## **ELECTIVE (SSC5a) REPORT (1200 words)**

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

## INTRODUCTION

Undertaking my elective at Apollo Hospital Ahmedabad, part of the largest for-profit private hospital network in India is a big privilege. I was under the supervision of Dr Lal Daga, who kindly took me under his wing. During the placement, I was also offered the opportunity to rotate in Paediatrics and Critical Care Departments, for broader exposure and to deepen my knowledge in these fields. I chose this hospital for its reputation locally and internationally, furthermore this placement also allowed insight into how private healthcare differs from public healthcare.

1 and 4) Evaluate the level of 'common' cardiovascular conditions seen in the adult population within developing countries such as India and discuss the level of care given to these patients; Widen my knowledge of Cardiology by speaking to an entirely different cohort of patients, learning new presentations of diseases and potentially learning much rarer conditions which may be 'commoner' in countries such as India.

The Cardiology Department at Apollo Hospitals is considered as one of the "superspecialty" departments, whereby it sees a large volume of patients presenting with cardiovascular conditions daily. My learning largely took place in the Coronary Care Unit (CCU), Catheterization Laboratories and Outpatient Clinics. During my observership, I got to encounter both common and also conditions which are rare in the UK. Notable examples include Rheumatic Fever.

The practice of cardiology is largely similar to that of the UK. Apollo Hospital is equipped with catheterisation laboratories, offering procedures including Coronary Angiography, Percutaneous Coronary Intervention (PCI), Pacemaker Insertion and more, akin to specialized Cardiac Care Centres in the UK. Notably, case volume is higher. Common conditions observed mirror that of the UK, including Hypertension, Coronary Artery Disease, Acute Coronary Syndrome, Valvular Heart Disease. Rare conditions that were observed included Rheumatic Heart Disease. Whilst prevalent in India, its incidence is reducing owing to timely antibiotic prophylaxis, however it is nearly unheard of in the UK! Other rare conditions encountered during observerships within other specialties included Congenital Oesophageal Atresia with Tracheoesophageal Fistula, Marfan's Syndrome, Stevens-Johnson Syndrome and Cerebral Myeloid Angiopathy. Patients often present at varying stages of the disease course, often leading to non-specific clinical presentations. A clinician often had to keep their questioning open and not fixate on a single diagnosis to not miss the diagnosis. This is an especially useful skill to carry forward in my

future career as while the common conditions are common, however one should not forget about the "weird and wonderful" conditions.

India is a multicultural, multilingual nation, with 16 national languages and over a thousand dialects spoken. As a foreigner, language barrier was a significant challenge during this placement. Owing to significant language barriers, interaction with patients was limited as patients spoke mainly Gujarati or Hindi, with minimal English being spoken. English was spoken among staff, whereby they kindly helped translate the gist of the interaction to me in English after. As an observer, I was encouraged to ask questions and clarify my doubts. Consultants offered ad hoc teaching regarding topics surrounding the clinical encounter. This included cardiac chamber anatomy when viewed using Transthoracic Echocardiography, Coronary vasculature from the view of coronary angiography and implantable cardiac devices. This greatly helped refine and broaden my understanding and appreciation of Cardiology as a specialty.

During my time, I was an observer to the healthcare team, mainly observing their interactions with each other and the patients. The roles of the healthcare teams in India are not as diverse as compared to the United Kingdom, whereby the healthcare team largely comprised of only doctors, nurses and pharmacists; Unlike the UK whereby allied healthcare professionals play a more prominent role in patient care. This meant doctors and nurses had the shoulder the roles that would normally be delegated to allied health practitioners, resulting in less holistic care. This experience was a firm reminder to be holistic and think from multiple angles that may factor into a patient's care. The structure of postgraduate cardiology training is similar to that of the UK, notable differences being trainees spend most of their time in the same hospital.

2 and 3) Describe how healthcare is provided in India, a developing country, and explore the patient's opinion of their healthcare received. Compare this against the healthcare system in the UK; To explore health inequality and discrepancies faced by they adult population in India, whilst comparing that to the adult population in the UK.

India houses a population of over 1.4 billion, which is now the largest in the world, in contrast to the UK's 67.6 million. India allocates 2.5 % of its Gross Domestic Product (GDP), whereas the UK allocates 12% of its GDP to healthcare. India operates a "two-tiered" healthcare system, where patients may seek secondary care from either Government-funded Civil hospitals or Private hospitals, whereby patients either pay out of pocket or have healthcare insurance coverage. Civil hospitals are noted to have extensive geographical coverage, however is underresourced and oversubscribed, hence healthcare resources are rationed to those who need it the most; Private healthcare boasts better resources and more personalized care, however can often be financially and geographically

inaccessible, as private tertiary hospitals are limited to large urban cities such as state capitals such as Ahmedabad, thus limiting access to patients from lower socioeconomic backgrounds. This was an especially large contrast to that of the United Kingdom, whereby healthcare via the National Health Service (NHS) is free at the point of use, funded by general taxation. However, it suffers from flaws such as oversubsription and "post-code lottery" effect.

Given that Apollo Hospital is a private hospital, cost is a huge factor taken into account when offering an investigation or intervention. Costs incurred onto the patient were considered as part of the decision-making process regarding the patient's care. Every interaction with a healthcare professional intervention, hospital admission, outpatient appointment had its price, its cost borne by the insurer or patient. Hence, repetition of tests such as repeat ABGs were minimised as much where safely possible. Apart from routine investigations used to diagnose suspected disease, healthcare screening packages were on offer, aiming to screen for cardiovascular, gynaeco-oncological and even checks for elderly patients! These were comprehensive, often including physical examinations, blood tests, non-invasive imaging such as echocardiography, X-Rays and even Pelvic ultrasounds! The concept of healthcare being a commodity is something entirely new to me, coming from the UK, whereby investigations and treatment were purely guided by clinical need. The concept of diagnostic stewardship was introduced to me, whereby diagnostic tests should be guided by clinical need with understanding of its performance characteristics and the ods of confirming or denying the suspected diagnosis in mind. This especially was a good learning point to be mindful of over or under-investigating patients under my care, when I start work as a Foundation Year Doctor in August.

Apart from western medicine, homeopathic medicine was an alternative source of health care to the public is prevalent in India. Ayurvedic medicine is an ancient, Indian system of medicine which emphasises on illness prevention rather than prevention. Its primary goal is to prevent disease manifestation and serves as an alternative therapy to chronic illness. However, limitations of its interaction with Western ('Allopathic') medicine include disparity between Aryuvedic treatments and pharmaceutics and lack of rigid regulation in modern society. Distrust in pharmaceutical companies also underlie healthcare seeking behaviour among the local population.

To conclude, this elective placement was insightful and enriching. The knowledge gained here will put me in good stead as I prepare to start work as a junior doctor in August.

(1135 words)