Ocular characteristics of people with special needs in Hong Kong

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Purpose: To identify the prevalence of various ocular conditions among people with special needs in Hong Kong.

Methods: Data from 513 subjects aged between 3 and 61 years were collected from vision screenings conducted in special schools, hostels and Hong Kong Special Olympics events. Screening procedures included distance and near visual acuity tests, cover test, colour vision test, stereoacuity test, refraction, pupil reflex, external and internal eye health and intra-ocular pressure assessment.

Results: More than half of the subjects (53.8%) failed the distance visual acuity test. The prevalence of myopia and astigmatism was 42.7% and 43.3% respectively. Exotropia was more common than esotropia. One third of the subjects had intra-ocular pressure over 21mmHg.

Discussion: In contrast to findings reported for western populations, people with special needs in Hong Kong are more likely to have myopia than hyperopia. They are also more likely to have exotropia than esotropia. The high failure rate of presenting vision in this group of people highlights the importance of a systematic approach in the delivery eye care services by relevant authorities.