

ELECTIVE (SSC5b) REPORT (1200 words)

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

Japan is an island in East Asia with a population of 126 million. It is made up of 6852 islands, and we spent out elective in the northern island known as Hokkaido. The majority are Japanese nationals. Famous for its cuisine, entertainment and history, Japan attracts many visitors every year.

Objective 1: Describe the pattern of cerebral stroke in Japan and discuss this in the context of global health

The current definition of stroke is 'a neurological deficit due to a focal injury of the central nervous system' (Sacco, Ralph L, 2013) with a vascular origin. This definition includes a cerebral infarction, intracerebral haemorrhage and subarachnoid haemorrhages (Sacco, Ralph L, 2013).

Worldwide, stroke mortalities have decreased, however, the number of people who have died or have become disabled from stroke remains significant. In 2013, there were over 25 million stroke survivors and 6.5 million stroke deaths. There were also 113 millions DALYS and 10.3 million new strokes. With an increasingly ageing population, and increase in stroke risk factors, there will continue to be a significant number of people affected by strokes every year. (Feigin, Valery L, 2017).

In Japan, there were 130, 159 deaths in 2017 due to stroke. This makes up over 12% of total deaths and it is the third commonest cause of mortality after coronary heart disease and influenza/pneumonia. Unlike the rest of the Western World, people in Japan are at an increased risk of intracerebral haemorrhage and intracranial arterial sclerosis. For example, almost 40% of strokes are lacunar strokes and 130 per 100,000 men in Japan suffer from intracerebral haemorrhages (Toyoda, Kazunori, 2013).

Until the 1980s, strokes were the leading cause of mortality. However, due to improvements in the management of hypertension, the incidence of strokes have decreased (Furuta, Y, and T Ninomiya, 2016). Therefore, there is a general downward trend in the mortality of strokes. Like the rest of the world, it will become more and more important to reduce modifiable risk factors and improve the quality of life of patients after a stroke.

Objective 2: Describe the pattern of health provision in Japan and contrast this with other countries of with the UK

Japan and the UK have similar ideals when it comes to providing healthcare. Both are universal and comprehensive, with an aim to keep expenses low. Established in 1961, the Japanese universal healthcare system is funded by a social insurance system. In Britain, taxes pay for the NHS. (Morita, Kiyoshi, 2011).

To access healthcare in Japan, patients can either go to a public hospital or to a private hospital/clinic. Though private hospitals are more expensive, overall, healthcare costs for patients are low in Japan. Because it is completely patient based, there is a huge funding issue, with major financial burden on the government. There are many reasons for this, and I will highlight a few key problems. Firstly, Japan has a low birth rate and one of the longest life expectancies. 20% of the population are 65 years old or above (while in England, 16% of the population are over this age) in 2005. The

dependency of the elderly on young adults and associated medical and nursing expenses are expected to rise. The current funding cannot support this system financially.

Secondly there is an exhaustion of existing resources with long hospital stays for elderly patients and insufficient medical workforce leading to an increased workload for medical staff. This leads to an inadequate delivery of proper healthcare. Japan generally favors expensive medical technology compared to other countries. For example the use of MRIs per capita is 8 times higher than Britain, and twice as high as in the USA. The average length of stay at hospital is very high.

Thirdly, there is an abuse of medical facilities, with mild illnesses going to emergency services instead of primary care. There have been some discussions in Japan to reduce the increasing demands of healthcare by introducing the GP system and encouraging a higher percentage of the workforce training into becoming a local physician. It will be interesting to see if part of the UK model of healthcare can be implemented into Japan and whether it will help alleviate the cost of healthcare in Japan. (Morita, Kiyoshi, 2011)

Objective 3: Describe how Japan addresses the risk factors for stroke and other medical problems (such as cancer) through screening programs to reduce acute medical admissions.

With an increasingly ageing population, Japan struggles with an increase in medical expenditures and admissions. One of the way they counter this is through screening for common conditions which are treatable when diagnosed at an early stage of the disease. In Japan, they screen for... I will focus on how they screen for the metabolic syndrome to reduce strokes and how they reduce mortality through cancer screening.

In 2008, a new screening program was trialed to reduce the risk of patients' developing the metabolic syndrome. After checkups, the patient is given lifestyle advice. They measured waist circumferences (WC), (BMI) reduction amongst other risk factors to assess the effectiveness of this program in 2018. The second study showed that in 3 years, there was a significant reduction in cardiovascular risk. This would also reduce the risk of stroke and acute admission in the long run. (Nakao, Yoko M., et al.,2018)

Cancers are an important cause of mortality in Japan. In particular, lung cancer, gastric cancer, colorectal cancer, breast cancer and cervical cancer are screened for. (Yoshida, M, et al., 2010). In a 2010 study, a positive relationship was found between screening and cancer mortality. It reduced acute admissions. The challenge currently is to increase the uptake of medical screening to improve the effectiveness of these programs. There are several challenges in Japan preventing uptake of screening. This includes legal, ethical and technical issues including a problem of understanding and education with regards to these diseases in the general population. However, there has been a reduction in mortality with cervical cancer, breast cancer, colorectal cancer, gastric cancer, lung cancer and liver cancer. (Nakao, Yoko M., et al.,2018)

Objective 4: Describe how this elective taught me how to work as part of a medical team in a foreign country in which I don't speak the language fluently, and describe how this has improved my communication skills.

Before I went to Japan, I spent some time honing my Japanese language skills. I was able to communicate well with Japanese people in the streets and in shops. However, I did notice I lacked the ability to speak with formal speech with patients and with doctors. While there were difficulties communicating technical terms, during clinics were doctors were speaking in lay term to patients, I

felt like I understood the majority of their explanations and was able to observe how well they communicated information about disease and treatment plans.

A study was done to show the difference between doctor-patient communication in the US and in Japan. It was interesting to note the results which showed that US doctors spent more time on treatment and follow-up and social talk while Japanese physicians spent more time examining patients and diagnosis/ consideration talk. Yet, the research showed many similarities between the two countries, with similar time spent in each phase of the encounter and similar ratios of questions, pauses and interruptions (Ohtaki, Sachiko, et al., 2003). I learnt to use what they said and their body language to improve my own communication skills with patients.

Conclusion:

Japan has certain obvious similarities and differences with the UK and the rest of the world. It was enjoyable to experience a new culture with many similar conditions to the UK and see how the Japanese sustain their healthcare system to provide good quality medical care to their people.

Bibliography:

Feigin, Valery L., et al. "Global Burden of Stroke." *Circulation Research*, American Heart Association, Inc., 3 Feb. 2017, circres.ahajournals.org/content/120/3/439#sec-2.

Furuta, Y, and T Ninomiya. "[Epidemiology of Stroke in Japan and Comparison with the World]." *Advances in Pediatrics*, U.S. National Library of Medicine, Apr. 2016, www.ncbi.nlm.nih.gov/pubmed/27333738.

Morita, Kiyoshi. "Healthcare Provision and Management in the UK and Japan." Daiwa Foundation, 14 June 2011, dajf.org.uk/seminars/uncertain-futures-the-individual-society-and-the-state-in-the-uk-and-japan/healthcare-provision-and-management-in-the-uk-and-japan.

Nakao, Yoko M., et al. "Effectiveness of Nationwide Screening and Lifestyle Intervention for Abdominal Obesity and Cardiometabolic Risks in Japan: The Metabolic Syndrome and Comprehensive Lifestyle Intervention Study on Nationwide Database in Japan (MetS ACTION-J Study)." *Plos One*, vol. 13, no. 1, 2018, doi:10.1371/journal.pone.0190862.

Ohtaki, Sachiko, et al. "Doctor-Patient Communication: a Comparison of the USA and Japan." *Family Practice*, vol. 20, no. 3, 2003, pp. 276–282., doi:10.1093/fampra/cm308.

Sacco, Ralph L., et al. "An Updated Definition of Stroke for the 21st Century." *Stroke*, American Heart Association, Inc., 1 July 2013, stroke.ahajournals.org/content/44/7/2064

Toyoda, Kazunori. *Advances in Pediatrics*, U.S. National Library of Medicine, Jan. 2013, www.ncbi.nlm.nih.gov/pmc/articles/PMC3779676/

Yoshida, M, et al. "The Relation between the Cancer Screening Rate and the Cancer Mortality Rate in Japan." *The Journal of Medical Investigation : JMI*, U.S. National Library of Medicine, Aug. 2010, www.ncbi.nlm.nih.gov/pubmed/20847525/.