Elective Report

Simon Cavinato, ha09344.

For my elective, I performed rotations in neurology, neurosurgery, and emergency medicine in Mulago Hospital in Kampala. This involved spending time on the wards, in theatre, and in the emergency department. A typical day would consist of joining the team for the ward round in the morning and in the afternoon clerking patients and performing any procedures that were available and within my capabilities. I learnt a great deal during this time, understanding the workings of a hospital in a resource poor country, experiencing medicine in an environment without the luxury of advanced tests, and learning the differences in diagnosis and treatment of patients in a country with a high incidence of HIV/AIDS. The people of Uganda and Kampala were wonderful to be with, always welcoming and willing to help both in the hospital and out. I feel as though I met and gained an understanding of the objectives that I set out before leaving, and inevitably learnt a lot about other areas that I did not anticipate.

Gain an understanding of medicine in a resource poor country

This was consistently the most striking feature of Mulago hospital, and the factor that led to the disparity between medicine in the UK and public hospitals in Uganda. From the availability of doctors and beds, to the possibility of tests and treatments for the patients, the lack of resources was the driving force behind the problems found in the hospital. For the first few weeks of our time in the hospital there was a strike involving all of the junior doctors. This was due to the fact that they had not received a paycheque for the previous 3 months, and caused great difficulty in the hospital. Most of the administration of the medicine itself was carried out by the medical students, as the consultants did not spend enough time in the hospital to spend much time with the patients. The majority of the consultants would spend a morning in the public hospital and the rest of the week in the private hospital. This is an inevitable eventuality in a country with very little to offer the doctors in terms of pay in a public hospital, and most of the consultants would spend their mornings in Mulago with little or no pay, for the reason that the hospital needed their skills and expertise. An obvious result of this is that there is little continuity of care for the patients, who will only see the same consultant once a week. A lot of the care that would normally be carried out by nurses in the UK was undertaken by family members in Mulago. This includes cleaning the patient, administering oral medications, keeping and moving the notes, and observing the patient for any changes. There were simply not enough staff to carry out these duties by nurses, but the positive was that they were always completed with diligence and care.

Many of the treatments and tests that we would take for granted in a UK hospital were more difficult to come by in Mulago. In the UK, a full blood count and urea & electrolytes

will often be carried out regularly to give a patient's baseline and observe the change, but these were only performed when definitely necessary for diagnosis in Mulago due to the cost. CT and MRI would only be used in severe cases where it was very necessary in cases such as stroke and severe head injury. ECG machines, though available in the hospital, were difficult to come by, meaning not all patients who would normally require an ECG received one. The administration of oxygen was only given to patients with sats that were lower than the normal threshold in the UK, often below 80%. Due to the cost of the oxygen and availability of cylinders, a single cylinder would be shared between 3 or 4 patients, making it difficult to titrate oxygen delivery.

Experience medicine in a country with a high prevalence of HIV

This was also a huge factor on the hospital and the diagnosis and treatment of patients. Being the only public hospital of the capital, Mulago catered for most of the poor population. In this population the prevalence of HIV was particularly high, and of those in the hospital an HIV prevalence of 80% was quoted by one of the consultants. This is an understandable statistic, as most of the patients who make it onto the wards of Mulago are particularly unwell, often with conditions such as TB, PCP, and meningitis. The clinical features of a typical case of meningitis were slightly different in Kampala, with a slower onset and less severe features, as the most common cause of meningitis was cryptococcal. Of the patients with meningitis, 90% of these were caused by Cryptococcus neoformans. This would normally have been difficult to deal with considering the funding of the hospital, but during our placement there was an American team conducting a study on meningitis in Mulago, meaning there were large amounts of amphotericin and other expensive medications that were more readily available. Most of the patients who arrived with meningitic symptoms were treated empirically for cryptococcal meningitis if they showed other signs of HIV.

The stigma associated with HIV meant that few patients would readily admit to having HIV or would have been tested in the past. For this reason, the term HIV was never used and ISS (Immune Suppression Syndrome) was used instead, so as to avoid embarrassment for the patient. The doctors were very adept at spotting the signs of HIV, such as cachexia and Kaposi's sarcoma.

Uganda has had a great level of success in combatting HIV, and has the lowest levels of sub-Saharan countries due to their large level public health campaigns to promote awareness and charity groups improving the availability of condoms. This is very impressive, but the effects of HIV on the population were still easily apparent and had a massive effect on the hospital and the patients, particularly those from the poorest backgrounds.

Experience medicine in a country with fewer tests and gain experience of diagnosis with predominantly the history and examination.

This was an easily apparent difference between the UK and Mulago, and again reflects the lack of resources. I found that the doctors would make quicker diagnoses based on intuition and experience than in the UK. For example, patients would come into the emergency department holding their hands to the shield against the light, and from this the doctor would assume a diagnosis of meningitis. This diagnosis was correct in all the instances that I saw happen, and the doctor would also speak to the patient and take a brief history and perform a focused examination. The speed and shortcuts used by the doctors was necessary in these circumstances, due to the volume of patients that they would see in the emergency department. I did not directly see any cases in which the misdiagnosis was made, though I did see cases that had been previously misdiagnosed, most likely due to a shortcut in the diagnostic process. I was asked to clerk a patient who had come in having been discharged the previous day. They had been discharged with a diagnosis of cerebral malaria and given antimalarial medication; however, during the process of taking the history it became clear that meningitis was a more likely diagnosis, and this was subsequently proven correct. This eventuality had arisen due to a lack of time that could be spent with a patient, the lack of resources in testing, and shortcuts taken in the diagnostic process. This helped to teach me the importance of caution in diagnostic medicine.