

Abstracts of Asian research published in the international literature

Planning Low Vision Services in India

A population-based, cross-sectional study was performed to assess the prevalence and causes of low vision in a population in southern India for planning low vision services. 10,293 people of all ages from 94 clusters representative of the population of the Indian state of Andhra Pradesh were enrolled. The participants underwent a detailed eye examination, including measurement of visual acuity with logarithm of the minimum angle of resolution charts, refraction, slit-lamp biomicroscopy, applanation tonometry, gonioscopy, and stereoscopic dilated fundus evaluation. Automated threshold visual fields and slit-lamp and fundus photography were done when indicated using predefined criteria.

The main outcome measure was low vision, defined as permanent visual impairment that was not correctable with refractive error correction or surgical intervention. Participants with best-corrected distance visual acuity $<6/18$ to perception of light or central visual field $<10^\circ$ because of an untreatable cause in both eyes were considered to have low vision.

Low vision was present in 144 participants — an age-, gender-, and urban-rural distribution-adjusted prevalence of 1.05%. The most frequent causes of low vision included retinal diseases (35.2%), amblyopia (25.7%), optic atrophy (14.3%), glaucoma (11.4%), and corneal diseases (8.6%). Multivariate analysis showed that the prevalence of low vision was significantly higher with increasing age, and there was a trend for higher prevalence with decreasing socioeconomic status. Extrapolating these data to the estimated 1014 million population of India in the year 2000, 10.6 million (95% confidence interval, 8.4–12.8) people would have low vision. These

data imply that there is a significant burden of low vision in this population, suggesting a need for low vision services.

Dandona R, Dandona L, Srinivas M, et al. Planning low vision services in India: a population-based perspective. *Ophthalmology* 2002;109:1871–1878.

Prevalence of Blindness and Low Vision in Malaysia

A national eye survey was conducted to determine the prevalence of blindness and low vision and their major causes among the Malaysian population. A stratified 2-stage cluster sampling design was used to randomly select primary and secondary sampling units. Interviews, visual acuity tests, and eye examinations for all individuals in the selected households were performed. Estimates were weighted by factors adjusting for selection probability, non-response, and sampling coverage.

The overall response rate was 69%. The age-adjusted prevalence of bilateral blindness and low vision was 0.29% and 2.44%, respectively. Women had a higher age-adjusted prevalence of low vision compared with men. There were no significant differences in the prevalence of bilateral low vision and blindness among the 4 ethnic groups, and urban and rural residents. Cataract was the leading cause of blindness (39%) followed by retinal diseases (24%). Uncorrected refractive errors (48%) and cataract (36%) were the major causes of low vision.

Malaysia has blindness and visual impairment rates that are comparable with other countries in Southeast Asia. However, cataract and uncorrected refractive errors, although readily treatable, are still the leading causes of blindness, suggesting the need for an evaluation on accessibility and

availability of eye care services and barriers to eye care utilisation in the country.

Zainal M, Ismail SM, Ropilah AR, et al. Prevalence of blindness and low vision in Malaysian population: results from the National Eye Survey 1996. *Br J Ophthalmol* 2002;86:951–956.

Knowledge of Blinding Eye Diseases among a Chinese population

Patients' knowledge and participation in their care are important for the prevention of blindness from common eye diseases such as cataract, glaucoma, and age-related macular degeneration (AMD). The aim of this study was to measure knowledge of these conditions in the Hong Kong Chinese population. People aged 40 years or older living in the Shatin district of Hong Kong were randomly selected as part of a larger study of causes of adult visual loss. The participants received eye examinations in which the primary cause of visual disability was recorded. The respondents were asked by trained interviewers in a standardised fashion about their knowledge of cataract, glaucoma, and AMD.

Of the 2538 eyes examined, 7.0% had visual acuity less than 6/18. Approximately 70% of the visual disability for people aged 60 years or older was caused by cataract, AMD, or glaucoma. Awareness of cataract was high, in that more than 90% of respondents had heard of the condition. However, only 22.9% of participants could correctly describe cataract symptoms, and these percentages were lower for glaucoma (10.2%) and AMD ($<1\%$).

This selection of the Hong Kong Chinese population had limited knowledge of common eye diseases. Educational programmes to enhance public awareness may be needed to improve the effectiveness of health promotion and thus prevent unnecessary blindness.

Lau JT, Lee V, Fan D, et al. Knowledge about cataract, glaucoma, and age related macular degeneration in the Hong Kong Chinese population. *Br J Ophthalmol* 2002;86:1080–1084.

