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VISUAL DEFICITS CAUSED BY REFRACTIVE ERRORS IN SCHOOL AND PRESCHOOL CHILDREN

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ABSTRACT

Anomalies of refraction are the leading cause of low visual acuity in children. They can decrease the visual acuity for near (hypermetropia), for far (myopia) or for both (astigmatism). Their serious consequences are strabismus and amblyopia. The aim of the study is to measure the prevalence of anomalies of refraction. It is a transversal type of study, where were included 3-9 years old children in urban and rural area of the city of Tetovo, Macedonia. In the study participated 1848 children, 917 (49.6%) from them were females and 931 (50.4%) were males. 858 (46.4%) belonged to preschool agegroup 3-5 years and 990 (53.6%) to agegroup 6-9 years. Anomalies of refraction were found in 226 (12.2%) of children (95%CI10.74 – 13.77). Prevalence of anomalies of refraction 12.3%, from which 10.3% preschool children and 13.9% among school children. Prevalence of anomalies of refraction was 11.9% in females and 12.6% in males. Prevalence of Astigmatism was 5.5%, Hypermetropia 4.0% and Miopia 2.8%. Miopia was found more prevalent in 6-9 years old children. Anomalies of refraction and their consequences, amblyopia and strabismus should be diagnosed and treated in early childhood.

Key words: children, refractive error, screening, vision