

Vision Centre Helps Reduce Blindness & Vision Impairment

A Longitudinal Study

India has done numerous surveys to gauge the extent of blindness and visual impairment (VI) during the past 50 years. The prevalence of blindness in all age groups (with $<6/60$ as blind)



Fig 1: Prevalence of blindness in all age groups

According to a nationwide survey conducted in 2009, the prevalence of blindness in adults over 50 (defined as having vision $<6/60$ in the better eye) was 8.5%. For worldwide comparisons, the World Health Organization (WHO) utilises presentation vision of $<3/60$ in the better eye. This criterion resulted in a prevalence of 5.34%.¹⁻⁴ Due to the combined efforts of the government, non-governmental groups, and several private practitioners, blindness and VI have declined in India.⁵ Moving from mobile to fixed facilities (such as a vision centre or VC) and from mass eye care (eye camps) to individualised care were two key improvements. The World Health Organization (WHO) suggested implementing "integrated people-centred eye care" (IPEC) in 2019. The IPEC

strategy means integrating eye care with other medical disciplines and offering community and primary care (in villages) to tertiary care (in cities) at reasonable costs.⁶

A recent clinical study gathered information on eye health from residents of a city slum and low-income neighbourhood in Pune, Maharashtra, India, over the years 2015–16 and 2018–19. The entire population/community was screened door to door and supplemented with additional diagnosis and treatment in a VC that was set up nearby.⁷

Visual impairment was defined as distant presenting visual acuity (PVA) in the better eye on 6/18. The PVA was used to characterise VI and was further divided into four categories:⁸

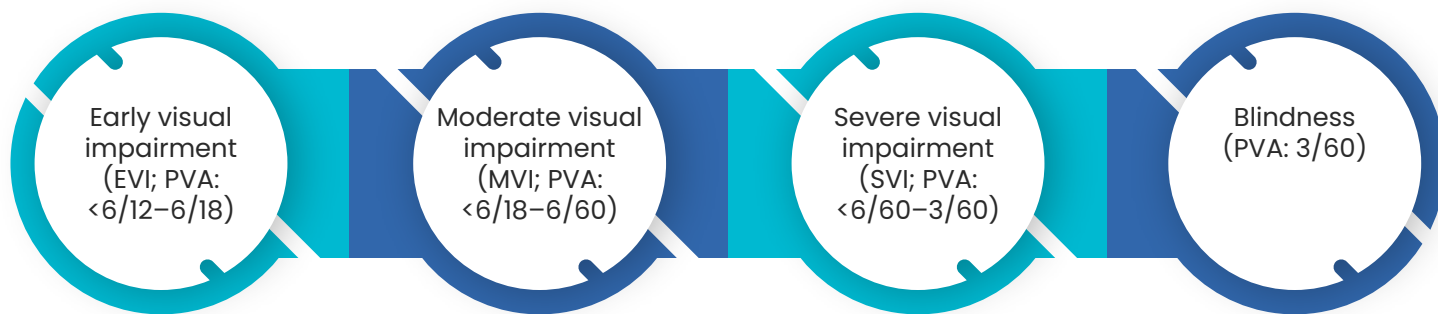


Fig 2: Four categories of PVA

In 2015 and 2019, a significant difference between good and impaired vision was discovered. Nearly 44,535 individuals from 9213 households were evaluated for the first time, and 43,708 individuals from 9039 households (98.1% of the original cohort) were studied for the second time.

(VA 3/60-3/60) Causes	2015-16 n=43	2018-19 n=43	P
Cataract	25 (58.1%)	14 (60.9%)	0.830
Pseudophakia Refraction	4 (9.3%)	0	0.131
Glaucoma	3 (7%)	2 (8.7%)	0.801
Diabetic Retinopathy	2 (4.7%)	1 (4.35%)	0.955
Refraction	4 (9.3%)	5 (21.7%)	0.161
Unknown	1 (2.32%)	0	0.461
Corneal Causes	6 (14%)	0	0.060
Microcornea with iris coloboma	1 (2.32%)	0	0.461
Phthisical Eye	0	1 (4.35%)	0.168
Total	43(100%)	23 (100%)	

P>0.05 (Not significant) Chi-square test used

Table: Causes of severe VI (3/60-<6/60) in two-time point cohorts

The prevalence of blindness, age- and sex-standardised was 1.3%. cataracts (45.7%) and general posterior segment problems (39.1%) were the two most frequent causes of blindness.¹⁴ The current study found ageing, the feminine gender, and limited access to eye care for the high rate of VI. Due to the close proximity of the VC and year-round accessibility of eye care, the current study on the low-income/slum population can overcome some of these obstacles. The VC can raise awareness of several chronic illnesses, including diabetes and hypertension, as well as the significance of fundamental health care, including nutrition, mother and child care, immunisation, and other preventive measures.^{15,16}

CONCLUSION

To provide people with accessible, adequate, and ongoing eye care, IPEC has been recommended by the newly released World Report on Vision (WRV).⁶

The methodology, which combines eye disease surveys, longitudinal surveillance, and screening and care, benefits IPEC.

The closeness of the VC reduces age and gender restrictions on receiving eye care and incentivises patients to return for an examination.

“Vision centre was staffed and led by a women's team. The approach may be initially cost intensive but it repays the investment and more in the long run.”

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