

ELECTIVE (SSC5b) REPORT (1200 words)

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

Pre-Hospital and Emergency Medicine on the Water

Describe the pattern of issues found in search and rescue missions and discuss how they might present similarly or differently in the UK

From this elective I have learnt that search and rescue missions tend to fall within two main categories: medical issues and boat related issues. Medical issues we have experienced on search and rescue missions have ranged from the minor such as hand injuries and dehydration, to more serious issues such as suspected heart attacks and head injuries, and in the very worst case, a drowning. In contrast, boat related issues tended to be issues surrounding damage to boats, collisions, and boats bringing on water. In addition, what we found was that when there was a boat related incident, often medical issues would coincide. An example of this was a collision we attended – where the two boats had come into contact, there had been a significant degree of impact which had led to several injuries on board. One major factor in the presentation of these issues was the way in which they were reported. What became clear was that often there was a significant degree of misinformation over the radio, which often meant that when we arrived on scene, we were presented with a case completely different to what we were expecting. An example of this was a call out where we were told we were going to see a major head injury. After having raced to the scene, expecting to find a seriously unwell patient, we instead were presented with a gentleman who had actually suffered a hand injury. Had we had the correct information, we likely would not have mounted the level of response we offered, and therefore in reflection it revealed how important accurate radio calls are. In comparing this to the UK, often misinformation is given on ambulance calls and similarly, this does often lead to an incorrect response.

Describe the structure of the health service and healthcare provision in the Caribbean (Antigua) and how it differs from the UK

The health service in Antigua and Barbuda is divided into 6 districts, each which has an appointed medical officer who oversees the service. The health service has a mixed funding system, where revenue comes from government spending, employers and employee contributions and from medical benefits. Government spending on healthcare is 4% of GDP, contrasting to the UK where health spending is currently 9.8% of GDP.¹ Similarly, as with the UK, the whole service is managed by a Minister for Health. Across Antigua and Barbuda there are twenty-six community clinics, one public hospital in Antigua, and a smaller facility in Barbuda.¹ However, the health system is largely supplemented by private clinics which dominate a proportion of healthcare provision. Out-of-pocket health expenditure is high, at 30% of total health expenditure.² In comparison, the UK which has a fully public, free at the point of delivery health service, has a much lower level of OOPs at 15.1%.³ From this elective, it is clear that out-of-pocket payments are a huge burden to the local population of Antigua. Many patients will forego undertaking important tests such as scans and blood tests as they cannot afford it, and this leads to a worsening level of health in the population. ABSAR provides a free clinic where basic examinations, minor surgeries/sutures and medication can be offered on donation basis, which means the local population can access basic health care.

1. Health in Antigua and Barbuda [Internet]. Commonwealthhealth.org. 2018 [cited 24 May 2018]. Available from: http://www.commonwealthhealth.org/americas/antigua_and_barbuda/
2. Antigua and Barbuda - Out-of-pocket health expenditure (% of total expenditure on health) - Country Comparison [Internet]. Indexmundi.com. 2018 [cited 24 May 2018]. Available from: <https://www.indexmundi.com/facts/indicators/SH.XPD.OOPC.TO.ZS/compare?country=ag>
3. UK Health Accounts - Office for National Statistics [Internet]. Ons.gov.uk. 2018 [cited 24 May 2018]. Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthcaresystem/bulletins/ukhealthaccounts/2015>

Compare and contrast the population health of Antigua and Barbuda to that of the UK and the expectation of patients in medical services.

The population of Antigua and Barbuda suffers from a diverse range of medical issues. Life expectancy at birth is 75.4 In comparison, the UK has a life expectancy of 80 to 83.5 Infant mortality in Antigua is 9 per 1000 live births⁴, whereas in the UK it is 3.8 per 1000 births.⁵ The most common cause of death in children under 5 is birth asphyxia⁴; in the UK, the most common cause of death in infants is immaturity-related conditions.⁵ The rates of chronic conditions in Antigua and Barbuda are high – 11.3% of the population suffer from raised blood glucose, 38.5% suffer from high blood pressure, and 33.1% suffer from obesity⁴. In contrast in the UK, 6% of the population suffer from diabetes, 26-31% of the population suffer from high blood pressure, and 26% of the population suffer from obesity.⁵

4. Antigua and Barbuda [Internet]. World Health Organization. 2018 [cited 24 May 2018]. Available from: <http://www.who.int/countries/atg/en/>
5. (PHE) P. Public Health Profiles [Internet]. Fingertips.phe.org.uk. 2018 [cited 24 May 2018]. Available from: <https://fingertips.phe.org.uk/profile/health-profiles>

Develop my skills in acute assessment and clinical competencies in emergency and pre-hospital settings.

This elective has given me a chance to practice a diverse range of skills and develop my ability to acutely assess an unwell patient. In the medical station we have seen a multitude of conditions we would not have encountered in the UK. This includes envenomation from sea urchins, brown-recluse spider bites, tropical diseases such as Dengue fever, and a whole host of boating injuries. We acted as first responders during Sailing Week, which meant we were the first on scene to several incidents on the water. This meant we had to perform our acute assessments on the high seas, which was a interesting challenge – performing an ABCDE assessment whilst there's a high swell and strong winds is definitely a skill I would not have picked up in the UK. In addition, Sailing Week offered the chance to practice many clinical skills. Common injuries which we saw included rope burns, lacerations and many hand injuries. We got the chance to hone many skills such as suturing, giving local anaesthetic and performing digital blocks, and wrapping and dressing wounds and burns. These are all skills which I now feel much more competent in and will hopefully use these going forward in my medical career. One significant experience which was valuable despite being incredibly sad was a drowning case which I was a first responder to. I had to perform CPR and insert an airway into a patient on the back of a speeding rescue

vessel. Even though the patient sadly did not survive, I really valued the experience as it showed me how I worked under pressure and allowed me to demonstrate my competencies in managing a cardiac arrest.