GENERAL MEDICINE

Elective Report

Name: Sonal Navsaria

Location: Mnazi Mmoja Hospital, Zanzibar and Muhimbili National Hospital, Dar es Salaam

Introduction

I chose to do internal medicine with a specific interest in HIV and public health in the prevention of HIV transmission. I chose to do my elective in an African country, this has allowed me not only observe the diagnosis and management of HIV but also to look at internal medicine at two tertiary hospitals in Tanzania.

1) **What are the prevalent conditions presenting in Zanzibar hospitals?**

In Mnazi Mmoja Hospital in Zanzibar I was able to spend time on both the male and female general medical wards. Here we were lucky enough to see a variety of different presenting complaints, often at late stages of a disease. The most common presenting complaints were renal failure and cerebral vascular accidents both secondary to hypertension, this seemed to be the most common diagnosis.

Hypertension was often coupled with diabetes mellitus which was another common diagnosis. On several occasions I observed patients who came in with hypoglycaemia or more commonly diabetic ketoacidosis. A few patients also had congestive cardiac failure.

I also saw many patients with Malaria, they presented with fevers and general malaise. I also saw a patient present with confusion, aggression and talkativeness. At first the patient was thought to have a psychiatric condition however on examination he has found to have a fever and so the diagnosis of cerebral malaria was made.

Overall I was able to observe a large number of conditions; however the most common was hypertension and its complications.

2) **How are the emergency services managed with limited resources in Zanzibar? How does this differ to the UK?**

Mnazi Mmoja Hospital was a tertiary centre and so they did not have an accident and emergency department, however there still had patients who needed urgent care in emergency scenarios such as myocardial infarctions and cerebral vascular accidents. No amount of reading had prepared me for the severity of lack of resources. This ranged from staff to investigations. There seems to be a large number of patients on a ward, there was little privacy and only 1 doctor per day to look after all of them. The investigations were basic. There was no pulse oximetry, arterial blood gases and only one ECG machine for the whole hospital. The female medical ward could only do ECGs twice a week. There was an X-ray machine and a CT. Advanced testing such as tumour markers, ventilation perfusion scans and biopsying could not be performed.

Another limiting factor was the cost of the investigations and treatment as many of the patients could not afford these. One lady had query ovarian cancer, however as she could not afford the abdominal CT she had to be discharged as there was nothing else the hospital could do. Patients who may have had strokes could not afford the CT heads. A patient who may have had Hepatitis could not afford the antigen testing. The list goes on.

In theatre there was a leak from the air conditioning that went directly into a patient wound, there was not money to fix the theatre. Aseptic technique was not always used due to lack of equipment and training differences.

In the UK things are so different. The NHS prevents all that is happening at Mnazi Moja Hospital. Patients do not need to worry about the cost of a CT or the medication they need. In the UK people do not think twice about seeking medical attention and so diseases are caught earlier.

3) **How is HIV managed and diagnosed in Tanzania? How is patient education delivered to the public?**

"Africa has 25% of the world's total disease burden, 3% of the total health workforce, and just 1% of wealth" Oxford Handbook of Clinical Medicine

At Muhimbili National Hospital I was on the Infectious disease ward. A large proportion of the ward was made up of HIV positive patients. Most of them were in the fourth stage of HIV with some serious opportunistic infections. Almost all of the patients were receiving HAART. I was surprised to find that all antiretroviral drugs were free of charge for the patient along with any other treatment they needed. The treatments were very similar to the UK with most patients starting with Efavirenz, Zidovudine and Lamivudine (or Combivir). Some patients were even on Atripla which is very common in the UK as it is only one tablet per day. However due to the limited funding the use of Atripla is restricted.

Much of the management I observed focused on treating the opportunistic infections. There were a large number of patients with Tuberculosis, cryptococcal meningitis, candida and a few patients with karposi's sarcoma. This differed to the HIV ward in the UK as the main opportunist infections were P.Carinii of which I only saw 1 case at Muhimbili National Hospital.

Most of the patients that I saw had already been diagnosed with HIV however the few that I did see get diagnosed presented with opportunistic infections and often with a CD4 count of less than 250. The diagnosis was made using a serum ELISA test. I did not see any rapid saliva tests being used.

Unfortunately due to the fact that my placement was in hospital I was unable to observe the health promotional aspect of HIV. I was however able to go to a HIV clinic. A large part of this was checking CD4 counts and prescribing drugs. I was also able to observe some health promotion. This mostly involved advise on sexual practices.

4) **Personal development goals: To further develop my practical and communication skills and to reflect on how I can improve.**

At Mnazi Mmoja Hosital due to the lack of investigations available/affordable the history and examination becomes the most important diagnostic tool a doctor can have. More decisions are based on clinical examination and gut feeling. Due to the language barrier I was unable to take a history from the patients. However I was able to examine patients. At times I did find it hard to maximise on the learning opportunities do to the number of students, at times this was 15 students following 1 doctor around on ward round.

When I could examine I found advanced signs that I would never find in the UK. I also observed how the doctors used their knowledge and clinical judgment to make decisions without all the tests that I am so used to relying on.

At Muhimbili National Hospital I was given the opportunity to practice phlebotomy, blood cultures and many examinations. I felt that in this short space of time I was able to improve my examination skills due to the number of signs there were to elicit. To improve I would like to take back to the UK all that I have learnt about decision making, forming a differential diagnosis and how to elicit sign and interpret then.