ELECTIVE (SSC5c) REPORT (1200 words)

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

1. What is the prevalence of major trauma in Belize? How does this differ from that in the UK, and how does the contrast in funding and provisions impact on mortality following trauma?

Trauma is responsible for a large burden on the Belizean health system, with road traffic accidents reported to be the 5th leading cause of death. In contrast, road traffic accidents are ranked 18th in the UK, with non-traumatic causes being more common. Other sources of major trauma in Belize include gunshot and stabbing wounds, but these are less frequently seen than road traffic accidents. This is similar to the pattern seen in the UK, but stabbings are more frequently seen than gunshot wounds in the UK, especially in areas such as East London.

The health system in Belize is a mixture of public and private health care, but the majority of Belizeans are unable to afford private health care. However, as the management of major trauma is usually an emergency, the necessary treatment is usually available to patients if they are able to reach the hospital in time. One aspect of the management of major trauma in Belize I found surprising was that the Western Regional Hospital in Belmopan (the capital city of Belize) was not equipped to deal with severe trauma such as that seen in an RTA. Instead, patients are transferred to one of the larger hospitals in Belize City. In a way, this is similar to the model seen in London, in which major trauma is diverted to trauma centres such as the Royal London Hospital. However unlike Belize, the Helicopter Emergency Medical Service (HEMS) allows patients to be transferred to the hospital in a timely fashion. As the hospitals in Belize City are located one hour away in an ambulance, the delay in receiving life saving treatment is likely to have a significant effect on mortality.

2. Describe the management of an acute abdomen in Belize. How does this differ from the UK in terms of common aetiologies, diagnostic tools and methods of treatment?

During my time at the Western Regional Hospital, the most common cause for an acute abdomen that I observed was acute appendicitis. Although I observed other causes, such as pancreatitis and cholecystitis, appendicitis was more common, and I was able to observe a number of open appendectomies. Although the steps in the procedure were the same as those that I had learnt about and seen, it was interesting to see the surgeons using older tools and equipment than their counterparts in the UK. Another cause of an acute abdomen is tubal rupture secondary to an ectopic pregnancy. However, as I spent very little time with the gynaecology team, I am unsure of how common this is in Belize.

In terms of diagnostic tools, a number of blood tests are available at the in-hospital laboratory, including full blood count, clotting screen, clinical biochemistry, culture and virology. However, the imaging available to the clinicians was limited to a non-portable x-ray machine. Therefore, the mainstay of diagnosis was a thorough history and examination along with clinical experience.

Despite the clear disparity in funding, and therefore equipment available compared to UK hospitals, the management of the acute abdomen is much the same as it is in the UK. This is unsurprising, as the

doctors and surgeons in Belize are trained in a similar fashion to UK counterparts, with many originating from Cuba and other neighbouring countries.

3. Belize has the highest prevalence of HIV/AIDS in Central America. Describe the impact of HIV/AIDS on the healthcare system, and how the Ministry of Health has attempted to reduce this impact through healthcare schemes and patient education.

Although I was aware that the Ministry of Health had been attempting to reduce the impact of HIV in Belize, I was immediately struck by the effort that the government had to gone to in order to increase awareness of the disease. On arrival in Belmopan, I immediately saw a number of beautifully hand-painted murals and other banners describing the need to practice safe sex, and the necessity to have an HIV test in order to start life saving treatment. As the major cause of HIV is through unprotected sexual intercourse, efforts have been made to educate the population on the correct use of condoms, despite the fact that Catholicism remains the most followed religion in the country. Another method of patient education is achieved through the "Together We Can" program, a peer education program run by the Belize Red Cross, which targets those at most risk of contracting HIV, such as high school students who may not be aware of safe sex practices.

Interestingly, the Ministry of Health in Belize has a joint programme in place to tackle HIV/AIDS, tuberculosis and other sexually transmitted infections. As patients with HIV/AIDS are at much higher risk of developing tuberculosis, this would appear to be a shrewd strategy. Having spoken to a number of the doctors at the hospital, I learnt that there are a number of HIV regional testing days in which a group of healthcare workers set up a temporary outdoor station at which members of the public are able to take a blood test for free in order to check their HIV status.

Encouragingly, the efforts made by the Ministry of Health have seen a reduction in the incidence of HIV and the number of new infections per year, both of which fell sharply between 1999 and 2002, and have continued to steadily decline.

4. How has this elective helped me to improve my clinical skills and management of patients? Was it necessary to adapt my skills in order to perform medicine in a new country?

During the elective, I feel that I had opportunity to practice my clinical skills, and occasionally, I was able to discuss management plans with the doctors at the hospital. However, being unfamiliar with the protocols and the formulary used in Belize made it difficult to be specific with management plans. In terms of examining patients, I found that the busy outpatient clinics were a valuable source of patients willing to be examined. Although the clinic rooms appeared to be less modern than those in the UK, they were of a similar set up, including a desk, examination couch and the equipment needed to examine patients.

Despite the fact that Belize is an English speaking country, I found that many of the patients spoke Kriol or Spanish as their main language, and only spoke broken English. This made communicating with some of the patients difficult, especially when taking histories and instructing the patients during examinations. When seeing patients alone, if I wanted to ask questions or give instructions to patients, I often had to gesture or act out actions. During my time at the hospital, I was able to learn a

number of rudimentary Spanish phrases that I used during history taking. However, I often found it difficult to understand the responses I received, and so found these phrases to be of limited use. With hindsight, I now realise that it was naïve to underestimate the number of patients that would speak Spanish, and so I feel that I would have benefitted from some lessons in Spanish before leaving for my elective.

Having completed the elective, I now feel more aware of how I would need to adapt my skills if I chose to perform medicine in a new country. In developing countries such as Belize, it is necessary to adapt to work with the resources available, and the best source of advice on how to do this is clearly from doctors who have experience in practicing medicine in that environment. However, I feel that the most important adaptation that is needed is to ensure good communication with patients. Having underestimated the importance of learning the local languages, I can now appreciate how vital this is.