

A-15 Prevalence and distribution of refractive errors, amblyopia and strabismus in children aged 3-5 years

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Objective: To find out the extent of the common visual defects (refractive errors, amblyopia and strabismus) among children aged 3 to school going age.

All children who were able to interpret the symbols of the Snellen's Chart meant for children of 3-5 year population of Bope-Poddala MOH Division were screened for visual acuity at the special eye clinics organized by the Department of Community Medicine, University of Ruhuna. Those who failed in the screening test were subjected to complete ophthalmic examination.

Out of 729 children screened 358 (49.1%) were boys and 371 (50.8%) were girls. 263 (36%) children were 3-4 years old and 466 (64%) children were 4 - upto school going age. Ethnicity was 605 (83%) Sinhalese, 122 (16.7%) Muslims and 2 (0.3%) Tamils. The prevalence of refractive errors was 6.85% (50). The distribution of unilateral and bilateral refractive errors were found to be the same. In unilateral refractive errors 34% had errors in the left eye. Myopic astigmatism was found to be the commonest type of refractive error (58% of total refractive errors). Prevalence of amblyopia was 3.0% (22). Unilateral amblyopia was 2.1% and bilateral amblyopia was 0.9%. Out of total amblyopes 56.0% were boys and 44.0% were girls. All amblyopes and 90% of refractive errors were detected only during the survey.

The prevalence of strabismus was 2.1% (16) and of those 44% had divergence, 31% had convergence and 25% had alternating type of strabismus. A statistically significant proportion with unilateral refractive errors had strabismus (44%) ($p=0.05$) compared to the children with bilateral refractive errors and strabismus (20%).

This study highlights the gravity of common visual defects found in the Sri Lankan children aged 3-5 years and much attention is needed in prevention of childhood visual abnormalities which are correctable if detected early.