

# AWARENESS AND PERCEPTION REGARDING EYE DONATION AMONG MEDICAL STUDENTS

## Community medicine

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### Abstract:

**Objectives:** To know the awareness and perception regarding eye donation among the first year medical students.

**Study design:** Cross sectional study.

**Setting:** Konaseema Institute of Medical Sciences, Andhra Pradesh, India.

**Subjects:** 138 medical students from first year M.B.B.S were participated in the study.

**Study variables:** Age, gender, awareness of eye donation, ideal time and willingness to donate eyes.

**Results:** Majority (89.2%) were in the age group of 18-19 years, 97.1% were aware that eyes can be donated after death, 74% know the ideal time for donating eyes. 93.5% were willing to donate their eyes.

**Conclusion:** Imparting knowledge regarding eye donation should be a part of their curriculum in order to spread the message in the community.

**Key words:** Andhra Pradesh, Medical students, Eye donation.

### Introduction:

The blindness is a global problem. Recent estimates of World Health Organization suggest that there are 40 million people, who are blind worldwide and that more than 90% of them live in developing countries. Nearly one-fifth of them are in India.<sup>1</sup>

Corneal blindness is due to scarring or clouding of the normally transparent cornea. Usual causes are infection, Vitamin A deficiency and trauma. As per the current statistics, corneal blindness is the 4<sup>th</sup> leading cause of blindness worldwide.<sup>2</sup> Keratoplasty or Corneal transplantation is the sight restoring surgery for corneal blindness. It is a surgical procedure where

the damaged or diseased cornea is removed and replaced by a healthy cornea from a deceased donor. This surgery is presently totally dependent on eye donation after death.<sup>3</sup>

According to the Eye Bank Association of India, the current cornea procurement rate in India is 22,000 per year. It is estimated that a significant proportion of donor corneas are unsuitable for corneal transplantation.<sup>4</sup> Based upon our current ratio of available safe donor eyes, we would need 277,000 donor eyes to perform 100,000 corneal transplants in a year in India. There is approximately a 20-fold increase from the donor eyes available now. A shortage of transplantable corneas is common and has been the subject of much attention.

To increase procurement of corneas, raising the level of public education on eye donation is an important first step. Soliciting for actual eye donation at the time of death is a necessary and accepted practice.<sup>5</sup> Though the factors affecting procurement of corneas and the public attitude towards eye donation have recently received attention in the developed world, not much has been published from the developing world.<sup>6</sup>

**Methods:**

The present cross sectional study was carried out in the Konaseema Institute of Medical Sciences, Amalapuram, East Godavari district, Andhra Pradesh, India among the newly admitted first year medical students. The study was conducted in the month of January 2015.

Approval from the Institutional Ethics Committee was taken prior to the study initiation. A pre tested, semi structured self administered questionnaire was used to collect data on the background information, awareness and perception regarding eye donation.

The data was processed and statistical analysis was done

using Epi-info version 7.0.

**Results and Discussion:**

138 first year medical students were participated in the study. Among them majority (89.2%) were in the age group of 18-19 years, gender wise 65.2% were females.

97.1% of the students were aware that eyes can be donated after death, similar findings were observed in other studies.<sup>6,7</sup> In contrast to that in a study among adult population only 50.7% of the population were aware of eye donation.<sup>8</sup>

81.2% of the students were aware that donated eyes can be used for corneal grafting. 74% of the students have knowledge regarding ideal time for donating eyes, in another study among medical and non medical students they found that 63.3% knew that it should be done within 6 hours.<sup>9</sup> In our study only 24.6% know the place for eye donation. In another study done on final year medical students found that 67.4% students could name a few eye banks.<sup>10</sup> This could be due to their increased knowledge as compared to first year students. (Table – 1)

**Table: 1 - Awareness regarding eye donation**

Awareness	Yes			No		
	Male	Female	Number (%)	Male	Female	Number (%)
Eyes can be donated after death	47	87	134 (97.1%)	1	3	4 (2.9%)
Donated eyes can be used for corneal grafting	38	74	112 (81.2%)	10	16	26 (18.8%)
Ideal time for donating eyes is within 6 hours after death	34	68	102 (74.0%)	14	22	36 (26.0%)
Knows a person who has donated eyes	9	12	21 (15.2%)	39	78	117 (84.8%)
Knows contact place for eye donation	13	21	34 (24.6%)	35	69	104 (75.4%)
Donors eyes can be preserved in the eye bank	29	52	81 (58.7%)	19	38	57 (41.3%)

In our study 93.5% of the students were willing to donate their eyes. In another study among medical students in Delhi 87.2% were willing to donate their eyes.<sup>7</sup> In contrast to that in another study willingness to donate eyes was less (41.5%) among relatives of post-mortem cases how were aware of eye donation.<sup>11</sup> 91.3% felt that eye donation is a noble work and 89.1% felt that it is pleasure to help the blind. (Table – 2)

**Table: 2 -  
Perception regarding eye donation**

Awareness	Yes			No		
	Male	Female	Number (%)	Male	Female	Number (%)
Are you willing to donate your eyes	45	84	129 (93.5%)	3	6	9 (6.5%)
Eye donation is against your religious beliefs	39	76	115 (83.3%)	9	14	23 (16.7%)
Eye donation is a noble work	44	82	126 (91.3%)	4	8	12 (8.7%)
Pleasure to help the blind	44	79	123 (89.1%)	4	11	15 (10.9%)
Donated eyes can give vision to a person	43	84	127 (92.0%)	5	6	11 (8.0%)
Eye donation is like rebirth	41	78	119 (86.2%)	7	12	19 (13.8%)

Lack of awareness, other reasons like objection by family members, dislike of disfiguring the body, delaying of religious rites, and religious restrictions were reported as the reasons were not donating eyes.<sup>6,12</sup>

### Conclusion:

In our study majority of the students were aware of eye donation and expressed willingness to donate their eyes, but less knowledge regarding contact place for eye donation. So we have to educate them regarding eye donation campaigns and various eye banks as a part of their curriculum so that they will spread this message in the community.

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