

## Introduction

I carried out my medical elective in Bethesda Hospital in South Africa. Bethesda hospital is a district general hospital located in north eastern KwaZulu Province. It is a rural hospital with 230 beds and provides a range of services including trauma and emergency, paediatrics, orthopaedics, maternal as well as the community clinics. I chose to do my elective here to gain experience in rural medicine in South Africa and to learn more about the common diseases affecting people.

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

The health system of South Africa is struggling to cope with four excessive health burdens:-

- (1) Communicable disease (especially HIV/AIDS)
- (2) Non-communicable disease
- (3) Maternal, neonatal and child deaths
- (4) Deaths from injury and violence.

The per capita health burden is the highest of any middle <sup>income</sup> country in the world. Unfortunately the brunt of all these disease burdens is still carried out by the poorest families.

South Africa, with only 0.7% of the world's population, has 17% of the world's HIV/AIDS cases - 5.5 million and the greatest HIV/AIDS burden of any country. Closely linked to this is the epidemic of TB, which has more than doubled since 2001. There are

Significant numbers of people with multi-drug resistant TB and an increasing number with xDR-TB.

KwaZulu Natal Province is the hardest hit with an HIV prevalence of almost 40% and a TB notification rate of 1066 per 100,000. I was able to see this with the large number of patients suffering from HIV and TB at Bethesda Hospital. Since 2003, free antiretroviral therapy has been provided in public health services. However, the load on the health system will increase further in the future as HIV/AIDS and TB will increasingly become chronic diseases requiring lifelong treatment.

Non-communicable diseases such as diabetes, cardiovascular disease, cancers and mental illness are on the rise and disproportionately higher in poor people living in urban areas. It is also increasingly affecting rural communities. In low income women, obesity is a rising problem.

In terms of maternal, neonatal and child health, South Africa is off track for achieving the millennium development goals for reducing child and maternal mortality. Each year almost 75,000 children die, 23,000 in their <sup>first</sup> 4 weeks of life. Another 23,000 babies are still born and closely linked to 1,660 maternal deaths. The main causes of maternal death are direct obstetric causes and HIV/AIDS - which increases the risk of maternal death ten-fold. Malnutrition in children is a major challenge in children as is HIV/AIDS.

Violence and injuries together form the second leading cause of death in South Africa. The death rate from injuries is almost double that of the global

average. Almost half of all injury deaths are from interpersonal violence between men. However, female homicide rate is 6 times the global average. Children are also exposed to physical, sexual and emotional abuse. Road traffic accidents account for 16,000 deaths each year. The roots of violence and injury include high levels of poverty and unemployment, alcohol and drug use as well as the widespread availability of firearms.

These current health burdens of South Africa are rooted in distinctive features of South African colonial and apartheid history that divided citizens according to race and gender. Major social changes resulted in destruction of family life, alcohol abuse and violence, contributing to the major current health problems.

Working at Bethesda Hospital, I saw most of these health burdens but particularly HIV, TB and malnutrition in children. HIV and TB, being so common in the population had to be considered a differential for the majority of patients presenting with various symptoms. After working in the paediatric ward, I saw just how common malnutrition was and the various problems that occurred when patients defaulted their HIV or TB treatment due to family issues.

Describe the pattern of health provision in relation to the country in which you will be working and contrast this with the UK.

In South Africa, both private and public health systems exist. The public systems serves approximately 80% of the population but is generally underfunded and understaffed. Only the wealthiest 20% of the population uses the private system, where there are far better facilities and provisions. The public system struggles to deliver healthcare to the people and the burden on the healthcare system is increased by the fact that almost half of the population are unemployed and living in poverty. The state system is chronically underfunded and spending on drugs per patient, for example, is much less than in the private sector. Along with a shortage of funding, there is also a shortage of doctors (only 7.7 per 10,000) especially in rural areas. The majority of doctors - around 80% - work for the private health sector. To help combat this, the government has made it easier for foreign doctors to practice in South Africa and has made it compulsory for medical school graduates to complete community service in understaffed hospitals and clinics. The majority of primary health care is nurse led; there are no general practitioners in primary care as such.

The National Health Service - NHS - is the publicly funded healthcare system for England. It is primarily funded through central taxation and provides a comprehensive range of health services, the vast majority of which are free at the point of use for

legal residents in the UK. It is the largest and oldest single-payer healthcare system in the world. Generally the same treatments are available to everyone regardless of their economic status. Primary healthcare is general practitioner led rather than nurse led. There is also private healthcare but the vast majority of the population uses the services provided by the NHS. There are many more doctors working for the NHS - 27 per 10,000. The NHS, being a public health service of a developed country is able to provide a high level of healthcare compared to the stretched, underfunded public health system of South Africa.

## Personal / Professional development goals. Reflective Assessment

I have had a very enjoyable experience at Bethesda Hospital. I rotated through the different departments at the hospital and learnt a great deal, especially about HIV, TB as well as malnutrition in children. I also had the opportunity to visit the community clinics and see patients. I have been able to practice my clinical skills and have learnt how to do certain procedures such as lumbar punctures, spinal anaesthesia and pleural taps - all of which I had no prior experience. Spending time in general outpatients and community clinics exposed me to a variety of patients and conditions. This has broadened my horizons and made <sup>me</sup> more knowledgeable. I have not only experienced a different health care system but also a different culture and way of life. Seeing the doctors and healthcare professionals work with limited resources and constraints has made me appreciate how difficult their work is and what a brilliant job they are doing for the local community. My time at Bethesda has been an invaluable experience and one I feel will benefit me greatly in the future.