

## Medical Elective Report Floating Doctors, Bocas del Toro

### Self Reflection

I carried out my medical elective in Bocas del Toro, Panama. Bocas is a small island town that thrives on tourism, attracting people from around the world to sample the local food and to explore and surf the beaches. I was there to work for Floating Doctors, a non-profit organisation that runs medical clinics in indigenous communities of the archipelago surrounding Bocas.

My time was split into multi-day and single day clinics. Before starting work with Floating Doctors I imagined that I would come across a lot of malaria and other tropical diseases such as Schistosomiasis and Giardiasis. However when I arrived, discussions with senior providers working for the organisation explained that Malaria is infact uncommon in Panama. This became clear to me when I started working in the clinics. The malaria that does exist is generally Vivax, one of the mildest strains. For this reason, I am changing my reflection to suit the diseases and illnesses that I did come across. Patterns became apparent and I found links between medical presentations and underlying social factors. I became more and more interested in the anthropological aspects of medical problems seen in Panama.

I started my first week with a multi-day clinic in Quebradasol. I arrived the day before to set up our clinic in the Rancho, a common place for the people consisting of a sturdy wall-less hut. On the way I went to see a local man, Daniel, with symptoms of Rheumatoid Arthritis. I discussed treatment options with Ben, a senior provider and head of the organization, and went back to Daniel's house the following day after clinic had ended with analgaesics and anti-inflammatory medication. It became apparent then that this experience would require flexibility whereby not all people would be able to attend the structured clinic but would receive home visits when we could fit them in. Common presentations among the children were Worms and Scabies. Women mainly presented with obstetric and gynecological problems whilst the men tended to have problems linked to occupation, for example labour-induced musculoskeletal back pain and sun-induced eye strain.

A clinic took a person through from an intake station where they would get their vitals checked and their presenting complaint noted. Once entered into the system the person was then seen by a provider. I was a junior provider. I worked with a volunteer who could translate in Spanish, to take a full history and carry out what investigations we could to attempt a diagnosis. Investigations were extremely limited for example we were unable to take blood samples or send anything to a lab. We had the use of blood glucose (BM), urine dipstick and sputum culture. We also an ultrasound scanner (USS) which had been donated from the manufacturer and was a fantastic utility for obstetric cases but also to rule out more sinister pathologies. I had a specific case of a young boy who presented with tenderness in the right hypochondrium associated with long standing loss of appetite and weight loss. He also had diarrhea. I discussed my case with Lizzie, a senior provider and we were concerned that he may have amebiasis. Performing an USS was re-assuring in this case to rule out an amoebic abscess in his liver. Also, the USS allowed another provider to

rule out an abdominal aortic aneurysm in a middle-aged man with severe epigastric pain. Having the basic modalities of BM, urine dipstick and blood pressure monitoring was extremely useful in a community where type 2 diabetes and hypertension is extremely common and on the rise. Despite this however, the more common presentations in children such as worms could not be investigated. We could not perform microscopic examination because we did not have the means. Not only this, we would be unlikely to obtain a stool sample willingly as this is not an understood or accepted practice in this community where medical investigations have never been performed and therefore culturally unacceptable. In many ways, we were treating blindly but with the help of senior providers who have experience with these presentations we could make educated attempts to treat appropriately. We treated worms with Albendazole, a Benzimidazole 'anti-helminthic'. The commonest types of worm were hookworm, roundworms and whip worms specifically *ancylostoma duodenale* and *nectar americanus*. We know that the highest prevalence occurs where there is inadequate sanitation, low levels of education, and lack of access to health care services as was the case in Quebradasol. Despite the frustration of being unable to ascertain what strain we were treating, it was satisfying that usually the children got better following the treatment we administered. I could tell this by looking at their medical notes from previous clinic admissions with floating doctors.

Worm infestations can impair physical growth, brain development and are major causes of nutrient deficiencies such as iron deficiency anaemia so it was important to tackle the problem at hand and perform some preventative medicine. We also know that practicing good hygiene habits is imperative to the prevention of intestinal worms and so a large focus of each consultation was on education about good sanitation. Most people drank from either streams or rain water butts. One of Floating Doctors' aims is to improve sanitation and so I was encouraged to stress the importance of boiling the water if families were unable to obtain it clean. To improve sanitation, we gave each child a toothbrush and toothpaste, soap along with education. Dehydration was a widespread problem and so this was another aspect that I would tackle in every consult.

On the last day of the clinic I was frustrated with the thought that I would not be able to participate in the long-term follow-up of my cases however it gave me re-assurance to see that all cases with diagnostic uncertainty would be followed up by long-term senior volunteers. Also, on the morning before leaving to go back to Bocas, a couple of patients returned to the rancho for a follow-up. One girl, who I suspected of having Tuberculosis came to give a second sputum sample. An elderly lady came with a fall in blood pressure after I had initiated anti-hypertensive medication. We gave her a supply of Enalapril to last until the next clinic in Quebradasol. Unfortunately, the lady's husband had a history highly suggestive of metastatic cancer, presenting with several red flag symptoms. It highlighted that, although we could treat common presentations, the more sinister diagnoses would require complex follow-up. Floating Doctors have started using a scheme called Watsi which accomplishes just this. My argument here was: Should a 78 year old gentleman be put through a long investigatory process to reach a diagnosis that probably won't be treatable? On the other hand, by being in Floating Doctors system his condition can be monitored and pain control arranged.

Another aspect of the work that floating doctors does is in the running of a residential home, Acillo. It was floating doctors who helped to improve the conditions of the building and care provided over 10 years ago. It has helped to keep Acillo functioning as a care home since. We visited Acillo to give out routine medications. I think that the

medical care I could contribute was very limited due to the nature of my visit being once weekly. Their medical care is actually down to kind work of the long term providers who attend the clinic daily to carry out these jobs. I think the role we provided as volunteers was to improve morale and spend time talking to the elderly people, joining in with the entertainment. Most were so appreciative of us just being there and giving time to them.

I went on single-day clinics to communities near Bocas del Toro called Shark Hole and Cerro brujo. I gained confidence in treating common presentations by the end of work experience. One thing that this experience has taught me is that although common presentations crop up time and time again, it is important to view each case individually and not jump to conclusions when taking a history. A good example of this is the young boy who had amoebiasis which could easily be mistaken for a common presentation of worms. I will take away a huge amount from this experience. Not only will I miss the medicine and the noble people but I will miss all of the volunteers that I met along the way. I will be back for sure!!!