## 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:*** *Prevalent Cardiovascular Conditions in Cyprus and Comparison to the UK*

The World Health Organisation (WHO) has classified cardiovascular diseases as the most frequent cause of death worldwide – estimating that it is responsible for 17.9 million deaths per year. Cardiovascular disease encompasses a range of conditions affecting the heart or blood vessels, such as coronary heart disease, angina, congenital heart disease, stroke, and hypertension, among others. Modifiable risk factors contributing to cardiovascular disease include hypertension, hypercholesterolemia, smoking, diabetes, and physical inactivity.

In Cyprus, cardiovascular disease is the leading cause of death, comprising 34% of all mortalities, with its prevalence closely tied to the high incidence of risk factors for coronary artery disease. Insufficient physical activity affects approximately 45% of adults, while hypertension and diabetes affect 23.9% and 5.7% of adults, respectively. Tobacco smoking rates are notably higher (32.9%) than the EU average (20%). Although hypercholesterolemia prevalence data is limited, estimates suggest a high prevalence, particularly among the elderly, with an estimated overall prevalence of 14% in Cyprus.

Comparatively, in the UK, cardiovascular disease accounts for 26% of all deaths in the UK, making it the second most significant cause of mortality after cancers, affecting around 7 million individuals. Hypertension is estimated to affect 30% of the population, 6.8% have diabetes and 43% are diagnosed with hyperlipidemia. Additionally, 36% do not meet physical activity recommendations and around 12.5% are smokers. However, the UK has seen a decline in cardiovascular disease mortality over recent decades due to improvements in prevention, early detection, and treatment strategies.

Additionally, inherited cardiovascular diseases (ICDs) contribute significantly to morbidity and mortality in Cyprus, including conditions like cardiomyopathies and channelopathies. Cyprus's closed society and small population diminish genetic diversity, increasing the likelihood of inheriting such diseases. ICDs have garnered attention due to their association with sudden death in young individuals and athletes. The most prevalent ICD in Cyprus is Hypertrophic Cardiomyopathy, affecting approximately 1 in 500 people. Other notable ICDs include Arrhythmogenic cardiomyopathy, dilated cardiomyopathy, and Long QT syndrome, collectively affecting an estimated 3000 individuals in Cyprus.

In conclusion, I believe the most important aspect to consider in the attempt to lower the deaths caused by cardiovascular disease is the reduction of the aforementioned risk factors. Addressing these modifiable risk factors through public health initiatives is crucial and healthcare professionals in Cyprus can look at similar initiatives in the UK for inspiration.

***Objective 2:*** *Organization and Delivery of Cardiology Services in Cyprus and Comparison to the UK*

Cardiology services are primarily provided by hospitals and specialty clinics in Cyprus, where healthcare is sourced from both public and private sources. The Ministry of Health regulates the public system, which follows EU regulations. The private sector, on the other hand, is mainly unregulated, has an abundance of private physicians, expensive medical technology, poor organization and continuity of service. A major overhaul of the health system known as the General Health System (GHS) was put into effect in 2017 and provides universal health care. Since then, a large number of hospitals and private clinics have merged with the public system to improve oversight and treatment continuity. This new system resembles the UK's NHS, where patients access healthcare through their family doctor or GP, who manages various conditions and refers patients to secondary and tertiary centers when necessary. However, the system is still developing and requires improvements to standardize the quality of care. In my experience, most of the workload still sits with the cardiologist in terms of medication regime refinement and follow-ups. Conversely, in the UK, the GP will take on these tasks and patients would be referred to a specialist much later on in their disease progression.

In addition, Cyprus has seven centers that offer Percutaneous Coronary Intervention (PCI), all situated in two major cities – Nicosia and Limassol. The remaining three major cities lack PCI centers, causing a geographic imbalance that hinders access and creates health disparities. Nevertheless, the relatively short distances between major cities mean that, with proper planning, PCI centers can be reached in a timely manner.

***Objective 3:*** *Comparison of Cyprus' GHS to the UK NHS*

Cyprus' national health service, the General Health System (GHS), was introduced in 2019 to provide universal healthcare coverage to residents. Like the UK's NHS, the GHS aims to offer a wide range of healthcare services,

including primary care, hospital care, and specialist services. The GHS is funded by employees, employers, the state and pensioners, whereas the NHS is funded through general taxation and National Insurance contributions. Primary care is provided by general practitioners (GPs) in both systems and patients are referred to specialist care or hospital if needed. The difference between the two systems is that in Cyprus both private and public hospitals provide services under GHS. Additionally, the GHS covers most medicines by they may be subject to co-payments by the patients.
Another big difference is the involvement of public health and social care in the NHS. Public health and social care are an integral part of the NHS, further supporting the health and social care of the population. While similar departments exist in the GHS, they are severely underdeveloped and underfunded compared to their UK counterparts. One example is the care packages given to geriatric patients in particular. In the NHS, before a geriatric patient is discharged from the hospital, a care package needs to be organized assessing the needs of the patient and providing appropriate help such as delivering meals or home visits by healthcare professionals to administer medication or take blood tests. In the GHS, these responsibilities fall on the family members of the patient or by hired private healthcare professionals.
Both Cyprus' GHS and the UK's NHS aim to provide comprehensive healthcare coverage to their populations. The GHS is relatively new and still evolving, while the NHS has a long history and established structure but faces challenges related to funding and resource allocation. Each system reflects its country's economic and social contexts, aiming to balance accessibility, quality, and sustainability in healthcare provision.

***Objective 4:*** *Assessing and Managing Patients in Different Language and Culture Settings*

Assessing and managing patients in a different language and culture requires sensitivity and adaptability, as well as a nuanced understanding of the cultural, linguistic and healthcare system differences. In Cyprus, the patient-doctor relationship is influenced by cultural factors such as respect for authority and the importance of family involvement in healthcare decisions. Compared to the UK, where patients may be more assertive in expressing their preferences, Cypriot patients tend to defer more to medical professionals. UK patients are generally more informed about their healthcare and conditions, making it easier to convey necessary information and are more receptive to lifestyle advice and how impactful it can be to improving their quality of life. In contrast, Cypriot patients may downplay the seriousness of their situation or avoid seeking help until their symptoms are unbearable.
What I have learned in this 6-week placement is that in order to adapt consultation techniques, one must be aware of cultural quirks and build empathy and trust with patients by respecting and accepting their cultural choices and values. In order to deliver patient-centered care, overcoming linguistic and cultural obstacles requires effective communication, empathy, and cultural competency.