

ELECTIVE (SSC5c) REPORT (1200 words)

A report that addresses the above four objectives should be written below. Your Elective supervisor will assess this.

Tupua Tamasese Meaole Hospital is the largest general hospital of Samoa. Scattered across the two main islands of Samoa: Savai'i and Upulo, are a number of smaller district hospitals and clinics that serve the communities. Tupua Tamasese Meaole Hospital had recently been rebuilt as an impressive compound made up of 4 interconnected buildings. It is spacious and fully air-conditioned. The hospital is organised very similarly to a hospital in the UK, with the following departments: Accidents and Emergency, Outpatients, General Medicine, General Surgery, Obstetrics and Gynaecology, Paediatrics.

During our induction, we learnt that healthcare in Samoa was largely funded by the Government of Samoa. Local Samoans only pay 30 Samoan dollars (the equivalent of 9 British pounds) for each night at the hospital, irrespective of the treatment and procedures that are carried out. Each session of haemodialysis only costs 10 Samoan dollars (3 British pounds). From what we understand, most of Samoans have no problems affording a stay in treatment from the hospital if required.

Unfortunately, Samoan National Health Service has a severe shortage of qualified health professionals. Samoa has a population of about 200,000 but only a total of 76 doctors across all disciplines and including those in private practice. There are also inadequate numbers of nurses and allied health professionals. Oceania University of Medicine, the sole medical school in Samoa, trains 10-15 doctors each year. A proportion of doctors also come from abroad; mostly from Auckland or China.

Surprisingly, upon starting our elective at the hospital, this shortage of doctors was not as keenly felt, as the few doctors and local medical students worked effectively and efficiently to complete the ward rounds and the jobs before the morning was over. Clinics ran in the afternoons, and all the doctors were involved, leaving the medical students and nurses to run the wards. This meant that local students were more involved at the early stages of their training.

However, as we previously envisioned, the hospital was not as well-equipped in a number of areas. There were no further imaging capabilities beyond the simple X-ray and Ultrasound. There were no computed-tomography (CT) scanners or magnetic resonance imaging (MRI) scanners. This was especially evident when we had a patient who presented with tetraplegia and a sensory level at T1. Apart from doing an X-ray of the spine, there was no way of imaging the spinal cord and nerve roots. Such patients requiring further imaging had to be sent to neighbouring American Samoa or Auckland, which would often be days/weeks after the initial presentation. This episode had made me come to appreciate the accessibility of these investigations back home, yet at the same time respect the ability of Samoan doctors to practice a high level of medicine despite these challenges.

Samoa is a tropical island situated in the Pacific Ocean, yet it suffers from very similar disease as western cultures. It has a very high incidence of diabetes and hypertension. Its population also suffers from obesity and heart disease. Most of the patients that were admitted into the medical department were due to diabetic complications, heart disease or strokes. During our stint at the hospital, we had seen numerous diabetic foot ulcers that had been poorly cared for, leading to systemic infections and often the need for above the knee amputations.

After a number of weeks immersed in the Samoan culture, it was quickly evident why these non-communicable diseases have become such a problem for Samoan health authorities. The natural diet of Samoans include foods that are high in starches and carbohydrates. Taro (yam) is a dearly loved national staple that is packed full of starches and is nearly eaten for every meal. The taro is also eaten together with coconut cream which is also high in fat and calories. Samoa is an island born out of volcanic activity, making the ground excellent for growing food. Taro, bananas, papayas, coconuts are aplenty. The strong Chinese influence in Samoa over the years have also caused locals to develop a liking for noodles. With western influence, deep fried chicken and chips have also made its entrance into the diet of Samoans. Unhealthy food choices coupled with the Samoans love for a big meal have pushed the population into obesity.

In Samoan culture, the men in the villages work the fields and swim the seas to catch fish, while the women usually help with less strenuous tasks. However, these tasks are often undertaken by the young and those who are older tend to become more sedentary and do little exercise. Hence, together with their diet high in starches, this has led to a surge in incidence of ischaemic heart disease and stroke from the age of 50.

Educational and understanding of the different diseases is also poor, especially so in the villages. In many of these villages, traditional Samoan medicine is practiced, often using the knowledge of local herbs and plants. This however has led to inadequate remedies for diseases 'new' to Samoa. Poor understanding of diabetes has caused the failure to recognise a foot ulcer to be a complication and not a simple cut from walking through thick vegetation. Very much accustomed to wearing slip-ons for every occasion, diabetics here often wear inadequate foot wear to protect themselves from cuts and pressure ulcers. The tropical climate and poor hygiene also means that these ulcers often become infected very quickly.

Emergencies associated with diabetes are also common. Poor compliance of medication, inaccessibility of healthcare to the rural villages, and the shortage of the full range of anti-glycaemics/insulin has resulted in a number of cases of diabetic ketoacidosis and hyperosmolar hyperglycaemic states.

Another issue that stood out during our time at the hospital, was how commonly severe valvular heart disease presented in young teenagers in this country. In the UK, valvular heart disease is often seen earliest in the middle ages, often secondary to heart attacks, infective endocarditis or calcification. However, in Samoa, rheumatic heart disease is a major cause of heart failure in the younger population. It was terrifying seeing a thirteen year old girl with severe mitral and tricuspid regurgitation, an enlarged pulsatile liver and massive swollen feet. Rheumatic fever has largely been eradicated from the UK, and cases of rheumatic heart disease are uncommon. However, the experience of such a patient was a reminder to be grateful for the robust and accessible healthcare service we have back home.

Overall, it has been a very eye-opening experience coming to Tupua Tamasese Meaole Hospital to spend my elective. It has both been inspiring and sobering. Inspiring to see how the doctors in Samoa make the best of what is available and do their best for their patients. It is also sobering to see how the patients in Samoa despite having the most well-equipped hospital make the most of the situation; staying positive and being appreciative of whatever little care they receive. Making me realise how

both doctors and patients in the UK take for granted the wealth of healthcare services we have at our doorsteps.