

ELECTIVE (SSC5c) REPORT (1200 words)

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

Introduction and overview

I decided to undertake my elective in Belize, a former British colony within Central America. It is distinct from other countries in the region since it is culturally more similar to the Caribbean. Ethnically diverse and with a high prevalence of English speaking populace made it an appealing choice.¹

Belize has a total population of 340,8442 with a low density throughout the country. Population profile is mainly bottom heavy, indicating very high numbers of young people as opposed to middle aged and elderly. Life expectancy is 66 for males and 70 for females.¹ San Ignacio town lies deep within the western Cayo district near the border of Guatemala. It has a sister town called Santa Elena, both making up the region's largest economic hub and Belize's second largest urban area. Population for this town is estimated to be around 17,000. Both towns have hospitals serving the local populace, although complicated cases or patients requiring more intensive measures are transferred to the administrative capital of Belize, Belmopan.

The main causes of death in Belize include ischaemic heart disease (10.4%), diabetes (8.9%), interpersonal violence (8.2%) and stroke (7.7%). HIV/AIDS is also a top contributor (5.3%) with cancers making up another large proportion. Levels of cancer, diabetes and HIV/AIDS are on the rise compared with typical top causes of death (IHD and stroke).³

In terms of health care system, funding is primarily private and through the state. Some basic medical treatments are free of charge, however many procedures and drugs require payment. How the cost of calculated is not clear and varies from region to region. GDP & expenditure on health care services was 5.8% as opposed to 9.4% in the UK.²

San Ignacio hospital is a small, publically funded teaching hospital with basic facilities, sharing the burden with the hospital in San Elena. Although the outpatients department is very busy, there are only a small number of beds for inpatients. Services include General medicine, Maternity and delivery – any other specialities requiring anything beyond the most basic level of care require transfer of the patient to a better equipped facility (Belmopan, western regional). In addition to these onsite services, specialist clinics are provided from the western regional hospital.

I spent the majority of my time in the O&G department of San Ignacio hospital, observing day-to-day care of patients, participating in specialist clinics and observing deliveries.

1. What are the key gynaecological problems that affect the local population of women in the San Ignacio community in comparison to London ?

The maternal mortality rate in Belize is currently 45/100,000 which is much improved from previous years however still a large contrast to the UK rate (12/100,000). Infant mortality is 20.31/1000 live births vs UK rates of 4.4/1000 live births.³

HIV/AIDS prevalence rates are estimated to be 1.5% compared to 0.33% in the UK. Associations with low contraceptive usage (55.2%) and a high fertility rate (3.02 children per woman) can be made. Overall trend compared to previous years show an increase in diagnoses indicating a drastic need of an increase in public health measures and population awareness.³

Eclampsia, a condition characterised by tonic-clonic seizures, hypertension and proteinuria, is a life threatening condition which occurs during pregnancy. This was one of main maternal complications highlighted at my time in San Ignacio. Many women develop pre-eclampsia due to high levels of chronic poorly controlled hypertension. The high incidence is multifactorial, however it mostly boils down to lack of frequent monitoring and early intervention due to the high levels of poverty. Checks during pregnancy are much lower in frequency compared to the UK and many impoverished people simply do not present early enough for preventative measures – presentation usually after the patient has become symptomatic.

2. Describe the system in which Obstetric care is delivered in San Ignacio, Belize in comparison to the UK?

The system in which obstetric care is delivered in Belize differs from that in the UK mainly through their approach monitoring the patient throughout pregnancy. Pathway of care is similar in structure to the UK however with key differences dictated through lack of resources in the smaller public hospitals. Uncomplicated routine births are handled through these but as soon as issues with the birth arise, the patient is either transferred to a larger better equipped regional hospital or an emergency section performed. Pre-emptive action was a major part of the strategy in managing these patients as potentially complex cases would be exposed to excessive risk if managed reactively (i.e. cases where complications would require definitive specialist intervention only accessible in the regional hospital several hours drive away).

Also observed was the lack of theatre check protocol recommended by the WHO, where all theatre staff introduce themselves and their role before surgery. Sterile conditions were not as stringent compared to the UK e.g gloves only used when absolutely necessary. C-sections were very common in this setting

as often patients would reach the hospital with complications and be unfit for transfer to the regional hospital. Although all staff were highly skilled and efficient throughout the surgeries, it was noted that some checks by the midwives were not as consistent as those in the UK (APGAR scoring).

3. Discuss whether the care for pregnant women in San Ignacio is well-provisioned.

Healthcare provisioning overall is not comparable to the UK as standards vary from hospital to hospital, due to lack of resources in some areas. Hospitals in larger cities provide a level of care similar to most western countries, which contrasts with the smaller public hospitals saddled with limited resources and significantly lower staff numbers. Most medical staff double as reception and do administrative roles among daily duties. Equipment would frequently have to be borrowed from other wards due to shortage and were older models. In most public hospitals, ultrasound scans are not often available for patients.

Waiting times were frequently counted in hours and lines of patients on particularly busy days could extend out into the outer courtyard. The majority of patients were treated as outpatients unless absolutely necessary to admit. The low number of beds was the main factor for this approach. It was also felt that many patients waited until their condition warranted a trip to the hospital rather than go earlier, possibly due to financial worry.

Compliance with medication and treatment plans was perceived by medical staff to be inadequate and so a more authoritarian approach was commonly observed in contrast to the patient centered approach adopted in the UK.

4. Observe and reflect on the experience of working in a healthcare setting based in a developing country and the use of limited resources for provisioning healthcare for a large population.

This medical elective was eye-opening experience and highlighted how vastly different the UK system is from systems in central America. Although resource allocation is uneven and creates less than ideal situations for both doctor and patient, it was inspiring to see how medical staff make the best with what they have and work around the obvious issues presented to them. I was lucky that most of my patients did not have any trouble understanding English, however for the few that did, I have the nursing staff to thank for translation services at short notice. Formal translation services are non-existent and frequently relatives are relied upon for this. As there were no internet connected workstations in the wards, researching topics was more challenging (in contrast to UK hospitals). Our training, textbooks and the experienced staff were crucial in making the diagnoses.

Practicing medicine in this location strips everything back to bare basics and really hammers home how important it is to remember our fundamental skills and core knowledge.

References :

1. **CIA-WORLDFACTBOOK. Belize - People and Society.**
<https://www.cia.gov/library/publications/the-world-factbook/geos/bh.html>.
2. **WHO. Belize. 2015;** <http://www.who.int/countries/blz/en/>.
3. **WHO. Country Health Profile. 2015;** <http://www.who.int/gho/countries/blz.pdf?ua=1>.