### **ELECTIVE (SSC5b) REPORT (1200 words)**

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

I spent three weeks at Ekwendeni Mission Hospital in Ekwendeni, Malawi. The hospital had 5 main wards - male, female, paediatrics, maternity and a private ward. It is is private hospital, rather than a government hospital, so the majority of its funding comes from the fees paid by the patients. During my time at Ekwendeni I spent the majority of the time on the male ward as part of the team running ward rounds. However I also spend some time in theatre, at an outreach clinic, and on paediatric and maternity wards. The hospital only had one doctor; the rest of the clinical staff was made up of clinical officers and nurses. As elective students we were treated as part of the clinical team and expected to run ward rounds with support from senior clinical officers. The nurses were also always on hand to help with translation and advice on how to order tests or refer patients. I the hospital had many problems with supplies of medications in pharmacy, often running out of key drugs such as paracetamol, some antibiotics and malaria treatment. It was also common for certain tests to be unavailable due to shortages of slides, blood bottles and reagents. For the entire final week it was impossible to do any x-rays due to a lack of reagents. Overall, despite the frustrations of a lack if resources, I saw lots of varied and interesting medicine and found it to be a very rewarding experience.

### Describe the pattern of HIV and HIV-related illness in Malawi and discuss this in the context of the global burden of HIV.

There are 1 million people living with HIV in Malawi. Nationally Malawi are following the UNAIDS 90-90-90 targets which aim that 90% of people who have HIV will know their status, 90% of diagnosed patients will be on HAART, and 90% of people on ARVs will have an undetectable viral load. Malawi has a very high rate of HIV, although much improvement has been made in recent years. The most at risk group are young people who make up 50% of new HIV diagnoses.

In Ekwendeni, I saw a number of patients who were suffering from the consequences of untreated HIV. I saw HIV positive patients with TB, and one who had presented with cryptococcal meningitis who was subsequently diagnosed with HIV. In the developing world, TB is the most common opportunistic infection associated with HIV, which was reflected in what I saw in Malawi.

#### Describe how secondary care is allocated and delivered to patients in Malawi, in contrast to the UK.

The health system in Malawi is mostly hospital based. There are a combination of government hospitals and private or mission hospitals in Malawi. Patients can access secondary care services by attending the outpatient department of a hospital. These act like an A&E or a walk in centre, where patients can report with symptoms and access malaria testing, STI testing and other blood tests, as well as some treatment. Those who are most unwell are fully clerked and admitted to the hospital for inpatient treatment.

Ekwendeni Mission Hospital is a fee paying hospital that serves the Ekwendeni town and the surrounding villages in the district. Patients can choose which hospital they attend. Ekwendeni is a small hospital and therefore does not offer a full range of services. They can do some minor general surgery and caesarean sections, but more complex procedures require referral to a larger hospital. In Malawi there is only one CT scanner which is in the capital, Lilongwe.

In many ways the provision of secondary care to patients is similar in Malawi to the UK. The ward round is a recognisable feature of both countries, where inpatients are reviewed every day. There tend to be fewer investigations available in Malawian hospitals due to limited equipment and the cost.

Unlike the UK, the majority of hospitals in Malawi have very few doctors and are mostly staffed by clinical officers. Clinical officers have a shorter training programme than doctors but are expected to do a similar role to junior doctors in the UK. They have lots of practical experience and many will perform cesarean sections. On the other hand, the doctor takes on a more of a managerial role within the hospital.

## Describe the public health strategies used in Ekwendeni and wider Malawi to combat the transmission of HIV, in comparison to the UK.

In Ekwendeni Mission Hospital, and throughout Malawi, there is a push to get as many people tested for HIV as possible. All inpatients are offered HIV testing by specialist HIV counsellors in order to identify the maximum number of undiagnosed cases. This is also part of the UNAIDS 90-90-90 targets. In my observations on the wards, I was pleased to see that almost everyone consented to have an HIV test. In the majority of cases the tests were negative, however usually one or two patients a day would be disguised with HIV. From speaking to the nurses, the biggest challenge seemed to be getting the newly diagnosed patients onto ARVs. ARV treatment was not usually started as an inpatient, instead they were referred to a clinic where their CD4 count was checked and they were counselled about the treatment. However, some patients would never return for the clinic.

Other public health methods used to combat the transmission of HIV included the provision of condoms. I attended an outreach clinic for maternal and child health in the surrounding rural area. As part of the clinic they offered free HIV testing for anyone who wanted to be tested - couples, mothers and children, individuals - and they also provided condoms free of charge. Furthermore, in Malawi preventing vertical transmission of HIV is a key area of focus. Any pregnant woman who is HIV positive is given ARV treatment during pregnancy and for the rest of her life, regardless of her CD4 count.

In the UK HIV is far less prevalent, so the public health strategies tend to be targeted to at risk groups such as men who have sex with men (MSM) and IV drug users. The prevention strategies are similar however providing condoms and testing people who are at risk.

One big difference is that in Malawi male circumcision is promoted as a method to reduce HIV transmission, however that is not commonly done in the UK.

# To develop my skills as an independent clinician and as part of a team to optimise patient care when working in a resource limited setting.

During my elective placement at Ekwendeni Mission Hospital, I had many opportunities to enhance my clinical assessment skills both independently and as a team. I took part in daily ward rounds where I would be responsible for assessing a number of patients on my own. I would then feedback to the multidisciplinary team and we would decide on an appropriate management plan. If any cases were particularly complex or challenging, we could discuss with the senior clinicians for further advice. I feel that I was able to work well in a team. In particular, there was an emergency where a patient collapsed and we functioned effectively as a team to stabilise the patient.

The resources available at Ekwendeni were pretty limited; on occasion the only blood test available was haemoglobin level, and the only imaging was ultrasound which only one person had the training to perform. Therefore I had to adapt to what was available and rely more on clinical assessment rather than investigations.