ELECTIVE (SSC5b) REPORT (1200 words)

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

The Provision of Medical Care in a Hospital in a Malawian Town.

1. Describe the pattern of HIV in Malawi and discuss this within the context of the global burden of HIV.

When planning an elective in Malawi, I was aware of the fact that this was a country with high levels of HIV. Having been to the country before, I felt like I was well prepared with what I would face. During my time at Ekwendeni hospital, I saw many cases of patients with HIV, however, the level was probably lower than I had anticipated. According to data from UNAIDS in 2017, there was approximately 1 million people living with HIV in Malawi in 2016. This is a result of almost 10% (9.2%) of adults being HIV positive. Whilst dealing with patients in the hospital I was aware that their HIV status could alter the differential diagnoses that I prioritised given their symptoms. For example: in a HIV positive patient on the ward, the clinical officer who clerked them in began treating the patient for pneumonia. However, he felt it important to rule out Pneumocystis and Tuberculosis. In the UK, such a diagnosis is far less commonly seen. This is is due to the much lower incidence of HIV, estimated at 89 400 (0.16%) and high levels of ARV use and viral suppression.

2. Describe the provision of secondary care allocation and distribution in Malawi, in contrast to in the UK.

The government of Malawi provides healthcare to its population that is free at the point of access. On the surface, this seems similar to the UK with regards to he NHS. In reality, Malawi's limited resources and infrastructure mean that healthcare provision is challenging. According the the World Health Organisation, their healthcare provision ranks 182 out of 190. There are no emergency services in place such as ambulances and as such many patients cannot afford to come to hospital. The secondary care itself is provided predominantly by Clinical Officers who train for 3 years, in our case there was only one doctor working at the hospital. Often doctors in malawi end up in a more managerial role, aiding with the running of the hospital, regardless of their qualification levels. Sadly this also takes them away from patients.

3. Describe the strategies used prevent HIV transmission both in Ekwendeni and Malawi, whilst comparing this to the UK

Whilst working as part of a multi-disciplinary team at Ekwendeni hospital, I soon realised that one of the key members was the PMTCT officer, they are responsible for ensuring every patient admitted to the ward has been tested for HIV. This team are responsible for counselling and testing all patients in the paediatric ward, though in this instance, naturally, the parent's permission must be sought. This was so important in order for us to effectively treat the patients. Of course, if a patient comes in with respiratory problems, we are well trained in screening for TB red flags, having trained in each London.

That said, knowing a patient's status helped us to better prioritise our differential diagnoses. Is it pneumonia we are worried about or perhaps TB now appears more likely. This is in stark contrast to the UK where patients are not automatically screened. Before testing in the UK, patients are supposed to be counselled before their HV status is checked.

HIV has been on the radar of many charities and organisations for a long time. In particular, UNAIDs created the following goals. They created the 90-90-90 goals that are to be reached by 2020. That is:

- 90% of patients with HIV to know their status

- 90% of HIV positive patients to be on Antiretroviral (ARV) therapy

- 90% of people in treatment with fully suppressed viral load.

Despite having one of the highest levels of HIV In the world, Malawi is making good progress towards the 2020 goals. In 2016, 68% of people living with HIV were on antiretroviral treatment. However, current reports suggest that Malawi is close to reaching 2 of the 3 goals. 89% of patients are now thought to be on ARV and 89% of those on treatment are thought to have complete viral load suppression.

4. To be able to transfer my skills in order to work independently as a clinician in a resource limited setting.

Choosing to come to Malawi, one of the poorest countries in Africa, let alone the world, I felt that I knew what to expect. Having passed my exams and spent plenty of time on the wards, I felt prepared to start life as an F1 and was excited to see how I could use my recently learnt skills in Malawi. What I didn't realise was just how resource limited we were going to be. Having spent 3 weeks with a outreach charity before coming to Ekwendeni, I had experienced antibiotics running out and occasionally test kits for Malaria, I expected the hospital to be similar. To my surprise, I had grossly underestimated just how much this hospital was suffering due to its limited resources. As a U.K. medical student we had learnt to manage acutely unwell patients with an A to E approach. However, when faced with such a patient, who's GCS had suddenly plummeted to 3/15, we soon realised that our medical knowledge largely based on having equipment. A becomes a challenge when you don't have oxygen, B can be monitored but chest X-rays are not available. Again, C, ECGs are not an option and so on and so forth. Lab tests are unavailable, ABGs not used. We had to think fast and go back to basics. Our ability to think logically in an emergency, knowing basic physiology and understanding basic airway management enabled us to improvise and manage the patient within the constraints of the resource limited setting.

On general reflection, I found that having such limitations, understandably affected the level of care that was able to be provided. One particular case that shocked me somewhat was that of a premature baby, born by c-section. She was on oxygen and was being kept warm under a heat lamp, quite the difference to NICU. Unfortunately, it is not only medical provisions that is challenging to health provision. One weekend there was an electrical fault in the maternity department. This resulted in the oxygen and heat lamp for the baby girl failing and she sadly passed away. I found it a steep learning

curve to accept that things like this happen in Malawi, learning to accept your limitations as a doctor is of even more importance in a resource limited setting.