

## Zambia – Rural Hospital Elective.

### **1. Describe the pattern disease/illness in Mwandi, Zambia and discuss this in the context of global health.**

The most common illnesses requiring medical attention in Mwandi are HIV/AIDs, tuberculosis, malaria and malnutrition in children. These illnesses are among the most common causes of morbidity and mortality globally, and yet there is little funding for research into treatments as they rarely affect people in the richer western world.

There are no published statistics regarding the prevalence of HIV in the area around Mwandi. It is, however, thought that as many as 1 in 3 people in the local population are HIV positive. This has led to an increase in the incidence of TB since the 1980s, when HIV first became a problem. It is estimated that 80% of TB cases in the area are in HIV positive people. This reflects the global pattern of disease whereby the incidence of TB has increased again in areas where HIV has become endemic.

Many patients presenting to Mwandi mission hospital present very late. Whilst this is often due to an inability to get transport to the hospital or miss work due to financial constraints it is often because they see witch doctors first. When an illness is related to HIV this delay leads to a delay on diagnosis and may, therefore, result in the infection being spread further as the patient fails to take precautions. It also means that patients may be beyond the point at which western medicine can help, further undermining peoples trust in the effectivity of western medicine, and so preventing them from seeking medical help early in the future.

In summary the pattern of disease in Mwandi, Zambia reflects the most common causes of morbidity and mortality globally, and is typical of the diseases seen in developing countries. HIV in particular has a huge impact on a nations economy, as it effects so many people of working age. It also has significant social and spiritual effects, affecting the populations mental and emotional well being.

### **2. Describe the pattern of health provision in relation to Zambia and contrast this with the UK.**

Health care provisions in Zambia are free at the point of access, unless patients choose to seek private medical care. This is very similar to the NHS system in the UK but the way the hospitals and clinics are funded varies. In Zambia there are government funded hospitals, mission hospitals and hospitals which are partially funded by both sources. This means that much of the funding for healthcare services is reliant on foreign aid. Whilst the UK is supposedly self sufficient they rely upon immigrant workers, particularly cleaning staff and nurses, to prevent staff shortages without having to increase salaries too much.

In the area in which I have been working, around Mwandi, there are no GP services. This means that unlike in the UK patients are first seen in outpatients and treated from there. In an emergency setting patients go straight to the main hospital, similar to patients in the UK going to A&E. There is, however, no free ambulance service, or actual A&E department and resus facilities are limited.

There is an outreach programme where HIV clinics and under 5 clinics are run out in the community, to aid with the lack of transportation. If patients need to go to the hospital one of the vehicles used for the outreach will often pick them up. If the vehicles are being used, however, patients have to rely on the good will of the mission workers, who have their own cars, to provide transport.

In rural areas patients see a clinical officer, similar to a nurse practitioner, when they first come into the hospital. These people are able to prescribe and treat most patient's, those they cannot deal with are referred to a doctor. This is a way of coping with the shortages of fully qualified medical staff in the area. In the UK almost all patients are seen by a doctor, with only certain conditions and clinics being entirely nurse led. The shortage of doctors also means that that, unlike in the UK, they have no senior support and so get no further training and must refer any complicated cases to a hospital 2 hours away.

Medications are free but very limited, and there are no prescription charges. If a patient requires referral to a second level hospital or above they must start paying for the investigations they require, although most treatments are still provided.

In conclusion, whilst both health care systems are free at the point of access the overall provision of care in the UK is much higher than in Zambia. This is due to the increased level of staffing, better staff training, better equipment and free treatment throughout a patients hospital stay in the UK.

### **3. Describe how the health care professionals are trying to deal with the local HIV epidemic.**

In Mwandi there is a mission funded "ART" clinic, aimed at tackling the HIV problem in the area. The co-ordinator of this programme estimates that approximately 1 in 3 people in Mwandi are HIV positive, whereas nearer 1 in 6 are HIV positive in the surrounding communities. It is thought that part of the problem is that educated people cannot find work and so resort to alcohol and this then leads to an increased chance of having unprotected sex. They are, therefore, looking at ways to generate work in the area while also encouraging local authority figures to enforce traditional values, where couples cannot meet unsupervised until married.

The healthcare professionals are placing the emphasis on prevention. There are various outreach programmes aimed at educating people regarding safe sex practices, male circumcision and promoting HIV testing. Pregnant woman are tested and, if positive, started on monotherapy from 14 weeks and the child is closely monitored and screened.



They have also set up an ART clinic, with over 2000 patients currently registered. At the clinic there is an adherence counsellor to educate the patient regarding transmission and prognosis and to encourage compliance with taking the medications. Patients are also monitored for the complications of HIV, progression to AIDS and response to HAART, if they are on it, or the need to start HAART if they are not yet on it. The clinic also runs an outreach service to rural villages in the area twice a week.

Healthcare professionals are also educated on how to reduce the risk of spreading HIV in the hospital setting – both to patients, for example using screened blood, and staff, for example using gloves and goggles when handling body fluids. They are also liaising with NGOs and charities for further advice and ideas on how to reduce the HIV prevalence in the area.

#### **4. Develop my ability to diagnose and treat with limited health care provisions. Reflect on how the experience will benefit my practise in the UK.**

Having spent time working in a hospital where many of even the most basic tests we rely on in the UK are not available I have had to learn to trust my clinical judgement. The inability to check your differential diagnosis through various tests means that more time is spent on your history and examination. As these skills continue to be vital in medicine anywhere in the world practising them and learning to trust my conclusions will significantly help me to become a better diagnostician back home in the UK.

The hospital I have been working in is very resource limited. This means that often the optimal treatments are not available. I have, therefore, had to learn to use alternatives and work with what is available. I have also learnt that often just caring for the patient is both helpful and appreciated.

This experience will help me in the UK, not only outside a medical setting where there are no lab tests or drugs available, but also in a hospital setting. Rather than ordering the “routine” tests because that’s what everyone else does, I will now base my diagnosis on the clinical situation and only order the tests required to confirm or rule out the differentials. I will also start treatment immediately, based on the clinical picture, using alternatives if the medications I want are not available. When the lab results are back I will then use these to check the treatment is correct, rather than waiting for them in order to start the treatment.