

1. What are the prevalent medical conditions in Uganda? How do they differ from the UK?

Overwhelmingly the most common presentation on the paediatric and general ward is Malaria. In any patient presenting with fever, malaria is the primary differential and quinine therapy is commonly initiated before the diagnosis has been formally established. Patients often present late and are commonly acutely unwell with high fevers, hypoglycaemia and life threatening anaemia. The mainstay of treatment for these patients is intravenous quinine, fluids, correction of hypoglycaemia and in severe cases a blood transfusion. Within a few hours of beginning such therapy, most patients appear to significantly improve and many are discharged within a few days. Another common presentation seen in Rushere is typhoid, a tropical disease caused by salmonella typhi. This condition is rarely observed in the UK, except in travellers returning from tropical regions. Typically this disease presents with high fevers, a dry cough and severe abdominal pain, it is also a leading cause of bowel perforation in Uganda. Patients are treated with fluid replacement and a ten day course of ciprofloxacin, the majority of patients make a full recovery although if left untreated the prognosis is poor.

HIV is still a huge burden in Uganda and while in recent times a fall in the rates of the infection has been seen, recent support of abstinence over barrier protection has seen rates of the infection start to increase again. Patients presenting in late stages of HIV or with aids defining illnesses are far more common here than in the UK, this might be attributed to late diagnosis and difficulties accessing the services here due to the stigma of attending HIV clinics. The provision of anti-retrovirals has seen huge improvements in Uganda but there are still large numbers of HIV positive individuals currently unaware of their status.

We have seen far less of the common UK presentations at Rushere hospital, such as hypertension, diabetes, and cardiovascular disease. This may reflect the shorter life expectancy seen in Uganda and is probably also related to the lower rates of obesity seen in this area.

2. How are services organised and delivered? How does this differ from the UK?

The hospital is a two tiered system with private and public facilities. On admission patients can choose to pay more for a larger, more private ward with better facilities or are admitted to the cheaper, crowded public ward. On admission to either ward a record of all tests, equipment, procedures and medications are kept for each patient and the family is billed at the end of the hospital stay before discharge drugs are dispensed. Everything from surgical gloves to glucose

monitoring strips have a cost for the patient. We have heard stories of patients absconding prior to completion of treatment to avoid paying these charges and it is clearly a significant burden for many members of this community. The cost of treatment is commonly considered in the management plan of a patient, many do not access appropriate services at nearby referral centres due to the cost implications.

Some services in Uganda are government funded. We witnessed an excellent outreach programme that delivered vitamins, worming tablets and vaccinations to children in the rural villages surrounding the hospital. Antenatal services are also provided free of charge. HIV testing and treatment are funded by the government and external aid, the hospital has a large clinic twice a week with specialist nurses providing counselling and anti-retroviral therapy.

In the UK it is unheard of for the financial status of a patient to impact on their access to medical services and all UK residents are entitled to free healthcare through the national health service. When formulating a management plan, doctors in the UK do not have to take into consideration the financial status of the patient.

### 3. How does the management of prenatal, perinatal & post natal care of women differ from the UK?

Antenatal care is provided both in the hospital and through outreach in the surrounding rural villages. Women are seen once in each trimester for an antenatal check, which features measurement of the fundal height, listening to the fetal heart rate and taking the maternal blood pressure. Women are also offered an HIV test and those found to be positive are appropriately counselled and given suitable treatment depending on their CD4 count.

During our time at Rushere we witnessed a higher rate of late miscarriage compared with our experiences in the UK. Perhaps this reflects the limited antenatal screening most women have access to, with ultrasound only available at a cost.

Women can choose to deliver their baby in the community, at home or in primary healthcare centres; or they can come into Rushere hospital for delivery, particularly in cases of problematic labour. The hospital has specialist trained midwives who manage the maternity department, consisting of wards and a labour room. There is also the facility to deliver via Caesarean section if required, however the risks associated with this are significant and the threshold at which one is recommended is higher than that of the UK. For example, in the UK breeched presentations are routinely delivered by caesarean, however here breeched babies are commonly delivered vaginally. Women are expected to bring sheets on which to deliver, bed sheets and all equipment required for the infant.

Postnatally, most women having had a normal delivery are discharged within 24 hours. The baby does not routinely undergo a neonatal examination and care of the baby is left entirely to the mother and her family. Following a Caesarean section women are routinely admitted for five days to ensure haemostasis and to monitor for infection. The next interaction mother and baby have with healthcare professionals is at the clinic providing their first childhood vaccine.

#### 4. Methods of overcoming language, communication and cultural barriers?

The language of the people in Rushere is Ankoli, a regional dialect with roots in the traditional Ugandan language of Lugandan. While most of the healthcare workers speak excellent English, we have found that most patients speak only Ankoli, posing a significant language barrier. During the ward round the doctor translates his conversations with the patients allowing us to be included in the consultation. When we are alone on the wards we have sought the help of student nurses who are able to translate our communication with patients. At times we have had to use basic visual aids to demonstrate our intentions, for example taking our own pulse before taking the patients.

There are huge cultural differences between Uganda and the UK and we have endeavoured to learn and understand these differences in our time at Rushere. One such example is the attitude of local people to the use of oxygen. In the UK oxygen is freely used for many patients on the ward, however in Rushere hospital it is only used in acutely unwell patients. For this reason many patients and relatives fear it's use as it is associated with significant mortality. This cultural difference can make it difficult to initiate appropriate oxygen therapy, something we had not envisaged being a problem.