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Original Research Paper

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A STUDY TO ASSESS KNOWLEDGE, AWARENESS, AND BEHAVIORAL PRACTICE TOWARDS EYE DONATION AMONGST IN-PATIENTS OF TERTIARY CARE CENTRE

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ABSTRACT According to the World Health Organization (WHO), approximately 45 million people worldwide are bilaterally blind, with corneal blindness accounting for a substantial portion of these cases. The National Programme for Control of Blindness (NPCB) reports that approximately 120,000 individuals in India are currently affected by corneal blindness, with an additional 25,000 to 30,000 new cases emerging annually. This study aimed to evaluate knowledge, awareness, and behavioral practice towards eye donation in IPD (In-patient Department) of our hospital. **Methods-** This cross-sectional study surveyed 1,400 IPD patients at a tertiary care centre in Central India between September 2023 and September 2024. Data was collected using a pre-tested, semi-structured questionnaire covering demographics, eye donation awareness, sources of information and reasons for willingness or reluctance to donate. **Results-** out of 1,400 participants, the majority of respondents (45.14%) were below 40 years of age, and 53.57% were male. Awareness regarding eye donation was observed in 48.29% of participants, while 34.43% expressed a willingness to pledge their eyes for donation. Hospitals emerged as the primary source of information (40.43%). The main reasons cited for unwillingness to donate included familial opposition, religious concerns, and fear of post-mortem facial disfigurement. **Conclusion-** This is first study among IPD patients done on large scale. The findings highlight the complex influence of socio-cultural factors and information on eye donation awareness and willingness. The study emphasizes the need for educational initiatives to improve knowledge and foster positive behaviours regarding eye donation, particularly in tertiary care settings, to increase the availability of corneal tissue for transplantation and address the supply-demand gap in eye banking.

KEYWORDS : IPD (In-patient Department), Eye Donation, Knowledge, Awareness, Behavioral Practice

INTRODUCTION

According to the World Health Organization (WHO), approximately 45 million people worldwide are bilaterally blind, with corneal blindness accounting for a substantial portion of these cases.[1] In India, corneal blindness represents a significant public health concern, with an estimated 6.8 million individuals affected by vision loss in at least one eye due to corneal diseases. Among these, nearly one million individuals suffer from bilateral corneal blindness. [2,3] The National Programme for Control of Blindness (NPCB) reports that approximately 120,000 individuals in India are currently affected by corneal blindness, with an additional 25,000 to 30,000 new cases emerging annually[2]. Despite the high prevalence of corneal blindness and the benefits of corneal transplantation, eye donation rates remain low. Increased awareness and knowledge are crucial in shaping attitudes and willingness. A structured approach addressing misconceptions, cultural sensitivities, and involving healthcare institutions can bridge the gap between donors and recipients.

MATERIALS & METHODS

This cross-sectional study was conducted on 1,400 admitted patients at a tertiary care center in Central India between July 2023 and June 2024. Informed consent was obtained from all participants.

Inclusion Criteria

- IPD patients of MGM Medical College and MYH Hospital Indore
- Aged above 18 years
- Literate in the local language

Exclusion Criteria

- Unwilling to participate
- Unaware of the concept of eye donation

METHODOLOGY

A pre-tested, semi-structured questionnaire was administered to collect data on demographics, awareness of eye donation, sources of information and reasons for willingness or unwillingness to donate.

RESULTS

A total of 1,400 participants were included in the study. The majority were male (53.57%, n=750), while females constituted 46.43% (n=650).Participants ranged in age from 18 to 84 years. The highest proportion of individuals (45.14%) were in the 18–40 years age group. With regard to religious affiliation, the majority of participants identified as Hindu (71.50%), followed by Muslim (12.64%) and Jain (6.93%). Nearly half of the participants (47.86%) were aware that the ideal time for eye donation is within 0–6 hours after death. However, only 23.57% knew that corneal tissue can be retrieved from the deceased at home. In terms of advocacy, 31.50% of participants expressed a willingness to promote eye

donation awareness in the community and to encourage the families of deceased individuals to consider eye donation

Table No 1: Distribution Of Awareness Among The Study Participants

Awareness About Eye Donation	Frequency (N)	Percentage (%)
Yes	676	48.29%
No	724	51.71%
Total	1400	100.00%

Table. No 2: Distribution Of Knowledge Among The Study Participants

Source Of Knowledge	Frequency (N)	Percentage (%)
Hospital	566	40.43%
Other	372	26.57%
Newspaper or Other Print Media	163	11.64%
Television	158	11.29%
Radio	71	5.07%
Friend	70	5.00%
Total	1400	100.00%

Table No 3: Distribution Of Behavioural Practice Among The Study Participants

Willingness For Eye Donation	Frequency (N)	Percentage (%)
NO	918	65.57%
YES	482	34.43%
Total	1400	100.00%

DISCUSSION

In our study majority of patients were males (53.57%) and rest were females (46.43%). **Neha Singh J et al** conducted a hospital-based cross-sectional study over a period of five years at a tertiary care center in Central India, involving 70 patients from the institution's eye bank. Among the participants, 71.4% (50 individuals) were male, while 28.6% (20 individuals) were female.[5] Similarly, **Gupta R et al** conducted a cross-sectional study among patients and attendants (aged 18 years and above) visiting OPD of PG Department of Ophthalmology in a tertiary care hospital recorded 190 male and 150 female participants in their study.[6] The observed gender distribution may be attributed to the prioritization of men's health and their greater autonomy in seeking care, while women often face financial and societal barriers to hospitalization.

In our study majority of patients (45.14%) within the 18–40 years' age group. **Neha Singh J et al** categorized participants into different age groups and reported that 4.3% of individuals were ≤ 20 years, 7.1% were between 21–40 years, 22.9% belonged to the 41–60 years category, 42.9% fell within the 61–80 years range, and 22.9% were older than 80 years. [5] Meanwhile, **Gupta R et al** classified participants into broader age groups, with 216 individuals in the 18–45 years category and 124 in the >45 years category.[6]

Individuals within this age group are generally more health-conscious, more likely to utilize tertiary care services, and more proactive in seeking timely medical attention for acute or lifestyle-related health conditions.

In our study majority of patients (60.4 %) were belong to Hindu religion, followed by Islam (12.64%) and Jain (6.93%). **Gupta R et al** reported that among their participants, 296 were Hindu and 44 were Muslim.[6] **Sushma H et al** conducted a questionnaire-based study among 250 medical and paramedical students at Al Ameen Medical College, Bijapur. Among the respondents, 60.4% were from the Muslim community.[7]

This distribution reflects the demographic composition of the region, where Hinduism is the predominant faith, and is likely representative of the general population seeking care at the tertiary care centre.

In our study only 48.29% of the patients were aware about eye donation. **Sushma H et al** study revealed that 99.2% of the participants were aware of eye donation.[7] **Subramaniam G et al** conducted a cross-sectional study on 507 non-medical undergraduate students in Tamil Nadu, using a structured questionnaire and found that 98.4% (499 students) were aware of eye donation.[8]

The low awareness of eye donation can be attributed to limited public education, prevailing cultural beliefs, and a lack of widespread awareness campaigns. Additionally, inadequate dissemination of information in healthcare settings, particularly in rural or less urbanized regions. Eye donation is lower among some Muslims due to misconceptions, lack of awareness, and fears about religious permissibility, though many Islamic scholars support it as a life-saving act.

In our study major source of information (40.43%) was hospital. **Joshi et al** conducted a cross-sectional survey among 47 ambulance drivers during the eye donation fortnight in 2022 using a structured questionnaire and found mobile phones (42.6%) to be the main source of information, followed by TV (12.8%), health workers (10.6%), and newspapers (8.5%).[9] In the study by **Gupta R et al** the most influential sources of information were newspapers/TV (94 respondents), followed by banners (58), doctors (58), and awareness camps (80). [6] **Bhandary S et al** conducted an observational study on 400 attendants at General Hospital and peripheral clinics in Melaka in 2007.They found that the primary sources of information about eye donation were electronic and print media (TV and newspapers), followed by awareness camps.[10] Hospitals serve as key platforms for educational campaigns and discussions on eye donation, owing to patients' direct interaction with healthcare professionals who provide reliable and authoritative information as part of routine care

In our study 47.86% patients knew the crucial time for eye donation is 0-6 hrs. **Gupta R et al** 212 respondents correctly identified that the ideal time for eye collection is within 6 hours of death, while 128 were unaware of this critical timeframe. [6] Similarly, **Joshi et al** found that only 13 respondents (27.6%) were aware of the ideal time for eye donation, whereas a majority (72%) did not have this knowledge.[9]

This awareness may be attributed to focused health education initiatives, professional counselling by healthcare providers, or prior exposure to public awareness campaigns highlighting the time-sensitive nature of corneal retrieve.

In our study ,only 34.43% patient were willing to donate eyes. **Joshi et al** found that 74.5% of participants were willing to donate their eyes, while 25.5% were not.[9]

The reduced willingness to donate eyes observed in this study can be attributed to a combination of deeply rooted cultural and religious beliefs, concerns regarding post-mortem disfigurement, and resistance or opposition from family members. Furthermore, eye donation is often not encouraged within families, as it is perceived as a sensitive topic that may lead to disagreements or conflicts, making it challenging to convince family members to support the decision.

CONCLUSION

This is first study among IPD patients done on large scale. The findings highlight the complex influence of socio-cultural factors and information on eye donation awareness and willingness. The study emphasizes the need for educational initiatives to improve knowledge and foster positive

behaviours regarding eye donation, particularly in tertiary care settings, to increase the availability of corneal tissue for transplantation and address the supply-demand gap in eye banking. To increase hospital eye donations, hospitals should run awareness campaigns, display informative posters, and show videos promoting eye donation. Training healthcare providers to counsel patients, encouraging open family discussions.

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