

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

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

### **Elective Report: Belize (April-May 2017):**

#### **1. What are the most common surgical conditions encountered in Western Regional Hospital?**

During my time at Western Regional Hospital in Belmopan, Belize, the most common surgical conditions that patients presented with included common surgical conditions that I have seen in Britain, including appendicitis and bowel obstruction. However, I was surprised to see the large amount of traffic accidents and non-accidental injury amongst teenagers and adults. These are some of the largest killers in the country for Belizeans aged 15-19 and 30-39 (1). While the hospital has a well established General Surgery department, for trauma patients requiring orthopaedic intervention, they needed to be transferred to Belize City. In addition, immediately before my arrival, there had been a team of ENT surgeons from the United States who had been visiting and performing clinics and surgeries free of charge for the local population, undoubtedly also seeing a wide range of ENT conditions. Many of the conditions seen at the hospital likely do not reflect the actual population incidence due to the non-attendance of patients at the hospital and lack of certain specialties.

#### **2. How is the healthcare system organised in Belize, and how does this differ to the UK's healthcare system?**

Much like the UK, Belize operates both a private and a public healthcare system side-by-side, with the public system providing the majority of Belize's population with their healthcare. Belize is a country with a population of approximately 370,000 people (2). The Belizean people are served by one major national referral hospital, the Karl Heusner Memorial Hospital, located in Belize City. The three remaining regions of the country are served by the following regional hospitals: Western Regional Hospital, Southern Regional Hospital in Dangriga, and Northern Regional Hospital in Orange Walk (3). The regional hospitals provide most basic hospital-level care, but function effectively as secondary centres, needing to send patients to Belize City for more specialist care. For example, patients in Western Regional Hospital requiring orthopaedic or ENT intervention would need to be transferred to the Karl Heusner hospital for the appropriate care. This is somewhat similar to Britain, where hospital services are beginning to become more centralized with hospital closures and the establishment of centres of excellence. However, the United Kingdom has more offerings at most of its hospitals and many more national specialist centres.

Alongside the hospitals, Belize has a number of health centers and health posts to provide community-based care, which is important for Belize's rural population. These equally provide treatment and serve a public health purpose in the communities they serve. The health centers are responsible for educating the local communities about public health issues as well as pre- and post-natal care and early childhood care. The health posts similarly educate the local people and send patients onwards to health centers or hospitals for more complex conditions. These community health programs are the rough equivalent of primary care in Britain, as they direct patients towards hospital services if needed.

#### **3. What are the main factors influencing access to safe and affordable surgical care in Belize?**

According to the Lancet Commission on Global Surgery, the number of specialist surgical professionals in Belize was 10.88 per 100,000 people. This is a stark contrast to the United Kingdom figure of 92.39 per 100,000 people. The lack of healthcare professionals is likely to be a barrier to safe surgical care in Belize. It is unlikely that the quality of the surgical professionals are sub-standard though, as the majority of the doctors I encountered were foreign-trained, particularly from Cuba. This is additionally true as visiting foreign doctors, such as the ENT campaign mentioned previously, bring along their expertise to train local surgeons in safe surgical techniques. Next, it appeared as though the health seeking behaviour of patients in a country like Belize were very different to those in the United Kingdom, with patients usually attending when their conditions were more severe. Greater population education on health topics may be required, as it was unclear to what extent the health centers and health posts were able to educate the rural population Western Regional Hospital supplied. For anyone thinking of doing their elective placement at Western Regional Hospital, I would highly recommend trying to organise a day to visit these health centers and posts. Lastly, at Western Regional Hospital, the transfer time for patients requiring orthopaedic surgery limits access to safe care, as patients may not be stable enough to make the 1-2 hour journey to the national referral hospital.

**4. Personal/Professional Objective:** Describe how you have been exposed to a greater range of medicine and have increased your ability to adapt to working in different healthcare environments.

One of the contributing factors to me choosing Belize as an elective destination was the fact that the national language was English, having formerly been a British colony. In the Western region of the country where this hospital was located, a much larger percentage of the population speaks either Spanish or Creole, although most did speak English as well. Taking histories from patients and communicating with them on ward rounds was much easier, and I even used the opportunity to practice my Spanish with some of the Spanish-speaking patients.

Alongside the greater number of trauma patients presenting to the hospital, Western Regional hospital also presented the opportunity to learn about tropical medicine. One patient had presented to the hospital with severe flu-like symptoms. In a country like Belize, the doctors immediately needed to rule out tropical diseases, such as zika, dengue, and chikungunya. From their history, they were able to ascertain that she had an unusual episode of PV bleeding, only two weeks after her last menstrual period, which she had simply thought was her period. However, the doctors then ran the appropriate tests and found she had haemorrhagic dengue with a dangerously low platelet level, a condition with a high mortality rate which they were fortunately able to treat. I am very grateful for the opportunity to have seen tropical medicine in person. Although I may not see such conditions again in my career, I found it to be a very interesting experience.

#### **Bibliography:**

- 1. Belize Ministry of Health. Improving Quality Health Services. <http://health.gov.bz/www/attachments/article/801/Belize%20Health%20Sector%20Strategic%20Plan%202014-2024-April%202014.pdf> (accessed 10 May 2017).**
- 2. Worldometers. Belize Population. <http://www.worldometers.info/world-population/belize-population/> (accessed 10 May 2017).**

**3. The Lancet Commission on Global Surgery. Specialist surgical workforce (per 100,000 people). <http://data.worldbank.org/indicator/SH.MED.SAOP.P5?locations=BZ-GB> (accessed 10 May 2017).**