

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

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

I carried out my elective at Western Regional hospital in the city of Belmopan; a small city located a couple of hour's bus journey from the capital, Belize City. Belmopan has a population of approximately 16,000 with Belize having a total population of 332,000. The country is split into regions; northern, western, southern and central. Western regional is located in the latter. There are 60+ beds in the hospital with a severe lack of doctors. There currently 9 doctors in total with only one general surgeon with a drive to recruit more doctors. Most doctors were Belizean, however, most had trained outside the country. Most commonly the doctors would train in Cuba and then return after completing their studies.

Common surgical operations included appendectomies, open cholecystectomy and minor trauma. Any patients with major cases, injuries or serious illness are transferred to Belize City and most of the resources and medication, which are spread thin across the country, are located there.

Belize has an indigenous population of the Maya people. The Maya's still live by their culture and historical way of life. Healthcare access to these people have been difficult as they live in remote villages with difficulty in access as well as a lack of district and rural nurses. The Maya's tend to use herbal and alternative remedies so they tend not to visit hospitals in the bigger cities and thus data on various health conditions and diseases have been difficult to obtain.

According to cancer research the prevalence of lower GI cancer in the UK is estimated to be 74 cases per 100,000. The prevalence for different diseases were hard to obtain. The data that had been collected for many years had been destroyed by a huge hurricane, and as all, if not all, data was on paper years' worth of audits had been lost. There is currently a new audit underway to obtain future data with a plan to be published in the coming year. The surgeon estimated the incidences of all cancers to be approximately 60 per 100,000. According to statistics produced by the World Health Organisation only prostate cancer appears in the top 10 causes of death with the majority being due to cardiovascular risk factors.

The acute surgical emergencies that I saw were similar to that of the UK, bowel obstruction, appendicitis and pancreatitis to name but a few. Resources are spread in the various regions and then further between cities in those regions, but not equally. Thus when a call is made to the ambulance

the crew have to judge the severity of the illness and decided which hospital to transfer the patient depending on the resources available.

At Western regional simple blood tests, X-rays and ultrasound scans were available, but not easily and quickly. If more specialist scans were required such as CT or MRI the patient would have to be transferred to Belize City as these were not available in Belmopan. On most occasions what I witnessed was that the patient was not transferred so not to use the limited resources.

In the UK there are multiple doctors of all grades available for help and multiple operating theatres available. In Western regional only two operating theatres were functional. Surgical techniques were very similar to that in the UK, however, in Belmopan they were careful not to open too many instruments or sutures again due to limitation. Unnecessary wastage is certainly something the NHS could improve on and seeing the lack of resources and how best to use what is available has certainly been eye opening and something I will keep in the back of my mind in future practice.

There was also a lack of anaesthetists so on numerous occasions there were long delays in transferring a patient to theatre. Due to the lack of doctors if multiple surgical emergency patients arrived in a short space of time there would be a debate about which patient to transfer to Belize City. As the sickest patient may not survive the journey and the resources available at Belmopan may not be sufficient to stabilise the patient. In addition, patient transfer using the ambulance would add further delays.

In the UK a lot of patient monitoring can be done electronically, however, I had seen on numerous occasions the use of manual systems to measure each vital. This made patient care on the wards more time consuming. The use of automatic blood pressure monitoring was available but only a limited number were available and sometimes they wouldn't work or simply no battery was available on hand.

Likewise with the UK certain operations required prophylactic antibiotics to minimise the risk of infection. This would occur on the general ward with the addition of fluid therapy, of which were also limited. There were only on a few occasions that LMWH was used and there were no clear guidelines on which patients should receive the injection. There wasn't a huge emphasis on getting the patient mobilised as soon as they could post surgery to reduce the risk of hospital acquired pneumonia or pulmonary embolism.

There didn't seem to be huge guidelines on minimising post-operative complications. There was a great deal of effort put into dressing wounds, dressing regularly to keep any incision site clean and dry. Like in the UK alcohol gel was on hand to be used before and after patient contact.

From the patient entering the operating theatre table everyone uses their best effort to maintain a sterile field. However a few times I had witnessed this to be broken. In addition I had noted that the full 7-step hand washing technique was glanced over and there didn't seem to be a big emphasis on bare below the elbow policy like the UK.

In the UK patients are all followed up in clinic, however, due to the lack of doctors and time away from theatre for clinics some patients were not given follow up dates and were told to come to A&E if they experienced anything untoward upon discharge.

Belize is different in comparison to other Central American countries in that it is predominately English speaking, as opposed to Spanish. I have very limited, if at all, Spanish vocabulary thus it made Belize an ideal place for me. Patients in general seemed friendly, engaging and open when it came to speaking about their medical issues and it made communication between me and the patient much easier. On occasion I tried to use Spanish but some patients spoke too fast for me to comprehend and thus my supervisor or other doctor or nurse would help translate.

The elective programme at Belmopan is looking to expand into possibly spending a day or a week with the Maya people, which unfortunately I didn't have the opportunity to do. This would have added another dimension in the elective in the sense of interacting with a community that date back to 3000 BC and still using traditional techniques and formulas for certain diseases.