

ELECTIVE (SSC5b) REPORT (1200 words)

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

Upon arriving at St Barts hospital I had expected to be spending 6 weeks with patients who had suffered from an acute myocardial infarction and required percutaneous coronary intervention. Instead I was met with an incredibly diverse number of cardiac conditions across 5 different specialities. Of course, due to the nature of Barts hospital I was able to see several AMI's that were treated by PCI as well as being able to follow the patient through both the operation and follow up care. Following the Electrophysiology team allowed me to better understand the variety of conditions that may require a pacemaker but also the different devices used to treat different conditions. The heart failure team taught me to investigate the cause of heart failure, as heart failure itself is not a diagnosis. Although it is easy to see a patient in heart failure and to try and immediately treat the symptoms it is also just as important to try and identify the cause of the heart failure in order to treat the patient in the long term. The transcatheter aortic valve implantation team gave me a better insight into valvular disease and also allowed me to experience valvular surgery in action for the first time. Finally the cardiomyopathy team demonstrated complex cardiac patient's with multiple comorbidities that were not simply cardiac cases but required a number of teams for ideal patient care. It was clear to see that atrial fibrillation is an incredibly common problem within cardiac patient's and is often a particular problem with regards to the management of other cardiac disease where AF is associated. Optimising medications, including anticoagulation, amongst multiple cardiac comorbidities was an important part of looking after each cardiac patient.

Taking my elective at St Barts gave me an insight into working at one of the leading cardiac units in the country. It also allowed me to see a tertiary cardiac centre where PCI takes place. It was a fantastic experience to see how a patient can be brought into the hospital, assessed, into the cath lab and back onto the ward in such a rapid amount of time. The team all working together to provide optimum care for each patient at each stage of the process. Once on the ward it was clear that the hospital had better access to certain investigations in particular echocardiography and cardiac MRI. The doctors were able to order these investigations for patient's more often than any other hospital that I had previously been to. The investigations themselves would also be completed a lot quicker, usually on the same day, again something that I know other hospitals struggle with due to either a lack of equipment or an increased demand. As the hospital does not have any year one foundation doctors it may be that the jobs are completed more efficiently due to more experienced doctors carrying out the work.

For each patient that I saw admitted to the wards I attempted to assess which modifiable cardiovascular risk factors they carried. The modifiable risk factors I used included smoking, diabetes, hypertension, abdominal obesity, psychosocial factors, diet, physical activity and alcohol consumption. The world health organisation describes social determinants of health to be 'the circumstances in which people are born, grow, live, work, and age, and the systems put in place to deal with illness' (1). Therefore I attempted to assess patients place of birth, occupation and access to healthcare. There were several patients who were born in South Asia, such as India and Bangladesh, that presented to the hospital. I found that these patients were not as well educated about cardiovascular disease and when speaking to these patient's I found that they had not had access to healthcare as much as those who had been born and raised in the UK. There was a higher prevalence of both valvular disease and cardiovascular disease at a younger age in these patients.

It also seemed that the patients who had either a sedentary occupation or were unemployed made up a larger proportion of the cardiac patients. These patients also seemed to be those who consumed more alcohol and smoked cigarettes. It also seemed that these patients had a higher prevalence of diabetes and hypertension. It would therefore seem that those less educated in healthcare, with either a sedentary job or are unemployed, and less access to healthcare from an early age have a greater likelihood of developing cardiac disease at a younger age.

Throughout my elective period I was able to spend a lot of time with a large number of doctors. Each doctor allowed me to assist them and taught me throughout my shadowing experience. During this time I was able to continue improving my practical skills ready for the beginning of my Foundation job. I was also able to gain invaluable advice in how to manage my time effectively. In particular I was able to improve my skills in knowing which patient or request required more urgent attention or which jobs could be moved down the list as they were less urgent. I also was able to practice my communication skills with both patients and a large range of staff members in the hospital.

References

Edward P. Havranek, Mahasin S. Mujahid, Donald A. Barr, Irene V. Blair, Meryl S. Cohen, Salvador Cruz-Flores, George Davey-Smith, Cheryl R. Dennison-Himmelfarb, Michael S. Lauer, Debra W. Lockwood, Milagros Rosal, Clyde W. Yancy. Social Determinants of Risk and Outcomes for Cardiovascular Disease: A Scientific Statement From the American Heart Association. *Circulation*, September 1, 2015, Volume 132, Issue 9