## ELECTIVE (SSC5b) REPORT (1200 words)

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

Malawi is one of the poorest countries in the world, it is situated in the heart of Africa therefore it's health systems, resources and spectrum of diseases are significantly different to those in the UK.

For three weeks I have been volunteering with a charity called World Medical Fund, based in central Malawi in a small town called Nkhotakota. This charity provides an outreach GP style service for children in 12 different remote locations between 1-2 hours drive from Nkhotakota. The clinic locations are often only accessible by 4x4 vehicles and in fairly remote, poor communities that have limited access to healthcare.

From the patients that presented at our clinics, the most common diagnosis was Malaria. This diagnosis was made from the presenting complaints of the patient, which then indicated a MRDT (Malaria Rapid Diagnostic Test) to be done - which the clinic offered to only those that indicated the need for one.

The rates of malaria varied between different clinics, mainly based on the location due to the surrounding landscape e.g. next to lake Malawi, more forested areas. In addition, some other influencing features were the wealth of the communities and access to medical services. Consequently, all of these aspects impacted on the number of patients being diagnosed with malaria at the different clinics ranged from 40-90% of patients attending the clinics.

Another fairly common infection that we had many children presenting with was schistosomiasis. This is an infection contracted from swimming in Lake Malawi - with the key presenting complaint being heamaturia. Again the geographical locations of the clinics directly affected the numbers presenting with this.

In the UK the diagnosis of malaria or schistosomiasis is rarely made, only occasionally in returned travellers as it's a tropical disease, so this exposure to so many cases gave me a great insight into the different presenting complaints and complications of these conditions.

Malawi is a developing country with a dynamic health system that is constantly striving to develop and support the needs of its people whist also facing many challenges and barriers.

One significant feature that impacts on health provision to remote areas in Malawi are the issues of roads and transportation. There are only a few tarmacked roads in the country - the main ones running through the country and in town centres. Otherwise they are all dirt roads meaning these can easily become damaged and impassible, particularly after heavy rainfalls.

As a result often supplies cannot reach the health centres in more remote areas meaning they are lacking equipment and medications. Consequently, patients are simply unable to get treatment due to a lack of resources- if they run out of malaria medications they just can't treat it. This doesn't happen in the UK as there are always well stocked supplies of medications or means to be able to get medications from other places if they do run out.

Another huge problem resulting from poor roads and lack of transportation is the ability of people to get to the hospitals when they are ill or even for clinic appointments. Most people have no transportation so walk everywhere. To even to reach their local health centre it can take a 4 hour walk (usually in the hot sun and often with a child tied to their backs). Again this is a stark comparison to the access to transportation and therefore medical care we have available in the UK.

As previously mentioned, the main medical problem that I saw in children presenting to us at the clinic was malaria, which in itself can be classed as a disease influenced by the social determinants of health as it can often be caught due to the lack of prevention methods. The simplest and best prevention against malaria is the use of malaria nets to sleep under, but some people can't afford to buy these. However the problem is not simply solved by giving away free nets (which in Malawi are given to pregnant women and through world charity projects can be sometimes sourced in other ways). Often people, particularly the very poor, covert these nets to 'better' use in other ways for example to help feed their family by using them as fishing nets or fencing around their vegetable patches to prevent animals eating them. During my journeys I have also noticed the nets used as toilet curtains and general handy fabric for tying things together!

Another key feature relevant to all countries world wide is the less balanced nutritious diet of the lower economic classes. In Malawi many children we saw were simply starving. They had incredibly low BMI's but also many were just extremely small for their age, one girl that particularly struck me was a 14 year old, but she looked like an 8 year old and weighed the same as a 5 year old healthy child. In comparison, nowadays in the UK often children from families on the bread line can be quite obese as the cheapest and easiest food to buy in the UK nowadays are often mostly fat and sugar laden carbohydrates which are more filling.

Working with the outreach clinic in different places and environments each day always presented their own challenges and therefore require me to adapt my skills of diagnosis and treatment based on what I was working with. I learnt to trust my gut instincts a lot more and actually really just look at and touch the patient to see how alert they were, and their temperature, and their heart rate were quick and easy good indicators into how ill each child was. For example, before the clinic even started we would look around at the children just to 'eye ball' any obvious ones that might require attention first.

Another skill I had to quickly become much more of an expert in was being able to auscultate the chest of a crying child, who was in a room of crying children and shouting mothers with the rain drumming down on the tin roof above us, and still be able to clearly hear the chest sounds in order to be able to make a decision if the child has a chest infection or not.

One particular challenge I had not thought about before was the use of traditional healers, which were frequently used in the local communities, often as a first place for people to go before seeking modern medicine. In these communities this usually involved making small cuts into the chest or abdomen areas and laying on these cuts herbs and mixtures of traditional concoctions. This would leave the patients with life long scars and often had limited, if any help for the medical complaint, obviously I would only see the patients who were not cured by this method so am aware of the biased view point I have on this. Unfortunately it often meant it delayed children being brought to seek medical attention whilst these traditional medicines were given time to work, meaning sometimes children presented very late.