

## **COMPARISON OF VISUAL FIELD ABNORMALITIES IN DEAF BOYS VERSUS HEARING ONES**

M. Khorrami-Nejad, M. Ranjbar-Pazooki

*Optometry, Mashhad University of Medical Science, Iran*

**Purpose:** To investigate the visual field abnormalities in deaf high schools male students in comparison with normal society in Tehran. **Methods:** Visual fields of hearing boys and boys with hearing disabilities were evaluated in high schools of Tehran, Iran in 2014. Sixty four deaf and 68 hearing boys, 14 to 20 years were tested for visual fields. They all have intelligence quotient (IQ) more than 70. We investigated their visual fields to measure Foveal Threshold, Mean Deviation and range of Glaucoma Hemifield(GHT) Test by using Humphrey automated perimeter. **Results:** Our investigation in students with hearing loss showed the high amount of anomaly in visual field comparing with normal ones. The results demonstrated that Profound hearing loss was noted in 50% of them and frequency of abnormality in visual field was from 31.02% to 60.09%. All types of abnormal visual fields such as Foveal Threshold, Mean Deviation and range of Glaucoma Hemifield Test were not associated with the type and severity of hearing loss. Frequency of early defect was 26.6% which was the largest frequency of visual field defect in deaf students .Early, typed, severity of visual field abnormality was not associated with the type and severity of hearing loss either. Only 12.5% of deaf students had best corrected visual acuity less than 10/10. **Conclusion:** The larger frequency of foveal threshold defects in children with hearing loss than the other visual field defects may demonstrate more defects in the center of visual field comparing with its periphery in individuals with hearing loss. A deaf boy is at greater risk of visual field abnormalities than hearing boys. **Key words:** Deafness, Hearing loss, Visual field, Quality of life. **Financial Disclosure:** No