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HIV.

Elective report

Describe the pattern of illness/disease of interest in the population with which you will be working and discuss this in the context of global health.

Having done my elective in South Africa the key diseases, which I had identified are HIV and TB. Both these diseases often co-exist (i.e. HIV patients will often contract TB as an opportunistic infection) rather than being separate.

HIV is endemic within the South African population, with 5.6 million people living with HIV and/or AIDS, more than any other country. The number of deaths caused by HIV/AIDS was 607,184 people in 2006 of which 41% were in the age range of 25-41 years of age. This stat highlights how the disease affects those of a working age and most alarmingly because of the disease, average life expectancy in South Africa is only 51 years old. This means almost 2 million workers or potential workers have to take time off or can't get employment because of hospital visits and treatment, which is to the detriment of South African economy.

Although steps have now been taken to tackle the HIV problem (such as free access to anti-retroviral and early detection and treatment) the government had been in denial in the past about the disease which has lead to the subsequent situation within SA. From my personal experience while on elective in South Africa almost 80% of the patients I had met had HIV, and this poses a huge challenge for clinicians because treating these patients are extremely difficult given resources and also co-infection with TB, which means medication regimens have to be thought of carefully as ARVs and anti TB drugs interact with one another. I had a great deal of respect for the doctors there having to deal with these types patients on a daily basis; it must be extremely difficult both mentally and emotionally.

Amongst HIV sufferers at least 40% will have or have had a subsequent TB co-infection. TB is the leading cause of death in South Africa and accounts for 28% of TB deaths worldwide. This is an alarming stat when you consider that TB exists in SA as a result of HIV suppressing the immune system, something which can be prevented. Plus having been in some of the South African hospitals you can understand why the TB spreads so quickly. Patients are often not confined to separate rooms due to lack of availability and hospital staff don't always have access to simple thing such as masks to help protect themselves. Also the existence of shanty towns and close quarters living compounds the problem further. Another issue SA is having to deal with is the increasing prevalence of multi drug resistant TB (due to patients not finishing their course) which has increased the burden on the health system.

In summary HIV poses one of the biggest health risks in South Africa with TB complicating matters making the clinician's life very difficult especially with the lack of resources available to them.

Describe the pattern of health provision in relation to South Africa and compare this with the UK

South Africa was initially very slow to implement free antiretroviral therapy for the public, largely due to the political powers at the time being in denial about HIV (Mbke and Manto). However now anti-retrovirals are available for free to those suffering from HIV and South Africa receives a large amount of its ARV's from America for free. However access to the medication is poor with only 37% of HIV patients getting ARV's in 2009.

Also the combo therapy approach in South Africa is different to that of the UK's, as they don't receive some of the latest drugs out there such as the GP120 blockers (fusion and entry inhibitors), instead using the WHO guidelines of 2 NRTI's (nucleoside reverse transcriptase inhibitor) and an NNRTI (non nucleoside reverse transcriptase inhibitor) essentially having a limited choice. Also in the UK, HAART (highly active antiretroviral therapy) is initiated at a CD4 count of 350, whereas patients with a CD4 count of less than 200 are treated in SA.

Primary Regimen for ART-Naive Patients in SA
Tenofovir (TDF) 300mg daily
AND
Lamivudine (3TC) 300mg daily or 150mg 12 hourly (Emtricitabine, FTC, may in future replace 3TC)
AND
Efavirenz (EFV) 600 mg at night (or 400 mg if <40 kg)
OR
Nevirapine (NVP) 200 mg daily for the first 2 weeks, increasing to 200 mg BD if no hypersensitivity reaction

The same sorts of issues arise with TB in SA. Poor access plus poor adherence has lead to the development of multi-drug resistant TB, which is now spreading making it more difficult to treat, especially amongst HIV patients. Things such as negative pressure rooms and DOT (direct observational therapy) which are common practice in the UK are almost non-existent in South Africa due to lack of resources (i.e. lack of nurses and medical equipment)

The issues highlighted here only scratch the surface in regards to the difficulties faced in South Africa when it comes to management and treatment; however the country is moving in the right direction and hopefully can one day curb the spread of both diseases.