## Medical Elective in Kota Kinabalu, Malaysia

**Objective 1: Describe the pattern of disease/illness of interest in the population with which you will be working and discuss this in the context of global health:** Compare and contrast the common presentation of diseases to general medical wards in Malaysia to that of the UK.

**Objective 2: Describe the pattern of health provision in relation to the country which you will be working and contrast this with other countries, or with the UK:** Describe the framework for healthcare services in Malaysia and how accessible these services are to members of the local community, including the healthcare opportunities for those with low-income background.

**Objective 3: Health related objective:** Describe the tropical diseases which commonly present in Malaysia and what provisions have been made by the hospital to deal with this and include the measures taken to avoid occupational hazards.

**Objective 4: Personal/professional development goals.:** Explain how the techniques learnt as a medical student in the UK would/would not prepare you to become a confident FY1 in Malaysia given the difference in disease pattern.

My elective posting involved being attached to Queen Elizabeth I hospital in Kota Kinabalu, Malaysia. The decision to complete my elective here was to try to understand the common presentation of patients in general medical wards and to understand the framework of the Malaysian healthcare system and to compare it with the NHS in the UK. Malaysia has a largely multicultural society with half of the population being Malays, a quarter Chinese. The population of Malaysia is approximately 32 million — who enjoy a well-developed healthcare system, good sanitation and clean water. The life expectancy of the population in Malaysia is around 74 years of age — this highlights how their healthcare system is comparable to most Western countries. In Kota Kinabalu, healthcare staff are required to speak at least English and Malay — with a lot of doctors knowing an additional language such as Hindi, Mandarin, Cantonese or Tamil.

In certain areas of the UK, there are patterns of disease prevalence to other areas depending on the demographic and the affluence of the population. During my time in Malaysia, we noticed that there are similarly a few conditions, which tend to occur more often, namely diabetes, tuberculosis and beta thalassaemia major. Not only do healthcare professionals in Malaysia treat these common chronic conditions on a daily basis, they also face challenges of treating tropical diseases such as malaria, leptospirosis and dengue fever. Dengue fever has been increasing in incidence with several warnings being issued to promote health awareness due to a 5-fold increase in cases from early March 20<sup>-</sup>15.

Having studied medicine in Whitechapel, students gained a good amount of knowledge on how tuberculosis is managed. With the majority of the population in Whitechapel having south Asian descent, incidence of diabetes is high placing a large burden on the NHS. Similarly, approximately 50% of Malaysians are considered overweight, which increases the number of diagnosed type 2 diabetics. The general presentation of symptoms is largely comparable to the UK and includes fevers, coughs, colds, muscle aches and pains and respiratory tract infections.

The Malaysian healthcare system is funded by taxes and is run by the government; providing universal services and a fast-growing private sector, similar to the UK. Having spoken to some of the doctors working in the Queen Elizabeth I hospital, the Malaysians are trying to implement a healthcare system, which has a similar framework to the NHS. All public sector healthcare services are administered and closely regulated by the Ministry of Health. This differs from the private sector, which is usually unregulated, a contrasting difference to the UK where all private sector healthcare services meet guidelines set by the Department of Health.

Private healthcare in Malaysia is usually found in urban areas with government-run public healthcare made available in less affluent areas where health provision would otherwise be basic. A significant number of the Malaysian population rely on traditional Chinese herbal medicines and other complementary alternative medicines. Unlike the UK, it is not uncommon that patients would have a presenting complaint that has been longstanding, but has only been assessed by a traditional healer a number of times. Surprisingly, the hospitals in Kota Kinabalu are very similar to the United Kingdom, in regards to the hierarchy of doctors, services offered and the general layout of the medical wards. Each

public hospital is similar to the next, when comparing the interventions made to diagnose and treat a variety of symptoms. Private hospitals on the other hand, vary vastly with some only providing basic healthcare. Such clinics tend to struggle financially as the competition for private health services is large, where only the clinics offering a wide array of services, or those with a strong reputation and patient database can survive.

Queen Elizabeth I hospital has all the facilities an NHS hospital in the UK would offer. An onsite A&E department, g floors of wards covering all general medical specialties, a large complex dedicated to the Universiti Malaysia Sabah medical student education and a visitor car park. We were fortunate enough to be given a tour of the hospital to see how different wards work, how nurses liaise with doctors and how ward rounds are completed daily. The hospital site also included the old Queen Elizabeth I hospital buildings, which varied greatly from the newer, modern and more habitable building. The old hospital buildings are no longer used, this allowed us to visit the wards and see the difference in standards between the old public healthcare set up in Malaysia to the modern hospital — and the UK. Wards housed approximately 16 patients with no space between beds posing an infection risk and poor sanitation as each ward contained a single toilet and much more basic medical interventions.

Tropical diseases are common in Kota Kinabalu, partly due to it being a coastal region with various jungles and stagnant waters. There is a much lower prevalence in urban areas such as Kuala Lumpur. The most common tropical diseases in Kota Kinabalu are malaria — and more recently — a high epidemic of dengue fever. A total of 591 dengue cases have been reported in Sabah, an increase of 204 cases from the same period in 2014. Of this number, two dengue patients have died, one in Kota Kinabalu and the other in Semporna. The operation involves 150 Health Department officials from various departments across the state, consisting of 42 control and prevention teams, six teams for entomology, four teams of health promotion operatives, and an enforcement team.

Activities will include inspection of houses in high-risk localities, demolishing Aedes breeding grounds with the community, fogging, forming of dengue action groups among school children in Kota Kinabalu and Penampang, as well as various collaborations with community leaders and government agencies in carrying out specific control activities.

Overall, I was largely surprised at the public healthcare system in Kota Kinabalu. I was surprised at how modern the system is and how the standards in the government-hospitals are very high. Although there are similarities to the UK in terms of the framework compared to the NHS, there were also stark differences. These included the approach to patient care, where all house officers are expected to be able to perform techniques such as pleuroscopy on demand, even if they are working on a neurology or gastroenterology ward. The house officers have a much greater responsibility than those in the UK especially as there are only 80 house officers working across 4 government-hospitals in Kota Kinabalu. Approximately a decade ago, there were only 8 house officers, so the healthcare framework is becoming more similar to the NHS although there is still a shortage of house officers to cope with the load of public healthcare in the region. Another striking difference was that there seemed to be no referrals to other clinics and/or hospitals with all conditions treated by the correct staff member on site.

The amount of knowledge possessed by each house officer is admirable and has taught me that as a doctor there is great responsibility and has given me the desire to push myself further to widen my skill set and remain extremely passionate about providing my patients with the best possible care in the future.