

Student Elective Report

Location: Saint Francis Hospital, Zambia

Dates: 22/04/2013 - 24/05/2013

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Introduction and Objectives

I spent my five-week elective in the Eastern Province of Zambia, at St Francis Hospital. It is a rural hospital that provides healthcare to approximately 200,000 people, although due to its reputation, in reality it serves a much larger population of 1.5 million. I spent my entire time in Paediatrics, as I felt this was a specialty that I needed to gain more hands-on experience in, and also felt I would see a large range of pathologies, quite dissimilar to those in the United Kingdom. My objectives were:-

- 1) Describe the pattern of disease/illness in Zambia and discuss this in the context of global health
- 2) Describe the pattern of health provision in Zambia and contrast this with the UK
- 3) Describe how healthcare professionals try to minimize child mortality rates in Saint Francis Hospital
- 4) Describe and reflect upon my ability to integrate successfully within the multidisciplinary team in Saint Francis Hospital

Main

A typical day in paediatrics started in the Special Care Baby Unit, where neonates, often premature, were cared for. It was incredible to see how much could be achieved with these neonates with so little resources.

The rest of the morning is spent on the general paediatrics ward, which consists of a make-shift Intensive Care Unit, a babies' room, two malnutrition rooms and several bays of beds. The paediatrics team that I worked in consisted of 1-2 senior doctors, 2-3 medical students, and a clinical officer. The senior doctors were both from the UK, and neither of them had specialist training in paediatrics, but were deemed the most experienced due to their exposure during their UK training. As a medical student, I was expected to see patients on my own, and then review these patients with one of the senior doctors, having devised a treatment plan for them. My supervising doctor(s) had to attend the Outpatient Department in the afternoon, leaving the students to run the ward. During these times, we employed the ABCDE approach to stabilize acutely unwell patients before calling for help.

Medicine in the two countries often seemed like worlds apart, particularly in terms of resource availability. Some vital medicines were in short supply at times in St. Francis Hospital including salbutamol, insulin, and even IV fluids! Basic laboratory tests such as arterial blood gases, electrolytes, and full blood count were completely unavailable.

As a result of the lack of diagnostic tools, the most important skill I learnt in Zambia was using my clinical judgement to assess patients. In the UK, my eyes would often be drawn to bedside monitors and blood results whenever first seeing a patient. At St. Francis Hospital, with the lack of advanced equipment, I quickly learnt to observe the state of the patient. I would use signs such as respiratory rate, nasal flaring, and subcostal recession to assess someone's breathing; and skin turgor, capillary refill, and fontanelle softness to assess hydration status. I hope that these skills will stay with me throughout my career, as I now realise how much can be gauged from simply observing the patient from the end of the bed.

There were also many cultural differences to take into consideration, noticeably around the time of death. Using the terms 'death' or 'dying' in front of patients proved to be difficult – it seemed to be culturally inappropriate. Thus, bad news was often communicated to patients in an indirect way through the nurses, describing a patient's symptoms that would lead to their death, rather than the imminent event itself. Personally, I had seen very little death on the wards in the UK. On the other hand, this was a frequent occurrence in Zambia. I experienced many moments of great sadness that challenged me emotionally – seeing children die in front of their parents. It humbled me to see how the local people were almost used to death. Perhaps the hardships and poverty of a third world country meant that this was more often an accepted part of everyday life, even in children.

I found the differences in medical ethics particularly challenging to deal with on paediatrics. One example was especially memorable, where a father brought in his malnourished son, who later died. Malnutrition is a huge problem in Zambia, but also seems to be an accepted part of life. Yet, by Zambian law, no child should die of malnutrition. In the UK many cases of malnutrition would be considered child abuse. However, that father was allowed to walk away, with no questions asked of him, and having to face no legal consequences. I felt quite helpless, as there were no channels for the doctors to follow in terms of flagging potential cases of child abuse.

The child mortality rate in Zambia was 55.0 per 1000 live births as of 2007, compared to only 5.3 in the United Kingdom. The reasons behind this huge difference are far-reaching. However, there were three contributing factors in Zambia which I felt healthcare workers paid particular attention to: malaria, HIV, and malnutrition. According to UNICEF, 50% of hospital admissions of under-5s are due to malaria in Zambia. This statistic certainly seems accurate after working there! The hospital was always well stocked with Coartem for malaria treatment, and blood slides were quickly interpreted by the lab staff.

As with most countries in Sub-Saharan Africa, HIV infection is much more prevalent in Zambia compared with the UK (estimated 12.5% of the adult population). This creates a huge strain on the health services and economy. The Zambian Government tries to ensure that all pregnant women with HIV have access to antiretroviral treatments during pregnancy, and are able to have a caesarean section for delivery. Minimizing vertical transmission is seen by the United Nations as a key effort in the fight against HIV/AIDS in Africa.

Malnutrition was also a large contributor to child mortality rates in Saint Francis Hospital. The paediatric department had dedicated 'malnutrition rooms' where these children were kept with their mothers and seen by doctors on a daily basis. They were fed every three hours with slowly-

increasing amounts of high-protein milk. Specially trained nurses were in round the clock attendance to monitor the children's weight, and monitor for any signs of infection.

Overall, I have really enjoyed my time in Zambia, and am looking forward to returning to the UK where I hope to practice medicine with a more open frame of mind, and an appreciation for the resources available to me. I have not only learnt a great deal of practical medicine, but have also developed as a person. I have become more aware of different cultures, more resilient to emotional stress and long hours, and have developed a stronger understanding of the meaning of teamwork. I am thankful to all my colleagues at St Francis who enriched this experience.