

ELECTIVE (SSC5c) REPORT (1200 words)

A report that addresses the above four objectives should be written below. Your Elective supervisor will assess this.

1. What is the most common paediatric presenting complaint? Does this differ from the UK?

In my time at Teule hospital I spent a week on the paediatric ward. One of the first things I noticed was the age of the patients. Almost all the patients were under 6 years old. ~~and~~ the ward was always packed and most of the beds had 2 children in them.

90% of the paediatric ward were children suffering from malaria, "preumaria" or diarrhoea. Sometimes it was a combination of 2 and sometimes it was all three. These children came with presenting complaints of fever, jaundice, shortness of breath + diarrhoea. The most common of these whilst I was on the ward was fever.

These presenting complaints are very similar to those we see in England. However, the underlying cause in many cases varied. By far the commonest cause of fever in a child in Tanzania (especially those under 6) was malaria. 60% of the paediatric ward had malaria. We attended Teule in April/May which is part of the rainy season and during this time rates of malaria are especially high. Therefore to further investigate my objectives I would like to look into rates of malaria on paediatric wards ~~at~~ during other months of the year.

Another common ~~diagnosis~~ diagnosis on the paediatric ward was "preenonia". After discussing with the doctors & auscultating many children's chests it became apparent that this diagnosis included bronchiolitis. This is also a common cause for admission in the UK.

2. What are the limitations of providing appropriate investigations in Tanzania?

I planned an elective in Tanzania and I knew they had less resources ~~and~~ less funding for healthcare. I therefore had assumed that there would be fewer investigations available. Only when I got here did I realise how few.

I spent each week rotating around different speciality + each speciality was limited due to the lack of investigations. I found this most noticeable on the medical ward.

Even the most basic tests weren't available. Ordering an FBC meant only getting an Hb. You could get a creatinine but no U&Es. HIV+ve patients could get a CD4 count but only on certain days of the week. The imaging modalities available were x-ray & ultrasound. CT scans, MRIs & even cardiac echos were not available unless the patient was transferred to the regional hospital in Tanga ~~or~~ ~~the~~ ~~nearest~~.

This all meant that diagnoses were mostly made on history (which was often limited) & clinical examination. ~~There~~ There were patients with ^{profound}DKA on the wards however there was no way of monitoring the pH. There was no way of monitoring their ket either. There wasn't even an ECG machine to monitor for arrhythmias. And this also means that ~~non~~ myocardial infarctions cannot be diagnosed - a far cry from the CCUs we have in the UK. As for as head injury goes - with no way of determining haemorrhages patients are blindly treated with mannitol.

3. Does treatment of infection differ in the UK & Tanzania?

The commonest infective condition I saw during my time at Teule/St. Augustines hospital was malaria. This occupied most of the paediatric ward + much of the male + female medical wards.

The treatment of "non-severe malaria" was "ALU" which is a combination of atemeter & lumefantrine. Severe malaria was treated with quinine. Whilst malaria is uncommon in the UK this treatment is the recommended treatment. The most common type of malaria in the area of Mukeza is probably *Plasmodium falciparum* + the treatment is the recommended treatment by WHO.

There were many patients in the hospital with pneumonia or with infective diarrhoea. However no ~~more~~ appropriate investigations were not available to distinguish which organisms were the causative agents. Therefore most patients received blind/empirical treatment.

Some of the antibiotics used are not commonly used in the UK. For example, many children on the paediatric ward were on gentamicin for diarrhoea. This is often avoided in the UK in children due to risks of toxicity. However, some of the antibiotics used would be considered appropriate. Pneumonia was mostly treated with a penicillin such as ampicillin. In Tanzania there is no severity scoring system like the CURBS & the not distinguish severe & non-severe formally. However in the very sick patients they are often put on a combination of antibiotics such as a penicillin + claritromycin as they would be in the UK.

4. How did I deal with the challenges of delivering healthcare with limited resources?

When I chose an elective placement in rural Tanzania I knew there would be limited resources. However, it was not until I got here that I realised how limited. It has been a very humbling experience to be part of a system where doctors themselves are not the rate limiting step in the provision of healthcare.

One of the aspects I have found most difficult to deal with is the fact that this is a payment at point of delivery system. As a doctor on a ward round you examine a patient then most likely order an investigation, maybe two, & ~~maybe~~ also you may also prescribe symptomatic or curative medications. However, the patient will not receive their appropriate investigation until it is paid for. They will not receive their appropriate treatment unless it is paid for. ~~Rebate~~ The money is mostly brought in by relatives who visit from 12.30/1 pm. This means vital medication may not be given for hours.

However there are some public health systems in place for free for Tanzanians. These are very rewarding to see. This includes treatment for TB & ~~tuberculosis~~ HIV. It also includes vaccination schemes for children & contraception for women - this includes depo injection, oral contraceptive pill + implants. With amazing schemes like this it seems that Tanzanian healthcare is moving in the right direction.