ELECTIVE (SSC5c) REPORT (1200 words)

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

What are the predominat types of cancer in Australia and does the prevalence of these cancers vary between the UK and Australia?

The epidemiology of cancer in Australia closely resembles that of the UK. This is not surprising as both the UK and Australia populations share a similar western culture including similar lifestyle risk factors. They are at the similar level of economical, industrial and cultural development and therefore have illness related to affluence but also the advantages of a well-developed health and social care system(s). In regards to the population dynamics, the populations of both countries' show similar features; that of an aging population with a rising life expectancy and a declining birth rate. The similarities are also seen in regards to population genetics and genetic variation as both populations have a significant proportion of the population with European ancestry. In 2012 there were approximately 323 new cases per 100, 000 while in the UK it was 273 new cases per 100 000. For Australia in 2012 there were 116,580 new cases of cancer (65,983 new cases in men and 50,598 new cases in women).

Figure 1: 2010 Cancer Incidence For Australia (AIHW Australian Cancer Database 2010)

The predominant types of cancer in the Australian population for men are: prostate, colorectal and melanoma of the skin, lung and head and neck. While in the UK male population the predominant cancers are: prostate, lung and colorectal cancer. For Australian women the predominant types of cancer are: breast, colorectal, melanoma of the skin, lung and uterus. While in the UK female population the common types of cancer are: breast, lung and bowel cancer.

The UK and Australia have many common features but one grossly different feature is the climate. Australia has a varied climate from tropical to temperate but overall it exposes the Australian population to much a greater amount to solar radiation and ultraviolet light increasing their cases of developing malignancies of the skin, notably melanoma.

How are the cancers services arranged in Australia, focusing on the referal of pateints from parimary care to secondary/tertiary care? How does this compare with the UK?

The UK and Australia have a similar healthcare structure in that the majority of patients are cared for in the primary care setting by general practitioners. If more specialist investigation and management are required a referral can be made for the patient to seen in secondary care usually within the hospital setting. Certain services or specialisation of care, for example cancer services, are managed onwards from the secondary care setting and therefore tertiary care centres.

In Australia, the main bulk of a medical oncologist's patient referrals come from secondary care, primarily via surgery although it is still possible for general physicians to refer directly to them. A similar process occurs with in the UK, but within the UK the National Institute of Clinical Excellence (NICE) has produced guidelines for the referral of patients that have features that are highly

suggestive of malignancy. This is known as the 'two-week wait' system. Using these guidelines patients can be stratified based on symptoms, durations of symptoms and risk factors into urgent and routine referral. With the aim of catching cancers at early stage and therefore increase the overall prognosis. Although in Australia general practitioners appear to have better contact with less barriers of communication with secondary care. Therefore if patient was seen with features suggestive of malignancy, they could contact a secondary care physician directly and stress the need for an urgent appointment.

Describe a health promotion and/or screening programme that was initiated in order to reduce the prevalence of a predominant cancer in Australia.

Australia like many other developed countries has national screening programs and many health promotion initiatives/strategies, which target common national problems like common cancers (breast, colorectal and cervical cancer), obesity, exercise, etc. As already stated a major variation between the UK and Australia is the incidence of skin cancers. Australia has one of the highest rates of skin cancer in the world with two of out of every three Australians developing a skin malignancy by the age of 70 years. Of these skin cancers melanoma carries the worst prognosis as it is a rapidly developing and aggressive malignancy with an insidious onset. To add to melanoma's dark reputation, it can develop in a young population with 25% of the cases in Australia developing in adults between the ages of 15-29 years. Melanoma is the third most common cancer and the nationally the most costly of all the cancers.

In the start of the 1980s the Cancer Council Victoria launched a health promotion campaign advising on the use of sunscreen and reduction of sun exposure. The successful campaign was called "Slip-Slop-Slap", using a cartoon singing seagull to advise people to slip on a shirt, slop on some sunscreen and slap on a hat.

From 1988 the sun protection program became "SunSmart". SunSmart has many facets including media, sports sponsorship, health and commercial policy advocacy, professional and public education as well as research. The overall aim of the SunSmart program is to change the 'personal and institutional attitudes and behaviours via environmental and organisational change'. With the goal of controlling existing disease and reduce the incidence of skin cancers.

The incidence of the commonest types of skin cancer, squamous cell carcinoma and basal cell carcinoma has declined over last 30 years. There is also a declining incidence of skin cancer in the younger cohorts of the population but unfortunately the incidence melanoma is still increasing. While the campaign is not fully responsible for this decline it has been shown to be a major contributing factor.

Upon reflection of the elective, discuss the postive and negatives features of a career in medical oncology? Briefly describe the in training pathway for medical oncology in the Uk?

I was pleasantly surprised to find that, unlike the common misconception, that oncology wasn't all death, doom and gloom. Actually I found the patients to be surprisingly cheerful and rather stoic about their circumstance. There were of course many sad moments but these, I felt, outweighed by the number of occasions that I found myself smiling because of the warm and resilient attitude of the patient in front of me.

The medicine is challenging and the patient care requires a very holistic approach. Medical oncology is becoming an increasingly complex medical speciality with a constant stream of new treatments and treatments regimens, greatly improving patient survival and reducing the impact of the cancer burden on a patient's life. Medical oncology is still a rather select speciality with high competition for training post and as it is a rather small speciality there is possibility of being isolated from other medical oncologist especially if working in a general district hospital. Although this is less of a problem as cancer care is moving to specialist centres.

In the UK, after completing the foundation and core medical training (CT1 and CT2), a medical oncology run through training post, ST3 to ST6, can be sought upon passing the MRCP. It is generally expected that a trainee with undertake some form academic and research post at some point during their training in order to future-proof the speciality.

References

Australia Institute of Health and Welfare (2015) Cancer In Australia. Available at: http://www.aihw.gov.au/cancer/cancer-in-australia/ (Accessed: 16/04/15).

Cancer Research (2012) Cancer Mortality Statistics. Available at: http://www.cancerresearchuk.org/health-professional/cancer-statistics/mortality (Accessed: 16/04/15).

Cancer Council Victoria (2015) About SunSmart. Available at: http://www.sunsmart.com.au/about (Accessed