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GENERAL MEDICINE

Rushere Community Hospital – Uganda
Elective Objective Report 2012

1) What are the prevalent diseases affecting patients at the Rushere Community Hospital and the surrounding communities? How does this compare to other regions of Uganda and other countries in Africa?

The range of diseases present at Rushere is quite remarkable. It is fair to say, however, as with many tropical regions, the major burden of disease is of a communicable nature (Figure 1). The vast majority of patients on the general adult and paediatric wards are there due to an infective cause in one form or another. From my limited experience, I think it likely truthful to say that even those that are admitted for other medical reasons are likely to have some manifestation of infection present (often dermatological).

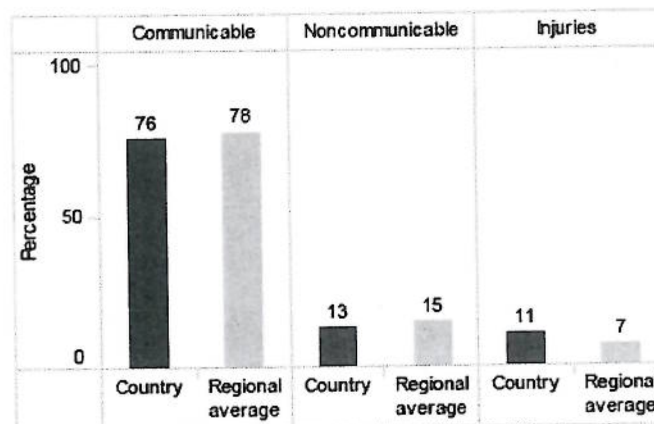

Figure 1 – Distribution of years of life lost by different causes in Uganda (2008)

Further analysis of the types and impact of infection is outlined in objective 3.

It is of note though that, although many of the diseases present at Rushere and other parts of sub-Sarahan Africa are also present in the UK, the presentations of them can often be quite different. Due to the limited access to established health facilities and a continued use of traditional healers, pathology accrues insomuch that by the time of presentation, the disease is often at a different stage as to what it would be at diagnosis in the UK.

Although this allows for rewarding 'end-of-bed' diagnoses (I myself diagnosed aortic stenosis before laying a stethoscope on the chest) it only adds to the challenge for the health professionals to deal with advanced pathology with limited resources.

One thing that struck me, however, is the importance of not forgetting 'Western Medicine' when assessing patients. It is easy to become blinkered with a 'Tropical Medicine' mindset, but ultimately problems such as hypertension, diabetes and even rarities such as Cushing's disease can - and do (/did) - still present.

Finally, as Figure 1 highlights, injuries (both accidental and not) are commonly confronted. The widespread use of boda-bodas (motorbikes – riders often without crash helmets), the presence of open fires in the home and the age-old issue of human violence further adds to the presentations seen (of note is the gentleman with a severe necrotising faciitis of the forearm due to a human bite).

2) What facilities are available at the Rushere Community Hospital and how does this compare to a standard NHS hospital in the UK. Does the availability of provisions have an impact on patient care?

Uganda is a landlocked country in central-east Africa with government-funded state hospitals and a number of other subsidised not-for-profit and private healthcare services. The following health statistics have been taken from the World Health Organisation:

	Uganda	Regional	UK	Global
Total Population	32,710,000	-	62,565,000	-
Life expectancy at birth (m/f)	48/57	52/56	78/82	66/71
Under-5 mortality rate (per 1000 live births)	128	127	5	60
Health Expenditure as % of GDP	8.2	-	9.3	-
Health per capita (Intl. $)	115	-	3399	-

Rushere is situated in the South-West of Uganda, about 4 hours from the capital, Kampala. The hospital is a non-government, not-for-profit missionary hospital that provides a number of services to the local communities (including general adult and paediatric services, obstetrics, surgery, outpatients and dental services). It is staffed by two full-time doctors and a number of nurses, midwives, clinical officers and administrators. A casual discussion led to the realisation that Barts and The London School of Medicine graduates more doctors each year than every medical school in Uganda combined. The relative lack of health professionals is depicted in Figure 2.

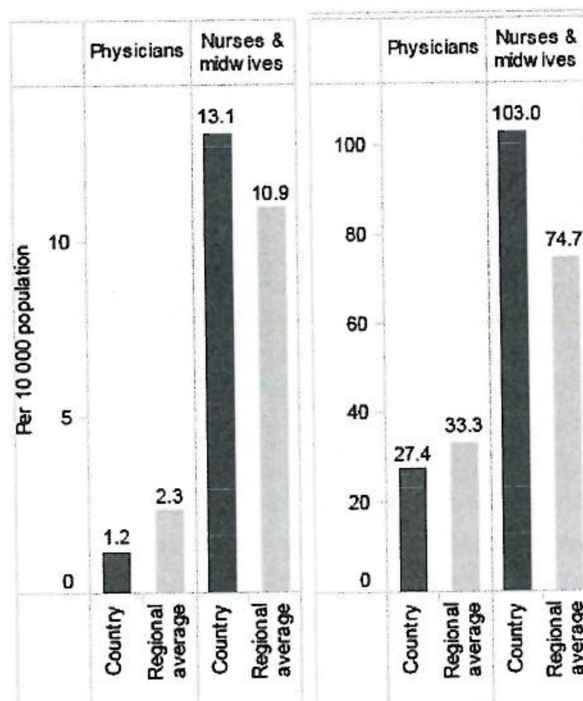

Figure 2 –Health Workforce in Uganda (left) compared with the UK (right)

It is of note that the doctors working within these regional hospitals do take on a much wider range of responsibilities than doctors within the UK. It is not unusual to be doing general medicine in the morning, paediatrics before lunch and surgery in the afternoon.

In terms of material resources and facilities there is an undeniable contrast between Rushere and a typical NHS hospital. There is a greatly reduced spectrum of investigations that can be performed at Rushere (for example,

there are only limited laboratory investigations and no CT or MRI scanner) plus medical equipment is limited (reliance on non-disposable equipment e.g. scrubs; finite numbers of cannulas; limited (working) sphygmanometres). Furthermore, the range of medications is more concise with greater dependence on broad-spectrum treatments, with less options within drug classes. The access to effective analgesia is also limited.

Obviously, these differences do have an impact on patient care but patients are still cared for within the means available. There is also the availability to refer patients to larger hospitals in the region to receive more specialist care. There is undeniably some frustration present when things that *could* be done are not done. It is important to note though that due to the private nature of the health system, even if every investigation or treatment was made available, the likelihood of patients being able to pay for the increased cost of their care is a different matter entirely.

3) What are the common infections affecting patients at the Rushere Community Hospital? Are these present in the UK? Do treatments exist and are they available in the region?

The commonest infections encountered have been malaria, HIV and tuberculosis. The following statistics exist for HIV and TB (taken from the World Health Organisation), with Rushere having slightly higher rates of HIV to the Ugandan average:

	Uganda	Regionally	Globally
Prevalence of HIV (per 1000 adults aged 15-49)	65	47	8
Prevalence of TB (per 100,000 population)	278	475	201

The importance of these infections has been highlighted globally with them attracting much funding and political attention. There is increasing importance placed on public health initiatives to encourage safe sex practices to limit the spread of HIV (the major spread of which in African countries remains via heterosexual intercourse). Rushere run an HIV treatment clinic which offers a free service to HIV positive individuals and their families. An issue which further complicates HIV is the ensuing immune-suppression which leads to a range of opportunistic infections which are not seen in immune-competent individuals. Examples include *Pneumocystis jiroveci* pneumonia, Kaposi's sarcoma and cytomegalovirus disease.

Furthermore, immunisation regimes against important infections are actively enforced including outreach projects to reach remote communities (one of which I was lucky enough to participate in). There are also financial allowances made for certain aspects related to the major infections such as free sputum testing for tuberculosis.

Further to these 'major' infections, Figure 3 highlights the vast importance that other infections (notably those causing gastroenteritis and chest infections) have in infant mortality; examples of which, on the most part, have been witnessed at Rushere.

On the most part, the treatment (not necessarily cure, but effective management) exists for all of the infections outlined above. The sad thing in regards to diarrhoea leading the charge in infant mortality is that the cause of death is often dehydration – an eminently treatable symptom provided access to clean water. Fortunately, the expensive drugs required for the treatment of HIV are often subsidised for nations with the greatest burden although the depth of options is limited compared to the UK.

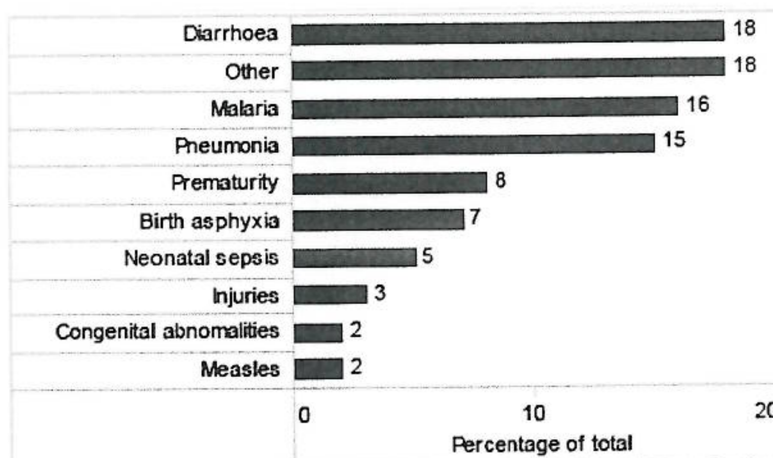

Figure 3 – Causes of deaths in children under-5 – Uganda 2008

4) How will the experience at Rushere Community Hospital affect one's future practice? Has it influenced one's future approach to the assessment, formation of a diagnosis and implementation of management plans?

My experience at the Rushere Community Hospital has been an enlightening one. My desire to undertake my elective in sub-Sarahan Africa has proved a rightfully wise choice. It has provided me with quite a unique experience in all manner of realms; culturally, environmentally and medically.

Despite studying and living in East London for 6 years, nothing can quite prepare you to being in such a minority. Being in such a rural area of Uganda and having near everyone stare at you or shout "Muzingu" is quite an experience. It cannot be viewed as rudeness though, but rather intrigue. The attention is matched on the most part by a generous, humble kindness, whether it be an "afternoon doctor" in someone's second tongue, or being sat next to the top table at a diplomat's son's wedding!

Medically, the hospital has provided fascinating pathology, ethical talking points and harrowing opportunities. Furthermore, the sheer breadth of the practicing doctors' knowledge and skills can only be admired. The reliance on clinical acumen rather than fancy investigations is noteworthy. All too soon in the UK, tests are ordered out of routine or defence rather than clinical need. It is also apparent that many things we have in the UK are taken for granted (e.g. virtually unlimited observation charts) and others sheer luxury (e.g. play therapists).

Overall, the experience will allow me to put many things into perspective. For one, I shall have to bite my tongue when confronted with patients complaining of the poor NHS food or waiting times! Ultimately though, the Art of medicine is working to the best of one's ability, within the available means, to the benefit of the patient. What it boils down to is an unfaltering passion to cure disease, ease discomfort and improve the quality of life of our patients and their families; whether this is at The Royal London, or Rushere.

Bibliography

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- Lecture Notes on Tropical Medicine 6th Edition – Gill and Beeching – Wiley-Blackwell (2009)

Acknowledgements

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