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

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

## **Background and Healthcare in Belize**

Belize is a country on the eastern coast of Central America. It is bordered north by Mexico, on the south by Guatemala and on the east by the Caribbean Sea. It is home to a wide variety of wildlife and ecosystems ranging from the flat coastal plains in the north to jungle and mountainous regions in the south of the country. Belize is also home to the second arrest barrier reef on the planet.

Belize is a multicultural society and the population is made up for a number of ethnic groups including Maya, Creole and many others. This can make providing healthcare difficult as each group has its own culture and approach to healthcare. Another difficulty in providing healthcare in Belize is that is has the lowest population density in Central America, making it difficult to reach much of the population who reside in rural areas.

The healthcare system in Belize is provided by both public and private services. The public health provisions were reformed in 2000 which resulted in the division of the nations healthcare into four regions; north, south, central and west. Each region provides primary and secondary healthcare via health centers and hospitals. The only region that has tertiary care is the central region which includes Belize city. The western region that I spent my elective time has two public hospitals, one private hospital and 5 health centers that serve a local population of roughly 61,000 people.

The Western Regional Hospital has two wards, a general ward and maternity ward. This. Maternal services are particularly good at the hospital providing care from the antenatal period, care of the newborn and post party care. The hospital also provides care for gynecological patients including those requiring gynecological surges and Caesarian sections.

1. Summarise the similarities and differences in anaesthetic requirements amongst patients from Belize and the United Kingdom.

The western regional hospital in Belize had a number of differences with regard to how anaesthetic care is carried out. There are limited operating theatres in the hospital and the majority of procedures that were carried out were emergency obstetric procedures such as Caesarian sections that were due to deteriorating foetal condition in conditions such as pre-eclampsia. In contrast the United Kingdom where anaesthetic induction is performed largely in an anaesthetic room separate to the operating theatre, in Western Regional Hospital the patient is wheeled into the operating room, still conscious, and put on the operating table before being anesthetized.

It was difficult to compare the anaesthetic requirements between patients in Belize and the UK because of the nature of the procedures I saw whilst at the hospital. As the majority of procedures were obstetric, this was also the main part of anaesthesia that I experienced whilst on my elective. As I have only had a little exposure to obstetric anaesthesia in the UK it made it difficult to compare the practice between the two countries. However, this did provide me with much more insight into a field of anesthesia that I had previously not experienced.

2. Outline the provision of perioperative care and anaesthesia in Belize and discuss how this differs in the United Kingdom.

The provision of anaesthetic care varied greatly in Belize compared to what I have experienced in the U.K. As the hospital is comparatively small and only has two operating theatres there was only one trained anaesthetist working at any one time. They were accompanied by one anaesthetic nurse who undertakes the majority of work that might otherwise be performed by an anaesthetic trainee in the U.K. Whilst the number of operating theatres and anaesthetic staff is very low, this is to be expected as there is very rarely going to be demands for more anaesthetic staff at one time. In terms of equipment I noticed that the anaesthetic department at Western Regional hospital had electrocardiography and capo graph you that are required for more basic anaesthesia. Due to the lack of more complex equipment, cases that are more complicated from an anaesthetic or surgical point of view are referred onto the better equipped tertiary centre in Belize City.

It is difficult to compare the provision of perioperative care and anaesthesia in the western regional hospital to the hospitals I have been training in London as they serve a much smaller population and therefore can be expected to receive less funding and be less well equipped. It would not make economic sense to fill a hospital with advanced equipment that is expensive to purchase and maintain if it is accessible within an hour drive already and would rarely be utilised. The differences I did notice however were with the

3. Gain insight into healthcare in a different social and cultural environment.

Although Belize is a primarily English speaking country, there are a couple of other languages spoken by some of the population. This was one of my main concerns when applying for the elective but I found that on arrival that most of the staff spoke fluent English. In the few times that I was unable to communicate with the patient in English I was able to use my very basic Spanish and assistance from the incredibly helpful staff, to communicate effectively.

My time at Western Regional Hospital allowed me to experience what working in a healthcare system that does not receive as much funding as the National Health Service may be like. Stepping inside the warm corridors of the hospital in Belmopan seemed a million miles away from the climate controlled floors of the Royal London. The wards were hot and stuffy and although seemed to be clean, the financial strains of the place could be seen. The operating theatres seemed old and in need of refurbishment along with some of the equipment there. The staff working in the hospital however do cope very well and provide the best level of care that they are able to with limited finances and equipment.

4. Develop my anaesthetic skills, particularly in an environment where resources may be scarce and techniques different.

As the staffing levels in the anaesthetic department were low, there were ample opportunities for me to practice practical procedures such as siting cannulae, taking arterial blood gases and phlebotomy. This allowed me to increase my competence and competence in performing these procedures as well as practicing communication skills with patients using the little Spanish that I can speak. This experience will undoubtedly serve me well as I look to starting my foundation training in the weeks to come.