

## Diabetic Retinopathy in the Community

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Sir,

The Second National Health and Morbidity Survey in Malaysia found the prevalence of diabetes, including those newly diagnosed during the survey, to be 8.3%. In this survey, 50.6% of the diabetics reported visual problems<sup>1</sup>. A population-based cross-sectional study of the adult Malay population in the district of Kuala Selangor, Selangor found that 2 subjects of 282 examined were blind, one from diabetic retinopathy and one of the 16 visually impaired had diabetic retinopathy<sup>2</sup>. In 1983, a clinic-based survey involving 145 patients at the University Hospital in Kuala Lumpur, found that 44.1% of the patients had ophthalmoscopically detectable retinopathy, 11% were thought to have 'serious diabetic eye disease' while 6.2% had proliferative diabetic retinopathy<sup>3</sup>. A pilot project to determine the feasibility of setting up a retinal photography service afforded the opportunity to examine a cohort of diabetics in a Sarawakian town whose diabetic care has largely been undertaken by the community health services. Ocular examination at this one-day screening event included visual acuity assessment, and fundoscopy using the binocular indirect ophthalmoscope. Sixty-four diabetic individuals were examined. The average age of these individuals was 55.9 years (standard deviation 13.0 years, range 5-84 years). The average duration of diabetes since diagnosis was 7.8 years (standard deviation 5.3 years, range 0.2-20

years). Seven (11%) individuals were insulin-dependent. Twenty (31%) individuals had evidence of diabetic retinopathy in one or both eyes. Of these, 8 (12%) individuals had sight-threatening diabetic retinopathy for which laser treatment was indicated. The benefit of laser photocoagulation for sight-threatening diabetic retinopathy and maculopathy is well established. Treatment is particularly effective when given early and adequately when the disease is still asymptomatic. Our findings suggest that there is probably a significant amount of sight-threatening diabetic retinopathy among the diabetics in Sarawak who are not diagnosed and treated in time to preserve good functional vision. Health education programmes can be in place to increase awareness and understanding of the disease in both the patients and healthcare workers to improve pre-symptomatic detection of sight-threatening diabetic retinopathy. While diabetic retinopathy screening has been found to be cost-effective in health economic terms in western industrialised countries, the health economics and population demographics in Malaysia is very different. Before the issue of screening in Malaysia can be considered, population data regarding diabetes, diabetic retinopathy, visual disability and its economic impact, and other health costs as well as population demographics need to be available or at least be reliably estimated.

**References**

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