

ELECTIVE (SSC5c) REPORT (1200 words)

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

1. The most prevalent chronic conditions that I saw whilst on my elective were not dissimilar to those present in the UK. A large majority of patients had cardiovascular disease such as hypertension and there was also a high incidence of diabetes. These chronic conditions account for up to 40% of deaths in Brazil. This does not differ dramatically from the UK, however these conditions may be better controlled in the UK due to a better primary care system that the rural patients in Brazil lack. I noticed during my time in Brazil that their diet consisted of high levels of salt and they ate a lot of red meat, this may have contributed to the high prevalence of hypertension.

The dermatological conditions I saw in the rural communities were commonly occupation related, with the majority of patients farming tobacco and maize for a living. The main condition I encountered was irritant dermatitis but we also saw several fungal infections acquired from the soil. There were also conditions that I'd seen in the UK, such as psoriasis, however in the majority of cases the lesions had been left untreated and had become very severe. Malignant skin lesions, from sun exposure, were also seen and were often quite large as the rural communities access to healthcare was poorer than that in the UK.

As these rural communities were cut off from the main towns they also received very little advice on general health and the majority were unaware of the risks of smoking or of the threat of skin cancer from prolonged sun exposure without protection.

2. Healthcare in Brazil is organised in a very different way from that in the UK. In Brazil the proportion of services that are privately funded are much higher than in the UK. Publicly funded services make up around 50% of the healthcare offered in Brazil compared to around 85% in the UK. Brazil is also a country with geographical and socioeconomic challenges with a large gap between rich and poor. It also has a population of over 200 million and the level of funding available to the public health service means that it has difficulties in providing sufficient healthcare to the population.

Furthermore services in Brazil are generally located in the major towns or cities meaning that a vast proportion of the population that live in the rural areas are deprived of easily accessible general healthcare, thus also the gateway to specialist services. There are 'local' healthcare centres that contain mainly nurses and one or two doctors, however these are often hours away from the remote farming communities who do not have either the time, or the means of transport to get to these centres. The centre that we were based at did run mobile clinics where a van would travel to the farming communities and offer basic healthcare advice and dental services. This service was underfunded and was unable to regularly visit single communities.

Several conditions that we saw were very treatable and would cause no/little trouble to the patients if they had been managed properly with regular check-ups to review their treatment. For example we saw poorly controlled acne and very severe psoriasis that had been able to progress as the patient had stopped their treatment. In the UK these conditions would be able to be managed and monitored by a patients GP and if necessary they can refer to a specialist should the condition become severe. During our time in clinics we also noticed a trend in patients blood pressure, a few were receiving treatment for hypertension but their blood pressure was still high. It is clear that with the UK system these patients would have their treatment escalated or referred to a cardiologist for a specialist opinion.

3. Telemedicine is a relatively new concept that is being explored across the world as a possible tool for their healthcare system. Brazil is a prime candidate for the use of telemedicine as its geographical dimensions make it difficult to access remote communities. In the UK the geographical problem is not an issue and there are a handful of truly remote communities, furthermore reviews have concluded that telemedicine is not a cost effective tool that the NHS should utilise.

Brazil's telemedicine projects have demonstrated that they are both feasible and financially viable and have been developed in some areas to become state-wide public telemedicine programmes. In other areas, like Rio Grande du Sul, projects are run in conjunction with universities.

The advantage of telemedicine is that it allows technicians with minimal medical training to give clinical services in remote areas without the need for the physical presence of a specialist doctors. It allows these technicians to refer patients, using telecommunication technology, to the specialist and get advice about diagnosis and management of patients. Whilst conducting the clinics it became apparent that it was necessary for the technician to be medically trained as vital elements of the history were missed by more junior medical students that helped on the project. Therefore it may be necessary for junior doctors to act as the mediator for the specialist in order for the service to run effectively. Another difficulty is that telemedicine services cost a substantial amount of money and for a country with a poorly funded public health system it may be difficult to justify, however for the rural communities this is their only access to healthcare so the projects must be viewed as necessary initiatives.

4. An interesting skill that I acquired whilst undertaking this elective was how to effectively use an interpreter during a consultation. I found it to be a challenging experience where I was left unsure if information had be conveyed correctly and also if I was receiving all the information from the patient, including subtle clues. It became apparent that it was important to brief the interpreter before the consultation began to stress the importance of translating all the information and not just telling me about the information they deemed important.

I also found ECG lead placement and interpretation very useful as I had not had many opportunities to practice this in the past. The design of the ECG leads was slightly different, using a reusable suction system instead of a disposable adhesive pad. Going

through the process of ECG interpretation was also useful and in one case I made the diagnosis of new left bundle branch block in a patient with chest pain.

Teamwork also played an important role in the project, with six medical students in total we took it in turns to have different roles within the team and worked in different groups. It allowed us to have the opportunity to experience different roles with different people thus giving myself a better appreciation of the importance of teamwork.