SCREENING OF PRIMARY SCHOOL STUDENTS FOR AMBLYOPIA AND AMBLYOGENIC FACTORS IN ALEXANDRIA, EGYPT

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Introduction

- Amblyopia is a cause of lifelong visual impairment if not detected and managed at an early age. Children with amblyopia may not be aware, nor complain of defective vision. Thus, the need for screening programmes to aid early detection and treatment of this condition. Children in the school age group are easily accessible.
- Amblyopia is defined as unilateral or less commonly bilateral decrease of best corrected visual acuity caused by vision deprivation or abnormal binocular interaction for which no causes can be detected by the physical examination of the eye.
- Amblyopia is mainly assosciated with factors that affect clarity of received image or equality of visual input between both eyes. These factors are known as amblyogenic factors.
- Amblyopia is classified to strabismic, refractive and deprivational amblyopia.
- The best way for management of amblyopia is prevention by screening and early detection of amblyogenic factors.

Aim of the work

The aim of the study is to determine the prevalence and risk factors of amblyopia among primary school students in Alexandria, Egypt.

Subjects and Methods

SUBJECTS

Cross sectional survey on 1000 students who attending primary schools in Alexandria, Egypt through the governmental campaign (Nour_Hayah) 2019/2020.

Inclusion criteria:

- Children aged from 6-12 years old attending schools which included in the compaign.

Exclusion criteria:

- Students with any evidence of ocular pathology such as congenital glaucoma.
- Uncooperative children.
- Children complaining of any communication or mental problems.

METHODS

After giving the informed consent all children were subjected to the following:

- History taking from students.
- Anterior segment examination for gross media opacity, lid position, and pupillary light reflex and ocular motility examination.
- Ocular alignment tests.
- Assessment of monocular uncorrected visual acuity (UDVA) and CDVA using landolt chart.
- Students whose visual acuity were less than 6/9 supposed to undergo cycloplegic refraction .
- Refraction before and after cycloplegia was performed using autorefractometer.
- Slit lamp examination of dilated pupils was done to check fundus and exclude posterior segment pathologies.
- Subjective refraction was performed using the same chart to avoid confusion of children.

Results

		N (%)
Classification of amblyopia (n=52)	Refractive	44 (84.62%)
	Strabismic	8 (15.38%)
Types of refractive amblyopia (n =44)	Anisometropic	14 (31.8%)
	Isometropic	20 (45.4%)
	Meridional	10 (22.7%)

Table : Classification of amblyopia (n=52).

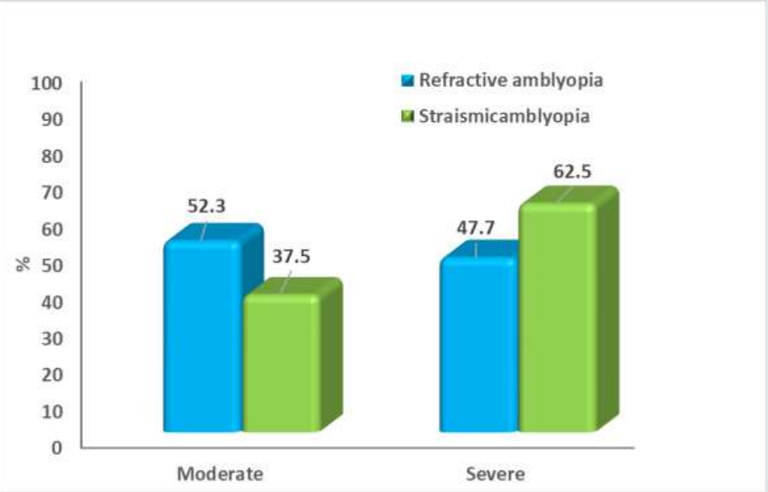

Figure: Severity of amblyopia in relation to types

Conclusion

It is highly recommended to have obligatory regular screening of primary school children. Child referral to the consultation is mandatory if having VA worse than 6/9 in one or both eyes or not adequately corrected by his own glasses. That would help over the lack of awareness among parents and community about amblyopia and promote a better quality of life for growing children