Original Research Paper

Volume - 15 | Issue - 10 | October - 2025 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

Opthalmology

# IDENTIFYING THE CAUSES OF VISUAL HANDICAP AMONGS PATIENTS ATTENDING OUTPATIENT DEPARTMENT FOR VISUAL HANDICAP CERTIFICATION IN DEPARTMENT OF OPHTHALMOLOGY AT GOVERNMENT MEDICAL COLLEGE BHAVNAGAR FROM YEAR 2022 TO 2024.

| | |
|---|---|
| **Dr. Priyanka J. Kharadi** | Assistant Professor, Department Of Ophthalmology Banas Medical College & Research Institute, General Hospital, Palanpur. |
| **Dr. Neepa R. Gohil** | Associate Professor, Govt. Medical College, Bhavnagar. |
| **Shrey Patel** | Intern Doctor, Govt. Medical College Bhavnagar. |
| **Dr. Harish Trivedi** | Associate Professor H/C, Govt. Medical College Bhavnagar. |

**ABSTRACT** Visual handicap is a critical global health issue affecting over 2.2 billion people, nearly half of whom suffer from preventable or unaddressed vision impairment.This article provides a structured review of definitions, etiologies, prevalence, impacts, and certification trends, with a focus on India. Findings underscore the urgent need for early diagnosis, preventive strategies, genetic counseling, and public health interventions tailored to local demographics.

**KEYWORDS :** Visual handicap, blindness, low vision, ocular diseases, certification, India, epidemiology

## INTRODUCTION

Visual impairment is one of the leading causes of disability worldwide. The World Health Organization (WHO)defines blindness as visual acuity of less than 3/60 in the better eye with best correction, and low vision as less than 6/12 but equal to or better than 3/60. In India, certification aligns with WHO criteria. The burden of visual handicap includes both preventable and hereditary causes. This review synthesizes global and Indian perspectives.

### Globalandnational Definitions

WHO, the American Academy of Ophthalmology, and the American Optometric Association provide definitions of blindness, low vision, and legal blindness. In India, definitions are legally codified for certification. Classification systems categorize impairment based on visual acuity and visual field limitations.

### Causes Of Visual Handicap

Globally, refractive errors, cataracts, glaucoma, diabetic retinopathy, and age-related macular degeneration dominate. In India, retinitis pigmentosa, congenital anomalies, and optic atrophy feature prominently in certification data. Trauma, corneal scars, and retinopathy of prematurity represent emerging causes.

## PREVALENCE

Atleast 2.2 billion individuals globally suffer from visual impairment, with one billion preventable. Cataract, uncorrected refractive errors, and presbyopia are leading causes. Prevalence is four times higher in low and middle-income regions. Indian data show significant numbers in younger and working-age groups, highlighting socioeconomic consequences.

## IMPACT OF VISION IMPAIRMENT

- Children: delays in development and reduced educational attainment.
- Adults: lower employability, increased depression and anxiety.
- Older adults: higher risks off alls, isolation, and institutionalization.
- Economic: global productivity loss exceeds US$400 billion annually.

## RESULTS

The following findings are derived from the study dataset of 494 patient:

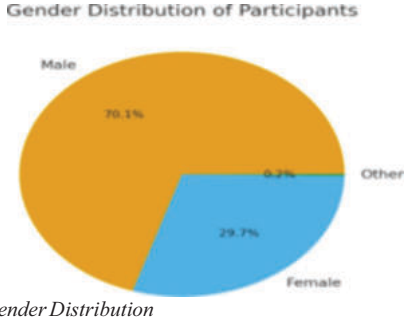


***Figure:*** *Gender Distribution*

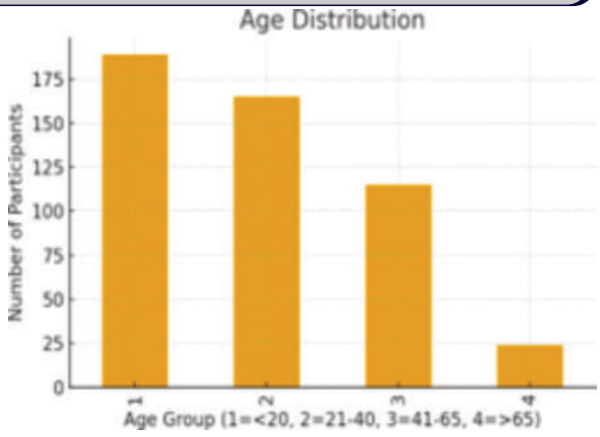


***Figure:*** *Age Distribution*


***Figure:*** *Vision Certificate*

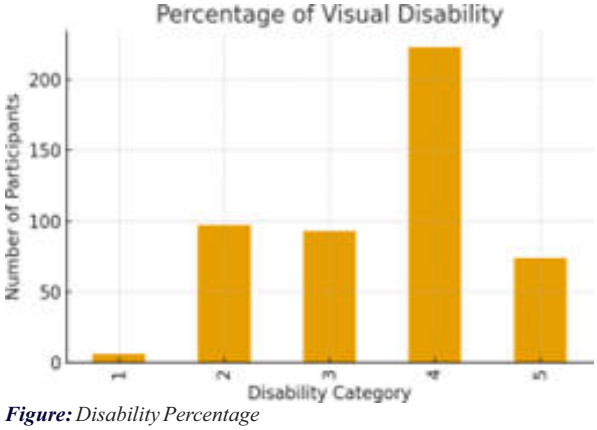


***Figure:*** *Disability Percentage*

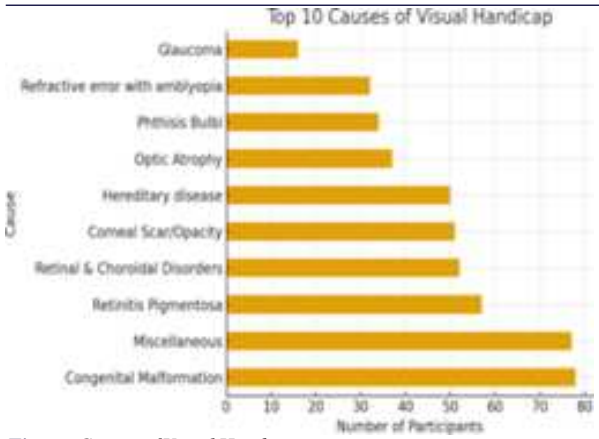


***Figure:*** *Causes of Visual Handicap*

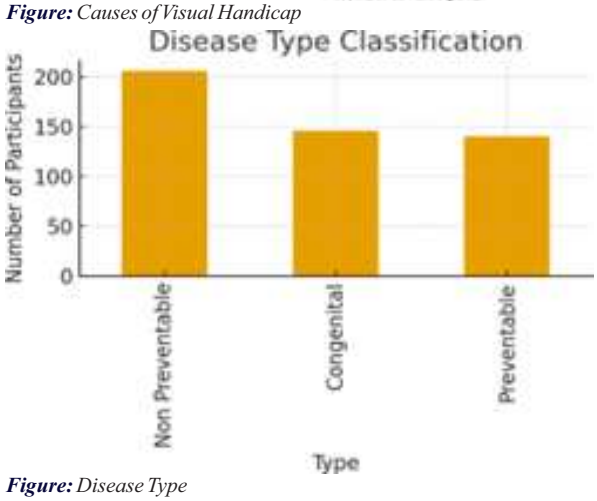


***Figure:*** *Disease Type*

## CERTIFICATION TRENDS IN INDIA

**Certification Studies Reveal:**

- Male predominance in recipients.
- Common causes: retinitis pigmentosa, congenital anomalies, optic atrophy, corneal opacity.
- Preventable causes such as glaucoma, refractive error, diabetic retinopathy are frequent.
- Around 30–50% of cases are preventable.
- Certificates provide access to financial aid, transport concessions, and employment benefits.

## DISCUSSION

Hereditary causes like retinitis pigmentosa require genetic counseling. Preventable causes such as glaucoma, diabetic retinopathy, and cataracts highlight gaps in awareness and screening. Trauma and corneal scars are significant in certain regions. Tailored public health strategies and rehabilitation measures, including vocational training, are essential.

## CONCLUSION

Visual handicap is a multi faceted problem with personal, social, and economic implications. A significant proportion of blindness is preventable through timely interventions. Certification systems both support individuals and provide valuable epidemiological insights. Strengthening early detection, prevention, and rehabilitation policies can reduce blindness burden in India and globally.

## REFERENCES

1. World Health Organization. World report on vision. 2019.
2. American Academy of Ophthalmology. Definitions of visual impairment. http://www.aao.org
3. Joshi RS, et al. Causes of visual handicap in central India. 2013.
4. Patil B, et al. Visual handicap in Karnataka. 2015.
5. Nainiwal SK, et al. Visual handicap in Rajasthan. 2016.
6. Kamat V, et al. Causes of visual disability in Mumbai. 2016.
7. Bandyopadhyay S, et al. Visual impairment registry in Kolkata. 2017.
8. Swain SC, et al. Visual disability in Odisha. 2018.
9. Taneja MK, et al. Visual handicap in Mathura. 2019.
10. Ambastha A, et al. Causes of visual impairment in Bihar. 2019.
11. Karmakar S, et al. Visual impairment in Eastern India. 2020.
12. Mohite US, et al. Causes of visual disability. 2021.
13. Farooq S, et al. Visual disability certification in India. 2021.
14. Kumar NKS, et al. Visual handicap in South India. 2022.
15. Sankhla P, et al. Visual impairment in Rajasthan. 2022.
16. Sujatha G, et al. Severe visual impairment in Telangana. 2023.
17. Deuri A, et al. Causes of visual impairment in Assam. 2024.