

Elective report

1. Describe the pattern of illness found in the population of Uganda, with specific reference to cardiology and tropical medicine, and compare this to the UK.

For my elective I was based in Mulago hospital in Kampala, Uganda. Kampala is the largest city in Uganda and Mulago is the largest publically funded hospital. I split my time between the cardiology and infectious disease teams to try and get an insight into the different challenges the doctors in Mulago face.

One of the most obvious differences which struck me was the relative lack of patients with coronary artery disease at Mulago. In London I was used to seeing cardiology wards full of patients who were at varying stages of coronary artery disease, whereas I only saw two patients with symptoms which seemed to be due to coronary artery disease during six weeks at Mulago. This was mainly due to differences in lifestyle and diet. The indigenous African diet has lower amounts of fat when compared to a western diet and the diet of African Asians. This has been shown to have produced an interesting variation in the rates of coronary artery disease and serum cholesterol in Africans and Asians in Uganda. Asians in Uganda have much higher rates of coronary artery disease, mainly thought to be due to a diet with higher cholesterol and increased genetic susceptibility.^[1] The Asian population also in general are in a higher socio-economic group than the African population which may also result in lifestyle factors which contribute to coronary artery disease.

Many of the patients seen in Mulago were young people, especially males with severe primary hypertension. These patients do not have the means to go to primary care where their condition can be managed and so are generally seen in hospital when their condition has deteriorated significantly and they are very unwell. Many of the patients I saw were males under the age of 50 who were in heart failure due to sustained and uncontrolled hypertension. This would be quite a rarity in the UK as GPs are responsible for controlling and monitoring the blood pressure of a hypertensive patient. This layer of care exists in Uganda but cannot be accessed by the poorest and so they end up in a situation where they are given medication in hospital with no follow up or monitoring of blood pressure. Many patients also cannot afford to buy their medication which leads to rehospitalisation after a period of initial treatment.

There were also many patients who had been diagnosed with endomyocardial fibrosis. This is a rare disease which I had not come across in the UK and which leads to many sufferers developing heart failure. Having talked to the cardiology consultants it seems to have an interesting but unknown aetiology as it is only seen in people from certain geographical areas in Uganda and migrants from Burundi and Rwanda. Various theories suggest that it could be due to environmental factors such as diet, pollution or even soil type but no evidence has been found yet. The prognosis is poor as most people present late and are already in biventricular failure.

2. Describe health provision in Uganda and compare this to provision in the UK.

Healthcare provision in Uganda is organised in a hierarchical system of seven levels, each providing varying levels of population coverage and services provided. Levels one to four cover areas ranging from villages to counties. Typically a level one health centre will cater for 1000 people and mainly focus on preventative medicine and health education. A level four health centre caters for 100,000 people and covers, prevention, cure, rehabilitation and emergency services. The next three levels are district health services, regional referral hospitals and national referral hospitals (such as Mulago), which serve increasing numbers of the population and provide increasingly specialist services.

Healthcare spending as a percentage of GDP in Uganda is 7.2% compared to the UK figure of 9.6%.^[2] This compares favourably to sub-Saharan Africa which spends 4.8% of GDP on healthcare and low income countries (as defined by the WHO), which spend 4.6% of GDP.^[3] One of the most interesting differences in healthcare spending is the proportion of public and private spending. Publicly funded healthcare accounts for 88.3% of the total healthcare expenditure, whereas as this figure is much lower in Uganda at 37.9%. This means that the largest contributors to healthcare spending in Uganda are the Ugandan people themselves paying for services at the point-of-need. In an economically developing country this has severe consequences in terms of access to healthcare. External sources account for 28.5% of spending in Uganda. This is comprised of aid and charitable funding and plays a huge part in funding national healthcare.

The overall lack of funding was apparent at Mulago hospital where only the most basic investigations such as full blood count and chest x-ray were available for free to patients. There were two ECG machines in the whole hospital. One was available to all patients and the other was only for patients who were willing to pay for it. This free machine was typically found on the ward and so someone presenting to A&E would not get an ECG until they have been triaged to the wards. This is obviously very different to the UK where all patients with chest pain would have an ECG immediately and follow up ECGs.

3. How has the elective changed your personal and professional development goals?

My experience in Mulago hospital has changed my attitude towards working in the developing world at some point. Before I would have thought I would have been very unlikely that I would want to work in a developing country but I found that not necessarily having all the required investigations at your fingertips sharpens your clinical acumen and reasoning. I enjoyed ward rounds where every patient was discussed and considered in detail. This is not always the case in the UK.

In terms of my future career I don't think that my plans have changed dramatically, but I really enjoyed working with the infectious diseases team and learning about tropical diseases. This was an area of medicine I hadn't found very interesting in the past but I found it fascinating in Mulago and has encouraged me to ensure my knowledge in this area is kept up to date.