

# SENERAC MEDICINA

## Elective Report: Western Regional Hospital, Belmopan, Belize

### Objectives:

- 1. What are the prevalent general medical conditions in Belize? What are the prevalent tropical diseases in Belize? How do these conditions differ from the UK?
- 2. How are general medical services delivered in Belize? How are tropical disease services delivered in Belize? How does this differ from the UK?
- 3. What measures are taken to address any health inequalities in Belize?
- 4. Are there different expectations of a doctor's role in Belize?
- 5. Reflect on elective activities and experiences?

### Introduction

Belize is a British Colony located in Central America, surrounded by the Spanish speaking populations of Mexico, Guatemala, Cuba and El Salvador. It is one of the few remaining national English speaking countries in this region of the world. Belize has a rather small population of just over 390, 000 people, but it has one of the most diverse populations known to Central America, with residents from neighbouring Spanish speaking countries and the Caribbean Islands. The country houses one of nature's world wonder, Belize barrier reef, along with various beautiful seaside landscapes. This accompanied with the friendly nature of the occupants has encouraged tourism to flourish. However, this has not been without its disadvantages as the natural beauty of this small country has deteriorated with the impact of tourism. Nevertheless, the people of Belize are aware of this impact on their environment and are very active in initiating restoration projects to try and rectify the problem.

#### **Prevalent Medical Conditions**

In the Cayo district, where the Western Regional Hospital is located, there was a high prevalence of dengue fever. This is a tropical disease not found in the UK that causes a viral haemorrhagic fever as a consequence of platelet depletion. The condition is transmitted by Aedes mosquitoes, which is why incidence increases sharply after the rainy season. The characteristic features include flushing, maculopapular rash and febrile illness lasting under two weeks. Treatment is with prompt intravenous fluid resuscitation and with maintenance doses to ensure urine output and blood pressure rises.

Other tropical diseases are present such as malaria and typhoid, but these are not a prevalent as dengue fever. Rabies is another disease that is uncommon in the western world that can be found in Belize. However incidences have been falling over the past few decades.

In contrast Belize has seen a large increase in pandemic conditions such as HIV, for similar reasons to the rise of HIV in the western world. Unfortunately, anti-retrovirals are not as widely available as in the UK. Belize has also seen a rise in asthma, which is quite a surprising find, since it is largely considered a disease of the developed world, being prevalent in the UK. Cardiovascular disease, respiratory disease, diabetes are all conditions which are becoming common worldwide with the UK and Belize being no exceptions.

### **Provision of Medical Services and Health Inequalities**

While Belize has a small population it provides is residents with a free health care system similar to the NHS, which in some cases covers trips to neighbouring countries such as Guatemala and Mexico to receive treatment if services are not available within the country. However, some expensive treatments and surgeries are not funded by the government along with elective treatments, excluding caesarean section. In contrast to the UK, Belize does not have access to a number of

diagnostic investigations, including MRI; therefore the majority of diagnoses made are purely on clinical grounds and simple investigations such as x-rays.

There are only a handful of hospitals throughout the country and there are currently no medical schools. Meaning that all doctors that work within the country are trained abroad, the majority emigrate from Cuba, which is known to have one of the best health care systems in the world. The picture in the UK is very different, even though numerous doctors are trained abroad; the majority are trained in the UK.

Resources are scarce within the Belize hospitals; over a two week period one hospital did not have amoxicillin stocked within the hospital because of financial difficulty, which shows the financial strain on the health system. Some of the hospitals rely heavily on donations made from foreigners, including international medical students on placements. Private health services are available to those who can afford it, but are not as widely available as in other countries.

#### Different expectations of a doctor

The Belizean doctor is bilingual, well versed in both English and Spanish. He is a master of clinical diagnosis because the lack of diagnostic tools leaves doctors to mainly rely on their clinical judgement to make the diagnosis. He is a generalist, few doctors mean that each doctor has to be able to diagnose and treat a variety of conditions; the general surgeon has to be able to deal with any surgery procedure thrown his way. He is simple and efficient; few resources means that doctors have to be consciously looking for the most cost effective solution, while the same can be argued for the NHS the consequences are not the same. The NHS has the ability to continue in a deficit and provide services. When a Belizean hospital reaches financial difficulty, services may no longer be provided (e.g. no amoxicillin for patients). The expectation and duties of a doctor is very different in Belize in comparison to the UK. Doctors have to be sharper, independent and flexible, while there is more assistance available in the UK.

### Reflection

This elective highlighted how health care is widely unbalanced throughout the world. It is difficult to see that investigative tools and commonly available medications that are seen everyday in developed counties are not available in other countries. While we all know that wealth has an effect on healthcare, it is difficult to vision how large the disparities are until witnessed firsthand. It would be unthinkable for a British hospital to run out of common medications such as amoxicillin, which is why we should appreciate the resources that we have at our fingertips under the NHS. Nevertheless, this elective has also taught the importance of clinical competence; while we may have diagnostic tools to aid our diagnosis here in the UK, it is not a replacement for our clinical competence. It is important to become as self-reliant and efficient as possible, as we as doctors may find ourselves in a situation without our new medical tools, where only our own clinical competence and skill will allow us to treat our patient.