Elective 2014: Tanzania- Murgwanza Hospital/Tumaini Fund, Diocese of Kagera.

Zobia Arshad

Objectives

1) Describe the pattern of disease/illness of interest in the population with which you will be working and discuss this in the context of global health

2) Describe the pattern of health provision in relation to the country in which you will be working and contrast this with the UK

3) Health Related Objective

4) Personal/Professional development goals: must also include some reflective assessment of your activities and experiences.

I recall one of the first conversations I had soon after arriving in Murgwanza, and before we started our placement at the hospital, with a Tanzanian teenager; our 18 year old neighbour with an interest in pursuing medicine, who remarked: "I think that God is fair; he has given you Westerners some diseases and us different diseases". After spending time in Murgwanza Hospital, I can see how despite the dubious "fairness" of disease distribution, in many ways, this observation encapsulates much of the pattern of illness in this region: Malaria, Tuberculosis, HIV/AIDs, Malnutrition syndromes and water-borne illnesses comprise a sizeable proportional of the burden of disease here but are conditions we would rarely expect to see in the UK. These are also, generally, preventable or, at least, treatable conditions, but in the context of limited resources and economic fragility, end up causing the bulk of mortality in Sub-Saharan Africa.

Regardless of age, malaria and pneumonia serve as the most frequent reason for admission and cause of mortality at Murgwanza hospital. However, the prevalence of diseases such as hypertension and diabetes follows a similar pattern to the UK and is globally rising, partly due to a genetic predisposition but also due to the lack of education regarding healthy nutrition. Even in the relatively affluent diet is poor, consisting mainly of carbohydrates and saturated fats.

An interesting observation relayed to us by the medical officer in charge was that the pattern of disease presentation to the hospital can be reflective of the staff working within it. As the hospital tends to be understaffed, there are only one or two speciality doctors. Currently as there is one obstetrician and gynaecology specialist the number of women with O&G related conditions attending the hospital has consequently increased and the most common surgeries performed in theatres are currently: caesarean sections, salpingo-ophorectomy, bilateral tubal ligation and total abdominal hysterectomy (also hernia repairs, as these can be performed by the non-specialist doctors).

Poverty plays a key role in determining the overall provision of health for the population: Tanzania was ranked at 201 out of 229 countries in terms of GDP per capita in 2008. Health expenditure is around €5/person per annum and consequently hospitals are plagued by deficiencies in all aspects patient care: human resources, medical equipment and pharmaceuticals.

Due to its remote locale, Murgwanza hospital experiences difficulty in recruiting healthcare workers, particularly doctors. This problem of unequal distribution of human resources is not limited to Murgwanza: a survey conducted in 2006 revealed that 52% of Tanzania's doctors work in Dar es Salaam, leading to 25 doctors per 100,000 people in this region; the national average is 3.5 doctors/100,000 people. Murgwanza hospital is responsible for a known population of at least 335,000 people, with a total of 5 doctors currently working at the hospital, resulting in approximately 1.5 doctors/100,000 population: significantly less than the national average and a huge contrast to the UK. Consequently the few doctors who work here are overworked and underpaid; doctors must come in on weekends to discharge patients from their wards, despite not being scheduled to do so, because if they do not, the wards will be overrun with patients on Monday morning. As it is, Murgwanza hospital is approved to have 200 inpatient beds. This is almost always exceeding 100% occupancy and, particularly on the paediatric ward, it is not uncommon to see 2 or 3 patients to one bed, a concept unheard of in the UK. There are support staff in the form of clinical officers, as well as nurses, who spearhead the outpatients department and act as a triage service for admission, escalation and also provide treatment.

Tanzania's health care consists of a mixed system of private and public health services. Faith based organisations, such as Tumaini, provide over 40% of health care provisions. Medical care for under 5s and over 65s is provided for free by the government, as well as maternity care, emergency and HIV treatment. For myself, it was a shock to see a price list for surgeries hung on the wall of the scrub room. Prior to starting my hospital placement, I was aware that a discrepancy in healthcare provisions would, of course, exist between an affluent country with a public health service such as the NHS in the UK and Tanzania, but after seeing an entire day's elective surgery list cancelled because none of the patients had paid, it was evident how widespread a problem affordability of treatment is.

Affordability and availability further propagate the problem of 'witch doctors', particularly in rural areas, where the majority of people will first seek treatment from traditional healers. Around 60% of those seeking health services depend on some traditional health services, according to the Ministry of Health and social welfare. This can be troublesome as inaccurate and, most sinisterly, dangerous treatment/advice can be given, exacerbating conditions and delaying treatment.

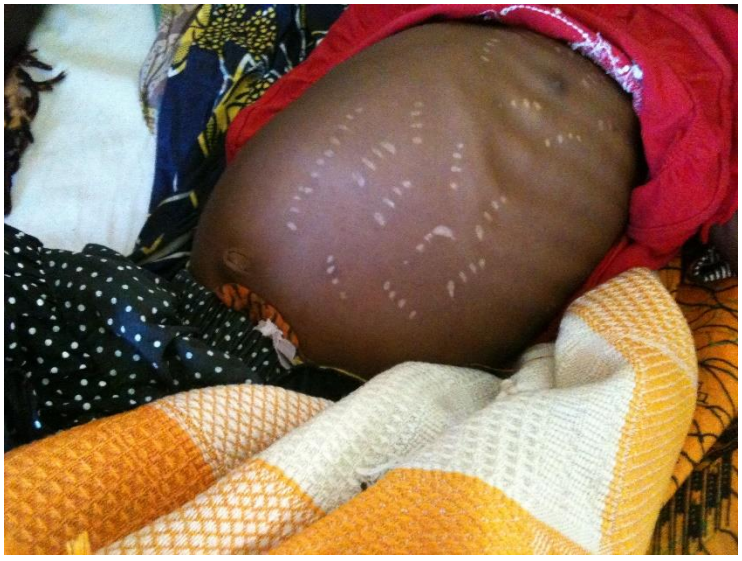

Fig 1*: Markings on the abdomen of a 3 year old child, with splenomegaly, who was seen by a traditional healer, prior to attending hospital, who has made nicks in the skin overlying the spleen using a razor, as a form of treatment.*

Coming to Tanzania, and particularly to the region of Kagera, which has an average prevalence of HIV at around 6%, and in working with Tumaini, a charity founded on the premise of aiding AIDs orphans, a personal health objective I had set myself was to acquire a greater understanding of the provision of healthcare in terms of HIV and AIDs, in the context of limited resources. To achieve this, I spent time in the dedicated HIV clinic at Murgwanza hospital. HIV/AIDs medicine is an area where, from what I have observed, the government has made a concerted effort to standardise the care and treatment regimens. I was impressed and surprised that every patient who is HIV positive in Tanzania receives the same 'continuing treatment' card, ensuring a visit to the doctor every month, a thorough drug history of the antiretroviral regimens for that patient, any side effects or problems and a CD4 count every 6 months (to which treatment combinations are tailored according to response). Tuberculosis and STI screening is also performed during these visits as well as counselling regarding one discussion topic per visit from those suggested on the form, such as 'Basic HIV/AIDs prevention'; 'promoting testing within the household' and 'pregnancy and family planning'.

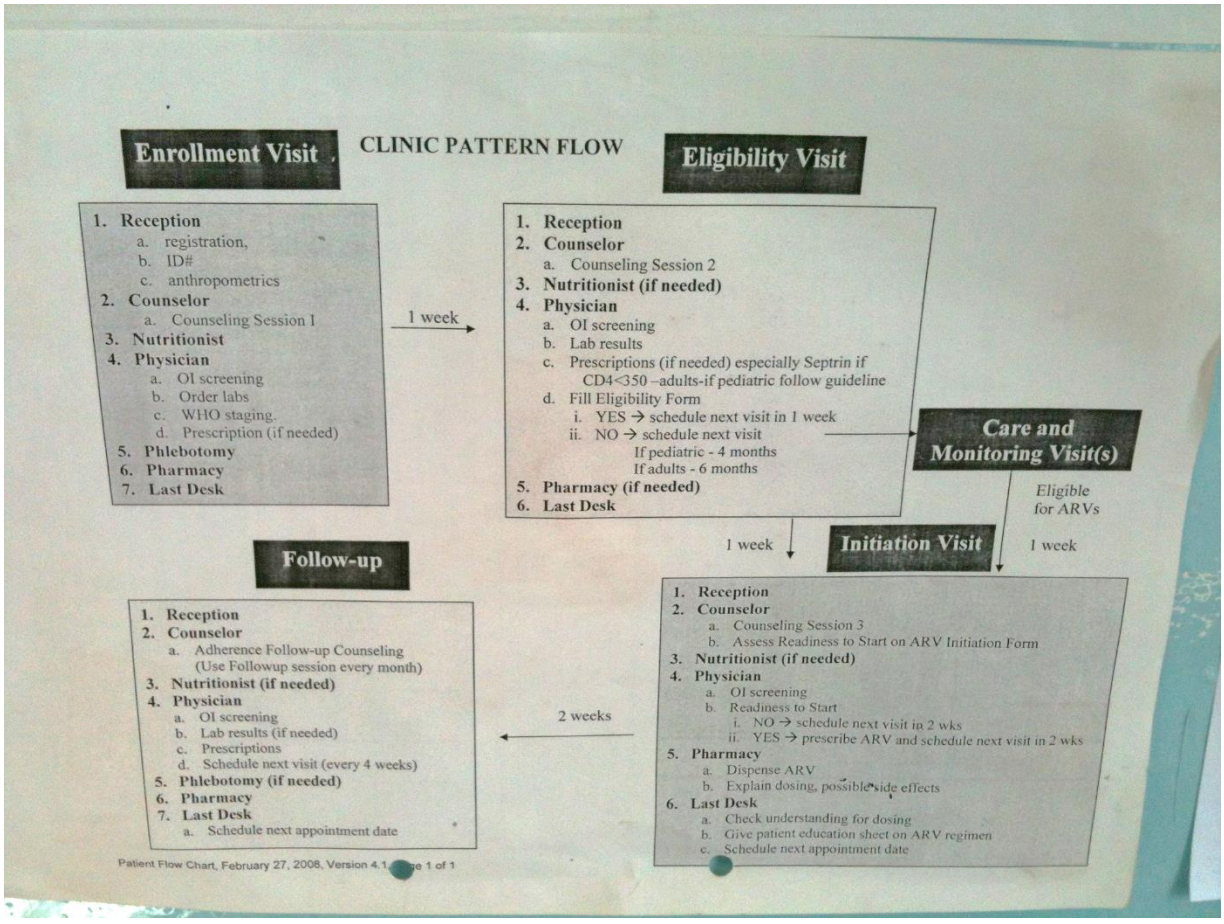

Fig 2: *Standardised guidelines for HIV clinic pattern flow, which outlines exactly who the patient should visit at various points of care and what each healthcare worker should be doing at each visit: i.e. opportunistic infection screening by the physician during a follow-up visit.*

Patients are asked to bring any left-over medication and this is used to direct counselling regarding exploration of non-adherence: the HIV doctor explains: "if we know the problem, we can address the problem". For example, one of the reasons for non-adherence, which is easily rectifiable, is the sharing of medication with others in the family. However, the problem remains

that although the services offered here are good, they are not easily accessible to those in the villages, who may have to travel for hours in order to attend the clinic. Tumaini has helped in this regard by setting up outreach HIV programmes, where doctors, counsellors and nurses visit a rural area and perform HIV testing, offer medication and other interventions, such as counselling, once a month.

Fig 3: *Rapid HIV testing performed at Mugoma Church as part of the Tumaini fund outreach HIV/AIDs programme.*

The HIV doctor at Murgwanza hospital informed me vertical transmission of HIV is declining in those who attend the hospital as they are more likely to know their HIV status and be enrolled on the Ministry of Health's 'prevention of mother-to-child transmission programme'. However, once again, this remains a problem in rural villages. Only 47% of Tanzanian women deliver in hospital/health care facilities, assisted by a health professional.

Fig 4: *Mother and Child, both HIV positive, attend the AIDs clinic in Murgwanza hospital. Mother has lymphadenopathy due to concurrent TB infection.*

I have been very fortunate in being able to address my personal and professional development goals whilst working in Murgwanza hospital by spending time in the Obstetrics and Gynaecology department, a speciality in which I have a keen interest. In Tanzania many women deliver at home or without adequate healthcare and consequently maternal mortality during childbirth is around 10%, one of the highest figures globally. I was able to attend clinics and Caesarean sections, as well as the labour ward. What struck me firstly was how similar a lot of aspects of maternal medicine are to the UK: the layout of the theatres, the use of the suction machine to estimate blood loss volume, recording the APGAR score at birth were all familiar practices to me from my O&G placement in the UK. However, there are stark disparities as well: pain relief and anaesthetic requirements during labour/C-sections are performed by a nurse; there are sometimes power-cuts during surgeries so a portable light must be used and standards for the maintenance of dignity of the patient vastly differ to the UK- the patient may be without clothes on the operating table, uncovered, fully conscious, for many minutes before the surgery is ready to be performed.

One of the most impressive aspects of care at Murgwanza hospital is the profound adaptability of the doctors who work here. 4 out of 5 of the doctors who work here qualified from medical school only 3 years ago and their ability to turn their hand to any form of care the patient requires, from orthopaedic surgery to psychiatry, has left me astounded. Not only can they perform this great variety of medical care, but as evidenced by their immense knowledge and skill, they are always striving to attain high standards of patient care despite the relative lack of resources. Morning meetings, which all staff attend, are focussed on improving patient care by exploring reasons for mortalities; delivering seminars on health topics, and discussing difficult cases. These practices which encourage on-going learning and improvement, as well as the knowledge and relentless hard work of the doctors, are all characteristics which I have found aspirational and I endeavour to follow these principles in my career as a doctor.