ELECTIVE (SSC5c) REPORT (1200 words)

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

1) What are the common dermatological and cardiology conditions found in rural Brazil and how does this differ to the UK?

Having spent a substantial amount of time in the state of Rio Grande du Sol in south Brazil I got to have a feel for some of the common conditions experienced there. However, due to the nature of the telemedicine project we are yet to have the full diagnosis back for most of the patients that we saw.

With regards to cardiology, many of the patients we saw in the clinic had well developed cardiac risk factors. Hypertension was rife and many patients had severe hypertension. Living in the local area I feel a lot of this could be down to the local lifestyle. Food in the south of Brazil was very salty, many foods were cooked in salt crusts or brine. High salt intake obviously being a cause of hypertension. Further to this many of the locals imbibed of a local herbal tea "chimmahow?" which they self-reported as being very high in caffeine. Again this could be contributing to local hypertension. Finally rural farmers of the area largely grow tobacco. They often process this and consume it also, often without the use of filters. This high unrefined tobacco use could also be contributing to some of the hypertension and cardiac disease observed.

Outside of the confirmed hypertension we observed many patients also who had had previous MI's and stents. Overall I feel that the incidence of heart failure and ischaemic heart disease was high, although i have no official statistics for this, and similar to the UK. Risk factors for cardiac disease were again high and i believe of similar proportion to the UK.

Dermatology was a more complex comparison. We believe we saw many cases of irritant dermatitis, largely of the hands. We felt this could be explained by the fact most of these persons worked with chemicals in the tobacco planting industry, often without the use of protective gloves. This is something i feel would not be the case to such a high degree in the UK due to more stringent health and safety laws.

The other point of note to raise with regards to dermatology was the apparently high prevalence of psoriasis in one village outside of Camaqua that we visited. Social movement is quite restricted in these rural communities with few people leaving or migrating to the area. As psoriasis has an element of heriditability it would be of interest to further evaluate local epidemiological statistics on psoriasis incidence in this area.

2)Describe the pattern of health provision in relation to the country which you will be working and contrast this with other countries, or with the UK: How does the provision of Healthcare in remote areas of Brazil (specifically dermatology and cardiology) differ to services in the NHS?

The healthcare system in Brazil is vastly different from the UK due to several factors. The first of which is that private funded healthcare in Brazil makes up over 50% of the healthcare budget compared to the 15% in the NHS. This makes for a dichotomous provision of healthcare between those able to afford private health insurance and those that aren't. The standard of healthcare provision is not the same.

The other large difference in healthcare arises as a result of the large continental dimensions of Brazil. Healthcare is concentrated in large conurbations. Persons living in rural areas are typically many hours from their nearest hospital. Often services are limited to a small clinic with few or no high ranking health providers (doctors). This means these people who are often poor as well as geographically isolated suffer poor healthcare provision.

In our elective experience we saw many cases of people who had mild/easily treatable conditions eg acne who were unable to receive treatment as there was no diagnostician capable of prescribing the necessary medications. Similarly we saw one lady who needed a pre-op ecg who would have otherwise have required a 10 hour round trip to the nearest city had we not been there.

This is different to the NHS in that people are never far from a local GP who could provide many of these services. And everyone can afford this treatment also as it is publicly funded.

3)Health related objective: Explore the benefits and disadvantages that telemedicine can have in providing medical care to those living in remote areas in developing countries?

Telemedicine is an emerging area of medicine in Brazil attempting to combat geographical healthcare inequalities in a country with continental dimensions. In the rural northern state of Minas Gerais there is now a public funded state telemedicine service. We were trialling the efficacy of telemedicine in the South of Brazil with some success. In the UK however, telemedicine has proven to be efficacious but not cost effective. This i believe is largely down to the much smaller geographical dimensions of the Uk and the relative ease of access to local healthcare. In Brazil telemedicine provides a means of offering high quality healthcare to persons who are geographically isolated. This is largely due to the fact that healthcare in Brazil is overwhelmingly located in large conurbations. This means the quality of healthcare is poor in rural areas due to difficulty in access. Telemedicine is bridging this gap.

4) Personal/professional development goals.: Reflect and evaluate how other medicine and healthcare systems differ from the NHS. Explore how language barriers affect the ability to provide safe, sound healthcare and how these obsticles can be overcome. Overall developing skills in -clerking with the aid of an interpreter -utilising diagnostic tools (ECG and digital photography) - Diagnosing dermatological and cardiological conditions -working as aprt of an MDT

As eluded to previously the Brazilian healthcare system is very different to the NHS. despite the introduction of a unified public healthcare system (SUS) in Brazil public care often lags behind that of private care. In the UK private care obviously exists but largely means paying for a shorter waiting time for treatment or receiving said treatment in more comfortable surroundings. What it does not mean is poorer quality of healthcare. The medical care when received is of a similar standard. From my experience in Brazil this is not always the case. Cramped and poorly equipped public areas of the hospital were a stark contrast to the spacious well equipped and well staffed floors of the private sector of the hospital. I found this particularly distressing as within the same people it appeared clear that those people with a means to pay were being treated better, whilst those without insurance or a means to pay suffered.

During our elective period we often used a translator to speak to our patients as our portuguese was inadequate. This highlighted some difficulties; often long answers were given by patients to questions. When we received the translation often it was shortened to a single sentence. This is obviously not ideal as the art of a good history involves picking up on subtle queues by patients and

various intricacies in the way things are verbalised. I found this made my history taking more long winded and less en pointe. In the future I think it is important to speak to my translator first to let them know exactly what i would like and to please not paraphrase answers but to use the patients own words.

I found through repetition my ability to take and read an accurate ecg improved vastly. I feel like our diagnosis as a team improved although we will not find this out until all the results are back from the senior clinicians. Overall I feel like this was a good trip that has taught me a lot about medicine in different cultures, the use of a translator and better history taking skills.