ELECTIVE (SSC5b) REPORT (1200 words)

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

1. What are the prevelent medical and surgical conditions in Belize compared to England

The prevelent medical conditions in Belize compared to England are those found in tropical climates, most of which are transmitted via mosquito. In the Western Regional Hospital we had teaching on following conditions: Malaria, Yellow Fever, Dengue Fever, Zika virus and Chikungunya. These five conditions were not particularly common but they were the main conditions the doctors at the hospital thought it was important for us to know about as we probably hadn't seen them before. They are all endemic to the area.

Zika virus is spread via mosquitos that originated from the Zika forest in Uganda. It is harmless to the normal person but can cause severe birth defects to fetuses in utero. Zika is a hot topic at the moment and it seemed many of the pregnant woman that came into the hopital were worried about it. However, Western Regional hospital had only ever seen one case of Zika virus in the third trimester, there were no abnormalities to baby or mum.

Belize it's self is a very low risk area for Yellow fever. If you are entering the country from yellow fever areas you have to have a vaccination certificate. Due to the high risk areas around Belize, there are sometimes cases in the hospital so it was important for us ti be aware of, although we didn't encounter it.

Chikungunya is a condition transmitted again by mosquito and presents with vague symptoms. Some of these symptoms include fever, joint pain, muscle ache, headaches, rash which could all equate to a myriad of conditions. Morbidity is low in these patients but at the extremes of age and in the immunocompromised the condition can be fatal. On wardround we saw one particular patient with these symptoms (minus the rash). Serology was done for this patient that came back negative. He was given supportive treatment for a common cold and discharged. Although this patient was clear, in these populations it's important to keep as a differential diagnosis.

Although we didn't see any patients with Dengue Fever, we were presented with a number of cases. Dengue had similar symptoms to that of Chikungunya but almost always has a rash covering large areas of the body. Symptoms are usually more severe with a sudden onset. The condition can be fatal and turn into a haemorrhagic fever. There was a large government inititive in schools and public areas to inform the local communities on how to avoid mosquito bites. These included repellents, times of day to avoid going outside or to wear long clothing and nets around the bed at night.

2 & 3. What are the medical and surgical provisions in Belize and how do they differ from the UK? What are the differences and difficulties between a fully government funded UK hospital compared to a Belize one?

In Belize there are primary and secondary clinics. The primary clinicas are the equivolent of General Practice in the UK, however, the doctors there are specialised in different medical and surgical specialities like a hospital. Therefore, you have to pick the specilaity you would like to see. If you have picked the wrong one they will send you away and you have to wait to go to another. There is also public and private health care. Primary clinics have waiting lists for months and months in the public

sector. Often it is impossible to be seen. Patients who have medical insurance go to private primary clinics to be treated.

The hospital I worked in was a secondary care hospital and was publically funded. It was one of a 4 regional major hospitals. There was one in the North, South, East and West of Belize. As it covered a large area of the country there was a high demand. Therefore it was very important to communicate efficient with the primary centers across the country. The hospital only had 2 ambulances and often the primary centers would need to borrow them. For example, a pregnant lady had been taken to primary clinic A 5 hours away with eclampsia. The ambulance was at another clinic B 2 hours from them. The patient needed regular infusions until delivery. So, the Obstectrics department had to communicate with both primary clinics to start one infusion at A, send the ambulance to A from B and back to B for more treatment then onto the Secondary clinic where they were to deliver the baby. This is an example where provisions are low and how a quarter of the country has to make the best with what they have. Comparing this to The Royal Londonn Hospital, the major trauma hospital in the east of london alone has one air ambulance and a multitude of ambulances.

Another example of a developing country with low resource is when the month before we arrived, the Southern Regional hospital Obstiatrician was taken ill. There was only one other Obstiatrician consultant left at the hospital. Therefore, many of the patients were directed to the West as the next closest hospital. This put huge strains on the hospital. We were told people were sleeping in the waiting rooms and on trollys in the corridors. Although something similar may happen in the UK if there was a bed shortage, there are many publically funded hospitals around the country that could share the pressure. This is compared to Belize where there are only 4 in the country.

The main thing that I found shocking was the lack of imagery. For example, we had a patient with suspected lung cancer. He was advised he needed an MRI scan for staging and surgery. MRI scans were not publically funded in the Western regional hospital. Fortunately, this patient could afford the scan but when I quizzed the doctor on what would happen if he couldn't afford it she just said 'they have to find the money or they can't get the right treatment'. This was very upsetting to hear and made me extremely greatful for the NHS.

4. To gain experience in clinical examinations when resources are low and/or there are language barriers

With regards to this learning objective, my main issue was the language barrier. Instead of trying to over come this I tended to only speak to the patients who spoke english or go with a fellow student who could translate. Luckily I had been taught how to work with translators in my medical degree although sometimes the fellow student hadn't. This made it very difficult to take a history and I felt things often got lost in translation. This was a good learning curve for me and realised the importance of using a professional translator at home rather than a friend/relative.