

## **Outcomes of MSU Long-term Initiative in Vision and Eye Studies for Prevention of Blindness Project: A Prevalence of Refractive Errors among School Children in Selangor**

Mohd Zaki Awg Isa, Fairuz Mohd Nordin, Mohd Ferdaus Sari and Azarina Abdullah

Management and Science University

### **Abstract:**

This study aims to determine the refractive errors and incidence of eye problems among school children in Selangor, Malaysia. A total of 1244 students, aged from 7 to 17 years were screened by trained optometrists, underwent standardized interviews and primary optometric care assessment of refractive errors and ocular health. Distance presenting visual acuity was monocularly measured by using a standard reduced Snellen Chart at a distance of 3m, with the participants wearing their current optical corrections (spectacles or contact lenses), if any. The examined population was 94.08 % ethnic Malay, 4.75 % ethnic Chinese, 0.87 % ethnic Indian and 0.30 % others. Myopia was the most common type of refractive error among children with prevalence of 80.5%, hyperopia at 6.1 % and astigmatism at 13.4 %. There was a significant correlation between age and myopia development ( $p < 0.05$ ). The prevalence rate of myopia is high among population screened in Selangor. Early detection with public health intervention are needed in community where the accessibility to eye care services is poor in order to create awareness on preventable vision and eye problems.

*Keyword:* Eye problems, refractive errors, vision screening, prevention of blindness