

## Analyzing the Causes of Amblyopia among Patients in Tertiary Care Center: Retrospective Study in King Faisal Specialist Hospital and Research Center

**Authors :** Hebah M. Musalem, Jeylan El-Mansoury, Lin M. Tuleimat, Selwa Alhazza, Abdul-Aziz A. Al Zoba

**Abstract :** Background: Amblyopia is a condition that affects the visual system triggering a decrease in visual acuity without a known underlying pathology. It is due to abnormal vision development in childhood or infancy. Most importantly, vision loss is preventable or reversible with the right kind of intervention in most of the cases. Strabismus, sensory defects, and anisometropia are all well-known causes of amblyopia. However, ocular misalignment in Strabismus is considered the most common form of amblyopia worldwide. The risk of developing amblyopia increases in premature children, developmentally delayed or children who had brain lesions affecting the visual pathway. The prevalence of amblyopia varies between 2 to 5 % in the world according to the literature. Objective: To determine the different causes of Amblyopia in pediatric patients seen in ophthalmology clinic of a tertiary care center, i.e. King Faisal Specialist Hospital and Research Center (KFSH&RC). Methods: This is a hospital based, random retrospective, based on reviewing patient's files in the Ophthalmology Department of KFSH&RC in Riyadh city, Kingdom of Saudi Arabia. Inclusion criteria: amblyopic pediatric patients who attended the clinic from 2015 to 2016, who are between 6 months and 18 years old. Exclusion Criteria: patients above 18 years of age and any patient who is uncooperative to obtain an accurate vision or a proper refraction. Detailed ocular and medical history are recorded. The examination protocol includes a full ocular exam, full cycloplegic refraction, visual acuity measurement, ocular motility and strabismus evaluation. All data were organized in tables and graphs and analyzed by statistician. Results: Our preliminary results will be discussed on spot by our corresponding author. Conclusions: We focused on this study on utilizing various examination techniques which enhanced our results and highlighted a distinguished correlation between amblyopia and its' causes. This paper recommendation emphasizes on critical testing protocols to be followed among amblyopic patient, especially in tertiary care centers.

**Keywords :** amblyopia, amblyopia causes, amblyopia diagnostic criterion, amblyopia prevalence, Saudi Arabia

**Conference Title :** ICSRD 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

**Conference Dates :** December 12-13, 2020