## **ELECTIVE (SSC5b) REPORT (1200 words)**

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

1. To understand and appreciate the common conditions that present to hospital in Belize and how they are managed with differing resources.

Belize is a country in Central America with varying and differing health needs due to its diverse environment, in particular due to its climate. Common problems which present to the hospital are often ones relating to cardiovascular disease. Part of the reason why cardiovascular disease is so common in Belize may be related to the dietary habits of the nation, with a lot of foods high in fat and fried when cooked. Alongside this, diabetes was also a significant problem, contributing to the prevalence of cardiovascular disease within the nation.

Infectious diseases are also a problem due to the nature of the climate and the diverse environment throughout Belize. Malaria is one of the more common diseases of infectious origin, particularly people presenting from more rural communities. The hospital has an effective setup for dealing with potential cases quickly, including a system whereby patients addresses are taken so they can be contacted and their blood film slides sent to public health who rapidly analyse the samples and see to getting patients treated as quickly as possible- an effective setup for dealing with a potential difficult public health problem. Other less common infectious diseases also present to the hospital, and doctors must have an awareness of these to be able to identify and treat them efectively. Chagas disease is spread through the 'kissing bug' which live in thatched roofs and mud which some houses are made of, again in rural communities. The disease has an acute and chronic phase and is treatable, however must be identified early, the hospital however has not seen a case for arund 3 years. Dengue fever, zika and chikungunya are other infectious diseases the hopital has to deal with- ones often not seen in the UK. A tip the doctors had for identifying chikungunya was that patients often presented with a particularly high fever of around 40 degrees, which would raise clinical suspicion of the disease.

2. To understand the structure and function of the healthcare system in Belize compared to that of the UK healthcare system.

The Belize healthcare system is divided up into 4 different regions Northern, Central, Southern and Western Health Regions. Western Regional Hostpal was based in Belmopan and is part of the Western Health Region. Each region has different services available, from hospitals to healthcare centres. The services available in Belize were far more limited than the services available through the NHS in the UK. For example, the only sexual health clinic in the entire country is situated in the Central health region, as well as the only tertiary level hospital in the country. This makes access to these services very limited and difficult to reach for those who may need it.

In some respects, there are plenty of similarities between the healthcare systems of the UK and Belize, in that commoner services are freely available and more easily accessible. However, I would say that the setup in Belize is far more limited, particularly for people who live within the more rural communities and outside of the major cities.

There are also private health services/clinics available for those who wish to use it, and these are mainly situated within the Central Health Region, however due to the division of wealth, people generally do

not use private healthcare and access the main clinics or hospitals and within rual areas even rely on home remedies to treat illness.

3. To understand and appreciate measures of health promotion and prevention across the local area in comparison to the UK.

Health promotion in Belize has many similarities to that in the UK but also has very different types of health promotion- this is due to the diverse nature of presenting compaints and also the variety of diseases people can present with. With respect to the similarities, the large prevalence of cardiovascular disease and diabetes meant encouraging exercise and healthy eating. This however is an extremely complex and health issue as we know from the UK, and tackling such a problem takes time, especially to see the results in public health.

Health prevenetion and promotion was also, of course, a big issue for preventing the spread of infectious disease- something which we do not really encounter here within the UK due to the massively differing climate between the two countries. The simple, yet effetive method in place for prevention included advocating the use of mosquito nets, thereby preventing the risk of bites a night when sleeping and in the household. Whilst this is certainly not a foolproof method, the low cost nature of the intervention makes it effective on a public health level, and would certainly cost less than having to start a large part of the ppulation on regular malaria prophylaxis long-term.

4. To gain an understanding and experience working with healthcare professionals in a different environment and understanding challenges facing healthcare professionals and patients in this setting.

There are many challenges facing healthcare professionals in Belize, I feel I could draw similarities between the UK and Belize, however would definitely say that in Belize there are far fewer resources available in terms of healthcare. The doctors work in a similar shift pattern to doctors in the UK; early, late and night shifts, alongside which the staffing levels differ with respect to the hospitals needs. There are 13 medical officers within the Western Regional Hospital responsible or the staffing of the wards. At night, the hospital generally only has one doctor on-call to cover the hospital from 4pm to 8am, meaning that tiredness and stress levels can be high due to the workload they may encounter. This is arguably similar the the UK however the UK tends to have more support available within the hopitals in terms of seniors being available for advice as well as higher staffing numbers to be able to see patients.

I have already briefly touched upon the varying presentations and needs of the population of Belize, and it's relatively large population who live in rural areas. This can mean travelling to hospitals or clinics and taking medication is not always an option. The rural communities do however have herbal/natural remedies which the doctors recommened and even advocate for their health benefits. This helps to overcome the barrier of needing to come into the hospital or clinic for every coplaint one may be suffering from. There are numerous amounts of these remedies, aloe sap is used for sunburn and people drink it for constipation and lemongrass is also used to help digestive problems. Calabash tree is used for menstrual cramps and also to help induce childbirth. Ginger root is used to help nausea, vomiting and sickness. Soursop is used to reduce fevers. The list is extensive and these are a few examples which I was fortunate enough to learn about, and as mentioned helps people to manage their medical complaints out in the community before seeking more necessary medical attention within clinics or a hopital environment.