ELECTIVE (SSC5b) REPORT (1200 words)

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

I have a keen interest in otorhinolaryngology, so wanted to use my elective as an opportunity to see how this lesser known surgical specialty is provided in a less economically developed country as well as increase my clinical skill set in this discipline.

On arrival at the ENT clinical at Queen Elizabeth central hospital in Blantyre, Malawi it was clear to see there was a pronounced ontological focus. This is due to the fact that hearing loss is the most common sensory disability with its prevalence increasing globally. The WHO estimate that 5.3% of worlds population are living with disabling hearing impairment and despite there being a lack of data from Malawi to corroborate this it is strongly believed that it is probably more pronounced in the sub-Saharan region. The aetiology of this pronounced hearing impairment is believed to be due to middle ear disease and impacted wax which can be treated through provision of basic primary-level ear and hearing care. It goes without saying that without this pathology being managed, it impacts on education, work and social relationships and is ultimately a great burden not only on individuals but also countries and communities.

The lack of resolution of this hearing epidemic is only made worse by the lack of ENT personnel. For a population of more than 17 million there is only one pure ENT surgeon (the head of surgery of the medical college also does some of the head and neck work) and 25 ENT clinical officers. The path to becoming a clinical officer involves undergoing a three-year training programmes which culminates in a Diploma in Clinical Medicine, allowing the holder to deliver medical services at secondary levels of healthcare. To put this use of clinical health officers in perspective within the Malawian health care system, most caesarean sections at district general hospitals are done by clinical officers not doctors.

Unfortunately, it was clear to see why there were such minimal provisions for ENT during the general surgical attachment of my elective. Whatever their reason for admittance onto the word, management of the majority of cases was made more challenging due to the high burdens of poverty related disease which takes a considerable proportion of Malawi's health budget. 10.8% of the population are reportedly living with HIV/AIDS, Malaria in most parts of the country is at least 75 cases per 100 people and there are a reported 412 cases of TB per 100,000 inhabitants.

Up until 2007 there was not one resident ENT surgeon in the entire country and the burden of disease related to conditions within that discipline were not known. My consultant Mr Wakisa Mulwafu was the first resident ENT surgeon having been sent by Malawi to the University of Cape Town as an ENT specialist trainee in 2003 where on his return in 2008 he set up the ENT services for the country, operating out of Queen Elizabeth Hospital.

Another part of this problem is a lack of post-graduation training structure in the country. This is put in perspective when realising that the oldest medical cool in the country, the University of Malawi college of medicine was only set up in 1991 therefore not much thought had yet been but into establishing a safe and effective post-graduate training pathway. An ENT specialty training scheme is in the process of being set-up by Mr Mulwafu and colleagues but regardless of the hard work being put in, the country is still some years away from an ENT consultant that is a product of its post-graduate surgical

curriculum. Mr Mulwafu when informing me of the work that they were doing always stressed the importance of creating a sustainable clinical service, one that is not based on visiting specialists, not however taking away the contribution they can make in terms of teaching clinical officers and specialists.

During my placement in the ENT department within Queen Elizabeth hospital it was clear to see the steps that under Mr Mulwafu's leadership they had taken to improve the provision of ENT services in Malawi. I was involved along with the staff of the department in the teaching of the clinical health officers and the medical students when they were rotated onto the department. Interestingly they had a a longer exposure to the specialty than we did on the MBBS curriculum in London which was I felt reflected in their knowledge of the specialty which was very impressive.

A lot of the tympanoplasties and ossiculoplasties were done by the clinical officers, once Mr Mulwafu was happy they were competent, increasing the amount of cases the department could accomplish in a week. On observing a few of these cases I noticed that the operative microscope was not used and in turn they adopted a technique using a rigid otoscope. On asking Mr Mulwafu about this, he replied that the clinical health officers, seemed to have difficulty in using the operative microscope, thus the training time would have been considerably longer, when compared too how quick they became competent on the otoscope. Additionally, when looking back on these cases for quality improvement services, no difference was was found between the two different approaches. This is just one example of how the department have made use of the resources they have to increase their output without negatively impacting patient care.

When considering paediatric ENT, a study among children showed a high prevalence of hearing loss, with an estimated 1800 children per million of the population having some form of hearing impairment. Mr Mulwafu after securing some necessary funding employed a novel solution of setting up a mobile audiology department so as to access the children in the rural communities. How this would work, (once having trained some community health workers in audiology) is that the portable unit, would go to visit each of the rural villages and test all the children they could find with the appropriate equipment. Any pathological or borderline results would then be invited, all expenses paid, to come to Queen Elizabeth hospital where they would have further investigation and treatment. It is an extremely successful scheme as can be seen by the huge increase of children from rural communities receiving appropriate and timely therapeutic intervention, which is one of the global objectives as a results of the lancet commission on global surgery. This also highlighted another barrier to healthcare that I had not yet considered, which is that some people in the rural communities could not access healthcare, simply because they have no means of transporting themselves to the city, this is a problem that still remains to be addressed by the health authority as there is no NHS transport equivalent.

My time in the ENT department was an invaluable learning experience, which has put me in excellent stead for my foundation job in ENT as well as my aspiration to become an ENT Surgeon. Throughout my weeks I performed many ENT clinical examinations and was exposed to a whole plethora of pathology that would normally not be seen in the UK. I was taught how to use a flexible nasoendoscope for which I then used for diagnostic purposes when clinical relevant in clinic and felt more confident with the microscope from the many times I had to micro-suction ear wax from the canal of a less compliant child. I also gained experience with another one of my interests which is medical education as I was able to help, as mentioned before in the delivery of the ENT curriculum to the variety of students that passed through the department.