

ELECTIVE (SSC5c) REPORT (1200 words)

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

Objective 1: Describe the surgical and anaesthetic needs of the Belmopan population, common diagnoses and methods of management.

My elective was carried out at Western Regional hospital in the capital of Belize, Belmopan. Belmopan is a small city with a population of around 16500. The hospital is one of 2 public hospitals in Belmopan and serves a total population of 61000 from the region. The Western Regional hospital itself had 61 beds, split between a general ward and a maternity ward. The general ward was for treatment of adults and children, as well as pre and post operative care and critical care.

The hospital was capable of performing common elective and emergency operations. Medically, the population of Belize has a high incidence of hypertension, diabetes and obesity. Common surgical operations however included appendicectomies, open cholecystectomies, caesarean section, trauma (including gun shot and knife wounds). Due to the limitations of the hospital, with regards to staffing, diagnostic equipment and beds. Often patients would wait much longer for investigation and management. The diagnostic techniques would often be inadequate with Xray and USS used when a CT scan would be optimal. Only one Surgeon was present at all times and the techniques he used were very similar to those in the UK with the exception of laparoscopic surgery which was not performed here. The outcomes appeared good with good recovery from what I observed. Given the limited resources I was impressed by the ability of the hospital to help patients who needed acute surgical attentions. When this was not possible, Belize city hospital would receive the patients.

Objective 2: Describe the provision of anaesthetic and surgical care in acute surgical emergencies and compare this with the UK.

The acute surgical emergencies I saw were similar to what we see in the UK. What was different was that many of them could not be dealt with at this particular hospital. At Western Regional we have the ability to X-ray, USS and blood test. There was no CT scanner and no ability to do blood tests beyond the basics. This meant that patients needing CT scanning, often after trauma, were transferred to Belize city over and hour away.

The emergencies we could deal with included acute appendicitis, simple displaced fractures, bowel obstruction and emergency caesarian section along with other gynaecological emergencies. The hospital most of the time had one surgeon working at a time. When two surgical emergencies arrive simultaneously one must wait or be transferred. This certainly is not ideal and something that rarely happens in the UK. The situation was the same with regards to anaesthetics.

The equipment both surgical and anaesthetic was similar to the UK, and anaesthetic techniques were very similar with similar monitoring. Laparoscopic surgery was not performed and appendicectomies were performed as open operations which increased the risk of infection. Overall, the hospital seemed to deal well with most simple surgical emergencies and it was only the major trauma such as gun shot wounds that were transferred to Belize City. The speed of investigation and management was shy of what we expect in the UK however it was impressive given the equipment available in the hospital

Objective 3: Discuss the prophylactic measures taken to prevent surgical complications in Belize.

Pre-operative care was carried out on the general ward. With regards to infection, prior to the majority of surgeries, prophylactic anti-biotics were given and the patient was filled with fluids before the operation. When the patient was on the table, aseptic technique was used, with the area being cleaned with betadine solution as in the UK. Despite the best efforts to maintain a sterile field, I found the techniques in Belize to be less effective than in the UK, with the sterile field being broken from time to time. Wounds were dressed and dressings changed regularly with patients in hospital, however I believe the follow up not to be as thorough as in the UK. Ted stockings were not used pre or post operatively however LMWH was sometimes given prior to surgery.

Given the very limited resources of the hospital, it was very clear that every effort was being made to prevent post operative complications. However sometimes the lack of resources, both equipment and staff made it very difficult to optimise care to the level we are used to seeing within the NHS.

Objective 4: Improve my ability to treat patients in conditions outside of the UK where there may be additional challenges such as a language barrier.

Belize was the perfect country for me to help achieve this objective. Belize is a predominantly English speaking country. However it is quite mixed in its culture and population. Belize has Creole, English, Spanish and various Maya language speakers. Depending on the part of the country you visit, there is a predominance of one of the languages. My supervisor spoke spanish and therefore this was a fantastic opportunity to improve my ability to communicate in Spanish both generally, and with regards to medicine, attempting to take histories partly in spanish at times, with supervision from my supervisor.

The patients in Belize were very friendly, and very keen to engage with me, this made the whole elective very enjoyable. It made it very easy for me to attempt my communication in spanish knowing that the patients were more than willing to help me by teaching me the correct way to say certain words and fill in the gaps in my vocabulary. Overall the Elective gave me huge motivation to return to the UK and continue studying Spanish until I can return a fluent speaker.