



AWARENESS OF EYE DONATION AMONG MEDICAL STUDENTS OF TERTIARY CARE HOSPITAL: A CROSS SECTIONAL STUDY

Community Medicine

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ABSTRACT

Most important sensory organ in human body are eyes because they imparts vision and power to see. Life is incomplete in visually impaired people as they can just touch, feel, smell things but can't see it. Two corneal blind people will get vision from pair of donated eyes. Corneal blindness is significant cause of visual impairment in India which accounts for 14 % of blindness in India. Approximately 1.9 million are suffering from corneal blindness and 20,000 are added each year. During 2018-19 nearly 68,409 donated eyes were collected which is less than half the requirement. Reason behind this is lack of awareness and neglecting attitude for eye donation. During covid-19 pandemic number of donated eyes reduced further leading to big trouble in eyesight. So, the present study was conducted among medical students of tertiary care hospital regarding awareness of eye donation.

KEYWORDS

Corneal blindness, eye donation, awareness

INTRODUCTION

Most important sensory organ in human body are eyes because they imparts vision and power to see. Life is incomplete in visually impaired people as they can just touch, feel, smell things but can't see it. Two corneal blind people will get vision from pair of donated eyes. Bilateral corneal blindness is significant cause of visual impairment in India which accounts for 14 % of blindness in India.^[1,2] The major causes of corneal blindness includes trachoma, corneal ulceration, ophthalmia neonatorum, xerophthalmia, vit A deficiency, ocular trauma, traditional medicines, onchocerciasis, leprosy.

Corneal blindness can be treated with corneal transplantation called as keratoplasty. As cornea is viable even after death, it is donated and used to save eyesight of corneal blind person.

Approximately 1.9 million are suffering from corneal blindness in India and 20,000 are added each year.^[3,4] During 2018-19 nearly 68,409 donated eyes were collected which is less than half the requirement.^[5] Reason behind this inadequate eye donation is lack of awareness and willingness among general public. During covid-19 pandemic number of donated eyes reduced further leading to big trouble in eyesight.

Awareness among medical students is key to increase awareness among general population. So, study to assess awareness about eye donation among medical students was done and based on results recommendations like lecture was included on eye donation in syllabus.

OBJECTIVE

To assess the awareness about eye donation among medical students of tertiary care hospital.

METHODOLOGY

A cross sectional study was carried out in 100 third minor students of tertiary care center willing to participate in the study. Data was collected using a pre structured self- administered questionnaire after getting informed consent and analysed by using SPSS version 22.

RESULTS

Table no 1: Frequency distribution of Basic knowledge of students about eye donation

1.Are the eyes removed from a living / a dead donor?	Only dead donor	Both living and dead donor	Don't know
Frequency %	88	08	04
2. Up to how long after death should eyes be removed?	Within 6 hrs	More than 6 hrs	Don't know
Frequency %	93	04	03

3. How long the donor eyes can be kept / stored before transplantation?	Upto 24 hrs	Upto 2-3 hrs	Don't know
Frequency %	63	17	20
4.What can be removed from donar eye?	cornea	Whole eye ball	Don't know
Frequency %	63	31	06
5.What can be transplanted?	cornea	Cornea, retina, lens	Don't know
Frequency %	70	27	03

Table no 2: Frequency distribution of Basic knowledge of students about eye donation

Questions asked	Yes frequency %	No frequency %
1.Is there any age limit for eye donation?	30	70
2.Do you think consent of family is required for pledging?	30	70
3.Do you think synthetic substitutes for cornea are present?	58	42
4.Do you know some local diseases which are contraindicated for eye donation?	36	64
5.Do you know some systemic diseases which are contraindicated for eye donation?	29	71
6.Do you know some websites names to pledge for eye donation?	02	98
7.Do you know names of some eye banks?	09	91

Willingness to pledge eyes

About 84 students showed their willingness for eye donation, 10 students refused to donate and 6 students said they might think of eye donation in future.

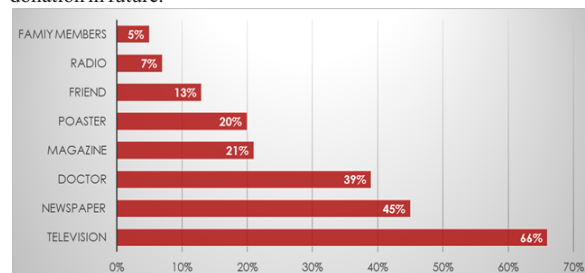


Figure no 1: Results regarding source of information

DISCUSSION

To fulfill increasing demand of cornea for corneal transplantation for treating corneal blindness, eye donation is required to be increased. Awareness about eye donation in general public is key to increase eye donation. Medical students including other healthcare workers should have knowledge about eye donation so that they can act as counsellors. In present study 88 % students were aware that eyes can be donated after death. In the study conducted by Meghachandra et al.[6] 99.4 % students were aware that eyes can be donated after death.

In present study 93 % students knew that eyes can be removed within 6 hrs of death. In the study done by Anita Gupta et al.[7] 38.2 % students knew that eyes can be removed within 6 hrs of death. This result was much lower than present study, could be due to involvement of nursing students as compared with medical students. So, awareness generation is required not only in medical students but also in whole paramedical and nursing students.

In present study 17 % students knew that eyes can be stored upto 2-3 days before transplantation. In the study done by Kss Vidusha et al.[8] 44.4 % students knew that eyes can be stored upto 2-3 days before transplantation. This result was higher than present study, could be due to study involved both third minor and major students.

In present study 70 % students knew that cornea is the part of the eye that is transplanted while study done by Meghachandra et al.[6] 86 % students knew that cornea is transplanted.

In present study 29 % of students knew that systemic diseases like Hepatitis b, HIV are contraindications for eye donation. In the study conducted by Kss Vidusha et al.[8] 82.6 % students knew about contraindications in systemic diseases. This result was much higher than present study, could be due to study involved both third minor and major students.

In present study only 9 % of students knew names of some eye banks while 6 % students knew names of eye banks in study by Sanjeev kumar et al.[9] Eye banks keep balance between eye donation and donors as they are involved in tissue harvesting, processing, distribution, creating public awareness.

In the present study Television (66 %) and Newspaper (45 %) were major sources of information. Similarly in study by Meghachandra et al.[6] Television (77.8%) and Newspaper (72.8 %) were major sources of information. So, the role of mass media in creating awareness is major and can be used for conducting mass campaigns and advertisements reaching illiterate population also.

In present study 84% of students showed their willingness for eye donation. Major cause of not willing to donate eyes was opposition from family members.

CONCLUSION

The present study revealed that medical students were well aware about eye donation and most of them inclined to pledge for eye donation.

There were certain misconceptions and lacunae in their knowledge.

Though the television was main source of information for eye donation contributing 66 % only 2 % knew the name of website for eye donation and only 9 % knew the name of eye banks.

There is need to enhance their knowledge and motivate them so that they can act as counsellors for eye donation.

REFERENCES

1. Pascolini D, Mariotti SP. Global estimates of visual impairment 2010. *Br J Ophthalmol*. 2012;96:614-8.
2. Oliva MS, Schottman T, Gulati M. Turning the tide of corneal blindness. *Indian J Ophthalmol*. 2012;60:423-7.
3. 8. Saini JS, Reddy MK, Jain AK, Ravinder MS, Jhaveria S, Raghuram L. Perspectives in eye banking. *Indian J Ophthalmol*. 1996;44:47-55.
4. Dandona L, Dandona R, John RK. Estimation of blindness in India from 2000 through 2020: Implications for the blindness control policy. *Natl Med J India*. 2001;14:327-34.
5. Govt. of India (2020), Annual report 2019-2020, Ministry of Health and Family Welfare, New Delhi.
6. Singh MM, Rahi M, Pagare D, Ingle GK. Medical students' perception on eye donation in Delhi. *Indian journal of ophthalmology*. 2007 Jan 1;55(1):49-52
7. Gupta A, Jain S, Jain T, Gupta K. Awareness and perception regarding eye donation in students of a nursing college in Bangalore. *Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine*. 2009 Apr;34(2):122.
8. Vidusha K, Manjunatha S. Awareness of eye donation among medical students of

tertiary care hospital, Bangalore. *Asian Pac J Health Sci*. 2015;2(2):94-8

9. Kumar S, Shukla US, Agarwal P. Awareness and knowledge on eye donation among students at Bhopal. *Natl J Community Med*. 2012;3(4):685-9