GENERAL MEDICINE

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King Faisal Hospital, Kigali

Objectives

1. *Describe the pattern of disease in a paediatric population in Rwanda in contrast to paediatric experience in the UK*

King Faisal is both a private hospital and a tertiary referral specialist centre. Taking this into account, patients admitted to this hospital therefore mainly fell into one of two categories: rare cases requiring highly specialised treatment and common conditions where the parents were financially able to opt to have their child admitted for hospitalisation. In this second group, conditions commonly witnessed in UK paediatric wards were observed, with gastroenteritis, bronchiolitis and exacerbations of asthma dominating presentations.

Our visit to the next major referral hospital in Kigali, C.H.U.K. (Centre Hospitalier Universitaire de Kigali), presented us with a different demographic. Here, entire wards were dedicated to malnutrition, congenital malformations and children with heart failure as a consequence of rheumatic fever. According to the WHO, over the period 2003 to 2009, 23% of under-fives were moderately to severely underweight, while 51% suffered from moderate to severe stunting [1]. As regards the rate of congenital malformations: this may reflect both the nutritional status of the mothers (anecdotally, we observed on the wards several occurences of spinal cord defects) and provision of antenatal care. While, in 2009, 96% of women were covered by antenatal care at least once during their pregnancy, only 24% experienced four or more contacts with antenatal services [1].

The prevalence of HIV infection in Rwanda has, unsurprisingly, impacted on child health. In 2009, there were an estimated 88,000 women of childbearing age living with HIV. Prevention of vertical transmission has become an imperative of perinatal care, with HIV prophylaxis commonly being provided in King Faisal's neonatal unit. Routine HIV testing is offered to all paediatric cases presenting to the main referral centres in Kigali in an attempt to detect both asymptomatic children and their parents in order to provide HAART at an early stage. HAART is now provided for free in Rwanda, however access to medical centres remains difficult for the majority of the population.

2. *Describe the provision of care in Rwanda and changes to the healthcare system over the past seventeen years and compare to the NHS*

Within Rwanda there are three levels of medical centres: health centres, district hospitals and referral hospitals (such as King Faisal and C.H.U.K). For the majority of the

population access to hospital care is made via the health centres, many of which are nurse and protocol-led and which perform the primary assessment as well as initiating treatment, referring up the medical hierarchy depending on the complexity of the case. In this context, there is often no possibility for patients to directly access higher levels in the event of an emergency.

Rwandan healthcare needs to cater for a population of 11.4 million, of which 57% were classified in 2007 as poor and 37% as extremely poor [2]. In 1999, 5 years after the genocide, a mutual health insurance scheme was reinitiated in Rwanda, with many different health insurance plans now providing for various population groups. Healthcare funding, however, remains largely dominated by aid: a reflection of Rwanda's dependence on external financial help. In 2010, approximately 53% of funding came from development partners in contrast to 19% from the Rwandan government and 26% from private individuals [3].

In a paediatric setting, numerous children are dependent on charity sponsors to fund both their initial hospitalisation and subsequent management within the community. In addition, charity medical teams come from abroad to undertake operations, especially cardiac valve replacements in the context of rheumatic disease, which would not be feasible otherwise. Through sponsors, children may also be sent to foreign countries for treatment that cannot be undertaken in Rwanda. However these interventions are rare and availability is vastly exceeded by current demand, leading to strict criteria for access.

3. *Assess the impact of Rwandan political life and the consequences of the genocide on child health seventeen years on.*

Since 1994, Rwanda has experienced relative political stability with elections being consistently won by the same party. Laudably, prevention seems to have become a central part of government health policies. Paediatric immunisation schedules appear to be well established. Immunisation rates for tuberculosis, diptheria, polio, measles, haemophilus influenza and hepatitis B in 1 year olds were all greater than 90% in 2009 [1]. Travelling throughout Rwanda emphasised the many public campaigns regarding HIV status testing and malaria transmission reduction. Additionally, during our time in C.H.U.K., interns commented on a future campaign aimed to raise awareness about rheumatic fever and the benefits of early intervention.

With 17 years having elapsed since the genocide, children are now from a generation that did not live through this traumatic period and has not been directly exposed to all the physical and psychological sequels that result from being survivors. However longer-term effects of the genocide still remain. Rape was commonly used as a weapon, with many women knowingly and intentionally abused by HIV-infected individuals. This resulted in increased transmission of HIV specifically to women of child-bearing age.

Since the genocide, it appears there has been an incredible drive for improvement in this country which has had to struggle with a high rate of poverty and the scars of both ethnic

cleansing and war. Both hospitals we attended were extremely keen to analyse their outcomes and push for change in spite of the, often frustrating, lack of resources. These developments, however, rely on continuing aid provision and lasting political peace.

4. *Improve communication and clinical skills in paediatrics in the context of a different cultural landscape.*

From a professional development perspective, our elective experience exposed us to many conditions we had not observed before. This was especially beneficial in cardiology were we were able to witness clinical signs that we had never seen outside of textbooks. The lack of resources, for example the hospital's single oxygen saturation probe being broken or x-ray machine being unable to work on generator during power cuts, meant we were exposed to a less-investigation intensive medicine which relies more wholly on examination findings.

Three languages are used in Rwanda. Most patients spoke kinyarwanda which meant that we were not frequently able to ask questions directly of the children themselves. French is still commonly used, especially by adults, and was often the chosen language to discuss with the patients' parents. In addition, english has in the past few years become the language of medical education in Rwanda and was therefore the language chosen for handovers, referrals and formal teaching. In this context, it could have been easy for a barrier to form between the english speaking doctors and the patients however the doctor-patient contact appeared extremely positive both in King Faisal and C.H.U.K. with doctors dedicating time to communicate clearly and elicit patient's concerns.

Word count: 1,122

References

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