

MEDICAL ELECTIVE - MUMBANDI MISSION HOSPITAL, ZAMBIA

- ① IDENTIFY COMMON CONDITIONS THAT LEAD TO HOSPITAL ATTENDANCE IN RURAL ZAMBIA, + STAGE OF DISEASE AT PRESENTATION → COMPARE THIS TO THE UK.

At Mumbandi hospital in rural Zambia, infectious disease accounts for the majority of hospital admissions. Data for the year ending December 2011 showed that 74% of 776 admissions were due to infectious disease. Measles, Pneumonia, Malaria + TB were the most common underlying conditions. Neoplasm and cardiovascular disease ~~each~~ accounted for 6% and 5% of admissions respectively, and trauma a further 10%. HIV prevalence in Zambia is currently estimated to be around 14%. However, the vast majority of patients in Mumbandi hospital during our visit were HIV positive and this had a major impact on the presenting complaints. For many patients, HIV status is first checked after presenting with symptoms of opportunistic infections, and we encountered significant numbers of such patients with CD4 counts of less than 50.

This disease profile contrasts markedly to that of the UK where cardiovascular disease and cancer makes up a much greater proportion of disease. Different lifestyle factors, including diet, exercise, education + access to healthcare provision, along with the differences in HIV prevalence and life expectancy between the two countries accounts for much of the disparity. The existence of screening program and emphasis on preventative treatment + management of chronic conditions in the UK also factors.

In general, patients present in much later stages

One initiative that had recently been started at the hospital was a hypertension clinic. Here the set up was not dissimilar to how things would work in the UK. Once diagnosed as hypertensive, patients are first given lifestyle advice & then commenced on medication if required. Medication is commenced at low doses with regular review until blood pressure is stabilised on an optimal drug regimen. ^{less frequent reviews then follow} The main difference is that the care & follow-up is all held in the hospital rather than a primary care setting. In addition, the range of drug treatments available is less & so there is less scope for trying alternatives if, for example, first line treatment gives intolerable side effects, or the patient has other comorbidities to consider.

- ③ OBJECTIVE: TO IMPROVE MY UNDERSTANDING OF THE IMPACT THAT HIV HITS ON THE PROFILE OF DISEASE SEEN IN HOSPITAL AND LEARN ABOUT THE INITIATIVES TO EDUCATE THE PATIENTS REGARDING HIV TRANSMISSION AND MANAGEMENT -

I was shocked by the prevalence of HIV amongst the inpatient population. Although I was aware of the Zambian HIV prevalence overall, the estimated inpatient level of up to 90% was higher than I had anticipated & in itself is a reflection of the secondary impact of the HIV virus in terms of opportunistic infections. PCP, a diagnosis that would be considered ^{only in} rare circumstances in the UK is often the first line differential for patients presenting with shortness of breath in Mwan. The high incidence of HIV means that opportun.

condition, and reasons as to why compliance is so important. Posters around the hospital reinforce these messages.

That said, there remains much to be done in terms of education regarding transmission of HIV. A report written for a local children's charity in Mwanzi reported high levels of misconceptions amongst the local population. Contaminated food & sharing toilets were given as routes of HIV transmission with sexual activity constituting only a small proportion of the responses.

④ OBJECTIVE: Improve my management planning for patients, in terms of investigations to request and medication to prescribe. Reflect on how my approach develops over the elective period.

At first joining the resident doctor on ward round felt somewhat overwhelming. Patients who appeared very sick remained on the general ward, and many of the common conditions, such as malaria and PCP were unfamiliar to me. However, as the first week went on I realised that the approach required was really no different to that we would use in the UK. A thorough history is essential, together with relevant examination. Monitoring the vital signs, together with feedback from patients gives a good starting point for assessing whether a patient is improving or deteriorating.

Being in the hospital long-term, & joining ward round each day allowed me firstly to observe the