

## Tanzanian Medical Experience

My observership at Mount Meru Hospital in Arusha, Tanzania, was one of the best experiences I could ever have. The medical placement consisted of 4 weeks observing across both the Emergency department and Internal Medicine Department. In addition to this, experiencing the culture helped me to understand what drives the medical system and how it is unique to the region, something I could never experience within Australian borders.

After leaving the Kilimanjaro airport, I was warmly greeted by my taxi driver and father of a host family I would get to know very well over a 4 week period. On the drive home on pitch black roads, we pulled over half-way to eat a local dish being cooked over coals at a street side stand, 'chips mayai' (chips and egg). To reach the family home, the unpaved bumpy roads would take its toll on most cars making the trip due to frequent rains beginning in mid-November. Houses that could afford it built massive walls and gates with security guards working around the clock. My host family was extremely kind and helpful, with one of the younger children having been adopted from a nearby village to avoid being married while in school. Children across Arusha commonly would wear foreign clothing donations as evident by a child in my host family sporting a 'Microsoft Office Development Team' jumper one morning. To me this proved that foreign acts of aid, no matter how insignificant, would always be appreciated in this striving country.

With only one day to gain my bearings, I was quickly inducted into the Emergency Department at Mount Meru Hospital, able to fit 4 beds parallel, with seats for about 20 patients in the outpatient room. My first patient set a heavy tone for the rest of the observership with lacerations on his leg, thigh and head. Doctors would speak to the patient in the local language, Swahili, and afterwards would try explain the situation in English to me. In this case, the patient reportedly had a "quarrel" with another local. Following this, a few uncooperative female patients lay on the beds staring blankly at the roof, I later learned that domestic violence was a common occurrence, with both strangulation and mental scarring being two key obstacles in the victim's ability to communicate with hospital staff. Throughout the day, staff would constantly be borrowing volunteers stethoscopes with only a few doctors wealthy enough to purchase some for themselves.

By the third day in the Emergency Department, I began to grasp which areas of the department needed assistance, and having spoken to the doctors and nurses, which areas the Feros Grant could be utilised for. Unlike other rural hospitals I had visited on a previous trip, I was surprised to find that Mount Meru hospital fared relatively well with regards to basic hygiene precautions with gloves plentiful in supply, and soap available at most times if sought after. From my understanding, Mount Meru hospital had attracted multiple other volunteers and foreign aid helping to raise the basic health standards. The hospital had one X-ray machine, a few portable ultrasounds shared across all departments and one MRI machine, but no leads as they were only available to buy in Dar es Salaam (the capital). The emergency department had two vital sign monitors, often leaving doctors unaware if a patient's condition deteriorated over time. As information such as the patient's heart rate and oxygen saturation was critical to survival, the hospital staff and I came to the conclusion that this was the best area to funnel resources into. Doctors would often have to call the other departments in order to locate missing vital sign monitors that had been borrowed earlier. When at a nearby medical equipment retailer, my accompanying medical staff

advised me that they would rather spend the donated Rotary Club money on more reliable and accurate German technology, as recently multiple cheap imported equipment had broken. To help the hospital three small pulse oximeters and a digital blood pressure cuff were purchased and introduced to the department. Very quickly I noticed over a couple days that hospital procedures were changing and became more efficient, in particular thanks to the pulse oximeter use. When patients arrived on stretchers, a pulse oximeter could quickly be attached to a single finger with no wires or connecting equipment required. No large vital sign monitors had to be untangled, unplugged from wall outlets and pushed around patient beds. The process became fast and effective. Each patient's heart rate and oxygen saturation could be quickly determined to decide whether the illness was affecting respiratory or cardiac systems. The digital blood pressure cuff was being used for a few days and saved doctors time, however hospital management decided that it was better utilised in a different deserving department.

While at the hospital I noticed that department performance metrics as well as wage distribution and resource allocation were all printed and pinned up on message boards (which had been donated by a Korean organisation). I really admired this transparency and believe that it reflected both the hospital and Tanzanian culture in wanting to progress and better themselves. I did encounter my fair share of cultural shock while staying in Arusha. For instance, in my second week a rat ran over my foot in the emergency department and no one cared. Both the patient, her mother and doctor all looked at me in confusion, when I asked what we would do about it. Speaking to my host family about this they laughed and responded with "why does it matter?". I believe that the reason behind their low hygiene standards would likely stem partly from a lack of knowledge behind disease transmission and general scientific understanding in the general population. A lack of funding also prevented proper health care almost constantly. Furthermore, having seen the X-ray machine broken for a week because someone stole a valuable part, as well as being scammed by the hospital's own secretary, I found that money and financial welfare plays a large and understandable role in society across all areas.

My most interesting medical experience of the trip was one particular case in which a patient presented with breathing difficulty, pinpoint pupils and an altered mental state. The doctor said that a family member had dropped them off from a farm and said they think she drank something. Suddenly, having learnt a near identical case in CBL (Case Based Learning) at UQ, I realised that she was very likely suffering from Organophosphate poisoning (caused by pesticide ingestion). Being able to contribute to the system in a meaningful way really inspired me to keep working hard and reading up on each case we encountered, using a Tropical Medicine Handbook I held in my front pocket.

Many of the cases I encountered while in Tanzania were arguably unique to a tropical third-world setting, an experience I could never achieve while in Australia. From HIV, malaria, anthrax and sickle cell anaemia, the Tanzanian people suffer from a myriad of burdensome diseases, often being infectious to those around them. I would like to thank the Rotary Clubs that helped make my experience a reality and helped fund a better health system for the people of Arusha. I know that a lot must be done to alleviate global disease, but it brings me hope to see that small communities can make a big difference.