

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

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

**What is the prevalence of rheumatological conditions in the UK? How does this differ from the rest of the world?**

**My elective was a 4 week placement which took place in Homerton hospital and consisted mainly of clinics. It was a fantastic experience not just for exposure to rheumatology as a speciality but also offered flexibility with regards to remaining in clinics or spending time on the ward.**

**Rheumatic disorders consist of a large number of conditions which are primarily caused by inflammation and disruption of the immune system. This can lead to damage to the adjacent structures, most commonly it is the joints that are affected as well as the surrounding muscles, tendons and cartilage. It is a huge burden in the UK due to the fact that it affects so many people and often leads to some form of be it either temporary or permanent disability. This in turns leads to further effects which are particular to each individual. For example, some people may feel like they have been robbed of their independence if they are unable to move and therefore work to earn an income.**

**With regards to the prevalence of rheumatological conditions in the UK, there is said to be a slight decline since 1998. The figures obtained from arthritis UK show that in 1998 16.4% suffered from a musculoskeletal condition, the most recent value shows that in 2006 the number fell to 15.6. However, this value encompasses any musculoskeletal problem which spans over 200 different conditions. In the 2001 health survey for England 18% of adults reported moderate to severe disability. 40% of these people attributed their disability to musculoskeletal conditions. This means that there is approximately 3 million adults in the UK who suffer from a moderate to severe musculoskeletal condition. As for looking at the world as a whole, I cannot seem to find any figures which suggest how the UK can compare to other countries in general, I assume that some other countries will have a higher prevalence of disability due to lack of funding and fundamental medications which are essential to managing rheumatological conditions, for example disease modifying anti rheumatic drugs and monoclonal antibodies.**

**What are the services offered in rheumatology in the UK? Are there different services being offered in other countries?**

**Services range from general or specialized clinics, some run by doctors and some by nurses. Nurse clinics involve reviewing long term patients as well as administering medications such as methotrexate injections, which helps to ensure that the new patients are seen by the doctors and that the regular patients are kept under the supervision of a healthcare professional.**

**There are also combined clinics such as combined foot clinics which involve a multi disciplinary team which consists of foot specialists and nurses as well as rheumatologists.**

**I am sure that many countries provide the same services that we do in the UK. However, it is clear that in order to provide such services, the economic wealth of the country plays a huge part. In countries such as east Africa, it was noted that diseases such as rheumatoid arthritis, gout and**

connective tissue diseases were just as common as is in the west, yet the emphasis on musculoskeletal health is not as strong as it is here. This could be for a number of reasons, the high number of communicable diseases and infections tend to take precedence with regards to global health as this can easily be stopped with the right interventions. However this leaves specialties such as rheumatology on the back burner as these conditions need careful and consistent follow up to ensure that the patient has the optimal treatment. Research done in east Africa showed that there were very few people trained to recognise rheumatological conditions and very few clinics that would run efficiently to ensure optimum management. It is also clear that many of the conditions encountered require treatment which in turn has its issues such as funding and immunosuppression. In countries where infections are so common and dangerous such treatments could in turn adversely affect the individuals.

To explore any new drugs which are currently being researched for the treatment of rheumatological conditions and explain the impact this could have on society.

It is well known in rheumatology that some conditions such as rheumatoid arthritis for example, can be managed using monoclonal antibodies which are also known as biologicals. This is done via a step wise process to ensure that the most efficient and safe medications are used first before moving onto the stronger medications.

When these drugs are administered, they are often done so by an injection or infusion. Some can be self administered similar to when diabetics take insulin, and some are done by a trained nurse which involves the patient having to travel to hospital approximately once a week. Recent studies however have shown that there may be a possibility of obtaining these drugs in the form of a pill. This could revolutionize society in a number of different ways. Not only would it cut down the need for specialist treatment clinics conducted by specialist nurses but it would also save a lot of money for the NHS as well as the patient as they would not have to travel in to the hospital every week.

Due to the nature of monoclonal antibodies, making them into a convenient form is an arduous task and certainly won't be possible for all the drugs, however there are a few drugs currently in the works for which it may be possible, such drugs will target certain receptors such as the JAK receptor or specific enzymes, one example being spleen tyrosine kinase. These drugs still remain in the early phases of clinical trials but are showing some promise, unfortunately these drugs will still have the side effects associated with most biologicals, such as immunosuppression and anaemia, therefore regular monitoring will still be required.

To explore a career in rheumatology and to develop my skills within this area in order to further consolidate my learning

I thoroughly enjoyed my time at Homerton hospital; it opened my eyes to rheumatology as a specialty as I feel that it offers a range of different conditions extending from osteoarthritis through to all the various autoimmune connective tissue diseases.

I managed to see a variety of conditions and observe various practical procedures such as vitamin d injections and ultrasounds of various joints in the hand. Each clinic allowed me to observe specific and

obvious clinical signs as well as observing focused history taking. Not only did I have the opportunity to speak to patients as well as examine them, I was also able to help teach 4th year medical students and observe their process of history taking and also offer them valuable feedback. This was not only useful for them but also for me as it helped to remind me of any vital things I had forgotten throughout the course of the last two years and allowed me to help my colleagues.

I am still considering rheumatology as a career choice as it will expand my knowledge not just in rheumatology but in general medicine as well. There is a perfect balance of ward and clinic work and this elective has also shown me that such skills can be applied elsewhere in the world, where it is really needed.