Emily Hall – Malawi Medical Elective Report

This report provides an overview of my six-week medical elective at the David Gordon Memorial Hospital in Malawi. It highlights my experiences and observations related to hospital service provision and public health initiatives.

Preparation

In the flurry of final year exams and Foundation Programme applications in the weeks leading up to my elective, it hadn't really sunk in that soon I would be travelling solo to Malawi. It was only whilst queuing for my gate that the reality of the situation sunk in. The seven weeks ahead of me became more and more daunting as I thought about how far I would be from my support network and comfort zone.

My flights and stopover in Addis Ababa went by without a hitch and soon I was on the ground in Malawi, marvelling at how green and beautiful the landscape was. I spent two nights in Lilongwe where I prepared for my placement by completing the RCPCH e-Learning ETAT+ course and continuing my rather poor attempts to learn Chitumbuka with the Utalk app, before heading up to Livingstonia via Mzuzu.

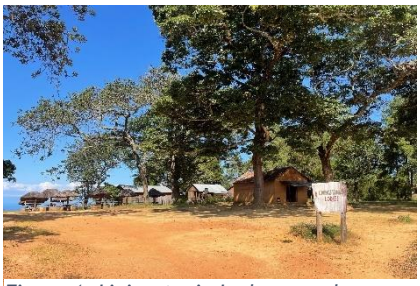

Figure 1: Livingstonia Lodges, my home for the duration of my stay with a breath-taking view over Lake Malawi.

On arrival at my accommodation, very kindly organised for me by Ishmael the acting medical officer in charge at DGMH, I was pleasantly surprised. I wasn't sure what to expect so was pleased to find a cosy cabin-like structure with an ensuite shower & toilet, hot running water (although it was an interesting orange colour) and reliable electricity.

Figure 2: Morning devotions and handover, attended by all hospital staff

My first day at the hospital began with 7am "morning devotions", a particularly foreign concept given the secular nature of UK hospitals. The link between church and healthcare at DGMH was palpably evident as the three-walled space filled with the sound of hymns sung in Chitumbuka. I was introduced to the hospital staff and warmly welcomed with claps. Everyone was very welcoming and friendly but despite my best efforts to learn some Chitumbuka before coming I didn't understand anything said in the language! Luckily for me the hospital staff all spoke English.

Hospital Service Provision

The David Gordon Memorial Hospital (DGMH) is a is a Christian Health Association of Malawi (CHAM) hospital that serves a rural population of 60,000 people through the main hospital in Livingstonia, four health centres along Lake Malawi and several outreach clinics. CHAM provides 37% of Malawian healthcare

Figure 3: Dr Dennis and I outside the main entrance of David Gordon Memorial Hospital.

services and train up to 80% of Malawi's healthcare providers. They primarily serve rural and hard-to-reach areas which are not served by government hospitals; hence CHAM receives some funding from the government. Despite this, most patients (excluding maternity and under 5s) are required to pay for their care. Given the low incomes in our local community this provided a significant challenge; it was fairly commonplace to have patients absconding without paying before their treatment course was complete, only to return a few weeks later having gotten worse (sometimes visiting a local healer in the meantime and exacerbating their condition by applying local ointments to open wounds!).

Figure 4: In the female ward with Agness, a nurse at DGMH.

The staffing structure of the hospital was very different to any I've encountered before during my training in London. There was just one doctor (Dr Chauma, himself only a few years out of medical school) responsible for the entire hospital. On a day-to-day basis, the wards were essentially run by clinical officers who have completed four years of training. Overall, I was incredibly impressed by the clinical officers at DGMH, they were conscientious in providing care to patients and far more competent at procedures than many FY1/FY2 doctors back in the UK, often being the lead surgeon for caesareans and other surgeries. They were excellent at diagnosing and treating common conditions like TB and malaria. I was particularly impressed by their ability to form diagnoses based on clinical signs and symptoms due to the lack of investigations available to us. This was a massive learning point for me during my time at DGMH, and really helped me to refine my clinical examination skills. It made me think about our heavy reliance on blood tests and scans in the UK and I wondered whether we perhaps overuse these in some circumstances. Although there were many times I was left feeling frustrated when we weren't sure what was going on with a patient and were unable to perform investigations that might have provided us with answers. On these the more challenging cases it felt like my opinion was really valued during our discussions.

Figure 5: Dr Dennis signing off on ward orders of medications from the pharmacy.

One thing I continuously reflected on throughout my time at DGMH was how much responsibility Dr Chauma had as the only doctor for the hospital. One of the things I value so much about UK hospitals is how you're surrounded by a team of people to bounce ideas off and senior help is never far away. This couldn't be further from the case at DGMH. The only option for difficult cases is to transfer them to Mzuzu Central Hospital, but often patients / their guardians are reluctant to make the 3.5h drive and believe they will get worse care as the government hospitals are so busy. Not only does Dr Chauma have this huge clinical responsibility he is also heavily involved in the administration of the hospital and has a large managerial workload- from signing off on pharmacy requests to having disciplinary meetings

with members of his clinical team - responsibilities you would only find incredibly senior clinicians having in the UK. Observing Dr Chauma perform these duties also highlighted to me the complexities of working within the tight budget DGMH has- there were time where we came very close to running out of IV fluids, and the hospital did not have any stocks of infant formula, which made managing unwell neonates incredibly challenging.

One of the ways I felt I was able to possibly impact practice at the hospital was by advocating for antimicrobial stewardship. Patients with cold-like symptoms arrived at the outpatient department and expected to get amoxicillin and paracetamol despite all their symptoms pointing towards a viral cause and them being quite well clinically. During my time in the outpatient department, I attempted to educate patients and their guardians on the importance of preventing antimicrobial resistance and highlighting that antibiotics are not harmless drugs, they can have side effects and so if they aren't needed shouldn't be being taken. Since my return to the UK, I was excited to hear that Dr Chauma attended a course on supervising the DGMH Health Service Assistants on managing common childhood illnesses in their outreach village health clinics, and his determination to educate them, and in turn empower them to educate the local community, on when and when not antibiotics are appropriate. Whilst the installation of a Full Blood Count machine on my last day at DGMH will allow clinicians to prescribe antibiotics in a more-evidenced based manner.

Figure 6: Martha, one of the clinical assistants, and I in the outpatient department.

Public Health Initiatives

I was particularly impressed by many of the public health initiatives at DGMH, spearheaded by Erasmo, head of the Primary Healthcare team.


Figure 7: Erasmo at the hospitals' fish ponds, part of the Primary Care Team's agricultural programme.

DGMH runs an incredible agricultural programme that is not only improving food security, and therefore the health of the local population, but also increasing local productivity and employment opportunities. There are multiple branches to this initiative. The maize programme provides maize seed to farmers who then give a portion of the grown crop back to the hospital to produce maize flour (used to make nsima – every Malawian I met's favourite dish!) in their maize mill. Similarly they provide local farmers with baby fish to raise, as well as growing them in the hospitals own fish farm to improve access to fish in the town – previously Livingstonia was completely dependent on fish being brought up from the lakeshore town of Chitimba. Erasmo also has exciting plans to expand these schemes to goats and cows to further improve food security, and has even sourced a machine that will allow them to create their own feed for the livestock to make the project more sustainable.

The Primary Healthcare team also have many other initiatives including nutritional programmes; under 5s outreach clinics that provide basic healthcare and vaccinations in the harder-to-reach local communities; and family planning services available at the hospital and in the form of outreach clinics. I was lucky enough to accompany the team on some of these visits and saw firsthand what a difference they made – it was an uncomfortable journey for us travelling over an hour in a 4x4 to reach the small villages and with very limited access to vehicles these people would struggle to access healthcare if it was not brought to them.

Personal Reflections

Overall I learnt lots during my time at DGMH. I feel like my prior understanding of healthcare systems in low-and-middle income countries through my BSc meant I had an understanding of what to expect. I also felt I was able to adapt well to the resource constraints at DGMH, and found the advice given to me by Dr Chauma invaluable in this. I was impressed by the clinicians flexibility, ingenuity, creativity and knowledge despite having limited medicines and practical equipment available.

One of the things that I struggled with most during my time at DGMH was how healthcare provision was influenced by community beliefs. I found it incredibly frustrating that we had at least one young woman a week presenting with self-induced miscarriages, and a constant flow of under-18 pregnant mothers in maternity yet our family planning service did not provide hormonal contraception to unmarried women.

Figure 8: Hospital staff accommodation.

Another thing I personally struggled with was the guardian system. In some ways it is incredible… it's almost impossible to imagine a scenario in the UK where a family member or neighbour would put their life on pause for weeks on end to provide daily care for hospitalised patients and even live in the hospital with them. I think the best way to describe it for someone who has never seen the hospital system in Malawi is that a patient's family member will essentially act as a healthcare assistant (HCA), providing the patient with food, helping them wash, and reporting to the healthcare staff how the patient is doing. In a healthcare system that is already massively struggling resource-wise this is simply invaluable and alleviates many pressures on hospital staff, however it also provides challenges. Sometimes reports on how well a patient was from their guardian would be at odds with our clinical assessment of the patient, yet it was hard to keep a patient in hospital when their guardian is adamant that they are ready to go home. It also made the issue of confidentiality and autonomy (something which is drummed into us back in the UK) far more challenging.

Summary

Despite these frustrations my overall experience in Malawi was incredible. Everyone was so welcoming, and I was instantly made to feel like I was a part of the community. I will really miss the colleagues and friends I made at DGMH. I feel like I have grown so much professionally and personally during my elective and now the coming life changes of starting my career and moving away from my university comfort zone seem less daunting. I am looking forward to bringing all of things I learnt during my time in Malawi with me during the next steps in my career.

Figure 9: Agness, one of the nurses at DGMH, teaching me how to make samosas.

With thanks to:

The Beit Trust for their financial support of my elective.

Graham Truesdale and the Livingstonia Hospital Partnership for their assistance in organising my elective.

The entire team at DGMH for welcoming me into their hospital with open arms, with particular thanks to Ishmael Nyirenda and Dr Dennis Chauma.

The community in Livingstonia for embracing me and making me feel at home in Malawi.