Visual improvement in children with low vision using low vision devices

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Abstract

Aim: To observe the effect of low vision devices (LVDs) i.e. 2.5x vista view, 4x telescope and magnifying glasses on distance visual acuity of children with low vision.

Subjects and Methods: This observational study was conducted in the department of Pediatric Ophthalmology and Low Vision Clinic at Al-Shifa Trust Eye Hospital. 40 children with impaired visual acuity from ages 5 to 18 years were included in the study. All children had detailed anterior and posterior segment examination by pediatric ophthalmologists while LVDs were prescribed in low vision clinic. All children fulfilling WHO criteria for low vision were provided with 2.5 X vista view, 4x telescopes and magnifying glasses for improving far vision. ANOVA was used to find out which low vision device is more effective in visual improvement either glasses or telescopes i.e. vista view and 4X.

Results: Out of 40 children 20(50%) children were males and 20 (50%) were females. Main cause of low vision in our study came out to be albinism. Our study states that 4x telescope is the most effective device to improve distant visual acuity in children with low vision.

Conclusion: Low vision aids are essential and effective for the children with low vision. They not only improve the visual acuity but also help in the education through visual rehabilitation. Al-Shifa Journal of Ophthalmology 2014; 10(1): 14-20. © Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan.