

ELECTIVE (SSC5c) REPORT (1200 words)

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

What are the common acute problems that patients present with in Belize and how do these compare with the UK?

Major national health challenges in Belize include HIV/AIDS, and co-infection with TB, as well as dengue fever and malaria, which are endemic particularly in Southern Belize. Although infections are a big challenge in Belize, non-communicable diseases are actually the primary cause of morbidity and mortality. These are similar to the biggest killers in the UK, cardiovascular disease, diabetes and cancer. Reduction in child mortality and improvements in maternal health are also a key focus in Belize. Maternal mortality was 45 per 100,000 live births in 2003, compared with 8 in the UK. Increasing problems relating to human behaviour, including violence and homicide, domestic and child abuse and road traffic accidents are another key challenge, especially in urban areas such as Belize City. Some of the common presentations to the ED were similar to those I have seen in the UK; acute exacerbations of asthma, women in labour, road traffic accidents and acute surgical problems. However there was also scope to see lots of new and interesting things; snake bites, dengue fever and malaria. I was also surprised to see there was a newly built acute psychiatric unit at the hospital. I had not expected psychiatry to be a priority, because I thought focus would be on more immediately life threatening illness, but it was good to see that psychiatric diseases were taken seriously. A large proportion of the psychiatric illness was related to drug and alcohol abuse, a similar situation to that in the UK.

Describe the pattern of healthcare provision in Belize and how this compares to the UK.

Healthcare in Belize is available through both public and private providers. The Ministry of Health is responsible for overseeing provision of public health services. Similar to NHS Trusts in the UK, Belize is divided into 4 'health regions' based on geographical area, and each area offers both primary and secondary care facilities. There are tertiary care services in only the Central Health Region. 9% of the Belize's total budget is spent on healthcare, in contrast with 18% in the UK. The services available under the public health system are much more limited in Belize in comparison to the UK: for example CT scans must be paid for by the patient and MRI is not available at all. Like the UK, much of the healthcare in Belize is funded through taxation, however they also receive international aid from the UN, UNICEF, United States and UK, amongst others. Around 15% of healthcare in Belize is privately funded. By law private care must be completed out of business hours, as doctors are salaried to work in public hospitals during the day. There are new initiatives in Belize city with hospitals that are funded by a combination of public and private money. During my placement at Western Regional Hospital

I was initially shocked by the state of repair of the hospital building and the lack of resources. The equipment that was available, such as xray machines were outdated and regularly broken. The staff worked extremely hard to do the best they could with available resources but it was a stark contrast to the hospital environment I am used to in London.

Discuss the tropical infections that are common in Belize, the challenges they pose for the healthcare workers and how they are managed in the acute care setting.

The main tropical diseases in Belize are malaria and dengue fever, spread via mosquitos, chagas disease from the assassin bug and leishmaniasis from sand flies. Malaria is not prevalent in built up areas, but districts such as Cayo and Stann Creek do pose a risk. 95% is P. Vivax and there is no evidence of drug resistance. Dengue fever occurs in both rural and urban parts of Belize and confirmed cases are rising more recently with the introduction of serological testing in 2007. A medical student also on elective with us in Belmopan contracted dengue fever whilst he was there, and it was interesting to see first hand how it affected him. Management is usually supportive, using fluids to keep patients rehydrated and allowing them to rest, or in the case of malaria antimalarials are also given. Although tropical diseases are still a health burden in Belize, they make up much less of a doctors workload than I had envisaged. Non-communicable disease such as diabetes and heart disease are actually much more common, diabetes ranking as the leading cause of death. This may be related to a combination of genetic risk and lifestyle: I was surprised by the amount of fried food, carbohydrates and the lack of fresh fruit and vegetables that is available in Belize. There has also been an influx of unhealthy foods from North America. This combined with the lack of public health intervention and education has contributed to a worrying epidemic of metabolic syndrome in Belize. Due to a lack of primary care and preventative medicine, patients tend to present with much more severe complications of diabetes than I had seen in the UK. It emphasised to me how important the role of the general practitioner is in managing diseases on a day to day basis and educating patients to make lifestyle changes.

To become more confident in dealing with common practical procedures in preparation for Foundation Year 1.

Due to severe understaffing at the Western Regional Hospital, I had ample opportunity to get involved on the wards and practice some of my practical procedures. I was able to regularly practice venepuncture, cannulation and infusions, catheterisation and wound dressing. As most of the patients spoke English or Creole it was easy to communicate with them and I feel like my confidence grew greatly during the placement. It was a fantastic experience to be so immersed in such a different culture and feel like I could be helpful and have something to offer. I became more confident in my diagnostic abilities, which was more challenging due to lack of facilities such as CT scans and some of the usual biochemistry we would rely on at home.

Overall I found the experience very rewarding, eye-opening and humbling. It made me appreciate the resources and facilities we have to work with as doctors in the UK, and I was infinitely impressed by the high level of care the doctors in Belize provide with such scarce resources.