Elective report – Harsimran Singh, Final Year, Barts and the London SMD
Elective in THAILAND 14th April – 23rd May

I completed my medical elective in the city of Phetchaburi, some 150km south of Bangkok in Thailand. Petcharat Hospital is a private hospital providing both secondary and tertiary care to the local province as well as acting as a port-of-call with patients both referred from smaller more rural centres and also referred on to the superspecialist centres found in Bangkok itself. The following report addresses the objectives set out prior to going on the elective:

Describe the pattern of orthopaedic, especially traumatic, injuries in Thailand. How does this compare with the UK/rest of world?

The hospital where myself and the other medical students spent most of our time had a fairly busy A&E department and a reasonable cross-section of traumatic injury is seen. The main road connecting North and South Thailand and the capital Bangkok, Highway 4, runs directly outside the hospital and it is from here and the surrounding streets that the vast majority of injuries originate; that is, in road traffic collisions. Whilst fractures and other trauma are of course often seen here in the UK on the roads, because of our better road safety and more aging population the *majority* are in the older population who tend to have comorbidities such as osteoporosis increasing their likelihood of fracture; conversely the typical orthopaedic patient in Thailand is younger and so it requires much more force to break their bones, forces found when motor vehicles are involved in collisions. I have no formal data but looking at the patients seen, almost all were riders or passengers of motorbikes rather than cars. Various factors could potentially explain this pattern:

- The riders typically have a laissez-faire attitude to personal safety, and it is not uncommon to see 3-5 passengers including pets and children on motorbikes designed for 2. Helmets are worn sparingly despite police efforts.
- The driving test consists of no open road driving, although I did note that you had to have a medical examination prior to applying, and the Thai doctors were shocked that we in the UK did not have the opportunity to charge for a private health check whenever anyone wanted a driving license.
- Road rules are broadly similar to the UK but with some de-facto differences. Driving the wrong way down the road is an acceptable way to deal with your destination being on the other side of the dual carriageway, and a quick flash of the hazard lights means "watch out, something unpredictable and dangerous might be going on".
- All of these human and systemic factors are compounded by the Buddhist belief in fate and karmic reincarnation, which causes some to tend toward recklessness. The end result is that Thailand has ~40 road fatalities per 100,000 capita per year, as compared to just 3.4 in Britain (WHO 2013, DoT 2012). Those who escape with only injury normally will need orthopaedic input into their management.

How are services for the management of orthopaedic conditions arranged in Thailand, including private and public sector provision as compared to the UK

Broadly speaking, I actually found that health services in general were arranged in a similar fashion to the UK. There is an overall split into public, or government, hospitals, and private ones. The private hospitals offer more sophisticated medicine in a more comfortable environment, but the patient or their family has to demonstrate an ability to pay. Public medicine is not free at the point of use but there is a system, originated by the controversial ex-PM Thaksin Shinawatra, whereby any patient with an income below a certain level can access whatever care they need for a particular incidence for a flat fee of 30 baht which at ~0.5 GBP is accessible to essentially all of the population. As a result under this and other systems almost the entire population is covered by some form of

guaranteed access to healthcare. It must in fairness be noted that while it is admirable that a middle-income country has successfully instituted near universal healthcare, the resource limitations inherent will affect how that can be administered. Therefore more advanced or expensive techniques such as MRI scanning, high-tech prostheses, and laparoscopic surgeries are found in the private hospitals.
With respects orthopaedics per se, as I noted above a far higher proportion of the case load is made up of traumatic emergencies in younger patients. Therefore there is only so much variation to be had in service provision; a fractured tibia needs to be reduced and fixed in place regardless, and quickly. However, one noticeable difference was in the recovery and aftercare for these injuries. Where in the UK the patient might stay in hospital for a spell commensurate with the trauma, in Thailand and in the private hospital where each night in the bed is itemised, the priority is to return the patient to their home rapidly but they are then expected to present to A&E regularly for wound dressing changes, checking of plaster casts and so forth, jobs which would usually be dealt with in the community in Britain, for example by district nurses.

- **Improve my understanding and ability in basic principles of orthopaedic care, e.g. fracture management**
- **Become more comfortable in the general surgical theatre environment**
- **Gain skills in care of the acutely unwell patient in preparation for FY1**
- **Reflect on experiences as per Appendix 3, SSC 5c**

I will be brief in this section as much of the information will be replicated in the reflection (Appendix 3). Unfortunately there seemed to be a feeling that as patients in private hospital are paying customers they should not be touched or unduly interfered with by medical students. Therefore hands-on clinical activities in the base hospital were fairly limited. However, we also spent time in a variety of other settings including government hospitals and primary healthcare clinics, and there I did manage to find some opportunities to scrub in and assist in theatres and to have more involvement in patient care. I was certainly very comfortable in the theatre environment although with considerably less stringent antiseptic requirements than in the UK this may not have been the closest replica to future practice!