

AN EVALUATION OF AWARENESS TOWARDS EYE DONATION IN NORTHERN INDIAN POPULATION

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ABSTRACT

The present study was planned with the objective of accessing awareness towards eye donation among general population. Out of the 250 subjects, 92.8% (232) knew that eyes can be donated after death; that they should ideally be donated within 6 hours of death was known to 102 (40.8%) of the subjects. The contact place for donation was known to only 82 (32.8%) of 250 subjects. The majority of the participants, 202 (80.8%) of 250 subjects, were either willing to donate eyes or had already pledged to donate their eyes. The perceived reason for donating eyes was nobility in the act of eye donation was the main motivational force according to 198 (82.5%) of the 240 subjects. Out of 179 subject, lack of awareness was cited as an important reason for people not donating their eyes among 67 (37.4%) of 179 subjects. Fifteen (8.3%) of 179 subjects disliked the idea of separating their eyes from their body and 45 (25.1%) sited objection by family members for not donating their eyes.

KEYWORDS : Awareness, Barriers, Eye donation, Donors, Motivation

Corneal diseases are a significant cause of visual impairment and blindness in the developing world. The major 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 (Krishnaiah, 2004; Dandona, 1998; Rekhi, 1991). The Andhra Pradesh Eye disease study (APEDS) reported the prevalence of corneal blindness at 0.13% (95% CI: 0.06-0.24), constituting 9% of all blindness (Dandona, 2001). APEDS also suggested a significant burden of corneal blindness in the rural population of Andhra Pradesh, of which 95% was avoidable. Although strategies to prevent corneal blindness are likely to be more cost-effective, visual rehabilitation by corneal transplantation remains a major treatment option for restoring sight in those who already have corneal blindness (Saini, 1996).

Approximately 18.7 million people are blind in India and 190,000 are blind from bilateral corneal disease. Every year, another 20,000 join the list (Kannan, 1999). The late Dr. Muthiah started the very first eye bank in India and he successfully performed the first corneal transplant in 1948 (Dandona, 1999). Even after more than 50 years, patients waiting for corneal transplants constitute a

considerable backlog, which continues to grow. The need, therefore, is to educate the masses about eye donation in an effort to increase the procurement of corneas.

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 (Saini, 1997). 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 (Diamond, 19987). With this background, they were admitted into this study with the objective of accessing awareness towards eye donation among general population. Well-informed population could be expected to influence eye donation rates. The education of paramedical early in their courses may lead to better procurement rates for donor organs.

MATERIALS AND METHODS

The current cross sectional study was planned and executed by the Department of General Medicine in collaboration with Department of Ophthalmology of a tertiary care teaching institution in the state of Haryana from January to July 2014 using pretested self-administered inventory. The study population consisted of general

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population residing nearby the medical college. They were informed and briefed about the purpose of study and requested to participate. Those who not willing to participate in the study were excluded. Anonymity of the subjects was maintained. Informed consent was obtained. Ethical committee approved the study.

Socio-demographic information related to age, sex, education, etc. was collected. Socio-economic status was assessed, based on the modified BG Prasad classification scale. Information about awareness on eye donation, perception regarding eye donation were collected. Reasons for not donating the eyes were also investigated. Data was entered in Microsoft Excel and analyzed using SPSS (Statistical Pack-age for Social Sciences) 21.0 programme. Data are expressed as proportion and percentages.

RESULTS

Out of the 250 subjects, 92.8% (232) knew that eyes can be donated after death ; that they should ideally be donated within 6 hours of death was known to 102 (40.8%) of the subjects. The contact place for donation was known to

only 82 (32.8%) of 250 subjects. The majority of the participants, 202 (80.8%) of 250 subjects, were either willing to donate eyes or had already pledged to donate their eyes. (Table 1)

The perceived reason for donating eyes was nobility in the act of eye donation was the main motivational force according to 198 (82.5%) of the 240subjects. Other major reasons were pleasure to help the blind (72.1%) and donated eyes can give vision to a person (68.3%). (Table 2)

Reason for not donating eyes is in subjects respondent are only 179. Out of 179subject, lack of awareness was cited as an important reason for people not donating their eyes among 67 (37.4%) of 179subjects. Fifteen (8.3%) of 179subjects disliked the idea of separating their eyes from their body and 45 (25.1%) sited objection by family members for not donating their eyes. (Table 3)

DISCUSSION

Well-informed community could be expected to influence eye donation rates. In this study 92.8 % of the people were aware that eyes could be donated after death. In a study among the south Indian population, 50.7% of

Table 1: Responses to the Questionnaire on Eye Donation (n= 250)

Responses	No.	%
Eye can be donated after death	232	92.8
Donated eye can be used for corneal grafting	179	71.6
Ideal time for donating eyes is within six hour after death	102	40.8
Know a person who has donated eye	7	2.8
Knows someone who has received a donated eyes	0	0.0
Know contact place for eye donation	82	32.8
Know there is an eyes shortage in India	188	75.2
Willing to donate eyes	202	80.8
Awareness about selling or buying donor eyes	0	0.0
Agree to sell donor eyes	0	0.0

Table 2: Distribution of Perceived Reasons for Donating Eyes by Donors (n=240)

Reasons	No.	%
Eye donation is a noble work	198	82.5
Pleasure to help the blind	173	72.1
Donated eye can give vision to a person	164	68.3
Influence after reading an article	8	3.3
A friend or relative has donated an eye	15	6.25
A friend or relative has received a donated eye	0	0.0
Influenced by a lecture	6	2.5

Table 3 : Distribution of Perceived Reasons For Not Donating Eyes (n=179)

Reasons	No.	%
Lack of awareness	67	37.4
Objection by family member	45	25.1
Feels body ill treated by eye donation	11	6.14
Dislike of separate eyes from body	132	73.7
Unsuitability to donate eye because of age	15	8.3
Unsuitability to donate eye because health problems.	18	10.05
Religious restrictions in separating eyes from the body after death	30	16.7
Signing eye donation card is like signing death certificate	25	13.9

participants were aware of eye donation. In another study among hospital staff, 97% of them had good to excellent knowledge about transplantation of various human organs (Singh, 2002). Information by mass media could be related to the high level of awareness in our study participants. A large number of subjects, 179 (71.6%) out of 250 knew that the donated eye is used for corneal grafting and 40.8 % knew that the ideal time for donation is within 6 hours of death. A study on medical and non-medical subjects also observed that 79.6% of medical subjects knew that eyes can be donated after death and 63.3% knew that it should be done within 6 hours (Manjunath, 2012).

Another study in the general population showed the awareness level on eye donation to be 73.8%(Manjunath, 2012). In this study, only 76 (31.6%) out of 240 subjects knew about the appropriate place for an eye donation. Present study showed that 188 (75.2 %) of 250 participants agreed that there is a shortage of eye donors and 202 (80.8 %) of 250 were either willing or had already pledged to donate their eyes. In a study among medical subjects, 87.8% of the respondents were willing to be eye donors. Willingness to donate eyes was less (41.5%) even among relatives of post-mortem cases who were aware of eye donation (Tandon, 2004). The nobility in the work by 82.5 % is prime reasons cited in the study for eye donation and pleasure to help the blind by 72.1% of the 240 participants. But lack of awareness was the reason for people not donating eyes according to 37.4% of the 179 respondents. Other reasons for not donating eyes included objection by family members, dislike of disfiguring the body, delaying of religious rites, and religious restrictions. Similar reasons were also reported in other studies

(Dandona, 1999; Phadke, 2002).

Mandatory consent for donation expressed before the death of the donor should ideally form the basis for eye donation. However, in the case of unavailability of such consent, consent from adult family members of the deceased donor should be obtained for eye donation. In a study done on the responses of relatives of post-mortem donors, only 44.3% of relatives of such cases gave consent for donation after intensive counseling. Mass media in the form of television, newspapers, magazines, and posters were important sources of information on eye donation. Other studies also found publicity campaigns and the media to be the major sources of information on this issue (Krishnaiah, 2004).

CONCLUSION

The present study observed that most of the participants were well aware of eye donation and most of them were inclined to pledge for eye donation. The perceived reasons for not donating eyes need to be considered while creating awareness about eye donation in the community. These subjects can be actively involved as volunteers in eye donation campaigns, wherein after proper training in counseling techniques, they can act as counselors for eye donors. They can also contribute by participating in creating awareness and motivate the people for eye donation during their postings in urban as well as rural community and to help to achieve "Vision 2020: The Right to Sight".

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