ELECTIVE (SSC5b) REPORT (1200 words)

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

1. What are the prevalent diseases off the islands of Bocas del Toro, and how do these compare to that of mainland Panama?

During my time with Floating Doctors I witnessed a host of tropical diseases as well as a variety of relatively common health conditions propagated by the remote setting, diet and lifestyle of the locals in Bocas del Toro. We were taught to consider conditions that are more common in tropical and subtropical climates, such as zika, chikungunye, malaria and yellow fever. Most commonly, however, patients came in with headaches, common colds, worms and diarrheoa. Other common conditions we saw were dermatological; scabies, fungal infections and leischmaniasis, as well as ophthalmological; cataracts and pterygiums. Particularly in very rural communities we treated a lot of patients with pelvic imflammatory disease; a condition likely to be caused by sexually transmitted infections.

Diabetes and hypertension are very common in these rural communities. Although we were able to prescribe metformin and antihypertensives, not many people knew what these conditions were, why they might have them, and how they could help themselves. A reliance on a relatively limited diet rich in carbohydrates, fats and refined sugars made it difficult to give health education to people to try and change these habits.

The aforementioned conditions do not vary hugely from those affecting mainland Panama in general. Having said that, the source of many of the worms, skin conditions and headaches were a direct consequence of people;s water source, crowded living and dehydration. These last few conditions are more prevalent in rural settings, regardless of whether patients reside on mainland Panama or Bocas del Toro. The difference between the regions lies in the resources and thus the ability to manage these conditions more promptly. Moreover, those in urban areas are likely to be able to afford treatments and may not have to travel as far to the nearest hospital, making it more likely for patients to seek medical attention. It is important to note the differences in attittudes towards modern medicine between Bocas del Toro and mainland Panama. Due to the geographical picture of Bocas del Toro and the scarcity in medical clinics, patients rely heavily on local medicine men and women, who are classically elders in the community with an extensive and rich knowledge of plant and herbal medicine.

2. How does the pattern of healthcare provision on the islands off the coast of Panama compare to that of the UK and what are the biggest influencers in this?

Panama has both a government funded healthcare system as well as private healthcare provision. The healthcare provision on hundreds of islands off the coast of Panama is mostly government funded, except on the main island where both provisions are available. In addition to the 'official' healthcare system in Panama, the Ngobe people, who are the indigenous people of Panama, also rely on medicine men and women who are specialised in alternative plant and herbal medicine. This can sometimes create some apprehension about modern medical therapies, which we experienced whilst with Floating Doctors. With Floating Doctors we travelled to different rural island communities, whom they visit every 3 months, thus allowing for some degree of follow-up. Although most of these communities do not have a permanent medical centre or clinic, the Panamanian government has

funded an outpost programme which now provides a similar care as Floating Doctors. When timed accurately, this means that patients are able to seek medical advice more often and potential emergencies are identified sooner.

Often, Floating Doctors were the only healthcare providers patients saw 'regularly', and being limited to what we brought with us, we were unable to run blood tests or scans besides very basic ultrasound for pregnant women. We had stethoscopes, blood pressure cuffs, pulse oximeters, thermometers, glucometers, Snellen chart, an Hb meter, speculums and an ultrasound kit. At base we had an ECG machine and further ultrasound machines that had been donated to the charity but these could often not fit in the boat when going to communities further away. Limited by the aforementioned resources, we relied heavily on basic observations to determine whether a patient was sick or not, and what the risk of deterioration might be. Although we were able to transport patients to the mainland on our boat, this would often mean patients did not have the money to get back to their island. This led to us often having to make sure the patient understood our safety netting advice as well as the potential consequences of not seeking medical help should they feel any worse.

Naturally, the differences between the healthcare provision in Bocas del Toro and the NHS are vast. The geographical challenges of the islands means that the only means of transport is by boat, with even more rural communities only being reachable by hiking for hours into the mountains. Consequently, the equipment that can be taken to these communities is limited. This meant that we had to rely heavily on the history and examination findings and manage the patient there and then based on our suspicions. This sometimes meant that we offered several treatments together prophylactically, but could also mean that we were unable to treat the patient adequately if we thought the patient may need extra medical attention. In one such case, a pregnant lady was in respiratory distress and had been vomiting violently for weeks. All we were able to do was stabilise her and offer to take her to a hospital, several hours boat ride away. Another such case involved a child with lesichmaniasis, an ulcerating skin conditions spread by sandflies that can potentially develop into more serious forms involving mucous membranes and internal organs. We explained the importance of getting her daughter to the hospital for the 21 day course of intermuscular injections that she required, yet the mother expressed she did not have the time or the financial means to get transport to the main town, let alone arrange accommodation for the duration of the therapy.

3. What are the public health incentives in Panama and Bocas del Toro?

Diabetes is a growing problem on both mainland Panama as well as Bocas del Toro. We saw some public health incentives regarding information giving to patients, however due to the nature of the mobile clinics of Floating Doctors and the sometimes extremely rural communities, we saw very little in the way of public health incentives other than that. At Floating Doctors we aimed to give some health education to patients, many of whom only drank one glass of water a day, did not brush their teeth and did not have clean sources of running water. Many of the incentives to provide a clean water source to communities were run by NGOs, and some by the Panamanian government.

A treatment that was always given prophylactically to any patient with a family member with suspected worms was given albendazole. In addition to this, most women were offered contraceptive injections, both by us as well as the public health service.

At Floating Doctors we handed out soap, toothbrushes and vitamins to all children and family members when we had the stock. Although we tried to explain the importance of the use of these

items and tried to do some degree of health education, some of these are only temporary fixes and the availability of the items themselves are the limiting factor to the communities using these items. This highlighted evermore the importance of follow up, and perhaps increasing the frequency with which these communities are visited, be that by charities or governmental health services.

4. Gain confidence in managing patients with conditions I am less familiar with and consider the challenges posed by practising in a foreign language.

Many of the conditions I saw during my placement were conditions I had heard of, but had not properly managed myself. I was encouraged to create management plans which were checked by the doctor, meaning I had to rapidly familiarise myself with the treatments for leischmaniasis, worms and certain skin conditions. In addition to this, as the charity is originally American and therefore much of the pharmaceuticals are American, I had to familiarise myself with brand names and slight differences in treatments and doses.

My Spanish is limited, and although I learned the basics before my placement, I feel like I was forced to learn it during my placement. I do feel more confident, despite my lack of variety of vocabulary and grammar. During consultations we always had an interpreter; this was essential, however it highlighted to me the difficulties this poses both in time efficiency, effective communication and gaining a detailed picture of the patient as a whole. Due to the language barrier, consultations often used very basic vocabulary, meaning it was difficult to understand the exact nature of someone's pain, for example. Although Spanish is the main language in Panama, many rural communities spoke their indigenous language, which only one or two of the interpreters were able to speak. I realised how language affects the confidence I have during a consultation, as well as how effective communication, through knowing a language fluently, can both halt or enrich the rapport that is built between the healthcare provider and the patient.