

# Original Article

## Awareness of diabetic eye disease among general practitioners and diabetic patients in Yangon, Myanmar

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### ABSTRACT

**Background:** Diabetes is an increasing problem in Myanmar with more than three million people affected. There are no data on awareness of diabetic retinopathy among the general practitioners (GPs) or diabetic population of Myanmar. This study aims to evaluate the awareness of diabetes-related eye disease among GPs and diabetic patients in Yangon, Myanmar.

**Design:** A cross-sectional survey.

**Methods:** From the Myanmar Medical Association Registry of 978 practicing GPs in Yangon, 200 were randomly selected and a structured questionnaire was sent to each. Each GP was asked to give a separate questionnaire to the first five diabetic patients who attended their practice.

**Results:** One hundred GPs and 480 patients returned the questionnaires. Although 99% of GPs were aware that diabetes could result in loss of vision, 49% never examined the fundi of their diabetic patients. Of the diabetic patients, 86% were aware that diabetes could damage their eyesight. Although 92% realized they should visit an ophthalmologist regularly, only 57% had seen an ophthalmologist. Patients who never attended school were less likely to visit an ophthalmologist than those with tertiary education (odds ratio 0.24; 95% confidence interval 0.09, 0.66). Patients with diabetes for less than 2 years were less likely to visit an ophthalmologist than those with diabetes for more than 10 years (odds ratio 0.21; 95% confidence interval 0.9, 0.44). There was no association between age, gender or work status and the likelihood of having seen an ophthalmologist.

**Conclusion:** Although both GPs and diabetic patients are aware of the need for regular fundal screening, just over half the patients had been screened. There exists a need for programmes in Myanmar to induce a behavioural change in diabetic patients with regards to screening examinations.

**Key words:** awareness, diabetic retinopathy, Myanmar, public health, survey.

### INTRODUCTION

The number of people with diabetes mellitus is increasing because of population growth, ageing, urbanization and increasing prevalence of obesity and inactivity. The number of cases of diabetes worldwide in the year 2000 was estimated to be 171 million. It is predicted that by 2030 the number will rise to 366 million. Over half will be in the Asia-Oceania region alone.<sup>1</sup>

Myanmar (Burma) is located in southern Asia and has a population of more than 50 million. The estimated prevalence of diabetes in 1998 was 1.4%.<sup>2</sup> Although there is a paucity of data available, a cross-sectional pilot survey using cluster sampling was undertaken in a suburb of Yangon in 2001 to determine the prevalence of glucose intolerance and diabetes in the population. The prevalence of diabetes in the sample of 285 people over the age of 30 years was found to be 6.3% (TS Latt *et al.*, unpubl. data, 2001). This result suggests that as many as three million people in Myanmar could have diabetes. In the Meiktila Eye Study, which reported the prevalence and causes of visual impairment in people over 40 years of age in rural Myanmar, not a single case of diabetic retinopathy was noted in the 2076 people

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