ELECTIVE (SSC5c) REPORT (1200 words)

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

I completed my elective in the Accident and Emergency department in Sabah, Borneo. This report will consider each of my learning objectives in turn.

1. What are some of the common admissions seen in A&E in Borneo, and how do these differ to the UK?

Throughout our placement, the most common admissions we saw to the A&E department were trauma and infectious diseases. The trauma was most commonly construction accidents and road traffic accidents, particularly motorcycle accidents. On one day we saw an entire family of four admitted to A&E who were all on one motorcycle with no helmets. The infectious diseases we saw were mainly TB and dengue, with on average one presentation per day. Patients commonly presented late.

These presentations of trauma and infectious disease are also commonly seen in the UK, however in the case of ID patients here are usually seen at a much earlier stage of their illness. Further common cases in the UK that were seen much less rarely in QEII include cardiovascular disease, falls in the elderly, and cases related to alcohol over-consumption.

2. How is the healthcare system structured in Borneo, and how does this compare to the NHS? How is the A&E department organised in Borneo and how does this differ to the UK?

The structure of the health system in Borneo consists of two healthcare systems running parallel to each other. The Government Hospitals provide free healthcare to all Malaysian citizens, on payment of RM1 at admission (approximately 20p). This payment covers the costs of all hospital care, including assessment, investigations, and treatment. The only exception to this is in the case of a surgical procedure, in which any equipment that is "left inside" the patient is paid for, for example a hip screw. The second, parallel healthcare system is in the form of Private Hospitals, which provide healthcare to whoever can afford it. All services, including assessment, investigations and treatment, are paid directly to the hospital by the patient. These hospitals tended to have more resources.

This healthcare system can be almost directly compared to the combination of NHS and private hospitals in the UK. However, one area that differed between the NHS and the Government Hospitals was in regards to the treatment of non-Malaysian citizens. These individuals are not entitled to the free Government healthcare and must pay back the entire costs of their hospital stay. The only exception to this rule is in the case of infectious and communicable diseases such as TB, for which treatment is free of charge. The aim of this system is to encourage patients with infectious diseases to seek treatment early and ultimately reduce the spread of such diseases. This can be compared to the NHS, in which treatment is provided free of charge in the case of an emergency, regardless of the nature of the emergency.

With regards to the structure and organisation of the A&E department, there were 12 beds in total. All patients arrived by ambulance, and were triaged outdoors by the paramedics. Patients were sent to either the "red" (resus), "yellow" (majors) or "green"(minors) zones, which equated to 'to be seen' times of immediately, within 30 minutes, and within 1 hour respectively. The overall target was for all patients to be seen and discharged from A&E to home or an inpatient ward within 6 hours. As previously mentioned, the triage was run by paramedics who would conduct a full initial assessment of the patient before they were seen by any doctors. The role of the paramedic was one of the most striking differences between the A&E in Borneo and in the UK; they are fully integrated in the A&E department and work as medical assistants to assist with the primary survey and procedures including ABG, intubation, bloods and cannulas.

Another difference I observed between the structure and organisation of the A&E is that it was often used as an ITU overflow when ITU was full. On most of the days we were there, there was at least one intubated and ventilated patient, often on maximal therapy, who should have been nursed on ITU but was instead kept on A&E due to lack of resources. This meant that A&E medical staff were also trained in ITU, which is different to the UK where whilst there is a lot of overlap, they are seen as two distinct specialities.

One observation I made with regards to the structure of the A&E department was the very clear hierarchy system that existed between healthcare professionals. Matron was very clearly in charge and commanded respect at all times from all staff. The junior doctors rarely spoke up and were usually ignored by the senior staff. This seemed to be a system that worked and everyone was comfortable with, but I felt that I would struggle to work in such an environment if it existed in the UK. I felt that it created an atmosphere where individuals would be afraid to highlight any concerns they may have, and I wondered what affect this may ultimately have on patient care.

Perhaps the most striking difference I observed between the healthcare systems was the extent to which patient care is resource-driven. Sabah is the poorest state of Malaysia and lacks many of the investigations and treatments that are routinely required. For example, the CT scanner was only available Monday-Friday between 9 and 5, so any patient who needed a CT scan outside of these times simply was unable to have one. The MRI machine was located in a different hospital, so patients would only be able to access this if transport and staff were both available. The doctors followed NICE guidelines, but this was also restricted to what resources were available. For example, I saw one patient who required thrombolysis following a stroke, but there was no alteplase available and there were no suitably trained doctors on that shift. This is very different to the UK, as I have never been in a situation where I have witnessed doctors wanting to provide a particular treatment but being unable to simply because the necessary investigations and treatments are unavailable. It made me appreciate training and working in an environment that is entirely need-driven rather than resource-driven.

3. What infectious diseases are commonly seen in Borneo? How are these managed? What public health interventions have you seen in relation to these diseases?

As previously discussed, the most common infectious diseases that I observed were TB and dengue fever. Other conditions included malaria and leptospirosis. These diseases are all part of the routine screen for any patient who presents to a healthcare professional with fever and vague constitutional

symptoms. Unfortunately I observed that many patients with these diseases presented at a life-threateningly late stage, for example with disseminated infection, pneumothorax, or severe haemorrhagic fever. The management of these conditions was the same as I have observed in the UK.

One difference I observed with infectious disease was the lack of isolation available to infected patients. Due to a lack of space and beds in the A&E department, infected patients were not isolated but were kept on the main ward and required to wear face masks. The staff were also expected to wear masks, however this rarely happened due to the high temperatures and the difficulty this created with regards to communicating with other staff and patients. We learnt that in the previous month, one of the junior doctors on the ward had died after contracting TB from one of his patients; making it worryingly clear that these measures of infection control were not adequate. The surrounding patients on the ward were left fully exposed, potentially putting an already unwell patient at risk of further infection.

With regards to public health, I found it difficult to obtain information on available resources. Most of the patients who presented with late-stage infection were non-Malaysian citizens, and we were advised that these patients present late as they avoid seeking healthcare due to a fear of being unable to afford treatment costs. It appeared that there was a lack of understanding amongst the general public of the availability of free healthcare in the case of infectious disease, suggesting that this may be a a possible target for future public health interventions.

One public health intervention I did observe was the number of 'dengue fever' posters around the hospital and in public places such as hotel foyers and airports. These posters educated individuals on the mechanism of transmission of the disease, its symptoms, how to protect yourself, and when to seek medical advice. Whilst these posters were very 'word heavy' and not suitable for individuals who are illiterate, they provided clear and useful information to those who could access them. I was not able to find any information regarding the impact that these posters had on the presentations of dengue fever.

4. At the end of this placement, how have your clinical skills improved? How has this experience affected your interests in following a career in acute medicine?

Unfortunately throughout this placement I was in an 'observation only' role and was unable to practice any clinical examinations or practical procedures. I found this frustrating as there were many opportunities where I would have liked to use my clinical skills as I felt they were adequate for the situation. Despite this, I thoroughly enjoyed the placement and it has served only to confirm that I find acute medicine highly interesting and exciting and would love the opportunity to pursue it as a career.