ELECTIVE (SSC5c) REPORT (1200 words)

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

1. Compare the pattern of disease/illness seen at Rushere community hospital and the surrounding villages, with larger cities of Uganda (e.g. Kampala): a comparison of rural vs urban Uganda.

Rushere Community Hospital (RCH) is situated in the Kiruhura district in the southwest of Uganda. It is a Health Sub-District Headquarter for the area, mandated with planning, organisation, budgeting and management of the health services at this and the 12 lower level government health centres within a 70 mile radius. The hospital consists of 82 beds across a general ward, paediatric ward and maternity ward.

Due to the tropical climate, communicable diseases, namely TB and malaria, are the most common causes of admission - malaria more so at the time of my visit due to it being rainy season. As their presentation was often non-specific, quinine therapy was often started before tests confirmed the diagnosis. Injuries also featured heavily on the general wards due to the widespread use of boda-bodas (motorcycles) without helmets and high incidence of assaults for example a machete attack that had cleanly severed a man's trapezius muscle.

As per the referral based healthcare system in Uganda, RCH functioned as a referral centre for the surrounding lower level health centres, therefore the materity unit often saw a higher incidence of labour complications requiring caesarean sections than natural births, and so is not representative of the true pattern of the area.

To experience the difference in rural and urban hospitals, I paid a 3 day visit to the maternity ward at Mbarara Regional Referral Hospital (MRRH), which was overwhelmingly busy, with women sleeping on mattresses on the floors when there were not enough beds to accommodate them. MRRH receives referrals from sub-district hospitals such as RCH and lower level centres and sees 30 births a day, 10 of which are emergency caesarean sections that have often being referred in. In reflection, therefore, of the more complex cases they would tend to see, MRRH had a higher maternal mortality ratio of 27 in 2012.

2. How does the resources available to health practitioners at Rushere Community Hospital compare with those seen in NHS hospitals?

Never having visited Africa before, or worked in a hospital in a third world country before, my bleak ideas of what to find at RCH were based on the media. However, I was pleased to find that RCH was better equipped than I thought.

Patients that are not referred are seen in outpatients by medical officers and if deemed best to admit are cannulated, similarly to A&E in UK. Admitting patients are, once on the wards, started on IV fluids and often IV antibiotics regardless of presentation or source of infection. This was a strange custom for me to get my head around as not only are we taught to be cautious of antibiotic overuse and resistance in UK, but also the antibiotics that were commonly used at RCH included gentamicin, which in the UK is monitored closely for toxicity. Medications on the whole was generally well-stocked, and

when on occasion the hospital pharmacy was out of stock of a particular medication, the patient, or a relative, would purchase it from a local pharmacy or be given an alternative.

while management was not so problematic, with the availability of cannulas, needles, giving sets and IV therapy, diagnostic tests were limited. The on-site lab was able to process simple blood tests such as full blood count, but not U&Es or CD4 count, which would have been useful with the high number of cases of AIDS-related illnesses. Similarly, while there was a x-ray, there was no CT scanner, and in fact, there is only 1 MRI scanner in the whole of Uganda. And while sputum and urine culture was possible, CSF analysis was not.

The operating theatre had only one functioning room, as the other was lacking a operating table, and was equipped to carry out caesarean sections, hysterectomies, bowel anastomoses and hernia repairs. anaesthetic monitors were dated (blood pressure had to be taken manually) and choice of anaesthetic drugs were limited (often short-acting anaesthesia was used and the patient would start to wake and feel pain before they were closed).

The hospital had two portable oxygen machines, however both were faulty during my time there and a premature neonate was lost because of lack of oxygen for resuscitation.

One resource in particular that was lacking was the number of doctors. During a conversation with an O&G consultant we found out that Barts graduates more doctors each year than all the medical schools in Uganda combined. At RCH there was a F1 Monday to Friday with on-call nights, an surgical SHO Monday to Wednesday plus nights, a O&G ST3 Thursday to Sunday plus nights, and an internal medicine consultant on Mondays and Fridays. One method Uganda has adopted to make up for the lack of doctors is the additional healthcare staff they have, named clinical officers, who often work in outpatients (A&E) to clerk new patients, prescribe them treatments and admit or discharge them as they feel. they would also review patients on the wards if the doctors ward round was prolonged on another ward. Each ward has one nurse overseeing however many patients. While this would never be sustainable in an NHS hospital, in Uganda, patients are encouraged to bring an attendant, often a relative, to stay for the duration of admission and aid with 'nursing' tasks of washing, toiletting and feeding, thereby freeing the nurse to administer medication etc.

3. What are the most prevalent maternal complications seen at Rushere Community Hospital? Are these also the most prevalent complications identified in the UK?

In a country where the fertility rate in 2012 was 6.0, and higher in rural areas such as RCH where I met a woman with 14 children, obstetrics is an important speciality. Maternal mortality ratio in 2010 was 310 and according to UNICEF. Most of these are the result of unsafe abortions and obstretric complications such as severe bleeding, infection, hypertension and obstructed labour, often due to delivering outside health facilities without skilled care.

93.3% will pay at least one antenatal visit, but only 47.6% pay at least 4 visits. Antenatal visits would save many women delivery complications of pre-eclampsia and gestational diabetes by optimal treatment during the pregnancy; I witnessed a case of both conditions that had not been diagnosed until labour, resulting in stillbirths. Not taking advantage of antenatal services also meant they had no recent ultrasound scans done, if at all; one woman with large for dates abdomen was delivered by caesarean for macrosomia, but was found to be carrying twins. RCH aimed to tackle this by

undertaking outreach clinics in rural areas that involved a midwife history-taking, examining, administering tetanus vaccines and performing HIV tests on pregnant women and advising to follow-up at the hospital.

As healthcare in Uganda is private, many turn to cheaper traditional medicines rather than attend hospital. Uterine rupture was a complication I saw on occasion due to herbs given by traditional healers in prolonged labour to increase contractions. Also due to the cost , women delayed attending choosing rather to labour at home until complications arose. And as a referral unit for the surrounding health clinics, the women who were referred were usually in prolonged often obstructed labour. However assisted deliveries with the use of ventouse or forceps was not practised at RCHand therefore these women were taken to theatre for caesearean sections. of these women, there was one case of a woman who remained hypotensive and anaemic following surgery. She was taken back to theatre within 12h, after fluid resuscitation and blood products had no effect on observations, and a bleeding site at one of the broad ligaments was located and a hysterectomy was performed.

4. How will the experience of working in hospital in a third world country, with limited resources and language barriers, affect my future practice?

My experience at RCH has certainly been different to any experience at our UK NHS hospitals, in terms of the population, language, culture, facilities and medical conditions.

While all hopsital staff spoke English and all records etc. were in English, some patients, often the women, only spoke the regional language Runyankole. In a bid to communicate with these patients, but also show respect, I learnt a few key phrases and medical terms to build trust and break the language barrier. Patients were often willing to allow me to examine them, take blood etc. as it was the cultural norm to allow doctors and nurses to do anything with minimal questions asked, but also because they would be pleased to say that they were treated by a 'Mzungu' (white person)!

There were many moments we were left watching helplessly such as when a teenage girl died of an AIDS-related respiratory condition as there was no oxygen and her family had no funds to take her to MRRH. On the other hand, when a man suffered a multiple fractured pelvis from a RTA we had to fashion a pelvic binder using bedsheets to use when transferring him to MRRH.

Having obliging patients, trying to communicate without translation services and experiencing tough moments made this elective valuable to my learning and future practice.