Bonita Stevens

Reflection

Elective: Livingstone General Hospital, Livingstone, Zambia

Objectives:

Describe the pattern of paediatric diseases in the population of Zambia; discuss in the context of global health

In the UK, children present relatively seldom to hospitals. The illnesses seen most commonly include trauma, congenital problems and genetic diseases, and infections such as bronchiolitis. In Zambia, the burden of disease is very different. We saw several children who were HIV positive, some with AIDS defining illnesses despite the availability of HAART. There was a lot of malnutrition; we saw a two year old child die from malnutrition and poor fluid management. There were also lots of burns victims, usually from kitchen accidents. Young children are often left alone with pots of boiling water balanced on unstable stoves, resulting in large burns on the torso and hands. Malaria was also often seen. Mosquito nets were not available in the hospital.

Public health campaigns in paediatrics still exist, but understandably target very different diseases to those we have noticed at home. They are also less well-funded; most of the posters we saw gave only written information, with advice such as “Porridge which stays on the spoon has more nourishment for your baby,” and “Rehydration fluids should be less salty than tears”.

How are paediatric services organized and delivered? Contrast this to the UK.

In the UK, paediatrics is a specialty where services are very much consultant-led. As a medical student you spend most of the time observing, and even as a junior doctor, in your Foundation Year 1 you are often supernumerary. In contrast, paediatric services in Zambia are largely manned by interns, who are either in their final years of medical school or have just graduated and are doing the equivalent of FY1 and FY2. During the time we spent on paediatrics in Livingstone General, we saw the consultant once, for the grand round on Wednesday. The staffing is also very different for the nurses; on a ward with 24 beds, there were at times only two qualified nurses present. Student nurses covered some of the slack, but even so most nursing care is performed by family members.

Describe the burden of infectious and preventable diseases in an LEDC

In the UK, the chief causes of death (in men) are heart disease, lung cancer, COPD, stroke, and dementia. These are all classically diseases of later life, and indeed the life expectancy is over

80 years. In contrast, the life expectancy in Zambia is under 49 years. The prevalence of HIV approaches 15%, and amongst the hospital population this is understandably even higher. During the time I spent on the medical wards here, I saw only two patients who were HIV negative. This contrasts starkly with my experience of medicine at home, where I have only seen a couple of HIV positive patients. This chimes with the statistics; the UK has an HIV prevalence of 0.15%.

Other infectious diseases in Zambia include malaria, which is not found in the UK because the climate is less hospitable. Tuberculosis is seen in areas of East London, but is much more common in Zambia. The drug regimen is strict, and it is often very difficult to ensure all family members are tested and treated if necessary. Disseminated TB is also more common, partly due to late diagnosis but also to do with the HIV prevalence.

How have your clinical reasoning skills developed? Will the situations you've encountered change your practice in the UK?

Hospitals in the UK seldom have problems with resources and tests. Virtually all patients have blood tests on admission and regularly throughout their stay. Results are available the same day, usually through an electronic system meaning they can be accessed throughout the hospital and easily compared to previous results. In Zambia blood tests are harder to come by; results often take a few days to come through, meaning that while they can tell you a good deal about how your patient was three days ago they are often less useful for planning immediate management. During my time on surgery, I noticed the difficulties faced by doctors trying to take biopsies of suspicious lumps or lesions; these often have to be sent to the capital, Lusaka, meaning that results aren't available for a number of weeks. This delay in definitive diagnosis is frustrating for both patients and doctors, and also delays initiation of treatment. Given that malignancy is usually high in the differential for these patients, a delay in treatment of weeks can be very significant.

Some blood tests are simply not available at the hospital. I saw a patient with a large hepatomegaly and suspected liver cancer, but alpha fetoprotein can't be measured and the CT scanner was broken for the duration of our elective, so the only relevant tests available were LFTs and an ultrasound scan.

Without these adjuncts available, doctors in Zambia learn to rely much more heavily on their clinical judgement. Initially I found it very hard to form management plans without results available, but over the course of the elective I have become more used to it, and learnt from experiences. It has also made me very grateful for the facilities available in the UK.