

# Knowledge and Attitude regarding Eye Donation among Adults of Kamrup Metro, Assam: A Cross-Sectional Study

Ms Juri Phukon<sup>1</sup>, Prof. (Dr.) Bal Kishan Jangid<sup>2</sup>

<sup>1</sup>PhD Scholar, Desh Bhagat University, Punjab

<sup>2</sup>Mental Health Nursing

[doi.org/10.64643/IJIRTV12I1-181034-459](https://doi.org/10.64643/IJIRTV12I1-181034-459)

**Abstract**—Eye donation is a voluntary act of giving one's eye after death to restore the sight of individual suffering from corneal blindness. Corneal blindness affects millions of people worldwide and eye donation is the only way to treat it many cases. People have different level of knowledge and attitude regarding eye donation and substantial gap exists between these two due to various factors. The primary objective of the study was to assess knowledge and attitude regarding eye donation among adults of Kamrup Metro, Assam

## Methodology

The quantitative research approach and descriptive cross sectional study design was adopted for the study. The study was conducted on 40 adults selected through non probability purposive sampling technique. A structured interview was used to collect data on sociodemographic variables, knowledge and attitude regarding eye donation. Descriptive and inferential statistics were used to analyze the data.

## Results

The study result showed that 17.5% had adequate knowledge, 62.5% moderately adequate knowledge and 20% inadequate knowledge. Regarding attitude, 65% of the participants had moderately favorable attitude towards eye donation. A significant association was found between attitude with educational level and occupation ( $p<0.05$ ).

## Conclusion

The study findings concluded that majority of the adults have moderately adequate knowledge and moderately favorable attitude regarding eye donation. Public awareness campaign time to time is essential to address fears, misconceptions and will have better knowledge and more positive attitude regarding eye donation.

**Index Terms**—Adults, Attitude, Eye donation, Knowledge

## 1. INTRODUCTION

Human eye is a complex sensory organ responsible for vision, enabling humans to perceive and interpret visual stimuli from the environment. Damage to the cornea of the eye can lead to corneal blindness, a significant cause of visual impairment globally. According to World Health Organization, Corneal blindness is the 4<sup>th</sup> leading cause of blindness worldwide, accounting for approximately 5.1% of all cases. In India, corneal blindness has been a major concern. According to National Blindness and Visual Impairment Survey (2015-2019), reported a prevalence of 0.36% for blindness, equating to approximately 4.95 million individuals. Eye donation can help to restore sight to those individuals with corneal blindness. Assessing knowledge and attitude regarding eye donation among the public is essential to bridge the gap between actual and potential donation. This also helps to know the barriers and common myth regarding eye donation. A study conducted by Joshi R.S. (2023) on Eye donation: knowledge, beliefs, awareness, and willingness among ambulance drivers in Central India among 47 ambulance drivers from tertiary eye care centre. The study result showed that 27 (57%) participants were aware of eye donation; however, only 14 (29.7%) realized its importance. The common reason for nondonation of eyes was lack of awareness. The study revealed that there is a need to improve awareness and knowledge about eye donation among the participants. The investigator found that there is very little nursing research carried out in Assam related to eye donation. Assam differs in social and cultural aspects as compared to other states of India. Therefore,

knowledge and attitude assessment regarding eye donation among different group of people will help to overcome barriers and guide the government and NGO to take initiative for awareness campaign and thus ultimately increase the number of eye donation to combat corneal blindness in the region.

#### Objectives

1. To assess the level of knowledge regarding eye donation among adults of Kamrup Metro, Assam.
2. To assess the level of attitude regarding eye donation among adults of Kamrup Metro, Assam.
3. To find association between level of attitude regarding eye donation and selected sociodemographic variables.

#### Operational definition

##### Knowledge:

In this study, knowledge refers to understanding or awareness regarding eye donation among adults which was assessed by structured knowledge questionnaire.

##### Attitude:

In this study, attitude refers to certain ways of thinking towards eye donation among adults which was assessed by five-point likert scale.

##### Eye donation:

According to World Health Organization (WHO), eye donation is the process of donating the corneas after death, specifically to restore vision to individual with corneal blindness.

##### Adults:

In this study, adults refer to the individuals who are 18 years and above.

##### Hypothesis

H<sub>1</sub>: There is a significant association between attitude regarding eye donation among adults and selected sociodemographic variables like age, gender, religion, educational status, occupation, per month family income and source of health-related information.

## 2. MATERIALS AND METHODOLOGY

Research approach: Quantitative research approach

Research design: Investigator choose descriptive cross sectional study design for the study as it was considered the best method to collect primary data from a large group.

Setting: The study was conducted in urban area of Kamrup Metro.

Accessible population: The accessible population in this study are the adults of Kamrup Metro, Assam.

Sampling technique and sample size:

Purposive sampling technique was used. The sample size was 40.

#### Delimitation

The following are the delimitation of the study

1. The study is delimited to adults who can communicate Assamese.
2. The study is delimited to adults who are available at the time of data collection and willing to participate.
3. Study is delimited to adults from different occupation like private and govt employee, shopkeepers, local vendors, taxi drivers, homemakers, daily wage workers etc.

#### Description of the tool:

An interview schedule was prepared to collect data from the sample. The tool was divided into three (3) sections. The first section consisted of seven items to get the details of the sample such as age, gender, religion, educational status, occupation, per month family income and source of health-related information. The second section consists of ten (10) numbers of structured questionnaire related to eye donation. The third section is attitude scale consists of 15 statements. The response was made in five (5) point likert scale and response category are assigned weight from 1 to 5 for positive statement. This was reversed for negative statements. The tool was validated by 5 experts. The reliability coefficient for knowledge questionnaire was 0.67 and for attitude scale was 0.62. Informed consent was taken from the participants.

#### Statistical technique:

Descriptive and Inferential statistics were used such as mean, mode, median, standard deviation and Chi Square in the present study.

## 3. RESULTS

Out of the 40 participants, majority i.e 32.50% were in the age group 40-50 years, 65% were male, 72.50% were married, 70% were belongs to Hinduism religion, 42.50% have studied upto Higher Secondary class, 42.50% were in private job, 37.50% have the per month family income between Rs 18,497-Rs 30,830 and 42.50% gather health related information from friends and families. Regarding knowledge, 17.5% had adequate knowledge, 62.5% moderately adequate knowledge and 20% inadequate knowledge.

Regarding attitude, 65% of the participants had moderately favorable attitude towards eye donation. A statistically significant association was found between

attitude scores and two sociodemographic variables such as educational level and occupation ( $p < 0.05$ ).

Table 1 Frequency percentage distribution of level of knowledge regarding eye donation

n=40

Knowledge level	Frequency	Percentage (%)	Score range	Mean	Mode	Median	SD
Inadequate knowledge	8	20%	2-7 5	5	6	5	1.48
Moderately adequate knowledge	25	62.5%					
Adequate knowledge	7	17.5%					

Table 2 Frequency percentage distribution of level of attitude regarding eye donation

n=40

Attitude level	Frequency	Percentage (%)	Score range	Mean	Mode	Median	SD
Unfavorable attitude	4	10%	46-68 22	56.45	55, 63	57	6.55
Moderately favorable attitude	26	65%					
Unfavorable attitude	10	25%					

#### 4. DISCUSSION

The study findings revealed that there is moderately adequate knowledge and moderately favorable attitude regarding eye donation. The study findings are similar with previous research studies conducted by Dominika Szkodny et al (2021) and Rana and Paudel (2025). The present study also found significant association between attitude and educational level and occupation. These findings are also similar with previous study conducted by Hussien S M. (2018) where attitude was associated with educational level and awareness as favorable attitude towards eye donation was fair.

#### 5. CONCLUSION

The study concludes that there is moderately adequate knowledge and moderately favorable attitude regarding eye donation. Therefore, mass awareness program can be held to educate people about the importance of eye donation. Consistent public awareness campaign and open discussion will improve attitude towards eye donation. Thus, developing a positive attitude is key to increase eye donation rates and will combat preventable blindness.

#### 5. RECOMMENDATION

- Similar study can be done with larger sample to find the knowledge and attitude among adults.
- Awareness campaign time to time will help to educate different group of people and sensitize regarding eye donation.

#### 6. LIMITATION

- Investigator developed close ended questionnaire, there may be limitation of responses.

#### 7. CONFLICT OF INTEREST

The author declared no conflict of interest in this work

#### 8. FUNDING SOURCE

Self-funded.

#### 9. ACKNOWLEDGEMENT

The acknowledge all the participants for their active participation.

REFERENCES

- [1] Szkodny,D.,Wroblewska, C.E., Wylegala, E. (2021). Knowledge and Attitudes towards Cornea Donation among Different Social Groups in Poland. *Journal of Clinical Medicine*.2021 Oct28;10(21):5031. doi:10.3390/jcm10215031
- [2] Hussen, S.M., Belete T.G. (2018). Knowledge and Attitude towards Eye Donation among Adults, Northeast Ethiopia: A Community- based, Cross sectional Study. *Middle East African Journal of Ophthalmology*.2018 Jul-Dec;25(3-4):126-130, doi: 10.4103/meajo.MEAJO 267 16
- [3] Joshi,S.R., Goel, P., Adatiya, H. V., Seth, S.A., Rasal,V.,A.,(2023). Eye Donation: Knowledge, Beliefs, Awareness and Willingness Among Ambulance Drivers in Central India. *Clinical Ophthalmology*. 2023 May 1; 17:1263-1269. Doi10.2147/OPHTH.S401768
- [4] L.V. Prasad Eye Institute. (2023). About us. Retrieved from <http://www.Ivpei.org/about-us>
- [5] National Blindness and Visual Impairment Survey (2015-2019). India's Blindness and Visual Impairment Survey. Retrieved from <http://www.npcb.nic.in>
- [6] Rana, S., Paudel, S. (2025). Knowledge and Attitude Towards Eye Donation among Young Adults in Sainamaina Municipality. *International Research Journal of MMC* 6(1):203-218 doi:10.3126/irjmmc. v6i1.78088
- [7] Tortora,G.J., Derrickson,B. (2017). *Principles of Anatomy and Physiology*(15<sup>th</sup>). Wiley
- [8] World Health Organization: Corneal Blindness: A Global Perspective