## **ELECTIVE (SSC5b) REPORT (1200 words)**

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

Describe the application of forensic medicine in both medical settings, and in the court of law in Malaysia. How is this different to the UK?

Forensic medicine is the medical specialty responsible for determining the cause of death and injury, often used as a tool to aid in criminal investigations.1 I chose to undertake this elective in the forensic medicine department at Hospital Kuala Lumpur (HKL) in order to gain some insight into the specialty; as undergraduate medical education in the UK offers limited opportunities for experience.

There are two main types of post-mortem in Malaysia, clinical and forensic. Both types are carried out by the pathologists of the forensic medicine department, and consist of the same procedure; the difference between the two lies in the reasoning behind the request. In clinical post-mortem examinations, the cause of death is not known, although not considered to be suspicious. In forensic post-mortem, the cause of death may be known, but a detailed report on the body and any injuries must be documented for medico-legal reasons.

According to the Malaysian Criminal Procedure Code (CPC), under section 329, each police officer has a duty to investigate death. If the death resulted by any unlawful act of a sudden and unnatural manner, or by violence, the police can request a post-mortem examination from the nearest government hospital. The police, if satisfied with their investigation, are responsible for certifying the cause of death. This is very different to the procedure surrounding the certification of death in the UK, where a coroner would be responsible for requesting the equivalent of both clinical and forensic post-mortems. In the UK, these would both be categorised as a coroner's post-mortem examination. There is another UK category of post-mortem requested by a hospital doctor, the purpose of which is to aid medical research and further the understanding of a cause of death or illness. This hospital post-mortem is optional and only undertaken with the permission of the next-of-kin. In Malaysia, this type of post-mortem is never undertaken for a number of reasons. Given the majority Muslim population and their cultural beliefs, such 'routine' hospital post-mortems are seen as amounting to the desecration of a body, and as such are unacceptable.2

Although the next-of-kin can refuse a clinical post-mortem, forensic post-mortems are obligatory once requested by the police, although many families are unhappy with this. According to Islamic law, the body of the deceased must be buried as soon as possible, 2 and this therefore provides a point of contention for the next-of-kin. The HKL forensics department therefore provides a very rapid turnaround, with the time from the receipt of the body to its release often being less than a day. This is much quicker than in the UK where the average time is between three and four days, reflecting the cultural differences between the two countries.

HKL forensics department is also home to the only post-mortem CT scanner in Malaysia. Not only does this enable every body to be scanned before autopsy (enabling detection of high-risk cases such as TB, where extra precautions must be taken), but also aids in pioneering new post-mortem techniques. During my elective period, I was lucky enough to be able to see post-mortem lung biopsy of a TB case, reducing the risk of transmission to staff through avoiding opening the lung, and to assist in performing post-mortem coronary angiography on cases with suspected coronary artery disease.

Describe the pattern of healthcare provision in Malaysia. How is this different to healthcare seen in wider Asia, and in the UK?

Malaysia has a two-tier system of both private and universal government funded public health services, although public health service users are required to pay a small fee for treatment and investigation (as low as RM1). This results in the provision of basic care for the general population, whilst the private sector flourishes catering for individuals and companies able to afford it.3 1Care for 1Malaysia, published by the Malaysia government in 2009, supports this current system being replaced by a national health system to encourage a 'spirit of solidarity and equity'.4

The Malaysian public healthcare system is based on the 1950s British NHS, and remains largely unchanged, with the government acknowledging that 'efforts to study the sustainability and eventual introduction of a suitable financing scheme to replace the present one began in the 1980s, to date they have not led to any substantive action'.5 This means that wards are run in a familiar way, with ward rounds, written notes and drug charts. In the forensic department, discussion between medical staff is a mix of Malay and English, with formal presentation of findings conducted solely in English. Given the relative lack of clinical urgency, the doctors were able to explain everything in English, which enabled me to engage with the process.

Explore how forensic medicine influences public health initiatives in Malaysia. Is this different to the UK?

In my experience at HKL forensics department, I was surprised to see the number of patients dying of coronary heart disease, or dying with coronary heart pathology at a relatively young age. Many patients whose deaths were found to result from heart disease were in their 40s and 50s, with one doctor telling me the youngest she had ever seen was 16 years of age. I also saw some cases of extreme obesity, with one patient weighing 178kg. Speaking to the staff at the department, this is an unfortunate reflection of the development of Malaysia as it moves from a lower-middle income to an upper-middle income country. Cheap food is plentiful, and often unhealthy, but there is little public health promotion about healthy eating in the city. The hospital canteen does have calorie content information about food and drink it serves, but this does not seem to have spread much beyond the hospital.

Smoking is relatively prevalent in Malaysia, with 22.8% of adults smoking in 2015, a reduction of 0.3% from 2011.6 This compares to 17.2% of UK adults in 2015 smoking (previously 20.1% in 2010).7 Public health interventions I observed while on placement include graphic warnings on cigarette cartons, anti-smoking information in newspapers and magazines, and on television. However, cigarettes are inexpensive and easily accessible at an average price of around RM17 (£2.97), with a similar pack costing around £10 in the UK. The government has recognised that primary and secondary prevention schemes, as well as cessation services require improvement.6

Explore the field of forensic medicine in detail. Explore communication skills, especially relating to sensitive topics and difficult conversations

Until my elective, I have had no experience of forensic medicine and few expectations as to what it would entail. I envisioned difficult conversations with grieving families, however this was not the case, as the police handle the certification of death and post-mortem orders. The relative lack of such conversations is also contributed to by the tendency towards physician-centred care that I have observed here. On the whole, patients are willing to accept the advice of their doctors without question. This means that while the family often are not happy about the decision for post-mortem, they accept that it will happen with little protest. During my time on elective, I have learned a great deal not only about forensic medicine, but I have also strengthened my core knowledge of anatomy through demonstration and dissection. I would recommend this placement to any medical student wishing to achieve the same.

## **References:**

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