ELECTIVES WRITE-UP

1) What are the most prevalent diseases / illnesses in India? How do they differ from the UK?

According to the International Monetary Fund statistics, in 2012 UK was the sixth largest and India the tenth largest economy as measured by gross domestic product (GDP). However, when it comes to measuring life expectancy, there is a wide gulf between the two countries: UK ranks 16 (male life expectancy is 79 and female 82) whereas India ranks 126 (male life expectancy 64 and female 67). This significant variation in life expectancy between the two countries can be attributed to health inequality factors such as lifestyle, inequalities in distribution of wealth, education, housing conditions and the sum expended on the provision and distribution of health services (in 2010 UK spent 9.3% of its GDP on health whereas India spent a total of only 4% which equates to US$ 3,322 per person in the case of UK compared to US$ 132 for India). In addition, whilst UK's National Health Service is entirely government funded, India is one of five countries with the lowest public health expenditure in the world (1.1% of GDP); over 70% expenditure is funded by the private sector. The cumulative impact of these health inequalities and insufficient public expenditure on health has resulted in India (population of 1.2 billion against UK's 62 world population) accounting for 21% of the global disease burden with 17.3% of world population.

The ten most common diseases causing death in 2010 in India is shown in Table 1 below which also shows the prevalence of those particular diseases in the UK. Unlike India, the top 10 causes of death in the UK do not include diarrhoeal diseases, tuberculosis, hypertension, diabetes mellitus and falls but instead include cancers (lung, breast, prostate and colorectal) and Alzheimer's/dementia. These statistics are consistent with disease patterns that one would expect to see in a developing country with a young population and health inequalities outlined above versus a developed country with an ageing population.

Table 1: Top 10 causes of death in India per 100,000 population and their respective UK rate and world ranking

	INDIA		UK	
Top 10 causes of death	**Rate**	**World Rank**	**Rate**	**World Rank**
1. Coronary heart disease	165.79	37	68.80	155
2. Lung disease	142.09	1	21.47	98
3. Diarrhoeal diseases	132.70	11	1.95	119
4. Stroke	116.41	77	36.89	160
5. Influenza and pneumonia	68.04	67	23.69	125
6. Tuberculosis	28.83	58	0.4	170
7. Hypertension	24.44	107	3.67	183
8. Diabetes mellitus	23.83	108	5.04	185
9. Liver disease	23.59	27	9.48	96
10. Falls	23.48	1	3.51	109

[Adapted from http://www.worldlifeexpectancy.com]

Whereas injuries, communicable and non-communicable diseases account for 13%, 52% and 35% respectively in India, they account for 9%, 8% and 83% respectively in the UK. However, the rapid socioeconomic progress experienced by India, particularly in the last two decades, and increased use of vaccines (particularly for polio) has resulted in a steady decrease in infectious diseases and an increase in deaths caused by chronic diseases. As India's population ages, it is expected that chronic diseases will account for about 75% of deaths by 2030 with many of them occurring as co-morbidities. This is because the risk factors causing such diseases (high blood pressure, blood glucose and cholesterol, low fruit and vegetable intake, lack of physical activity, tobacco and alcohol overuse) is prevalent in India, mainly among the urban population.

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2) Describe the healthcare system in Malaysia and contrast this with UK.

Malaysia, with a population of 28.4 million, has a dual healthcare system - that provided by the State and the private sector. In 2010 the total expenditure on health was 4.4% of gross domestic product (US$ 641 per person) with public expenditure accounting 58.2% and private 41.8% of the total health expenditure.

The Ministry of Health is responsible for the provision of primary, secondary and tertiary healthcare, which it does through general and district hospitals and health clinics. These services (financed through taxation, contributions to Employee Provident Fund and Social Security Organization) are either almost free or heavily subsidised by the State and are not dependant on the ability of an individual to pay (in 2007 government expenditure on health as a percentage of general government expenditure was 6.9%). Specialist services are available only at certain hospitals and the patient has to be referred to avail himself of such services. The lack of health centres in rural areas has been overcome by the government through the use of "Tele-primary Care'' which enables doctors in those areas to consult specialists in other hospitals on problem cases. Private healthcare is paid by private health insurance coverage and out-of-pocket expenses and so the affordability of private healthcare is mainly in the domain of the affluent members of society. Private treatment, primarily providing curative services, has shorter waiting time, is regarded as being of higher quality and providers include general practitioners and private hospitals of varying sizes.

Fundamentally, the UK healthcare system, with its National Health Service (funded through taxation, which except for dental treatment, prescriptions and eye tests provides free medical care through hospitals and general practitioners to all residents) and private healthcare (funded through insurance premiums and out-of pocket expenses) is somewhat similar to that in Malaysia. However, whilst the UK system has evolved since the Second World War, the Malaysian system has reached its current high standard of professionalism and service (evidenced by high life expectancy age of 72 for males and 76 for females) in a comparatively short time and Malaysia is now a popular medical tourist destination because of its lower cost of private healthcare and English speaking staff.

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3) Learn about the investigation, diagnosis and management of a health condition at Sarawak General Hospital.

One of the many cases at Sarawak General Hospital was of a 19 year old female student who attended A&E with a history of fever (unable to measure temperature at home), rigors, greenish sputum production and loss of appetite for 4 days. However, no joint pains, night sweats or recent infections. On examination had no lymphadenopathy, clear lung bases, ejection systolic murmur at left sternal edge, abdomen is soft and non tender.

Observations such as blood tests (FBC, ESR, CRP, blood cultures, autoantibody screening and HIV status), chest x-ray, ECG and midstream urine analysis were taken.

After being admitted for few days, the patient developed lower limb neurological deficit affecting both motor and sensory modalities to T10 level (just below umbilicus). Lumbar puncture indicated high protein and white cells and MRI scan of spine and brain was performed which revealed spinal cord lesions. Eventually the diagnosis was extensive transverse myelitis with ascending neurological deficit. The patient also had positive ANA and dsDNA autoantibodies indicating that she had SLE which may be one of the contributing factors to transverse myelitis.

As there is no effective cure existing for people with transverse myelitis, management was symptomatic to relieve symptoms and reduce the spinal cord inflammation. Therefore, the patient was given IV fluids, urinary catheter was inserted due to urinary dysfunction, analgesia, subcutaneous heparin and IV methylprednisolone were commenced. This lady will undergo physiotherapy to reduce pressure sores and prevent muscle contractures.

4) Reflect on my application of my medical knowledge and skills and ability to communicate with patients in the context of a different cultural, social and language background.

I enjoyed my elective experience in India and Malaysia. I saw some cases (such as typhoid in India) that I may not be able to see in the UK and was able to attend lectures and clinics. In both countries, it seemed to me as if there was a lack of emphasis on communication with patients compared to the UK and patients do not seem to question the doctors methods. I noticed that confidentiality was not maintained as sometimes two separate consultations were held in the same room.

Many patients attend the hospital at a late stage due to financial restraints resulting in limited management of their condition. Their local hospital may not have the resources or home remedies may not have had an effect and so attending the costly, long and uncomfortable trek to city hospitals further deteriorates their condition. Communication especially with poorer people was challenging due to a lack of education and my limited vocabulary to have a conversation with them. However, I felt that my medical knowledge and skills were up to date and I was questioned by consultants on management of conditions compared to the respective country's medical treatment.

I have seen that in both these countries, there is a high incidence of tropical diseases and I was able to enhance my knowledge and history taking skills in this area. After gaining experience in these countries I feel that medical resources are taken for granted in the UK.