

ELECTIVE (SSC5b) REPORT (1200 words)

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

Objective 1:

During my three-week placement at San Camillo Hospital in Rome, I observed several prevalent cardiac surgery-related diseases in the local population, reflecting broader trends seen globally. The most common conditions necessitating surgical intervention included mainly coronary artery disease (CAD) and valvular heart diseases (particularly aortic stenosis and mitral regurgitation) and operations around the ascending aorta.

Coronary artery disease was the leading cause of cardiac surgeries, primarily due to the high prevalence of risk factors such as hypertension, hyperlipidaemia, smoking, diabetes, and sedentary lifestyles. Patients often required procedures such as coronary artery bypass grafting (CABG) to restore adequate blood flow to the heart muscle. This trend mirrors global patterns, where CAD remains the foremost cause of morbidity and mortality in both developed and developing countries.

Valvular heart diseases, particularly aortic stenosis and mitral regurgitation, were also frequently encountered. Many patients presented late with advanced symptoms, necessitating urgent surgical interventions like valve replacements or repairs. The ageing population in Italy contributes to the high incidence of degenerative valvular diseases, with most patients ranging between 50-85 years-old and a significant cardiovascular past medical history. Less common were operations to the outflow tract of the heart which were usually coupled with the replacement of the aortic valve itself.

In the context of global health, these observations emphasize the universal challenge of managing cardiovascular diseases (CVDs). Despite advances in medical technology and surgical techniques, disparities in healthcare access and outcomes persist. High-income countries like Italy benefit from sophisticated healthcare systems capable of managing complex cardiac conditions. However, low- and middle-income countries face significant barriers, including limited infrastructure, insufficient trained healthcare professionals, and financial constraints.

Addressing these global health challenges requires a multifaceted approach, including enhancing preventive measures, improving healthcare infrastructure, and fostering international collaboration to share knowledge and resources. Strengthening primary care to manage risk factors and investing in healthcare education are crucial steps toward reducing the global burden of cardiac diseases and improving outcomes worldwide. My experience at San Camillo Hospital highlighted the critical role of cardiac surgery in addressing severe cardiac conditions and the ongoing need to bridge gaps in global cardiovascular care.

Objective 2:

Throughout my three-week placement at San Camillo Hospital, I significantly expanded my previously limited understanding of cardiac surgery and developed a deep appreciation for the evolving areas within this complex specialty. Although I did not have the opportunity to participate directly in AUDITs or research projects, I actively engaged in learning and familiarized myself with new concepts and emerging trends in the field.

One area that particularly fascinated me was the future of robotic surgery in cardiac procedures. While robotic surgery has become established in various medical disciplines, its application in cardiac cases is advancing rapidly. I observed several robotic surgeries, primarily focused on mitral valve replacement or repair. Witnessing these procedures highlighted the potential of robotic technology to enhance precision and outcomes in cardiac surgery.

Additionally, attending daily multidisciplinary team (MDT) meetings and handovers provided valuable insights. I assisted in presenting numerous cases, which presented a unique challenge due to the language barrier. Although I am Italian, my medical studies have been conducted in English, making it difficult to translate various medical terms, drug names, and investigation results into Italian. In hindsight, this challenge proved to be extremely beneficial for my learning and consolidation. It compelled me to reinforce and expand my medical knowledge, particularly in cardiac surgery and cardiology.

To understand the different terms and abbreviations used during these presentations, I had to look them up, which allowed me to review areas of medicine that I might not have revised. This process not only improved my understanding of cardiac surgery but also enhanced my ability to communicate complex medical information effectively in both English and Italian.

Overall, my placement at San Camillo Hospital was an enriching experience that deepened my knowledge of cardiac surgery and highlighted the importance of continuous learning and adaptability in the medical field.

Objective 3

The primary outcome of my three-week experience at San Camillo Hospital has been gaining insight into healthcare systems outside of the UK. Understanding how different countries operate and the quality of healthcare they provide is invaluable, especially given the uncertainties faced during a medical career. This knowledge broadens my options for future opportunities.

Like the UK, Italy operates predominantly with a public healthcare system that allows patients to access treatment freely, although there is a growing presence of private healthcare institutions. However, the training process in Italy differs significantly from the UK's. Medical education in Italy consists of a six-year undergraduate program followed directly by specialty training, which varies in length but does not exceed five years. Admission to specialty training is determined by a national test, with rankings dictating program placement. After completing specialty training, professionals continue to develop their careers, focusing on either academic or clinical paths.

Assessing the quality of healthcare in Italy compared to the UK is challenging, especially with my limited experience in Italy. Both systems exhibit areas of excellence and areas needing more investment, sharing common issues such as government funding for research and infrastructure. Despite my brief exposure, I noticed that UK hospitals generally appeared to be better equipped and staffed compared to those in Italy.

This experience has highlighted the value of understanding different healthcare systems, providing a broader perspective on global medical practices. It also emphasized the importance of adaptability and continuous learning in navigating a medical career across various healthcare environments.

Objective 4:

During my three-week placement at San Camillo Hospital in Rome, I gained a profound understanding of how health inequity impacts patient outcomes in cardiac surgery. Health inequity, particularly in access to healthcare, plays a significant role in determining the success and prognosis of cardiac surgical procedures.

At San Camillo Hospital, I observed that patients from higher socio-economic backgrounds generally had better access to preoperative and postoperative care. These patients were more likely to receive timely diagnoses, optimal pre-surgical evaluations, and comprehensive follow-up care, all of which contribute to improved surgical outcomes. In contrast, patients from lower socio-economic backgrounds often faced delays in diagnosis and treatment due to limited access to primary healthcare services. This delay can result in more advanced disease stages at the time of surgery, leading to increased surgical risks and poorer outcomes.

Language barriers and lack of health literacy also contributed to health inequity. Patients who were not fluent in Italian or who had limited understanding of medical information struggled to navigate the healthcare system. This often resulted in missed appointments, non-compliance with preoperative instructions, and inadequate postoperative care, all of which can negatively affect recovery and long-term outcomes. Furthermore, unlike in the UK, the scarcity of foreign staff members limits communication to Italian, with English being spoken infrequently, making it hard for foreigners to communicate.

Moreover, the presence of private healthcare institutions in Rome highlighted the disparity in healthcare access. Patients who could afford private healthcare received quicker, and sometimes more advanced, treatments. This starkly contrasted with those reliant solely on the public healthcare system, where resource limitations and longer waiting times were common.

This experience underscored the critical need for equitable healthcare access to ensure optimal outcomes for all patients undergoing cardiac surgery. It emphasized the importance of addressing socio-economic, linguistic, and financial barriers to healthcare.