## **ELECTIVE (SSC5c) REPORT (1200 words)**

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

From London to Belize: A comparison of healthcare needs and practices

## **Objectives:**

- 1. Discuss the main causes of morbidity and mortality in Belize, and how they influence healthcare provision in Belmopan and the surrounding area?
- 2. Examine the main differences between the organization and day-to-day provision of healthcare between Belize and the UK.
- 3. Discuss the challenges faced by both healthcare professionals and patients in a developing country such as Belize.
- 4. Reflect upon any difficulties faced whilst studying in a different clinical environment, especially those that may influence future development as a healthcare professional.

Western Regional Hospital is the 3rd largest hospital in Belize and provides both primary and secondary care services to the Cayo district of Belize. Although situated in the capital city of Belmopan, the population it serves is largely rural, with patients travelling to the hospital from outside Belmopan, which largely consists of governmental buildings. The hospital consists of a maternity ward, psychiatric unit, Emergency Department, 2 surgical theatres, a general ward, and primary healthcare clinics. The hospital also has a health education centre (locally called HECOPAB) with 2 clinic rooms where patients can talk to hospital staff and access information on a range of healthcare topics including contraception. Although the primary healthcare clinic at the hospital is usually the first port of call for most patients, the hospitals also collaborate with a few community health centres located in the surrounding towns and rural areas. These centres are nurse-led and focus predominantly on antenatal and postnatal care, childhood vaccinations, and health education, however the availability and quality of these services is supposedly very variable.

Similarly to the UK, healthcare in Belize is publically funded, although private healthcare also exists for those who can afford it. Public healthcare in Belize is overseen by a Ministry of Health and spending accounts for approximately 6% of the country's GDP, equating to expenditure of approximately \$460 per capita annually. The UK, in comparison, spends 9.4% of GDP on healthcare and \$3,500 per capita per annum. These statistics, based on 2012 figures, are also reflected in life expectancy (72/78 M/F in Belize and 79/83 in The UK). Throughout my time at Western Regional Hospital it was evident that it was a hospital continuously working at maximum capacity, where staffing numbers were often stretched and equipment was always in limited supply. Services that rely on technology and machinery were limited in the hospital, which relies solely on plain radiographs and ultrasound for imaging, requiring referral to KHM Hospital in Belize City for CT or MRI services. To

make use of space in the emergency department, a bay titled #4.5 was often utilised, where an extra curtain had been fastened to a cupboard to cordon a small area around a patient. Despite these shortfalls, day-to-day healthcare provision was frequently very efficient, with many similarities to the UK. From the primary healthcare clinics, patients who required ongoing care were referred elsewhere in the hospital or to KHM hospital in Belize City to see a relevant specialist.

During my time at Western Regional I witnessed a wide range of different pathologies. The non-communicable diseases prevalent in Belize are largely similar to those seen in the UK, with cardiovascular disease, diabetes, and cancer causing significant amounts of death and disability. Notably, trauma is the second highest cause of mortality in Belize after cardiovascular disease, resulting both from a large amount of gang violence that plagues the country, but also a high number of road traffic collisions. Road safety is not as thoroughly enforced in Belize as it is in the UK. Malaria, dengue, HIV and tuberculosis are significant health problems in Belize, with an estimated adult HIV prevalence of 2.1%. Reduction in HIV transmission is subsequently a major public health priority, with many campaigns and health promotions rolled out across the country. Due to funding constraints, most of the reduction in AIDS related deaths in Belize has resulted from prevention. The health education department at Western Regional focused heavily on HIV, preventing transmission, and educating patients about common opportunistic infections such as tuberculosis, for which Mantoux/Heaf tests were readily available.

Belize is facing many other challenges that affect the health and well-being of its population, including poverty, high rates of substance abuse, susceptibility to natural disasters, and public stigma surrounding mental health disorders. Psychiatric disease in Belize is increasing in prevalence and has necessitated mental health reform. Western Regional Hospital has a nurse-led psychiatric unit, which focuses on treating patients as outpatients rather than institutional care as used to be the norm in Belize. However, these services are particularly susceptible to funding insufficiencies; supposedly receiving the lowest proportion of funding in comparison to other areas of the hospital. As with other areas of the hospital, staff work closely with the health education department to focus on prevention, by offering help and advice on substance misuse and raising awareness of mental health problems with a view to lessen stigma and prevent discrimination.

Throughout my elective placement at Western Regional Hospital I have encountered many difficulties. A large number of these difficulties involved misunderstandings associated with language misinterpretations and cultural differences. Although Belize is an English speaking country, many patients exclusively spoke Spanish or spoke Belizean Creole, which can be very difficult to understand, especially when patients are distressed, as is very common in a hospital. Members of staff mostly all spoke English, however due to large patient lists, understandably did not have enough time to translate conversation whilst I observed consultations or procedures.

Everyone I encountered at Western Regional were friendly and very happy to allow me to get involved in patient care. Sometimes however, I feel this presented its own problems, where both doctors and nurses at the hospital asked me to do things that were outside of my comfort zone as a medical student. For example on a couple of occasions I was asked to both draw up and administer unfamiliar intravenous medications in the emergency department. I was unsure whether these instances may have been influenced by high expectations of UK medical students, or perhaps different responsibilities of Belizean medical students compared to those in the UK. Although perhaps they were influenced again by poor staff numbers and each member of staff was merely happy for an extra pair of hands. In the environment of the Emergency Department I found it very difficult to explain that I did not feel confident in reconstituting and administering these particular medications, especially in front of each patient, however had I not done so and acted outside of my capabilities, things could have been much worse. I hope I am able to remember this situation during my FY1 year and to always be sure to voice my concerns and seek help from a senior member of staff if I feel out of my depth.

One of the main things I have learnt from my elective is how teams of hardworking people can manage adversity in the healthcare setting (in the form of staff and equipment shortages) when positively motivated. From an organisational perspective, preventative medicine appears to have been utilised very effectively in Western Regional Hospital as an inexpensive way to improve health and well-being of a diverse community.