

## Elective Report

### Objectives

1. Describe the pattern of presentation of metabolic syndrome in Belize and discuss this in the context of global health.
2. How does the Accident and Emergency department in Belize differ from the UK?
3. Improve practical skills
4. Improve confidence and ability when seeing patients

Belize is situated on the Caribbean Coast, between Guatemala and Mexico. It is a developing country, with people of many different cultures and ethnicities. We undertook our elective in the capital city, Belmopan. The largest, busiest hospital in the western region was situated here.

The metabolic syndrome is an endemic in Belize, with wealthy citizens enjoying the luxury of imported, unhealthy foods and a lack of exercise. On the other hand, poorer residents have little access to healthcare, leaving conditions such as Diabetes and Hypertension undiagnosed for many years. Additionally, public health suffers a lack of investment in Belize, leaving the population with little information about the correct choices to make regarding their health. This is reflected in the diets of many families, where meals are concentrated with fats and carbohydrates. This is dependant upon the region in which people live (city, coastal or mainland), ethnicity and availability of ingredients.

During our time in Western Regional Hospital, we encountered many obese, diabetic patients who had no idea that they suffered from hypertension. They may have been admitted for an orthopaedic injury, but a routine blood pressure reading would demonstrate consecutively high readings. Doctors would then commence treatment, but hadn't enough time to go through conservative measures to reduce their blood pressure such as lowering salt intake and exercising more regularly. This takes nothing away from the marvellous job the multi-disciplinary team were doing on critically ill patients.

The growing obesity problem in Belize isn't helped by the influx of unhealthy food options from North America. The key to controlling the growth of the average waistline is community education and outreach. The doctors I spoke to informed me that money was beginning to flow into these areas.

Moreover, the metabolic syndrome and its harmful effects need to be addressed sooner in patients' lifetimes, rather than tackling the end-stage effects that place an unfair burden on the strapped resources of hospitals in Belize.

We spent most of our time in emergency department of the hospital. This gave us an opportunity to compare and contrast the provisions in a busy, teaching hospital in Belize with that of an English emergency department. The department was well organised with a triage system in place, run by a senior nurse who streamed patients into appropriate areas for observation and consultation. This was similar to the triage system in the UK. The cubicles were small, hot and uncomfortable with little room for relatives and other visitors. Though a triage system was in place, a huge influx of high-priority patients would have brought the department to calamity. But thankfully, during our time in Western Regional, this did not happen.

One of the major observations we made, was the delay in presentation of patients with serious injuries due to the lack of ambulances and distance needed to travel from remote areas where incidents such as car accidents would occur. This impacted on the decisions that needed to be made by emergency doctors. Additionally, though the department coped

well with the equipment available to them, CT scans could not be done on sight. Patients had to be transported to Belize City, which was over an hour away. This made treating head injuries very difficult. Another provision that we take for granted in emergency departments in the UK is point of care blood gas machines and blood count machines. This luxury was not available to diagnosticians in the emergency department in Belize.

Furthermore, the hospital only had one surgeon on-call at any one time. This had huge implications on surgical admissions, and the workload on the surgeon.

Overall, we were thoroughly impressed with the emergency department in Western Regional Hospital, and we were in awe of the ability of doctors to think on their feet with a serious lack of provisions. However, there is definitely a need for investment into these departments, which we can only hope happens with growth of the socio-economic status of the country as a whole.

I had the opportunity to improve my practical skills in the emergency department of Western Regional hospital in Belmopan. The doctors were very willing to let us give a helping hand in many procedures and tasks. Our independence in doing such procedures grew as they were assured of our ability over time. Taking blood, cannulation, and wound dressing were common procedures that we were expected to do by ourselves.

I believe that my confidence in seeing patients has improved after the time I spent in Belize. My ability to think on my feet and use the information I have in front of me has improved. Additionally, I have learnt to appreciate the excellent provisions we have in the UK, whilst also understanding that there need not be a complete dependence on technological systems for the fundamental processes of diagnosis, investigation and treatment.