



To assess the knowledge of the undergraduate medical students regarding eye donation

M.Phani Kumar¹, B.Sidda Naik²

1- Associate Professor, Dept of Pathology, Fathima Institute of Medical Sciences, Kadapa. 2- Professor, Dept of Ophthalmology, S.V.Medical College, Tirupati, A.P.

Abstract:

Eye donation is an act of donating one's eyes after his/her death. Only corneal blinds can be benefitted through this process not other blinds. It is an act of charity, purely for the benefit of the society and is totally voluntary. An Eye Bank is a charitable organization and is not for profit. The study aims to assess the knowledge of the undergraduate medical students of RIMS Medical College, Kadapa regarding eye donation. In this study, 98.2% of the under graduate students were aware that eyes could be donated after death. Only 50% knew that any person above 2 years can donate eyes. Only 16% knew that persons who has undergone Lasik cannot donate eyes.

Key words: Awareness; Corneal transplantation; Eye donation; Kadapa; Knowledge

Introduction

Sarvendriyanaam Nayanam Pradhaanam, goes the adage meaning that the eye is the most important of all organs in the body. Eye donation is an act of donating one's eyes after his/her death. Only corneal blinds can be benefitted through this process not other blinds. It is an act of charity, purely for the benefit of the society and is totally voluntary.

An Eye Bank is a charitable organization and is not for profit. India with its nearly 1.2 billion population needs a lot of eye care and hence there is an unmet need for eye donation. In the developing world, corneal diseases are a significant cause of visual impairment and blindness.

Important causes of corneal blindness include trachoma, corneal ulceration following xerophthalmia due to vitamin A deficiency, ophthalmia neonatorum, and the use of harmful traditional medicines, onchocerciasis, leprosy and ocular trauma [1-3].

Objective

The study aims to assess the knowledge of the undergraduate medical students regarding eye donation.

Materials and Methods:

Type of Study:

Cross sectional study. Study Design: Descriptive type of study. Study Population: Undergraduate medical students of RIMS Medical College, Kadapa.

Data Collection Procedure:

Pre-designed, pretested, semi-structured questionnaire developed for the purpose, containing questions about demographic details, awareness of eye-donation, sources of information and their reasons for donating and not donating eyes.

Study Period:

March to June, 2011. A total of 200 under graduate students were enrolled for the study.

Inclusion Criteria:

All the roll numbers of the students in a particular batch will be imputed and using the random number generator of Epi-info software package version 7.1.

Exclusion Criteria:

Students who were absent on the day of study were not taken.

Consent was taken from all the students.

Results:

Table 1: Correct responses to questions on eye donation (n=200)

Responses	No.	Percentage
Can eyes be donated	196	98.2
Ideal time for donating eyes is within 6 hours after death?	135	67.4
Cornea is removed from donors eye	131	65.7
Any person above 2 years can donate eyes	100	50.0
Maximum allowable time for storage of donor eye is 72 hours	42	21.1
Persons wearing spectacles /glasses can donate the eyes	139	69.4
Persons who has undergone Lasik cannot donate eyes	32	16.0
Person with HIV cannot donate eyes	196	98.2
Family members have pledged to donate their eyes	32	16.0
Eyes should be kept closed after death of donor by relatives	154	77.0
<1 hour time is taken for removing the donor's eye	80	40.0
Knows contact place for eye donation	52	26.1
Awareness about selling and buying of donor eyes	156	78.0
Willing to donate eyes	42	21.1
Awareness regarding eye donation is up to the mark in India	16	8.0

Table 2: Distribution of perceived reasons for donating eyes by donors: (n=200)

Reason	No.*	Percentage
donated eyes can give good results	80	40.0
friend / relative has received a donated eye	02	4.0
friend / relative has donated eye	32	16.0
eye donation is noble work	42	21.1
it is pleasure to help a blind person	100	50.0
impressed after reading an article	16	8.0

*Multiple responses

Table 3: Distribution of perceived reasons for not donating eyes (n=32)

Reason	No.*	Percent age
Lack of awareness	16	8
Objection by family members	32	16
Feels that body is ill-treated by eye donation	22	11
Dislike of separating eyes from body	22	11
Unsuitability to donate eye because of age	02	4
Unsuitability to donate eye because of health problems	02	4
eye donation will delay funeral and other religious rites after death	32	16
body organs should not be separated after death because of religious reasons	32	16
corneal transplantation yields poor results	16	8

*Multiple responses

Table 4: Source of information on eye donation (n=200)

Source	No.*	Percentage
Television	135	67.4
Newspaper	131	65.7
Magazine	100	50.0
Poster	42	21.1
Doctor	168	84.2
Radio	42	21.1
Friends	100	50.0
Family members	16	8.0

*Multiple responses

Discussion

The level of knowledge of medical students are important determinants in promoting eye donations as they are the future potential doctors. In order to function as effective promoters of eye donation medical students must possess the relevant knowledge as well as appropriate attitude and belief. In many countries including India the decision to donate eyes ultimately lies with family members. Many potential donors may be missed if doctors fail to approach family members about the possibility of eye donation and if they lack sufficient knowledge about eye donation to answer

questions or concerns of family members after death of the donors. They play an important role in not only treating patients but also responsible for improving patient behaviour.

In this study, we tried to assess whether medical students have the knowledge needed to maximize eye donation rates and, if not, to identify areas that could be targeted by future curriculum modifications. Majority of the students have satisfactory knowledge but it is not sufficient to make them good spokespersons for eye donation.

In this study, 98.2% of the under graduate students were aware that eyes could be donated after death. A study done in south Indian population showed that, 50.7% of participants were aware of eye donation [4]. A study done by Gupta, et al. in Bangalore reported that, of the 188 students, it was observed that 102 (96.2%) males and 80 (97.5%) females knew that eyes can be donated after death [5]. Information of eye donation by faculty members in medical college and mass media could be related to the high level of awareness in our study participants. Only 50% knew that any person above 2 years can donate eyes. Only 16% knew that persons who has undergone Lasik cannot donate eyes.

In the present study, though 98.2% were aware of eye donation only 21.1% were willing to donate eyes. A study done by Gupta A, on nursing students' around 58% were willing to donate [5]. In another study 64.5% were willing to donate their eyes [6]. Knowledge regarding the number of hours within which eye should be removed for donation was good (67.4%) in this study as compared to (38%) among nursing students at Bangalore [5] and (39.7%) in the study conducted by Kumar S et al, on students at Bhopal [7]. Only 40% of the students knew that it takes less than 1 hour for removing eyes after death. Very few studies have not assessed the knowledge of the students in this regard. This is important to remove the misconception that eye donation delays the religious rites after death.

Among the students, 98.2% knew that HIV infected persons are not eligible for eye donation. A study done by Dhaliwal on medical students at Delhi reported 38.8% only knew that HIV infected persons are not eligible for eye donation [8]. In the present study only 26.1% of the students knew about appropriate place for eye donation which is contradictory to the study of Nekar et al, who reported that 74% of the college students at Hubli knew about eye banks [9]. More than one-third of the participants were unable to name or locate an eye bank in this study. Misconceptions should be removed as medical students who are uncomfortable

with the idea of such donation will obviously make poor spokespersons for eye banking [8].

Majority of students have mentioned that they have to consult their parents for eye donation. Only when their parents agree they will be able to donate their eyes. There were different sources from which eye donation information has reached the students. Nearly 16% of students have said that their parents There is no international standardized questionnaire on eye donation knowledge available and this may be a limitation in comparing the findings of this study with various studies.

Conclusion:

The present study revealed that medical students were aware of eye donation, but the knowledge regarding the place of eye donation, time limit to collect cornea, storage, consent, age limit, contraindications, whom to contact were still not known clearly.

Acknowledgement

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Recommendations:

1. Medical students can be trained as volunteers for eye donation campaign.
2. Measures must be taken by all the concerned governmental and nongovernmental organizations to raise awareness on eye donation.

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Corresponding Author:

Dr. M.Phani Kumar, MD (Pathology),
Associate Professor,
Dept of Pathology,
Fathima Institute of Medical Sciences,
Kadapa, A.P.

Email: phanimeruva@gmail.com