ELECTIVE (SSC5c) REPORT (1200 words)

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

What are the prevalent cardiovascular conditions in Malaysia? How do these compare with the UK?

The life expectancy for Malaysians is 71.7 years for men and 76.4 for women. The leading cause of death is coronary heart disease (22.18%), followed by stroke (11.67%), influenza and pneumonia (9.20%), and road traffic accidents (7.85%). Compared to leading causes of death in the UK, cardiovascular related mortality is worse in Malaysia. The biggest differences are the rates of death from road traffic accidents which are much worse in Malaysia, and mortality from lung cancers which is higher in the UK.

In Malaysia, the prevalence of hypertension is as high as in developed countries, with an estimated prevalence of 6.2 million people over 18 years of age in 2011, accounting for 32.7% of the population (National Health and Morbidity Survey IV (2011)). Above the age of 30, this rises to 43.5%. These rates are comparatively high for these age ranges, probably accounting for the younger presentation of cardiovascular disease seen in Malaysia. The majority of patients coming to the Heart Centre in Kota Samarahan were age 30-40. Rheumatic fever is much more commonly seen in Malaysia than the UK as its prevalence is heavily influenced by socio-economic status. It accounts for a significant amount of chronic structural heart disease and valve disease in Malaysia, whereas it is very rarely seen in the UK with rates less than 1 in 100,000 population in developed countries. Another important factor is the high rate of diabetes in Malaysia, with 1.85 million cases and prevalence of 11.6%, expected to rise to 3.24 million (13.8%) by 2030. Again, there is a young age of onset with a long disease relative to the duration seen in Western countries, putting Asian patients at high risk for cardiovascular and renal complications.

How are cardiac care services organised and delivered in Malaysia? How does this differ to the UK?

The healthcare system in Malaysia is somewhat similar to the UK in that it is made up of a state sector and private sector. The public healthcare system is implemented in government run hospitals, where patients have to pay a nominal fee to see specialists which is the equivalent of about £2-3. If they can afford to, patients also pay for components in operations they receive, such as valve replacements (costing approx. 7000 ringgit), although arrangements are made to provide for patients of poorer socio-economic backgrounds. Care can be free if the patient or their spouse or children have worked as public servants. Private hospitals are far more expensive, but provide better facilities and more efficient access to investigations and procedures. At the end of their stay in private hospitals, patients are given a bill which is itemised to include everything used during their care, many of which could be taken for granted in the UK, such as swabs, gloves and aprons. Doctors' fees alone for seeing a patient on a ward round can be around 150 ringgit, meaning private hospitals are generally used exclusively by the very wealthy or those with adequate health insurance.

Sarawak General Hospital in Kuching is the largest hospital in the state of Sarawak in Malaysia and serves as the main tertiary and referral hospital in East Malaysia on the island of Borneo. Cardiac services are provided by the Heart Centre in Kota Samarahan, which is about 25km away from SGH. The Heart Centre opened in 2011, and provides for patients from the whole state of Sarawak, as well

as patients who visit from Indonesia for treatment. There are a number of private hospitals in Kuching including Borneo Medical Centre, KPJ Specialist Hospital and Timberland Medical Centre.

How does local diet and lifestyle affect prevalence of heart disease?

Last year, Malaysia was reported to be the most obese Asian country, with 49% of women and 44% of men found to be obese. The rate of obesity in Malaysia was 45.3%, followed by South Korea (33.2%), Pakistan (30.7%) and China (28.3%). The reason for the severity of this problem is most likely due to the fact that much of the food in Malaysia is fried or contains a high oil content. The food commonly available in Malaysia includes Indian, Malaysian and Chinese cuisine. National dishes such as nasi lemak and laksa are cooked with coconut milk, which contains a large amount of saturated fat. Chinese and Malay food often contains a significant amount of salt, for instance where soy sauce is used. There doesn't seem to be very much emphasis on primary prevention and lifestyle awareness in Malaysia, where this is something with room for improvement. As previously mentioned, the rates of cardiovascular disease and diabetes are high, with diet and sedentary lifestyles being a major cause for this.

To be able to adapt to a different environment and communicate with patients where language and cultural differences may be a barrier.

The population in Sarawak is made up of multiple Dayak tribes native to Borneo, primarily Iban (~29%), including Bidayuh, Melanau, Orang Ulu and others, as well as Chinese and Malay people. Therefore, it is a particularly multilingual and multicultural area. Each of the Dayak tribes have their own languages, which, while related to Malay, can be very different. There are also multiple dialects of Chinese commonly used in Sarawak including Hokkien and Hakka as well as Mandarin and Cantonese. This means that local doctors often need some help translating even if they speak multiple languages themselves. There are usually plenty of staff on hand to help, so this is generally not too much of a problem. It was quite a challenge for me to keep up with everything that was going on, as most consultations with patients took place in languages other than English. I found that body language was quite important for my own interactions with patients, as meanings can be conveyed without words in some cases, especially with clinical examinations.

In terms of cultural differences, Kuching was fairly westernised so there wasn't much to be concerned about. The majority of the population is Christian, followed by Islam. Since this is quite similar to the demographic in the UK, this was not an issue. The environments were very different at each hospital I spent time in. SGH was very busy with rapid patient turnover in clinics and very crowded wards. The private hospitals were much more spacious and modern, providing a more comfortable environment but there was less opportunity to get involved. The biggest culturally different experience was visiting a rural village in Simunjan. The trip was organised by a Sai Baba group, which is a religious following similar to Hinduism. We stayed in an Iban longhouse overnight, hosted by the leader of the village. It was an unforgettable experience seeing how they lived, farming rice, pepper and oil palm trees, and relying on generators and water filters for power and water. They even had a collection of skulls from slain enemies of the village, demonstrating how old the community was. Running a clinic and dispensing medications in this environment was a challenging

and interesting experience, from which I hope to have improved my abilities to adapt to new situations while maintaining a professional demeanour in healthcare provision.