

ELECTIVE (SSC5b) REPORT (1200 words)

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

1) Describe the pattern of Cardiological disease and acute medical conditions in the population of Auckland and New Zealand. How does this compare to the pattern of Cardiological disease and acute medical conditions in London and the UK.

The burden of cardiological and acute medical disease is broadly similar between both New Zealand and the UK. This is mostly attributable to the more economically developed nature of the two countries and due to the majority of both countries hailing from Caucasian descent. Both medical systems will experience ever increasing volumes of mostly lifestyle based conditions such as coronary artery disease, type 2 diabetes mellitus and hypertension.

There are two notable exceptions to the above statement. The first is in regard to treatment of acute ST elevation myocardial infarctions. In the UK, and London especially, it is extremely rare to see these events treated with anything other than primary PCI (unless there is a strong contraindication, or it is not considered to be in the patient's best interest). This is not the case in New Zealand, where the rugged terrain and wide spread nature of the population, make it extremely rare for a patient to present to hospital within the PCI window. This leads to large numbers of patients, especially in the rural areas, receiving thrombolysis initially before being transferred for definitive treatment at an angioplasty centre. This was new to me as I had never seen a STEMI treated with thrombolysis before now.

The second notable exception is in regard to rheumatic fever. In the UK I have seen 1 case of rheumatic fever in my 5 years in medical school. It was considered such a rare event that it was presented at grand round in the hospital and written up as a case report. In contrast, of the first 5 patients I saw on the ward in Auckland, 3 had rheumatic heart disease. This can be attributed to the large Maori and Pacific Islander population of New Zealand, as they live in areas with high density of population and they seem to have a genetic predisposition to the condition. This gives rise to an interesting medical practice of aggressively treating throat infections in younger Kiwis and treating with prophylactic antibiotics for many years after an infection, in an attempt to decrease the burden of rheumatic fever and subsequent heart disease.

2) Describe the pattern of health provision in New Zealand and compare and contrast this with the UK.

The health care provision in New Zealand is broadly similar to the NHS in that it is nationally funded, free at point of care and universal. Like the NHS, it also has a supernumerary private layer which is superimposed above the regular health care systems.

Where the systems differ is in the efficiency of management and access to the care. Whilst the NHS has layer upon layer of pointless and crippling bureaucracy which not only cripples efficiency but also soaks up limited financial resources, the Kiwi system is relatively smooth and efficient. There are, of course, things which would be improved but overall, access is extremely good for all and this is borne out by the fact that very few people access healthcare through the private system.

A few things which help the system in New Zealand and would be useful improvements in the UK are: a universalised computer system between hospitals, GPs and Pharmacies and, most importantly, fair

treatment of junior and senior doctors (though it should be noted that the nurses were not so happy with their treatment and were striking whilst it was there).

Junior Drs in New Zealand are paid almost double what their NHS equivalent is paid. On top of this, they work much more humane hours and are given free meals and coffee within the hospital. These measures would be broadly unsustainable in the NHS but it gives a picture of how much better staff are treated over there than back home.

3) To look at the integration of the Pacific Island communities into the health care system of New Zealand. Do they access health care adequately? What can be done to improve this? How does this compare to minority communities in the UK?

The Pacific Island and Maori communities in New Zealand have poorer integration into the healthcare systems than the people of white, European descent. I should stress that I say poorer rather than poor as they still access healthcare sufficiently in the most part but not as readily as they could or should.

From my experience, I would put this down to 3 different things.

The first is their lower health literacy. They are generally less aware of health risk and warning signs which people with higher health literacy would be. This is due to poorer standards of education within the community and, to a lesser extent, a reluctance to move away from more traditional tribal ways.

The second reason is lower socioeconomic status. This is a fairly universal concept which is seen across the world where the lower the socioeconomic status of a population, the poorer their access to healthcare despite the provision being available. An example I experienced was the Maori gentleman who worked as a labourer and as a result he didn't present with heart failure till it was very late stage as he couldn't afford to miss time working or risk being told that his condition was incompatible with his job.

The final reason is more specific to the Maori and Island cultures. In these cultures, sickness is still seen as a sign of weakness and it is seen as an undesirable quality especially in males. As a result, people are generally less willing to admit the requirement for medical intervention until they can no longer hide the condition. Furthermore, as this practice has been going on for an extended period of time, the people have developed a genuine hardiness which isn't present in many other communities.

I would say that the first two points would correspond fairly well with the migrant and lower socioeconomic groups within the UK, however, the 3rd point I have theorised is much more unique to the Maori and Island population of New Zealand compared to other ethnic groups around the world.

4) To improve my knowledge of common and interesting cardiological conditions including diagnosis and management of these patients both acutely and long term.

Also to improve my diagnostic and clinical skills when dealing with acute medical issues.

I believe I fulfilled the second part of this final learning objective quite well purely from a volume standpoint. I was given more responsibility than I have ever been given before and that contributed to a vast improvement in my clinical reasoning and skills.

I do not believe that my knowledge of cardiology or acute medicine improved all that much as the burden of disease is very similar to the UK with one notable exception, Takotsubo condition which is

otherwise known as stress induced cardiomyopathy or “Broken Heart Syndrome”. This condition mimics an anterior MI when it present and has a characteristic “squid ink pot” morphology on angiogram (an anterior wall motion abnormality). I saw a case of this and I found it fascinating! If managed well in the initial 24 hours then a patient can make a full recovery after this condition.