

Jaison Patel, elective report, Gujarat (India), 16 April – 18 May

**Elective report, Gujarat (India), 2012, Jaison Patel**

Orthopaedics conditions in India are very similar to those of the UK, but also has some problems that are a specific problem in India. Obesity is very common in both India and the UK. This leads to problems in premature joint degeneration especially of the knees. From my experience it was easy to see that the increasing problem of obesity coupled with an ageing population has seen joint replacement surgery rise. Problems that I saw that were unique to India included spine problems, foot problems and orthopaedic flurosis. Spine problems originate from the manual labour industry in India. A lot of work that is carried out by machines in the UK is still being carried out by people. One in particular is carrying good from place to place. This is still done using people and putting the materials on people heads, therefore leading to spinal degeneration and slipped discs. Another reason for this problem could also be the poor quality roads that lead to abnormal movements within the spine. Orthopaedic flurosis is a problem that I saw in India that I have never seen in the UK. It is caused by excessive fluoride consumption mainly from drinking water. Foot problems seemed to be more common in India as well. This is a problem that is caused by bare foot walking, poor foot wear and poor road surfaces. This can cause overuse injuries of the foot and also exacerbates any abnormalities that were already present.

The delivery of healthcare in England is provided mainly through the National Health Service (NHS). The NHS was established in 1948 with an aim to provide healthcare that was free at the point of delivery. Up until this point patients were required to pay for their treatment apart from some teaching and charitable hospitals. Since then the NHS has developed to provide some of the best health care in the world, providing patients with the latest and best treatments.

Nearly two-thirds of the Indian population lives off less than \$2 a day. India has a predominantly private sector lead healthcare system which together with a low GDP leads to health care inequalities. India's investment in healthcare far exceeds its neighboring countries and is close to that of several European countries but still faces difficulties with access to care. The main difference between the healthcare system in England and India is the relative imbalance of public and private sector healthcare. In India that majority of public health care for example immunisations, is provided by the public healthcare system, where as the profiteering services are provided by the private health care sector. Approximately 80% of outpatient care is provided for by the private sector.

Trauma in India is becoming increasingly worrying and more common, increasing by 3% every year. Middle to low income countries such as India account for 90% of deaths that occur due to injuries worldwide. Victims of trauma in India are 6 times more likely to die of their injuries compared to their developed counterpart countries. Evidence shows that timely referrals to a trauma centre can reduce morbidity and mortality significantly.

In England there are several specialist trauma centres which provide care to the majority of trauma cases. Trauma cases are brought directly to trauma centres even if other hospitals would be closer. My teaching hospital, 'The Royal London Hospital' is one of the largest trauma centres in the world and also home to the London air ambulance service (LAS). The LAS is a specialist helicopter that provides emergency trauma care to areas that would otherwise take longer to reach by road and then brings them to the specialist trauma centre. The majority of trauma cases are received via road ambulances.

In India the increased burden of trauma to the healthcare system is being realised by health officials and there is a push to invest in trauma centres throughout India. Specialist trauma centres provide important care within the 'golden 1 hour' of any major incident. They provide a triage service for victims

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to ensure there is no delay in taking them to the specialist centres. They provide patients with specialist care within hospitals and much needed long term care for recovery. Logistics within India provides a major challenge in delivering an effective trauma care system. There is a push for these new trauma centres to provide this service for certain areas and ways of overcoming difficulties in transportation being developed. In the UK trauma centres have the added benefit of a multidisciplinary team being available. This means specialists in orthopaedics, general surgery, vascular surgery, maxillofacial surgery, neurosurgery, emergency medicine are all under one roof and can provide the best care possible. These specialists are also available in the long term recovery of the patient which in my experience can take years. This system is being developed in India currently and I am certain this will improve patient outcome dramatically.

Prevention is always better than cure. Primary and secondary prevention techniques in preventing road traffic incidents have shown to decrease patient morbidity and mortality. There are several ways in which accidents can be prevented. Primary ie preventing the accident from occurring and secondary preventing injury and death if an accident occurs.

Primary prevention techniques include teaching safe driving techniques; enforcing speed limits; preventing drink driving; road signs; pedestrian pavements and crossings, not overloading lorries etc... From my experience here in India it is easy to see the differences. There is very little organization of roads and pedestrian walk ways. Traffic laws are rarely obeyed and only occasionally enforced by the authorities. There are additional factors such as agricultural motor vehicles and animals that increase the chances of a road traffic incident occurring.

Secondary prevention techniques are those that reduce morbidity and mortality where road traffic incidents have occurred. These include the wearing of seat belts; child car seats; air bags; wearing crash helmets and protective clothing for motorcycle users etc... From my experience there is a greater awareness of these secondary techniques compared to the primary techniques. There are more motorcycle users wearing crash helmets and more use of seat belts. However I have also noticed that this is more common in middle-class and upper-class populations. The lower class population continues to take higher risks most likely due to affordability of these equipments.

The biggest question with regards to this is who is responsible for this. In the UK, the department of health in conjunction with the National Health Service and police services promote the reduction in road traffic accidents. They carry out television and poster campaigns promoting speed reduction, safety belt wearing and safe driving. Road safety is taught to children in schools and traffic laws are strictly enforced by fixed fines and even jail sentences. In India there is a strong consensus that the government, ministry of road and transport and ministry of health and family welfare should be responsible for road safety. There should be more stringent measures applied to the issuing of driving licenses. Traffic laws should also be enforced more strictly by police. There have been attempts at issuing these problems and from my experience of visiting India several times it is clear to see that there has been an improvement. However there is still a lot of work to be done.

Personally I have become more confident with my abilities to examine patients. I feel that over the last 5 weeks I have gone from examining patients as a fixed routine, to examining patients with a diagnosis in mind and adapting myself to prove the diagnosis right or wrong. I have become more confident using a different language with patients. By being forced to communicate in Gujarati and Hindi I have developed my language skills. I feel this is something I wouldn't have done without this experience.