

## **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**

#### **1. Describe the pattern of disease seen by ABSAR compared to the UK emergency services.**

ABSAR is a voluntary organisation which operates a 24/7 call out service to medical emergencies, as well as marine search & rescue missions. During my elective there have been two weeks of sailing races, and a large influx of boats and crews to the English Harbour. For this reason I have been on hand to a number of marine related injuries and emergencies, rather different to my training in London. The calls we have attended have been a range of medical and marine emergencies including sinking boats, dismantled boats, boat collisions and severe injuries. Much of the injuries have involved limbs or fingers being trapped in winchs or sails and rope burns. Aside from the marine related injuries, the tropical environment of Antigua also introduced a number of new conditions into my medical training. Due to the vast number of reefs, there are many envenomations by urchin spines, lionfish or jellyfish. Insect bites are another common problem faced by ABSAR, including the brown recluse spider bites its victims who then get profound tissue necrosis. There are high rates of diabetes, lung disease and heart disease on the island like the UK, however I have noticed that there is less continuity of care through general practitioners in Antigua which might be contributing to suboptimal care for chronic diseases which ultimately may result in long term complications.

#### **2) Compare and contrast the provision and organisation of emergency services in the Caribbean with the emergency services in the UK.**

In Antigua there is just one main public hospital on the island, which serves the 90,000 people that live in there. They also have emergency medical services (EMS) which operates 3 ambulances. On the island these services are often over-run and response times vary depending on distance from the ambulance base in St Johns. Due to this discrepancy between response times, ABSAR is often the first responders to local call-outs and either take the patients to the hospital or treat the patient until the EMS arrives. Together these services provide emergency medical care to the Island. In addition to the public services there are also private medical facilities that can be utilised if the patient has medical insurance, however costs are generally very high for those without insurance.

In the UK, there are more emergency vehicles and hospitals in operation, one large difference between Antigua and the UK is the number of services available on the island. In Antigua if there is need for PCI (percutaneous coronary intervention) or Neurosurgery, these are not available in the hospital, therefore there needs to be a doctor flown in from a nearby island, or a medical evacuation of the patient to a different island or to the United States. Therefore in Antigua the planning and communication between different medical organizations is crucial for timely delivery of medical care. In contrast these services more readily available at a greater number of hospitals in the UK, for example if there is a major trauma incident in London the LAS (London ambulance service) will be directed to the nearest Major trauma centre for example The Royal London, St Marys, Kings College or St George's Hospital depending on which is closest.

**3) Examine the challenges faced by ABSAR and the impact they might have on the local community. Compare this to the challenges faced in the UK.**

ABSAR is a voluntary organisation, with multiple different remits including running a medic station, two search and rescue boats, a fire truck and two emergency response vehicles. The running of all these different aspects requires firstly a large number of people. Obviously without the people this service would not be able to run as it does and therefore fewer emergencies calls would be possible, this would lead to longer waits for ambulances or lack of marine rescue which would ultimately impact the local community in a negative way. The majority people who work for ABSAR do so on a voluntary basis without a salary, which could be seen as a barrier for recruitment and retention of a workforce. Some similarities can be drawn between this and the current UK medical force which is facing a downward trend in doctors applying for and taking up training posts, despite the need for more doctors. Many UK doctors especially junior doctors are travelling abroad for work and perceived benefits such as increased pay and better quality of life. Other challenges that I have notice during my time with ABSAR include treating patients without being able to order tests which are so common in the UK. For example if someone in the UK has a urinary tract infection, we would usually send a MC&S before starting antibiotics, this however requires a lab which they do not have at ABSAR. However it does show me that without blood tests, urinalysis and imaging so readily available we need to trust our clinical skills and diagnostic ability, and refer to specialilst services when nessassary.

**4) Reflect on the development of clinical skills during the elective, and how they will impact future work.**

During this elective I have seen and cared for a wide variety of cases, majority of which are acute problems that require immediate attention. As the Medic Station is situated in the English Harbour, the patients that come in are often boating related injuries of which a large number of these injury involve limbs which have been trapped. I have had numerous opportunities to develop my acute wound/laceration management. A new skill that I have learnt is how to perform a digital block, I have specifically used this to reduce the pain and distress for patients with finger injuries which need cleaning and suturing. Wound management is something that we do at ABSAR on a daily basis, caring for burns and blisters, by seeing the improvements over time I am now able to tell if a wound is not healing as would be expected. Other skills gained here include assessing walk-in patients in the medic station. This type of work is similar to the pace and decision making which is required by a doctor working in A&E or general practice, which will benefit my future practise. As well as assessing and deciding on a management, my documentation, handover and prescribing skills have improved, which is vital for a junior doctor in the UK. I am thankful to ABSAR for the learning opportunities that I am sure to use in my career.