THOMAS BOYLE
RURAL MEDICINE

1. **Discuss the main burden(s) of disease facing the population in this rural part of Northern Tanzania.**

The main burden of disease in this part of Tanzania is infectious diseases. I have been on a general medical ward and have predominantly seen pneumonia's, gastro-intestinal infections, thyphoid and some malaria cases although in this area malaria is less prevalent than surrounding areas, but still a fever is malaria until proven otherwise! I have also seen a whole host of TB related infections from pulmonary TB to spinal TB to disseminated TB. This is such a problem here that there is a whole ward dedicated to active TB cases. There are also many cases of osteomyelitis. Interestingly however HIV rates are relatively low by comparison to other parts of the country but there is still a dedicated HIV service. My particular ward housed the male cardiac beds and so I saw a lot of CCF, it is difficult to be definitive as to the main underlying cause of the heart failure but I would suspect valve disease secondary to rheumatic heart disease is common. This is quite unfortunate as there is no cardiac surgery available in the country. A massive confounding factor here is malnutrition. There are varying degrees of poverty in this rural area and often the poorest people present very wasted with little reserve to help fight the infections. The hospital has introduced a feeding programme for paediatric malnourished patients but there are just not the resources to expand this for the adult population. Alcohol and Type 2 diabetes are also real emerging issues that compound medical conditions in this population and the hospital is trying to tackle these with dedicated services.

2. **Discuss the healthcare provision in Tanzania and in particular the obstacles facing missionary hospitals.**

The Healthcare in Tanzania is predominantly private in the sense people must pay at the point of use but it is administered via a mixed private/public/charity structure with an overarching government control. A stepwise system exits from village services to dispensary services to district and then regional and referral hospitals but it is really only at district level that patients see anyone with real medical knowledge. Yet this structure is important because more than 70% of the population live in rural areas with poor access to the 'local' district hospital. So access is really dependant on income and location. At Haydom people are accepted and treated initially without having to pay anything upfront. They have to pay at discharge but most cannot afford it themselves and so the wider family club together to pay the bill, the family can work off some of the bill by doing jobs around the hospital like cutting grass etc but for the poorest there is a fund which covers the cost, although an elder of their tribe most attest to their inability to pay. Whilst in the hospital the relatives must also look after the patients, cook and clean them. Nursing staff manage medications, carry out clinical procedures and monitor the patients but the caring role is done by the family. Mission hospitals such as Haydom face the conflict of having to serve two masters, they must satisfy government policy but also their fund providers which can at times be very difficult. Haydom is currently in a period of transition as the Norwegian government (their main funder) is withdrawing most of its funding in 2014 and so there has been a drive to find new donors otherwise the hospital might fold.

3. **Discuss how the wider determinants of health are viewed by clinicians and outline the ways in which health promotion is practised.**

I think Tanzanian clinicians are aware of the socio-economic and cultural issues that influence healthcare and indeed are reactive to these to some extent. For example one of the biggest learning curves for me was to think twice about ordering a test because the patients' family will have to pay for them and often there is a balance between what is really needed to make a difference in the management of each patient, after all, what is the point of a biopsy or CT when there is no treatment available for a cancer? I also observed clinicians taking account of the family circumstances or the mental health issues of patients in their management plans. But of course not to the same extent as in the UK because of limited resources and also I do not think this forms a big part of their training. I have seen little in the way of health promotion in any big way, there are no adverts promoting health issues for example. Whilst I have seen the western doctors and the specialist nurses (diabetes) counsel patients about alcohol, diabetes and the importance of drug compliance, I must say I have not noticed the local doctors doing the same. This is not to say they do not because I cannot understand all what they say to patients but again I do not think they get as much training in the importance of health promotion as western doctors.

4. **Discuss the importance of clinical judgement in a healthcare setting without the safety net of lots of investigations and how my clinical skills have developed as a result of my experience.**

In Haydom I have found that clinical judgement is very important due to the lack of resources, for example whilst I was there the lab machine for FBC's was out of order and so we had to rely on clinical signs of anaemia. Similarly there was no reagent for the biochemistry machine and so we were unable to check U&E's and so if we were worried about hyperkalaemia for example we would do an ECG. You also need to use your judgement when considering investigations and treatment options for people because they have to pay for these, so for example on the basis of imaging results, you might recommend to the patient that there is little point in pursuing treatment because it looks bad and further investigations and treatment will be costly, which may bankrupt the family and the treatment may not work. Whilst you provide as much information as possible to help them make their decision, there is little objective evidence for you to base your advice like there would be in the UK. It is quite difficult to hear about parents having to decide whether they get treatment for one sick child or fed and educate their other children. I think my clinical skills have improved in my short time here because I often did ward rounds on my own and had to make decisions, which I confirmed later with a senior. I think you gain confidence with such responsibility and become more astute to recognising sick patients. At first I did panic when alone with a sick patient but with a little experience I learned to do the basic things first and then get help.