

ELECTIVE (SSC5b) REPORT (1200 words)

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

What are the most common presentations to A&E in Kigali? Discuss this in the context of global health.

My experience in the Accident and Emergency department in the UK is probably not directly relatable to my experience in Central University Hospital Kigali (CHUK) in Rwanda. My time in the UK was spent in a smaller hospital which did not receive referrals from other hospitals, and many cases which occurred in the region served by this hospital were redirected to a tertiary referral centre before ever entering the doors of the smaller hospital. The tertiary referral centre had expert teams for dealing with major trauma, so there was almost none of this in the patient population I have had experience with. CHUK, on the other hand, is a tertiary referral centre fed by district hospitals spread far and wide across Rwanda. It has a considerably more sophisticated emergency department than these hospitals, and receives many of their most difficult cases, including a huge volume of trauma patients. Similarly to the UK, most of this trauma is caused by road traffic collisions. Accidents involving the riders and passengers of the extremely popular motorbike taxis make up the majority of the trauma cases, and a significant proportion of the emergency department admissions.

Unsurprisingly, the emergency department in CHUK has a far higher incidence of tropical infectious diseases. Malaria is particularly common, as well as tuberculosis and HIV. It is common to see patients in the emergency department with the sequelae of untreated HIV, which is considerably less common in the UK, partly due to a decreased prevalence of HIV but also due to more widely available treatment.

Trauma and infectious disease make up the large majority of the emergency department's work. The infectious disease includes presentations which are also common in the UK, such as pneumonia and urinary tract infections, as well as the tropical diseases discussed above.

Because healthcare is free in the UK, it is uncommon for diseases to present at such a late stage as in CHUK. Most people in Rwanda have some form of medical insurance, but still pay a proportion of their medical costs. This means that people are likely to present later, only when the disease is giving them intolerable symptoms. There is also often a delay in presentation to CHUK as many patients will be referred from a community clinic to a district hospital before reaching the tertiary referral centre. These delays in treatment can make it more difficult to control disease progression and in some cases mean that the disease is untreatable by the time it reaches CHUK.

Describe the pattern of emergency medicine health provision in Rwanda and contrast this with the UK.

While many diseases are treated in exactly the same way as in the UK, they are often using a reduced selection of drugs (which may or may not be available from the pharmacy that week), and particular equipment and drugs are valuable resources spent carefully. This is most obvious in the case of ventilators. For the time I was on placement in CHUK, the emergency department had between 2 and 4 ventilators working to various degrees of quality. There are particular problems at the moment in making end of life decisions in the emergency department as there is little local knowledge about the role of ventilators in returning patients to health, and the hopeless prognosis of severe brain damage. As it is therefore hard to get consent from the family to turn off ventilators, patients who will never recover are left on them until another patient with a better prognosis requires one.

The nutritional needs of patients are mostly served by their friends and family rather than the

hospital. There is no formal system for feeding patients, so their relatives bring food and drink to them in the hospital. This can leave gaps in the system for patients who do not have anyone to bring them food. My understanding is that in some cases the staff will bring them food and drink, but this does not always happen.

The role of the emergency department in treating patients seems quite different in this context to that in the UK. In the UK there is a 4 hour target for discharging patients home or to another hospital team. This means that the role mostly involves the immediate stabilisation and treatment of patients. However in CHUK the average stay in the emergency department is between 3 and 4 days, extending the role to include longer term medical treatment of patients. This is partly related to the slower flow of patients through the hospital generally, leading to longer waits for beds in ITU and the wards, but delays related to a patient's ability to pay for their treatment also play a role. Before a patient can have a CT scan, they have to pay for it. If they can't afford a CT scan then decisions about their treatment have to be made on a purely clinical basis. If there is some confusion over whether or not a patient will be able to pay for the scan, it is not uncommon for decisions regarding their care to be delayed while waiting for the scan, with the scan itself taking several days to be paid for and then performed.

The documentation of everything that happens to a patient and every decision made regarding their care is considerably more consistent in the UK than in Rwanda. This is perhaps partly due to the litigious nature of UK medicine, but can lead to gaps in communication between members of the staff and uncertainty over exactly what has or hasn't happened to a patient.

Because of the expense of scans routinely used in the UK such as CT and MRI, the emergency department in CHUK is considerably more reliant on ultrasound techniques. All the trainees I worked with were experts at diagnosis using ultrasound, which seems an incredibly useful skill as it is cheap, minimally invasive and non-harmful.

Discuss the treatment options for common tropical infections in Kigali

Disease	1st Line Treatment	2nd Line Treatment
Malaria	Artesunate	Quinine
HIV	Tenofovir (TDF) + Lamivudine (3TC) + Efavirenz (EFV)	Tenofovir (TDF) + Lamivudine (3TC)* + Nevirapine (NVP)
Tuberculosis	2 RHZE / 4 RH	2 SRHZE / 1 RHZE / 5 RHE

Practice communication with patients with a first language other than English

It has been very difficult to practice communication with patients in CHUK as the vast majority of them speak only Kinyarwanda with a few words of French or English. As the hospital staff tend to be more educated and conversation between doctors is often in English, I have relied on them to translate for me if I needed to talk to patient. This works well for getting consent to perform examinations or use ultrasound scanning, but makes history taking nigh on impossible.