Elective Report

Student's name and contact details: Victoria Ward, v.ward@smd10.qmul.ac.uk

Elective subject: Emergency Medicine

Elective Dates: 1st -31st May 2014

Elective location: Harlem Hospital Center, New York. Columbia Exchange Programme

Supervisor's name and contact details: Dr Mike Bouton, Course Director. boutonm@gmail.com

Learning Objectives:

1. What are the prevalent conditions treated in the emergency department in New York?
2. How does the organisation of emergency/acute medicine differ to the UK?
3. Discuss an interesting case that you saw in emergency medicine.
4. How has this elective prepared you for becoming a junior doctor?

What are the prevalent conditions treated in the emergency department in New York?

Harlem's population is about 67% African-American and 20% Hispanic, and is deprived with the average annual household income half of the national figure. The community has the highest mortality rates in New York City, and conditions like hypertension, diabetes, heart disease and stroke are particularly prevalent in the area. During the placement I saw several patients with these problems as well as asthma, seizures, sepsis, syncope, pulmonary emboli and anaphylaxis.

The department also sees a high rate of trauma, in particular gunshot wounds and stabbings, especially in young men, and during the month I saw one major stabbing injury and several minor lacerations.

There is also a high rate of psychiatric and substance abuse problems in the area, with several patients presenting with suicidal ideation or psychosis, and many patients were intoxicated on alcohol or other drugs like cocaine, crack, benzodiazepines and opioids.

In addition to the adult side, I also spent time in the Paediatric Emergency Department where the majority of cases were viral infections, such as upper respiratory tract infections, conjunctivitis, otitis media and gastroenteritis, or asthma exacerbations. However I also saw patients with sickle cell crisis, head injury, burns, and some orthopaedic problems.

How does the organisation of emergency/acute medicine differ to the UK?

The organisation and provision of healthcare in the US is complex: there are private and state run hospitals, and healthcare is provided through both private and public insurers, with the majority of people being covered through private employer-sponsored insurance. The two main tax-funded public insurance programs are Medicare, covering people over 65 or with disabilities, and Medicaid, which provides healthcare to patients from low incomes, but there are also some 'safety-net providers' in disadvantaged communities.

Harlem hospital, where I took my elective, is a state-run hospital and provides care to medically underserved, low income and minority populations. In 2013 26% of patients seen in the Emergency Department in Harlem were uninsured and 54% were on Medicaid, higher than other hospitals in New York.

Prior to coming to New York I expected there to be large difference between the healthcare systems in the UK and the US, but I was surprised at actually how similar the provision of emergency care is between the two countries. In the US all patients must be provided with emergency care, regardless of their ability to pay, and so all patients that I saw were given the care that they required. However as many patients seen in the ED were uninsured, I did notice a significant number of patients presenting with non-emergency conditions, such as having callouses on their feet or to renew their regular prescriptions, probably because they do not have a primary care provider. This was particularly noticeable at night where many of these patients were also homeless.

The ED was run in a very similar way to hospitals I have worked at in the UK. Patients are triaged by nurses and given a severity score. They are then seen and assessed by a doctor, and appropriate investigations are ordered and treatment given. Some patients required consults by other departments such as internal medicine or surgery, and were subsequently admitted.

I did, however, notice differences in the training of medical staff in the US. The medical training in the US is much shorter: students enter medical school as graduates and study for 4 years (similar to the Graduate Entry Programme in the UK), and then as new doctors they tend to enter Residency straight from medical school, with these programmes lasting mostly 3-5 years in length. However their hours are much longer, with surgical trainees typically working 24 hour shifts on call, and having 1 day off per week. I also noticed that medical students are given more responsibility early on in their training, and final year medical students are almost the equivalent to the UK's FY1's. In the US they have Physician Assistants, who have undergone 2 years of medical training but are not doctors, and are affectively at the level of an SHO.

Discuss an interesting case that you saw in emergency medicine.

As Harlem is a major trauma centre I was keen to see how major trauma cases are managed. On one of my night shifts I saw a 22 year old man who had been assaulted and stabbed in his home by a gang of 9 strangers. He presented to the department via ambulance and had sustained a large laceration to his left upper quadrant. In the primary assessment he was found to have a left pneumothorax and so the doctor proceeded to insert a chest drain. However during this time a tension pneumothorax developed and the patient's blood pressure started to drop suddenly. As the doctor had already started to insert the chest drain he managed to relieve the tension through blunt dissection of the pleura, and the patient was stabilised. He was then sent to surgery for repair of the laceration and internal examination for any further organ damage, and made a full recovery. During this case I observed the incredible teamwork that happens in the emergency department and how calm everyone remains in such a tense situation, and also saw how a primary and secondary survey was conducted.

How has this elective prepared you for becoming a junior doctor?

I chose to do my elective in Emergency Medicine in Harlem as I hoped to see a wide variety of cases and wanted to gain further experience in assessing and managing acutely unwell patients. During this placement I was able to assess patients independently and develop a management plan myself, before discussing this

with my senior, and as a result I clerked many more patients than I have done on most placements in the UK. This gave me invaluable experience in practising my history-taking and examination skills, as well as formulating diagnoses and management plans. I saw a wide range of clinical problems during the placement and as a result feel more confident in recognising and managing common emergencies.

I gained further practical experience in taking bloods, blood gases and inserting cannulas, and also got the chance to practice suturing and administering local anaesthetic. In the major trauma cases I observed the primary and secondary surveys and FAST scans being performed and saw intubations and the insertion of chest drains.

I also learnt how to think more like an emergency physician through asking the salient questions to rule out life-threatening emergencies and then presenting my findings succinctly; skills that will stand me in good stead for being a junior doctor.