ELECTIVE (SSC5b) OBJECTIVES

Write out your submitted objectives from STEP-1 below.

OBJECTIVES SET BY SCHOOL

1 What medical conditions are prevalent in rural Malawi and how do these differ to areas of rural UK?

Cape MacClear is a fishing village on the coast of Lake Malawi with a population of around 15,000 people. It is a village with significant healthcare and social challenges, with the majority of the villagers living on less than one US dollar a day. There are marked differences between the medical conditions that I saw in Cape MacClear and those that would present to a clinic in rural UK. I shall discuss some of these differences here. The most common presentations were due to infectious diseases. Malaria is prevalent in the region and we were there at the height of malaria season, as such we saw many patients with malaria. In 6 years of medical training in the UK I have only seen one case of malaria and this was in London, not a rural clinic. Other common infections rarely seen in the UK included Bilharzia (which was present in the water of the lake) and Typhoid. In addition there was a high prevalence of HIV in the region. Presentations relating to HIV in the clinic would be due to complications of immunosuppression, adverse reactions to the antiretroviral medication, or an incidental finding following HIV screening. In the UK, the areas with high HIV prevalence are large cities such as London - HIV infection would be an uncommon medical condition in rural UK.

What surprised me was that there was also a lot of similarities between the conditions presenting at the clinic and those that you would see in a General Practice in the UK. For example there were lots of children coming in with fevers, sore throats and coughs. As in the UK there was still the constant debate of whether the infections were bacterial or viral in origin. There were patients receiving treatment for long term conditions such as hypertension and diabetes, conditions that you would commonly see in the UK. I also noted a number of patients coming in with musculoskeletal problems such as arthritis and back pain.

2 2 What level of healthcare is available in Malawi and how does this differ to Zambia and the UK?

Providing a decent level of healthcare in Malawi is a challenge. It is one of the poorest countries in the world and has a high burden of disease. Malawi has a '3 tier' government funded healthcare system. The lowest tier is a network of rural hospitals and clinics that provide the most basic level of care. These government funded hospitals are usually poorly resourced and have low levels of staffing, they may not even have a doctor working there. Areas with these government funded hospitals and clinic may have support from charities and aid funded clinics - such as the clinic I was based at. Rural hospitals can refer patients to District hospitals, which can then refer on to top tier hospitals in major urban areas. Across all 3 tiers there are problems with having access to the right resources, for example supplies of commonly used drugs. The clinic we were working in had nearly run out of government supplied Malaria Rapid Diagnosis Tests and supplies of the 1st line antimalarial when we were there. In addition, whilst the higher tier hospitals may have more advanced equipment, the high demand or long waiting times mean that most patients won't get access to it. This system of 'primary care' centres in the community which can refer on to larger district hospitals, followed by larger hospitals in urban areas mirrors the healthcare system structure in the UK. Zambia follows a similar structure, and suffers from the same problems as Malawi, but to a lesser extent as it is a wealthier country.

One thing that Malawi and Zambia had in common was the use of 'Clinical Officers', especially in the rural hospitals. These medical staff are trained in a program consisting of one year

theory based training followed by two years of clinical training - like a kind of accelerated medical school. They are trained in dealing with common medical and surgical conditions, and are often highly skilled. However, they can sometimes be the most senior medical staff in the rural hospitals, so may have to attempt to manage conditions that are beyond their skill set. It is an innovative way to try and solve the lack of doctors being trained and meeting the demands of the healthcare system. The role could be compared to the newly created Physician Assistants in the UK.

OBJECTIVES SET BY STUDENT

3 What are the common emergency/acute medical presentations in Malawi and are these different to the UK? What are the local aims with treatment? what treatment is available?

The common emergency and acute presentations in Malawi reflect the environment in which the clinic was situated and the prevalence of certain conditions in that area. As discussed in section 1, there was a high prevalence of malaria in the region and I would say majority of patients that presented acutely unwell to the clinic were suffering from malaria or another infectious disease process. The clinic had developed a good system of dealing with suspected cases of malaria as a result of this. All patients had their temperature checked before they saw a doctor. If the temperature was raised, a quick malaria blood test would be carried out by clinic staff - all before seeing a doctor. This allowed rapid identification of patients suffering from malaria, and therefore allow treatment to be started quickly. The 1st line antimalarial in Malawi is a combination of 2 drugs (Lumefantrine and Artemether) taken orally twice a day for three days. We would sometimes admit patients that we were concerned about, especially children, so that they could receive a couple of doses of LA and also fluids (in the form of Oral Rehydration Solution - fluids via a cannula was uncommon). For cases of severe malaria we had intravenous artesunate. The clinic had good protocols for dealing with various different presentations of malaria and when to switch or escalate treatment.

Injuries and wounds also made up a large proportion of the acute case load. Burns were common, especially on children, as many people in the community used fires to cook and boil water. The nursing staff at the clinic had a wealth of experience in managing burns and wounds, and would often instruct patients to return at a specific date and time for wound redressing.

Whilst at the clinic we had a couple of cases of sight-threatening eye infections. Again, the staff were quick to intervene and start IV antibiotics in these cases when a bacterial cause was suspected.

4 4 To be a useful member of the team at the clinic. To assist them in providing a high standard of care to the local community. To be able to understand the needs of the patients that I see and use my clinical skills and knowledge to meet those needs

The staff at the clinic really involved us and made us feel part of the team. Sitting in on the first few clinics was a real eye opener in terms of how the patients interacted with healthcare professionals and what their expectations were. I found that patients would often come in with vague symptoms, such as ‘dry cough’ and then through history and examination find out that they wanted a pregnancy or HIV test. The clinic has a team of dedicated translators who were invaluable in assisting me when trying to work out what was wrong with the patient. I had had some experience of using translators in London, but I definitely found it challenging at the start - especially when trying to build a rapport with the patient. When seeing patients, I always had another doctor either sitting in with me or in the next room happy to answer my

questions - so I felt fully supported by the staff.