

## **ELECTIVE (SSC5a) REPORT (1200 words)**

A report that addresses the above four objectives should be written below. Your Elective supervisor will assess this.

### Understand the pattern and spread of local topical disease, particularly Zika Virus, and how the local health policy reflects this. Understand the burden of disease which the KMH receives due to tropical disease, and how it is working to reduce risk in its population

Unfortunately I had misunderstood the patient demographic that I would encounter whilst at KMH. As the only tertiary health center in the country it only had the most serious patients in admission on the ward. Whilst it was very interesting to see these extreme cases, such as a premature baby with ongoing necrotising enteritis and a toddler with PR bleed, there was much less tropical medicine than I had anticipated. The childhood vaccination programme was very similar to that of the UK programme, with a recent addition of a pneumococcal series on the government scheme due to a recent fatality of a young individual due to a preventable case of meningitis.

### Observe the delivery of paediatric healthcare, particularly developmental clinics, and how follow up occurs throughout the child's life. Compare this to clinics in which I have observed whilst in the UK **Pediatrics at Karl Heusner Memorial Hospital**

Spending time on the pediatric wards and the clinics ran at KMH, as well as in the community by doctors who work at the hospital has been a very rich and beneficial experience. This is the first time I have experienced healthcare in another country as a medical professional. This has also been my first trip to Central America, so overall has been a very unique experience.

Another of my objectives was to understand the level of care offered in Belize to pediatric patients, and then to compare this to that of what I have seen and experienced in the NHS facilities of the United Kingdom. Belize, like the UK, operates on a primary, secondary and tertiary health facility system. Karl Heusner Memorial Hospital is the only 'tertiary' facility in the entire country, serving as the referral destination for the population of Belize. KMH is both the national hospital, and also the regional hospital for Belize City district. Other than KMH there are seven more secondary level hospitals distributed amongst the district capitals, three of which serve as regional centers for referral to higher level of care. Despite KMH being the leading facility of Belize public healthcare there are still a number of significant differences in resources and facilities when compared to the hospitals which I have experienced working in in London. This is well demonstrated with the simple fact that despite being a pediatric ICU in Belize's flagship hospital, there are not enough resources in order to provide a ABG/VBG machine. This was an early shock during this placement, as I am used to these tests being run routinely and frequently on standard pediatric wards, let alone on an intensive ward.

Similarly, there is a significant lack of resources in terms of specialist medical professionals. On our first day we had a conversation regarding how the pediatric ward operated and the system in which, particularly complicated patients, are referred into KMH as well as out of KMH. The pediatric ICU ward on KMH is currently the only dedicated pediatric ward in all of Belize. This means it is not explicitly used for its ICU facilities, but in practice is more of a general pediatric ward for patients with significant illness from across the country. For pediatric patients who are not deemed to be severe enough for a referral to KMH (or I imagine if there are not enough beds at KMH) they tend to be kept on general medical wards at the facilities local to them. They are then under the care of the general medics, or if there are pediatricians local to that hospital, or in the few hospitals that employ a pediatric Siam they might get a level of specialist care. Further to this, there are no sub-specialist practitioners in Belize. Therefore if, for example, there was a patient with a complicated congenital heart deformity, they would not be cared for by a pediatric cardiologist, but instead be under the combined care of both a pediatrician and the cardiologist of that

hospital facility. It is also not uncommon for medical extradition to occur for the patients who are extremely unwell, or not able to get the level of care required within Belize. This commonly will be to the US or Mexico, with certain charitable institutions being able to help with funding for those who require it. For those who aren't supported by charity it is an unlikely prospect to be able to think of going abroad for better healthcare, but from what I have seen the hospital is good with being able to assist in finding funding, or signposting patients and families to places where they might be able to ask for help in costs.

Understand the financial and political standpoint of healthcare in Belize, and how this affects the work being done at KHHM. compare this to the UK and the NHS provision, as I know Belize is operating under a hybrid public/private healthcare system

One of my learning outcomes was to understand the financial elements of healthcare in Belize. On our first day we had a quick run through how the system works. In simple terms there is a subsidization from the government to help make public healthcare more affordable. This of course still means there is a point of care fee for healthcare, testing and for medications, however this is greatly reduced compared to private costs. The private healthcare industry is also rampant in Belize city, when walking around it is hard to not pass a number of private hospitals or clinics on your route. To me this shows there is a two (possibly three) tier system, where those with enough money or good enough medical insurance will be able to access the better quality and faster healthcare of private industry, where those who are not able to will be stuck with the public services. The possible third tier might constitute those who can't afford even the subsidized government supplied healthcare, and therefore are missed by the health system all together.

This also brings the complication of conversations whilst completing ward rounds or conducting a consultation. In the UK the main recommendations from the medical team will be the testing or investigation which will help identify the root cause of disease, or will be the most effective treatment option for the ongoing problem (with the condition that is supplied on NHS contract). However, due to the complexity of point of care costs, there is frequently a discussion regarding what is feasibly affordable for the patient (or the family of the patient in the examples I saw) versus the benefit of the test/investigation/treatment. This was particularly hard to witness when the mother of a young 2 year old was having the conversation regarding a CT scan for her child. She couldn't afford the fee of BZD 300 (~£120), and was asking if there were any cheaper alternatives, debating what the best option would be, and whether it was necessary to initiate a payment plan which she might not be able to pay off.

Development of my diagnostic abilities and formulation of relevant investigations, whilst knowing what I am intending on looking for or what they are being used to rule out

It was a less hands on elective than what I had anticipated due to prior information from students who attended last year. However I still enjoyed my time, got lots of teaching opportunities, and was able to develop my understanding of common pediatric diseases and conditions, despite having less independence than I am used to.