

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

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

**I undertook a six week long elective in Vietnam at the Viet Duc Hospital to explore my interest in Plastic surgery as a career.**

**Viet Duc hospital was established in 1906 by the French and is currently the largest surgical centre in the country. It has now over 1500 beds with 26 clinical departments and 36 operating theatres. The establishment also serves as a teaching hospital for Hanoi Medical University and in addition to providing training for various medical specialities, it also facilitates several research projects in collaboration with the Ministry of Health.**

**Furthermore, Viet Duc has fostered partnerships with hospitals in France, Germany and Australia and works closely with UK based surgeons. These international collaborations facilitate various research and educational opportunities including lectures and practical tutorials on surgical skills and anaesthetic techniques which I was able to benefit from during my time there.**

**The maxillofacial-plastics department at Viet Duc offered me the opportunity to get an exposure into various aspects of plastic surgery including craniofacial and cleft surgery, brachial plexus palsy, peripheral nerve injury, congenital anomalies, post traumatic and post oncological reconstruction, vascular anomalies and skin disorders. My day to day activities would include going on the ward round, attending clinics and assisting in theatres.**

**I spent a lot of time assisting in theatres which gave me more confidence in practical skills such as suturing. Whilst shadowing the emergency team I was able to gain more experience in the clinical examination of acute traumatic injuries and be familiar with their surgical management. I was able to follow the pathway of care following major trauma. Witnessing how the patients were stabilized before theatre really helped me to recap my understanding of A to E assessment. I learnt a lot more about basic airway management (also in patients with oropharyngeal pathology/trauma), fluid resuscitation and pain management which will certainly be helpful for me in my foundation years and beyond.**

**Vietnam has a very high incidence of occupational related trauma and Road Traffic Accidents (RTA) owing to poor infrastructure and inadequate law enforcement. According to the World Health Organization, around 14 000 people die every year due to RTAs in Vietnam. Due to the major traffic congestion and lack of adequate parking spaces, especially in cities like Hanoi, most people use motorcycles as their mode of transport. Hence, majority of RTAs involve motorcycles. Majority of the deaths occur in individuals aged 15 to 49 who make a significant contribution to the country's economy.**

In contrast, according to the UK Department of Transport, around 2000 people in the UK die every year as a result of RTAs. Despite the Vietnamese population being higher at 92 million, the incidence of RTAs in Vietnam is significantly higher. Many Vietnamese doctors believe that this statistic may be higher than quoted as many Vietnamese people prefer their loved ones who are in a critical condition to die at home. Often such patients are artificially ventilated and are given the necessary care to be able to pass away at home.

The Vietnamese government is working to improve the poor conditions of the roads and enforcing laws regarding adherence to driving rules and usage of helmets. For instance, many parents do not provide their children with a helmet as they believe that children who wear helmets and have an accident are prone to disabling spinal injury. Apart from neurotrauma, scalp avulsion (which is rare in the UK) is another serious type of injury seen in Vietnam as a result of non adherence to helmet wearing. Due to the sheer demand, Vietnamese surgeons have perfected techniques of microsurgical scalp replantation resulting in very good outcomes.

The WHO with collaboration with the National Safety Committee of Vietnam, Ministries of Public Security, Transport, Health and Education, the Global Road Safety Partnership and the International Injury Research Unit from Johns Hopkins University are working on a project to tackle this issue. This program addresses aspects such as drink-driving and promoting the usage of helmets for child passengers. Improvement of existing infrastructure and educating the public about road safety is key towards addressing this issue from a public health perspective.

Vietnam also has a high rate of children being born with congenital deformities due to the continued effects of chemicals such as agent orange used during the Vietnam War. During my time there, I saw many patients with extensive presentations of rare conditions such as AV malformations and Neurofibromatosis type 1 (NF-1). One patient of note had extensive NF-1 on his back, buttock and left thigh which weighed 45kgs altogether. This patient was unable to lie on an MRI scanner and the doctors had successfully removed 18kgs of tumour from his back. This procedure was very complex due to the sheer size of the tumour and also due to the difficulty of distinguishing it from neural tissue. However, the patient has intact neurological function of his legs and is now being closely monitored on the ward to manage the renal impairment he has acquired due to the surgical insult.

At Viet Duc, patients with complicated deformities are managed under the collaborative care of multiple surgical specialities including Neurosurgery, ENT, Maxillofacial Surgery, Ocular Surgery and Craniofacial Surgery. During my elective, a UK based charity called Facing the World was involved in providing free surgical procedures to a number of patients with complex conditions such as Apert's syndrome. I had opportunity to witness how complex procedures are planned and undertaken with the input of a multi surgical speciality team. During these assessments, I was able to see recognize the importance of early treatment for children with deformities such as craniosynostosis and how it can impact their development. However, many affected children in Vietnam do not get the appropriate treatment due to inequality in access to healthcare.

There are both public sector hospitals like Viet Duc and private sector hospitals. Most people pay via their insurance. However the government subsidizes fees for people who cannot afford to pay. However, a lot of people in rural areas are ill informed about how to access healthcare and may not be able to afford to travel a lot of distance to come to a hospital in the city. Provincial hospitals often do not have adequate equipment for surgery and intensive care. They may also not have the doctors and surgeons with enough expertise to manage certain conditions.

I also saw many patients who had complications due to being inadequately managed in provincial hospitals. Most of the doctors in prominent hospitals like Viet Duc undergo a very tough residency program. However in the provincial hospitals, doctors can be considered fully specialised after 9 months of training after their basic medical degree. This often means that patients may not receive the right level of care. Furthermore, doctors in the public sector get very low wages. For example, surgeons get paid per procedure and not according to the duration or complexity of the procedure. This results in a lot of doctors with inadequate training providing a poor level of care in some private establishments.

To address this issue, hospitals like Viet Duc run programs to support and educate doctors in the provincial hospitals. Although Viet Duc has a lot of state of the art facilities, a lot of their equipment is old and despite that, the doctors are very resourceful and work very hard to facilitate the best care for their patients.

Overall I had a positive experience during my elective and it was very interesting to compare the provision of healthcare in a developing country to that of the UK and to understand more about the underlying social, economic and political reasons behind them.