## ELECTIVE (SSC5c) REPORT (1200 words)

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

**2015 Elective Report ( Ophthalmology)**

**Selayang Hospital, Malaysia**

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**My elective was set in Selayang Hospital, a tertiary hospital located in the state of Selangor, Malaysia, with 960 inpatient beds and 20 clinical specialties. This hospital provides secondary and selected national tertiary care services, and is also the first hospital in Malaysia to operate with Total Hospital Information System (T.H.I.S) with the ultimate aim of paperless and filmless hospital operation.**

**It has been a privilege for me to be attached to the ophthalmology department in this hospital, as it is a well-known tertiary referral centre for retinal cases which offers vitro-retinal and medical retina services apart from paediatric, glaucoma and oculoplastic services, under the Malaysian Ministry of Health. Having had an ophthalmology placement in London, I was inspired to explore this specialty further and see how the services are being provided in other countries, specifically Malaysia. In this report, I am going to address the four objectives that I have set prior to my elective, which are:**

**1) What is the prevalence of diabetic retinopathy in Malaysia and how does it differ from the UK?**

**2) How are diabetic eye screening services organized and delivered in Malaysia? How does it differ from the UK?**

**3) Describe the factors that influence the uptake of eye screening services among the population in Malaysia.**

**4) Have your experience furthered your interest in ophthalmology? Explain.**

**Diabetes Mellitus (DM) is a major health concern in Malaysia with the prevalence of 11.6% and 14.9% in those aged above 18 and 30 years old respectively. This condition is associated with various complications, which can be divided into two major groups; macrovascular and microvascular complications. Diabetic retinopathy (DR) or diabetic eye disease is a microvascular complication of DM that affects the small blood vessels in the retina, and is the commonest cause of visual loss among adults of working age in Malaysia. According to the 2007 Diabetic Eye Registry, it was reported that the prevalence of DR in Malaysia was 38.6%.**

**Meanwhile, the prevalence of DM in the UK is much lower as compared to Malaysia with the average prevalence of 6%. The majority of these cases are of type 2 DM, associated with increasing cases of obesity in the UK. It is reported that the overall prevalence of DR in the UK was 39.5% over the last two decades, making DR as the commonest cause of blindness in the UK as well.**

**Looking at these figures, I can see that although there is a significant difference in the prevalence of DM in both countries, the prevalence of DR is still quite similar despite the improved diagnostic criteria and examination techniques in both countries. Therefore, early detection of signs of DR is very crucial to minimize the risk of blindness among the populations affected by DM. The public should be well informed about the importance of attending eye screening as they maybe asymptomatic until the condition becomes quite advanced and affect their eyesight with the risk of losing it completely.**

**I was fortunate enough to see how diabetic eye screening is being done in Selayang Hospital. The trained paramedics or nurses do the screening in one of the clinic rooms using a non-mydriatic fundus camera on patients with visual acuity 6/12 or better, and good fundus reflex. Patients who do not fulfill the above criteria will however be reviewed by the doctors for a more thorough fundus examination. The photograph is taken in an adequately darkened room and does not generally require pupil dilatation. However, in certain cases I have seen tropicamide 1% eye drop being used to dilate the pupil in order to obtain a picture of sufficient quality for grading.**

**In Malaysia, it is recommended that patients with Type 2 DM have their first fundus examination at the time of diagnosis. Patients with DM are usually referred by the public primary healthcare to undergo eye screening including visual acuity assessment and fundus photography at the nearest hospital or district health clinic equipped with eye screening facilities. The fundus photos are then graded according to the stages of retinopathy and this will then determine the follow-up schedule for each patient. For example, patients who show no signs of DR will be followed up every 12-24 months, mild non-proliferative DR (NPDR) every 9-12 months, and moderate NPDR every 6 months. All patients with diabetic maculopathy however need to be referred to the ophthalmologist.**

**I was told that all DR screeners must undergo appropriate and standardized training before they are credentialed and deemed qualified to perform the screening. The ophthalmology department in Selayang Hospital was able to provide this training as I have encountered several other nurses from the public primary healthcare as well as the private sectors, who were doing their attachments there before they are considered qualified to perform the DR screening themselves at their respective clinics.**

**In the UK, all people aged 12 and over with DM are offered annual DR screening appointments, and the screening are done at various locations including GP surgeries, hospital and optician practices. Eye drops are generally being used to dilate the eye for screening purposes, so the patients will be advised not to drive from their appointments or come to the appointments with a friend or family member due to blurred vision caused by the eye drops. Expert graders then examine the photographs and the result will be sent to patients and their General Practitioners within 3 weeks. In cases of sight-threatening retinopathy or maculopathy, patients will be referred to the ophthalmologist for further examination and management.**

**There are several factors that affect the uptake of eye screening in Malaysia and the Clinical Practice Guidelines (CPG) for Screening of Diabetic Retinopathy in Malaysia has nicely divided these into three major categories; patient factors, healthcare professional factors, and health services factors.**

**Patient factors include lack of awareness of the possible complications of DM, poor access to eye care services and different cultural beliefs. I personally believe that lack of awareness is a major**

**barrier to the uptake of eye screening among the populations in Malaysia who are affected by DM. As DR is generally asymptomatic until it becomes quite advanced, the patients cannot appreciate the importance of attending such screening. It saddened me to encounter patients who came for eye check for the first time when their vision has already badly damaged and nothing much can be done at that point. I also found out from the staffs working in the department that many patients who attended the eye screening at the public primary healthcare did not attend their appointment with the ophthalmologists after they have been referred. This only stress how important it is for us as healthcare providers to educate the patients about what DM is and how it can affect them in various ways, thus minimize their risks of losing their eyesight.**

**I am very glad that I have chosen to do ophthalmology for my elective posting as this has furthered my interest in this specialty. I was given the opportunity to assist the specialist in the cataract surgery and the chance to improve my techniques using the slit lamp by examining the patients in clinics. In addition to that, the doctors in Selayang Hospital were very helpful and keen to teach during my attachment and I am very grateful to them for all the knowledge and experiences that I have gained.**