

Awareness of eye donation in nursing students in a small city of northern India

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Abstract

According to the World Health Organization, blindness due to corneal conditions is the fourth leading cause of blindness worldwide after cataract and glaucoma. In India, it is estimated that there are approximately 6.8 million people who have vision less than 6/60 in at least one eye due to corneal diseases. An important cause of visual impairment are corneal diseases due to conditions such as xerophthalmia, ophthalmia neonatorum, trachoma, leprosy and ocular trauma. Although many steps are taken by the Government for raising awareness regarding eye donation, still the number of donations that take place are far less than the number that is required. Our study was undertaken to look for awareness regarding eye donation in nursing students of a small city of northern India. This study helped in increasing their knowledge regarding eye donations. These students will help in spreading knowledge regarding eye donations in the community which will further help in increasing the number of eye donations, therefore leading to better chances for patients with corneal blindness.

Key Words: blindness, eye donation, awareness.

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INTRODUCTION

According to the World Health Organization, blindness due to corneal conditions is the fourth leading cause of blindness worldwide after cataract and glaucoma¹. In India, it is estimated that there are approximately 6.8 million people who have vision less than 6/60 in at least one eye due to corneal diseases². An important cause of visual impairment are corneal diseases due to conditions such as xerophthalmia, ophthalmia neonatorum, trachoma, leprosy and ocular trauma^{3,4,5}. Although many steps are taken by the Government for raising awareness regarding eye donation, still the number of donations that take place are far less than the number that is required. It

is partly because of lack of awareness regarding eye donation and partly because of religious sentiments. It is very important to raise awareness in the general population as most of the people do not have the required knowledge about eye donations. Nursing students are the future health care providers and stay in close contact with a large number of patients and their attendants. They spend most of their valuable time serving the patients and hence were admitted into this study with the objective to assess their knowledge, attitude and awareness regarding eye donation. This study helped in increasing their knowledge regarding eye donations. These students will help in spreading knowledge regarding eye donations in the community which will further help in increasing the number of eye donations, therefore leading to better chances for patients with corneal blindness.

MATERIAL AND METHODS

It was a cross sectional study, carried out in a Hospital based in a small city of Northern India in the year 2018. A pretested, semi-structured questionnaire was self-administered for collecting the necessary information after obtaining informed consent from 100 nursing students. The questionnaire was based on demographic details, awareness and knowledge regarding eye donation,

awareness regarding eye banks, source of information, reasons for donation and not donating and intention to donate eyes.

RESULTS

Out of 100 students, 100 were females (100%). Age varied from 18 to 21 years old with 41 (41%) students who were 18 years old, 32(32%) students who were 19 years old, 17 (17%) students who were 20 years old, and 10 (10%) students who were 21 years old. It was observed that 98 students (98%) knew that eyes can be donated after death; that they should ideally be donated within 6 hours of death was known to 58 (58%). The contact place for donation was known to only 12(12%) of 100 students. The majority of the participants, 92 (92%) of 100 students, were either willing to donate eyes and none had pledged to donate their eyes.

Table 1: Responses to Questionnaire

Responses	Number	% (n=100)
Eyes can be donated after death	98	98%
Donated eyes can be used for corneal grafting	78	78%
Ideal time for donating eyes is within 6 hours after death	58	58%
Knows a person who has donated eyes	2	2%
Knows someone who has received a donated eye	1	1%
Knows contact place for eye donation	12	12%
Willing to donate eyes	92	92%
Already pledged to donate	0	0%

Television was the most common source of information on eye donation for 68 (68%) students, followed by word of mouth in 22 students (22%) and the print media for 10 (10%) students (Table 2).

Table 2: Source of information

Source	Number	%
Television	68	68%
Word of mouth	22	22%
Print media	10	10%

Fifty six percent students wanted to donate their eyes to help other people, followed by 24% who thought that somebody will get a vision from their noble deed, 11% wanted to see the world through someone else’s eyes, 8% wanted to get the blessings and 1% had other reasons. (Table 3)

Table 3: Reasons for donating eyes

Reason	Number	%
To help people	56	56%
Somebody will get vision	24	24%
To see through someone else s eyes after death	11	11%
To get blessings	8	8%
Other	1	1%

The fear of deformity after death was given as the most common reason for not donating the eyes by 32% students, whereas 12% were afraid that they would born blind in next life. 21% had religious reasons, 19% thought they could not donate their eyes due to eye problems, 6% due to some medical conditions, whereas 3% thought they needed more information to decide. (Table 4)

Table 4: Reasons for not donating eyes

Reason	Number	Percentage
Deformity after death	32	32%
Will be born blind in next birth	12	12%
Due to religious reasons	21	21%
Eye problems	19	19%
Medical problem	6	6%
It would not be useful	3	3%
Need more information to decide	3	3%
Other	4	4%

DISCUSSION

Out of 100 nursing students, 98 (98%) were aware that eyes could be donated after death, which was similar to a study conducted by Singh *et al*⁷ and Golchet *et al*⁸ in comparison to a study conducted by Priyadarshan *et al* in which only 50.7% of participants were aware of eye donation⁹. Though a large number of students were aware of eye donation, only 58% knew about the ideal time for donation. Out of all, 58% students knew that the ideal time for donation is within 6 hours of death, which is comparable to a study conducted by Meghachandra *et al* in 2007¹⁰. This was way high than a study conducted by Gupta *et al* in 2009¹¹ and way low than a study conducted by Magdum *et al* in 2015¹². Only 12% of the students were aware of a contact place for eye donation which was similar to a study conducted by Kumar *et al* in Bhopal¹³. In a study conducted by Sadana *et al*¹⁴ only 26% of the students knew about appropriate place for eye donation which was a little higher than our study. Similarly, according to study conducted by Singh *et al*¹⁰ among medical students in Delhi the contact place for donation was known to only 27.2% compared to 32.9% in a study conducted by Gupta *et al*¹¹. This shows that though the people would be willing to donate their eyes, they do not have the appropriate knowledge and idea about how to go about it. Though 92% of the students were willing to donate eyes, none had pledged to do so which was almost similar to a study conducted by Gupta *et al* in 2009¹¹ and Dhaliwal *et al* in 2002¹⁵ According to a study conducted by Bharti *et al*¹⁶ in Malaysia only 27% were willing to pledge their eyes and it was observed by them that the willingness and knowledge about eye donation in Indian population was way higher than Malaysian students. There were strong reasons for both donating and not donating the eyes. The reasons for both were also

assessed and most of the students wanted to donate their eyes to help other people (56%), followed by 24% who wanted to give vision to someone by donating their eyes. The fear of deformity after death was the most common fear for not donating the eyes, followed by religious sentiments which accounted for 21%. Lack of awareness was also one of the reasons for not donating the eyes. Gupta *et al* in 2009 also reported lack of awareness to be a cause for not donating the eyes in 12% cases¹¹. It is to be noted that when initially asked most of the students were eager to donate their eyes but most of them had their reasons for both donating and not donating the eyes. Hence it is important to clear all the taboos regarding eye donation and to give proper education to these students so that they can counsel the community further regarding the same. Television and print media played a great part in creating the awareness according to these students which was 68% and 10 % respectively. The present study revealed that nursing students were aware of eye donation but had little knowledge regarding the same. Hence it is important to educate them about the eye donation programs so that they can be actively involved in counselling and motivation of people for eye donation. More awareness needs to be created and the fear and taboo regarding eye donation in our society has to be removed for the success of these eye donation programs. Strengthening of our information, education and communication programs are needed for better implementation of such important programs such as eye donations.

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