensation of a pleasant company constructed village. Talking with an older gentleman from the village he explains he is a poor man, paid $3 per day every two weeks.

I hope that by discussing the tea plantations I can give a picture of the patient population in Thyolo. The hospital serves 611,000 poor, rural people who often have tremendous difficultly seeking care for a plethora of reasons. The hospital functions as a secondary referral centre, receiving patients from 37 health centres, in addition we discovered that all x-ray services were down and any patient requiring this service had to be sent to the hospital 20 miles away. Serious complications are referred on to Queen's Hospital in Blantyre, this happened regularly. Nonetheless, after 5 weeks we had met other employees from other district general hospitals in Malawi and we realized that our referral system was of a good standard in comparison. Thyolo boasted many functioning ambulances with regularly services running twenty-four hours a day. However, there are no paramedics and a reduced sense of urgency. We once saw a woman with a post-partum hemorrhage sitting in the back of a Toyota whilst the driver was talking to a friend.

With 350 beds (and up to 700 patients) Thyolo serves as a teaching hospital for doctors, nurses, clinical officers and medical assistants. One of the biggest benefits of living on site was to meet, eat with and chat to Malawian students. We could get a clear perspective on their ambitions, goals and lifestyle.

After reading information online we discovered many components to the hospital. Outpatient clinics included cervical cancer screening and treatment, ARV clinic, communicable diseases, chest clinic, surgical clinic, gynaecology and an orthopaedic department. The hospitals A&E was 24 hours. The hospital has 2 Malawian medical doctors, 26 clinical officers, 88 nurses together with medical assistants and patient attendants. It has 4 operating theatres but at the time only one was in use.

All operations, and indeed most hospital services are performed by clinical officers (CO). A CO is someone who undertakes three years of training and then performs most of the roles and responsibilities that we in the UK might associate with doctors.
The role of COs is a fascinating example of task-sharing that has been studied and scrutinized by many high-income country analysts. Demonstrating a ‘marmite’ effect, some love how it provides good access to care for a population in need others hate how less skilled staff are providing sub-standard care. I myself helped to write an article on the subject, showing that the complication rate for COs was equal to that of trained surgeons. In brief, what I found on the ground was something far simpler. If you teach someone a skill they perform that skill. In my opinion, you do not need a medical degree to perform the actions required for successful caesarean section.

However, if because you teach only one skill that is all you will ever get. This becomes problematic on general medical wards, where everyone has pneumonia or meningitis until proven otherwise resulting in most of the inpatients being placed on broad spectrum antibiotics.

Case 1: A man with central chest pain.

Whenever we went into the A&E department we would always see more than we bargained for, often cases that we would never encounter in the UK. But the more shocking thing would arguably be the lack of equipment. For our duration at the A&E department our only reliable piece of kit was our stethoscopes. The BP machine was either broken or so poorly calibrated you couldn't trust the reading. There was no ECG, Thermometer, Urine Dipsticks etc.

A big shock for us was when we encountered a man with crushing central chest pain. Confidently, we took a history and examined the patient, we felt like we had a good basic case; this was likely an Acute Coronary event and we would like to rule out a pulmonary embolism. Then it hit us like a brick wall, we had no equipment. We had no ECG, no system for measuring cardiac enzymes, no CT scanner or d-dimer to rule out the pulmonary embolism. In addition, we had nothing to give this gentleman, no drugs for thrombolysis and certainly no option for PCIS. He had come from the rural health center by minibus so we had no idea of how long the pain had lasted for. Pain was another issue for which we had no solution, some patients could receive IM diclofenac but it was usually reserved for those who were palliative.

It was a moment of brutal realization, with a case that might be simple in terms of diagnostic history we had nothing in our arsenal subsequent to that. You appreciate the multi-facetted care offered in high-income countries like the UK.

Case 2: Traditional Healers

During another morning in A&E we were finishing up with a patient when a meek young mother entered the room. Girls start having children young in Malawi, most likely not by choice. Accompanied by her mother she sat in the corner. Wrapped tight to her back in the traditional Malawian was a small baby. I had never seen a dead baby before so when she outparcelled out her child it was a shock to see a thing I usually associate with life to be so lifeless. It had been dead for likely a day and sick for over a week. The mother couldn't afford the travel from her village to the hospital so opted instead for a traditional healer. The therapy they offered failed to relieve the suspected Malaria and the child got increasingly unwell.

Once we had established what had happened the clinical officer explained what had happened to the mother who accepted it with a blank expression. She then wrapped the dead child back onto her back and, escorted by her mother, went to take the local minibus service home.

Thyolo hospital has a traditional healer outreach program where a hospital employee goes to the healers to work with them in identifying cases that are important to refer to hospital. Unfortunately, this referral still requires you to find your own transport to the hospital, one of the well-established barriers to healthcare.

Learning Objective 1: Develop a clear understanding of the approach to the diagnosis and management of emergency medicine cases in Malawi.

I can confidently say that I am extremely satisfied with this learning objective. Emergency Medicine is handled extremely differently in Malawi due to a lack of diagnostic and therapeutic equipment and a lack of referral services. However the Cos working there were intelligent and dedicated. We had to approach all cases with a different set of differentials (e.g. Malaria and TB would be at the top of my list rather than the bottom). It was a pleasure to learn more about these disease patterns. This paid off when I left Thyolo to go for a few days on Lake Malawi in an area called Monkey Bay. When I arrived, I heard that a child of one of the staff had Malaria. What I didn't realize was that the mother, hearing I was a Doctor had left that child in my care and left town. I went to assess the child and recognized this was a serious case of either meningitis or cerebral malaria. He needed a rapid diagnostic test and IV medication fast so we bundled him into a car to get to the nearest healthcare facility. Unfortunately, the car had no petrol! When we eventually arrived at the Monkey Bay district general I felt confident performing the diagnostic tests and starting my therapy. The CO on call that night was happy to have me there as she dealt with a potential hypoglycemic patient.

I felt this, my last patient in Malawi, summed up all that was enjoyable and all that was difficult about working in the country. However, Monkey Bay is extremely beautiful with crimson red sunsets and crystal-clear water.

Learning Objective 2: to build on my understanding of Global and Public Health

During my time at Thyolo I met some incredible characters, particularly the COs. The clinical officers do what they can with what they know and have. Some were superb, for instance if I left my oxford handbook in the department I know I would get a knock at my door that night from the CO on call asking me if they can keep it for a few days to read through it. Conversely some were poor, showing no interest in patients and knocking off early to go for Friday afternoon drinks. But who am I to judge? After getting to know the staff you realize that they are assigned to the hospital for life, with a fixed salary and no possibility of moving up or down in their career ladder. Some people are motivated by the patients in front of them, but some aren't and that is OK. I found it interesting that no one was really discussing how you motivate the workforce. With their seductive salaries and comparatively low hours NGO's have filled that empty space. Most CO's we met wanted to eventually move to an NGO to provide a better life for their families, and I couldn't blame them.

And what about the doctors? Our hospital had two doctors. We spent the majority of our time with a female doctor who explained her work was primarily administrative. This is despite the fact that, at roughly a Foundation Year 3 level she was one, in my opinion, one of the most clinically knowledgeable and skilled doctors I've encountered. Nevertheless, she spends most of her time behind her desk.

During our time we realized that the WHO had tried to solve some of this problem by creating a degree in Healthcare Management. COs and Nurses could complete the degree and replace doctors in their administrative positions. This would then free up doctors to perform more clinical work. William Easterly wrote a book entitled "the White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good". In it, he provides a plethora of anecdotal evidence to suggest that top down aid work often misses the point of the situation on the ground. Sitting with a beer at our local bar we met a nurse who had completed the Healthcare

Management degree. He was now indebt to the University and without a job. The WHO hadn't fully worked with hospitals to ensure that nurses and COs with the degree were actually hired for the position.

Conclusion

Thyolo is an incredible hospital located in a beautiful country. My time in Malawi was an invaluable experience that has opened my eyes to so many realities that I might not have been able to appreciate otherwise.