

## **ELECTIVE (SSC5c) REPORT (1200 words)**

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

### **Overview**

For my medical elective, I went to Zomba District, Malawi. Whilst there, I spent time at both Zomba Hospital and in also as part of a team of three students undertaking a scoping assessment for CRADLE, a study run by Maternity Worldwide.

By taking part in this elective I feel I was able an insight into the Malawian health system and improve my clinical knowledge, and also contributed in a small but meaningful way to CRADLE's on-going work . I also had the chance to learn more about the community, the health workers and their patients and the country of Malawi.

### **Scoping assessment for Maternity Worldwide**

Maternity Worldwide is a non-governmental organisation working in Sub Saharan Africa promoting women's health and maternity care. We were involved with Maternity Worldwide Malawi who are intending to run a project training community health workers to take blood pressure measurements for pregnant women to screen for pre-eclampsia. We also spent time at Zomba Hospital in the O&G department.

The intervention which they are plannin to study is the training of community health workers to perform blood pressure monitoring in rural clinics to screen for pre-eclampsia, a leading cause of maternal death in Southern Africa.

Whilst in Zomba, we gathered information about the maternal health system, both in the community and in hospitals. We attended antenatal clinics in several different settings and also gathered data from the hospital records to see the distribution of complications due to pre-eclampsia; haemorrhage and sepsis amongst other complications. The scoping assessment will be used by Maternity Worldwide to determine the feasibility of implemening the CRADLE project in Malawi.

### **Why I chose Malawi for my elective**

I have hoped for an opportunity to visit Malawi ever since I took part in an "Online Elective" project, working remotely with a medical student from Lilongwe. We produced a poster together which was accepted at the International Association of the Study of Medical Education (ASME) Conference.

### **Maternal mortality and morbidity in Malawi**

The maternal health burden in Malawi is very high and women are at increased risk of complications. One of the leading causes of maternal deaths in Malawi is pre-eclampsia, the complication we are particularly looking into as part of the project we did for MAternity Worldwide. This disease contributes to the high burden (3000 women per year) of maternal mortality in Malawi, which is one of the highest in the world. The lifetime risk of maternal death is 1 in 36, this contrasts to 1 in 6900 in the UK. Women are at particular risk in rural areas as it is more difficult for the them to access healthcare for financial, cultural and logistical reasons.

HIV prevalence in Malawi is 10% and therefore pregnant women may be HIV positive but without a diagnosis due to the lack of antenatal care testing. Therefore the risk of mother to child transmission is high. Moreover, 29% of maternal deaths in Zomba, Malawi are AIDS related.

Zomba District is in southern Malawi and is one of the poorest districts in the country with 70% of the population living below the poverty line. The population is young, with more than half of the inhabitants are aged 18 or younger. Therefore many of the women are at reproductive age leading to a high number of pregnancies and contributing to the maternal mortality.

### The health system in Malawi

The health system in Malawi differs to that in the UK in many ways. Unlike the NHS in the UK, Malawi lacks an adequate financing system meaning that people often have to pay for health care services through out of pocket payments. Due to the lack of funds for public health service, up to 85% of healthcare provision is financed by multilateral donors.

In Malawi there is a human resources for health crisis. There is only 0.019 doctors for every 1000 of the population. The lack of health workers is particularly apparent in the rural areas, as many doctors migrate either out of Malawi or to the cities for better career development opportunities and higher pay. This leaves the rural communities vastly underserved and contributes to the high maternal mortality.

The Three Delays Model illustrates the challenges faced by women accessing healthcare services. The first delay is the decision to seek care. This may relate to lack of finances, which is compounded by the low status of women and the acceptance of maternal death in rural areas. This contrasts to the UK where women have a higher status and health services are free at point of care and so women would be more inclined to seek help. Moreover, in Malawi there may be a lack of understanding of warning signs of pregnancy complication due to lack of skilled birth attendants. However, in the UK, highly skilled midwives would recognise problems early.

The second delay is the delay in reaching care. This again influenced by the availability of finances. This is exacerbated by poor roads, difficult terrain and long distances to healthcare services. Conversely, in most areas of the UK hospitals are in close proximity and roads are well maintained.

Finally, the third delay is in receiving adequate care. That is, having reached the facilities, the healthcare workers need to be well trained and motivated, there needs to be sufficient access to resources, medicines and appropriate referral systems. Malawi would be classed as a low-resource setting in contrast to UK, a highly developed country.

The health system is made up of community health posts, district hospitals and regional referral hospitals. Interestingly in Zomba region, there are no district hospitals and only one central referral hospital where we were based. Therefore the hospital receives both uncomplicated and complex cases.

As we were undertaking a placement in Obstetrics and Gynaecology we particularly learned about the maternal health system in Malawi. We learned about how most women live in rural areas, and despite attending the health clinics or hospitals for antenatal care visits, far fewer women presented when in labour to deliver at a healthcare facility.

**We learned how this was due in part to cultural attitudes, geographical issues and cost of travel and also negative beliefs about the level of care in hospitals.**

**We learnt about how the health system was structured when we met the members of the team and learned about their roles. Our supervisor was the only Obstetrician in the whole of the Eastern region of Malawi. All the other health professionals delivering obstetric and and gynaecological care are clinical officers. They have a shorter training compared to doctors and this was put in place to alleviate the human resources shortage and avoid the financial burden of training doctors.**

**We also visited a smaller Catholic-run community hospital where the staff were incredibly friendly and welcoming. Our supervisor was involved in the management of the hospital and explained that she has developed a good working environment and only employs staff with a good work effort. It felt like this attitude has filtered down to the healthcare professionals who were working there.**

**In the antenatal care clinics at Zomba hospital, we observed how women always came without their partner. Whereas, at Pirititi, the Catholic community hospital we visited, women were given an incentive (getting seen at the front of the queue) at their antenatal care visits if they attended with their partner. This was so that the men would also attend the health promotion and education sessions run by the hospital.**