## **ELECTIVE (SSC5c) REPORT (1200 words)**

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

I completed a 6 week elective placement in the department of Orthopaedic and Trauma Surgery at Cho Ray Hospital in Ho Chi Minh, Vietnam. Cho Ray Hospital is a large tertiary centre that accepts patients from the entire southern region of the country - a huge area of land home to tens of millions of people. The average day in the department began with the 7.00 am meeting in which new cases were allocated to surgical teams, and the on-call cases from the previous day were discussed. During the meeting we would sit with our clinical supervisor (one of the surgical residents, their equivalent of consultants) who would translate the important topics of discussion, talk us through any imaging, and answer any questions we may have had. In terms of patient load, by far the highest single contributor was from road traffic accidents (RTAs). The roads in Vietnam in general - and Ho Chi Minh in particular - are exceedingly dangerous, and lacking in well enforced traffic laws. In addition, the high cost of car ownership relative to the average income (the result of government taxation) means that the vast majority of people ride mopeds or motorcycles. Ho Chi Minh has close to 10 million residents, and the roads are often highly congested with mopeds. As a result we witnessed a lot of cases of high impact, serious trauma, often involving multiple-limb compound open fractures, crush injuries and degloving injuries. The status of Cho Ray as a tertiary referral centre also contributed to the severity of these cases; patients with the most serious injuries were transported from district hospitals all across the south of the country. However, the combination of the large region served and relatively poor transport infrastructure resulted in long transfer times for such patients, often as long as several days. After RTAs, the remainder of the work load was accounted for by regular orthopaedic conditions, including osteoarthritis (OA) of the hip and knee for which hemiarthoplasty and total hip and knee replacement were common procedures. Other procedures we witnessed included anterior cruciate ligament (ACL) repair, posterior cruciate ligament (PCL) repair, and both above- and below-theknee amputations.

The health care system in Vietnam differs from that of the UK in terms of funding, equality, and access to care. Vietnamese residents are required to contribute 20% of the cost of their treatment; this is to some degree means-assessed, such that less well-off individuals pay lower rates with subsidies provided in the form of charitable donations. In practice a large proportion of the population are poor and have all of their emergency medical costs covered in this manner. Access to elective procedures however, which in our department included hip and knee replacements, was consequently largely restricted to all but those able to contribute towards the cost of the procedure. The conditions on the orthopaedic and trauma ward were relatively poor. As a result of the incredibly high patient load there was a perennial shortage of beds, and most patients ended up sharing. The lack of space also meant that many patients were placed in beds on the balcony, with little formal shelter. There was also a lack of general hygiene, related to overcrowding, and a high incidence of post-operative infections and complications. The layout of theatres was also substantially different to UK hospitals. There was one scrubbing-in area shared between all 15 theatres; there were no separate rooms for the induction of anaesthesia, and patients were taken into the theatres to be sedated. Space here was also at a premium, such that all theatres were used for 2 operations simultaneously. This included having 2 anaesthetic teams with equipment, 2 surgical teams, and 2 nursing teams per theatre, which obviously made the rooms very crowded.

The treatment options for the conditions we saw were largely similar to those available in the UK, albeit with differences in the type of equipment and prostheses dictated by cost. Fractures, which as previously stated accounted for a large proportion of the case load, were managed using a variety of procedures - these included various means of internal fixation such as pins, plates, screws and intramedullary nails. The decisions regarding approach were largely made during the 7.00 am morning meeting, where the patient details, history and imaging was assessed. The cases were then allocated to the various teams, and a theatre list decided upon. As far as I could ascertain from the surgeons, there was a general lack of provision when it came to things such as physiotherapy or occupational therapy, and the rehab of patients post-hospital was largely non-existant. Rather, once medically fit for discharge, patients would be sent home in order to free up much-needed space on the wards. Despite these relative deficiencies, the level of training of the surgeons themselves was very high. Their working week consisted of 5 days on regular shifts, 1 day per week on-call, followed by 1 day off. Combined with the large number of patients, this busy schedule resulted in surgeons accumulating lots of experience in a large array of procedures. The trainees also seemed to take on more responsibility than their UK equivalents, acting largely independently from an early stage of training.

One of my personal development goals was to improve my skills at communicating with individuals in whom there is a significant language barrier. Obviously having opted to do a surgical rotation affected the necessity of this skill, since we spent the large proportion of our time in theatre with patients who were already unconscious, with a pre-established diagnosis and management plan. However there were occasions on ward rounds where it was necessary to speak directly with the patients; the Vietnamese surgeons were very helpful in acting as translators when required - while a lot of the population of Saigon were capable of conversational English, they did not possess the vocabulary to answer specific medical questions. Communication with the members of the surgical team was generally far easier. The level of English was exceptionally good among the youngest members of the team, who were usually able to mediate to some extent between ourselves and the senior surgeons, whose English was usually poorer. However, the standard of medical English was consistently high throughout the team - a consequence of the manner of the medical education in Vietnam, which occurs largely in English to allow access to the latest global research and educational literature.

In summary, I thoroughly enjoyed my Orthopaedic placement at Cho Ray. I found it to be an invaluable contribution to my existing exposure to the specialty, and a highly useful insight into the health care provisions of a country substantially different to our own.