

## Role of Vision Centers in Eliminating Avoidable Blindness Caused Due to Uncorrected Refractive Error in Rural South India

**Authors :** Ranitha Guna Selvi D, Ramakrishnan R, Mohideen Abdul Kader

**Abstract :** Purpose: To study the role of Vision centers in managing preventable blindness through refractive error correction in Rural South India. Methods: A retrospective analysis of patients attending 15 Vision centers in Rural South India from a period of January 2021 to December 2021 was done. Medical records of 10,85,81 patients both new and reviewed, 79,562 newly registered patients and 29,019 review patient's from 15 Vision centers were included for data analysis. All the patients registered at the vision center underwent basic eye examination, including visual acuity, IOP measurement, Slit-lamp examination, retinoscopy, Fundus examination etc. Results: A total of 1,08,581 patients were included in the study. Of the total 1,08,581 patients, 79,562 were newly registered patients at Vision center and 29,019 were review patients. Males were 52,201(48.1%) and Females were 56,308(51.9) among them. The mean age of all examined patients was  $41.03 \pm 20.9$  years (Standard deviation) and ranged from 01 - 113 years. Presenting mean visual acuity was  $0.31 \pm 0.5$  in the right eye and  $0.31 \pm 0.4$  in the left eye. Of the 1,08,581 patients 22,770 patients had refractive error in right eye and 22,721 patients had uncorrected refractive error in left eye. Glass prescription was given to 17,178 (15.8%) patients. 8,109 (7.5%) patients were referred to the base hospital for specialty clinic expert opinion or for cataract surgery. Conclusion: Vision center utilizing teleconsultation for comprehensive eye screening unit is a very effective tool in reducing the avoidable visual impairment caused due to uncorrected refractive error. Vision Centre model is believed to be efficient as it facilitates early detection and management of uncorrected refractive errors.

**Keywords :** refractive error, uncorrected refractive error, vision center, vision technician, teleconsultation

**Conference Title :** ICOOVR 2023 : International Conference on Ophthalmology, Optometry and Visual Performance

**Conference Location :** Tokyo, Japan

**Conference Dates :** January 09-10, 2023