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Prevalence of Refractive Errors among Primary School Pupils in Mosul City \ Iraq

الخلاصة

Abstract

Background: Refractive error occurs when the eye's optical system fails to adjust to bring parallel beams of light into proper focus on the retina. Refractive error includes myopia, hyperopia, and astigmatism. More than 43% of visual impairment is caused by uncorrected refractive errors, which is the second leading cause of blindness.

Objectives: The aim of the study was to estimate the point prevalence of refractive errors among primary school pupils in Mosul City for the academic year 2022 – 2023 and to determine the types and proportions of refractive errors, myopia, hypermetropia, and astigmatism.

Method and material: A cross-sectional descriptive study design was conducted on 661 primary school pupils in Mosul City for the period from the 1th of December 2022 to the 15st of February 2023. A multistage random sampling technique was adopted to ensure representativeness of sample for wide geographic scale and large number of primary schools in the city.

Results: The point prevalence of refractive errors was)25.0%(with myopia being the most prevalent form of refractive errors (52.1 %). Most of the pupils with good visual acuity (6/6) for both eyes.)78.1% (and)77.6 % (for right and left eye respectively. Male gender)62.0%) more affected than female)38.0 %(. Refractive errors were apparently more common among older children, (P = 0.001).

Conclusions and Recommendation: Myopia being the most prevalent form of refractive errors (52.1%) followed by astigmatism (34.4%) and hypermetropia (13.5%). Refractive errors pupils` have lower performance than the normal vision colleagues in the 1st semester and the study recommendation for the school health programs should be effectively implemented and accompanied by education and awareness campaigns to ensure that the corrections are used. It's recommended that teachers and parent educational program concerning pupil's vision is highly appreciated.