Hillside Healthcare International, Belize

I spent my elective working with Hillside Healthcare International. This is an American charity base in the Toledo district of Belize. The charity provided me with a variety of learning opportunities in different settings: a free standing clinic, mobile clinics into remote villages, community education programmes, and home health.

The aim of my elective was to enhance my medical knowledge, to gain practical knowledge of tropical diseases common to Belize and to gain all round experience interacting with patients in a different foreign country. I also wanted to experience working in a resource poor environment.

The Toledo district is the most southern district in Belize. It is also the most rural and the poorest. Most emergency care, maternity services, paediatrics and some chronic disease management is free and provided by the Ministry of Health. Hillside gets some of its medicines from the Ministry of Health free and works alongside the Ministry. Hillside also receives donations (usually from the USA) of medicines.

Hillside provides the local communities with medical care including pharmacy, nursing and physiotherapy. Whilst there I was able to actively be a member of the multidisciplinary team working alongside other medical students, pharmacy students and physiotherapy students as well as our qualified preceptors.

Whilst at the free standing clinic we would see patients from all walks of life – locals and tourists. All the services that Hillside provides are completely free to everyone and we never turned anybody away. The nearest hospital was a 20 minute drive away; this has an emergency room, 5 doctors, an ophthalmologist and the only dentist in the district. However, the nearest general surgeon was in Dangriga (20 minute flight away), and for most specialists we needed to refer to Belize City. Consultations in Belize City are not free and would often be too expensive for most of our patients). The lack of resources locally did limit what we were able to do but we made the most of what we had available. Furthermore some patients were reluctant to go to the hospital in Punta Gorda either because of the cost of the bus and/or because of a previous bad experience.

As well as the free standing clinic, I was also given the opportunity to go on many mobile clinics. This involved packing all our equipment and medicines into a jeep and driving (sometimes for about 3 hours) to the villages. When we arrived we would set up a pop-up clinic and see patients in their own village. I visited every village on the map apart from San Bonito Poite (which I did not reach due to bad weather and impassable roads). This provided me with a unique opportunity to not only visit the rural villages but also see the country and its population at work.

For many patients in Belize going to the doctor means taking the day off work and paying to get there (usually by bus). This means that many people do not come to the doctor unless it's absolutely necessary. This is why rather than waiting for the patients to come to us, we went to the patients. Whilst in the villages we saw patients that otherwise would not have sought medical attention.

In the villages we were unable to perform blood tests or get x rays. The only tests available to us were blood sugar monitoring, urine dips and pregnancy tests. Not only was this a very valuable experience as it allowed me to see what rural life is like in Belize but it also showed me the importance of taking a good history and examination as I had to rely on that rather than tests to diagnose and treat. Furthermore the only medications/treatments we had were the ones we brought with us. This meant that often we would substitute medicines and use the second/third line treatments or use medications off license.

Another aspect of my time at Hillside was the home visits with the nurse. This involved going to patients homes, accessing them and treating them. Mostly these patients were "palliative" meaning that they had a long term condition that was not going to get better (mainly because they could not afford the treatment). Often this meant seeing patients who back home in the UK would be treated and cured, which at points made me quite emotional.

Furthermore we would visit patients who required wound care for diabetic ulcers or the disabled who were unable to come to the clinic. Not only did this show me how privileged we are to have the NHS but it also allowed me to see into people's homes. This opened my eyes to how the local people lived and showed me the contrast between living conditions within Belize and compared to here in the UK.

In addition to the more clinical work, Hillside also gave me the opportunity to educate the public about health (mainly diabetes and hypertension) at health fairs in some of the villages. This involved us going into the communities, taking blood pressures and sugars, and providing advice and information on diet etc. This added another aspect to my elective; I learnt the importance of education, something that back home we take for

granted. Most people did not know what high blood pressure was or how diabetes can affect their lives. We also provided contraception advice and talked about the importance of family planning. What struck me most whilst taking part in these fairs is that a proportion of the population are from Mayan descent and speak Ketchi (with some limited English), and there are no words in Ketchi for family planning or the anatomy of the female reproductive tract. This made educating them about family planning options particularly difficult and challenging not only for me but also for the clinic staff who acted as translators as well as performing their own tasks.

Cases

The majority of the cases that I saw whilst on my elective were what is most common in Belize: diabetes, heart disease and stroke (1) but I also saw some more unusual diseases that I would not see back in the UK, such as scabies, worms and Chikunguya. Some of these cases really stood out for me and provided me with important lessons.

There is very little mental health provision in the Toledo district of Belize. There is one psychiatric nurse for the whole district, no psychiatrists and no mental health hospitals. An American couple came into the clinic; the husband had already been diagnosed with depression and started fluoxetine six weeks before. He was also an alcoholic and gets violent when he is drunk. The couple had just moved to Belize to set up an ideal life but everything going wrong and they were both under a significant amount of stress. The wife was self-harming as she did not know what to do and her husband has attempted suicide in the past and has current suicidal thoughts. I was very worried about the couple and did my best to counsel them and to offer any help I could. If this had been in the UK I would have wanted to admit them both for psychiatric care but I was unable to do this. The best that I could do was to start the wife on an antidepressant, make them both promise not to act on their suicidal thoughts and ask them to come back next week to have another discussion. Neither returned. I thought about suggesting that they return to the USA where they have some family and friends to support them but I do understand that this could be considered a step backwards and that they could feel like they were giving up. On reflection, I believe that I did the best I could in the situation. I hope that they do return before anything serious happens.

When I first arrived in Belize I was expecting to see many vector borne diseases such as dengue fever, zika virus and malaria. However this was not the case. I saw only one of two patients with suspected Dengue/Zika. This is mainly due to the efforts of the vector control department. I spent a morning with them: we went into gardens and educated people about the best ways to prevent mosquito breeding. We also put tablets in still buckets of water to kill any existing mosquito larvae.

Whilst at the clinic I saw a young man who came in with a rash, sore throat, joint pains and fever. He had the classic villiform rash and a low grade fever. The fever, sore throat and joint pains started three days prior to the rash. We were unsure of the exact diagnosis (Zika or Dengue) as his presentation fitted both. We sent off some blood samples – these take up to eight weeks to get results as they are sent to Barbados – for epidemiological reasons and then treated him symptomatically. We warned him and his wife (who was asymptomatic) to use two methods of contraception for the next six months as a precaution. What surprised me most about this case was how well he seemed. He only came in because he had developed a very impressive rash overnight, he just “felt like he had flu”.

Reflection

I really enjoyed my elective and feel that I gained immensely from it. As mentioned above I feel like not only did I enhance my medical knowledge, but also I gained many insights into what it is like to live and work in poor communities. I was fascinated to see how people live in Belize and know that what I have learned will stand me in good stead in my future practice both at home and abroad. I now want to go back to the clinic and precept in my F3 year if I am able to do so!

References

i. World Health Organization. *Belize: WHO statistical profile*. [Online]. 2015. Accessed 20th September 2016. Available from; http://www.who.int/gho/countries/blz.pdf?ua=1 .

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