

## **ELECTIVE (SSC5b) REPORT (1200 words)**

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

**Kawasaki Disease (KD) was initially described by Dr Tomisaku Kawasaki in Japan as an acute febrile mucocutaneous syndrome with lymphoid involvement(1). KD is a disease that is currently of unknown etiology in which the patient's blood vessels become inflamed, and can present with a large variety of multi-system signs and symptoms. Common symptoms include persistent fever unaffected by standard treatment (such as paracetamol or ibuprofen), bilateral conjunctival inflammation, cervical lymphadenopathy, erythema of the palms and soles with desquamation, and a diffuse macular-papular rash. An important complication of KD is the involvement of the cardiac system, as it the most common cause of acquired heart disease in the developed world(2), and can lead to sudden death due to a myocardial infarction via thrombotic occlusion of the coronary artery.**

**The Japanese child population is estimated to be 28 million, with 10 million children aged under 10 years old(3). KD affects approximately 264.8 per 100,000 children in Japan by the age of 5 years old(4). In comparison to the world, Japan has the highest prevalence of KD and is therefore a common and important disease to recognize in Japan. In comparison to Japan, the UK has a KD prevalence of 2.8 per 100,000 children by the age of 5 years old(5). Both Japan and the UK have a similar gender distribution with more males being affected than females(5,6), however KD affects the UK children population considerably less compared to Japan. The cause of KD is currently under speculation, and therefore there is no explanation why Japanese children are affected more than other countries. However common theories of its etiology include a genetic predisposition of the disease(7), and an infective cause(8).**

**Patients using the UK healthcare system can choose between the government-funded National Health Service (NHS) healthcare or private healthcare. The cost of NHS healthcare is completely covered by tax and is therefore free for the patient, whilst the cost of private healthcare varies with the hospital that the patient has chosen. On the other hand, the Japanese healthcare system is a combination of a public and private system. Japanese civilians are expected to pay for a national insurance policy in which they are entitled to receive a subsidy from the government to the total price of the service. The price of treatment is also based off the patient's salary, the service received (for example an emergency room visit is more expensive than a visit to the clinic), and the age of the patient. Japanese patients would usually pay for 30% of the medical bill, whilst 70% of the cost will be covered by the insurance. This would therefore provide Japanese patients with affordable healthcare that is proportional to their needs and ability to pay. Both healthcare systems are therefore easily accessible for every citizen - the UK system being completely free for patients, and the Japanese system being affordable for patients or completely waived for homeless patients.**

**However, the UK healthcare system differs in logistics from the Japanese healthcare system. In particular, NHS patients in the UK primarily encounter manifestations of logistical issues in long waiting times in comparison to the patients in Japan. In elective medical cases that require specialist input, UK patients are required to see a General Practitioner (GP) who is a doctor with some knowledge of all specialties before getting a referral to a specialist. This process would usually take one week to see a GP, and a few months to a year to see a specialist depending on the specialty, location, and availability. This would therefore make seeing specialists and accessing healthcare in the**

UK extremely difficult, particularly if a condition requires urgent attention. In contrast, Japanese patients can choose to go to a clinic or a hospital for treatment which can either be to see a general doctor or a specialist. Patients in Japan are able to see a doctor in a few hours for elective cases, therefore making the access to healthcare relatively quick and easy. UK patients are also able to access a similar healthcare system to Japan through the private healthcare system, however this would cost a considerable amount for the patient compared to seeing a Japanese doctor.

The Japanese healthcare system and the NHS currently both have an issue of lack of doctors. Overall, Japan has a 10% deficit of doctors<sup>9</sup> in hospitals which have affected the access of healthcare. Some areas of Japan face a greater deficit of doctors, such as Hokkaido with a 22% deficit<sup>(9)</sup>. Patients from more rural areas may therefore need to travel to more populated areas to obtain adequate healthcare. The NHS also seems to be experiencing a deficit of doctors in hospitals, with 71% doctors reporting rota gaps, and 65% of doctors reporting vacancies in specialties<sup>(10)</sup>. This lack of doctors in the NHS creates a longer waiting time for patients, because clinics do not have enough specialists to see patients at a rate that can reduce the patient queue and waiting times.

The majority of hospitals in Japan and the UK have a paediatric unit that is easily accessible for patients. Both countries also have specialist paediatric hospitals which further provide more accessibility of paediatric healthcare services to patients. However, UK patients can only see a paediatrician after a referral from a GP, which will take a long time in comparison to seeing a paediatrician in Japan. Japanese patients are able to see a particular sub-specialty paediatrician based on the medical issue the patient has, and if the patient is unsure on what sub-specialty that is required, patients can attend a general clinic that can refer patients to the correct sub-specialty. Although this protocol is similar to the NHS (GPs and a general clinic will know enough about all specialties to make the referral to the correct department), a non-urgent referral in the UK will take longer than a referral from a Japanese general clinic. However, an issue of not having a 'gatekeeper system' which an NHS GP provides, is that a Japanese patient will be required to pay if the patient attends the incorrect clinic. Therefore, having the freedom to choose the department to attend may be a barrier for patients, as the patient must choose the correct department, or attend a general clinic that will also take longer to see a specialist if required.

In conclusion, the Japanese healthcare system is a combination of a public and private system in comparison to the NHS state-funded system. This has advantages of providing faster and easier access to healthcare in Japan. However, this system may also be an issue as patients may need to travel to larger cities to see a specialist, and also require to choose to attend the correct department if not attending the general paediatric clinic. Although KD is rare in the UK, it is relatively common in Japan and is therefore an important condition to recognise in the Japanese child population.

## REFERENCES

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