## Pattern of Refractive Error among Amblyopic Children at tertiary referral hospital of Ahmedabad, Gujarat.

Dr.Vaishali Prajapati<sup>1\*</sup>, Dr. Surili Vyas<sup>2</sup>, Dr.Sneha Garasia<sup>3</sup>, Dr.Dharti Thakkar<sup>4</sup>, Dr.Kushang Shah<sup>5</sup>, Dr.Deepika Singhal<sup>6</sup>

<sup>1</sup> PHD Scholar of Gujarat University,Ahmedabad and Associate Professor, <sup>2</sup> 3<sup>rd</sup> Year Resident, <sup>3</sup> 2<sup>nd</sup> Year Resident, <sup>4</sup> 3<sup>rd</sup> Year Resident, <sup>5</sup> 3<sup>rd</sup> Year Resident, <sup>6</sup> Professor and Head, Department of Ophthalmology, GMERS Medical College, Sola, Ahmedabad

Corresponding Author: Dr. Vaishali Prajapati E Mail drvaprajapati@gmail.com



## ABSTRACT

Introduction: Amblyopia is one of the common causes of preventable uniocular or binocular vision loss in children. Timely diagnosis and management of amblyopia is crucial. If corrective measures are not taken in time it becomes permanent. Aim: To study the various types of refractive errors in amblyopic children aged 5-18 years in tertiary eye hospital. Materials and Methods: Retrospective cross -sectional study was carried out in the tertiary eye care hospital. All the children attending the ophthalmology OPD during January2021 to January 2023 were enrolled. All underwent detailed ophthalmic evaluation. After post mydriatic test, children with difference of two lines or more in visual acuity on Snellen chart were taken and detailed ophthalmic evaluation done. Results: The prevalence of amblyopia was 6.2% (n=48) with male dominant of 62.5% (n=30), while female was 37.5% (n=18). In types of Amblyopia, most common was simple Hypermetropic of 42% (n=20) followed by simple myopic and hypertropic Astigmatism 19% (n=9) in each. The Anisometropia Amblyopia was in 12% (n=6), while myopic astigmatism in 8%(n=4). The 69%(n=33) was binocular while 31% (n=15) was uniocular amblyopia. Conclusion: The Refractive errors are treatable and preventable cause of amblyopia. Timely diagnosis and proper treatments like spectacles, contact lenses, patching and active vision exercises, we can treat Amblyopia and prevent the psychosocial, economical loss in adult life.

Keywords: Myopia, Hypermetropia, Anisometropia, Astigmatism