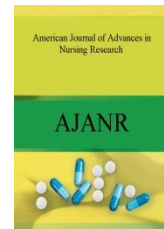




## AMERICAN JOURNAL OF ADVANCES IN NURSING RESEARCH

Journal homepage: [www.mcmed.us/journal/ajanr](http://www.mcmed.us/journal/ajanr)



### KNOWLEDGE AND ATTITUDE REGARDING EYE DONATION

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#### Article Info

*Received 25/06/2016*

*Revised 15/07/2016*

*Accepted 17/07/2016*

**Key word:** Eye donation, Glaucoma, Cataract, Trachoma, Blindness and corneal transplantation.

#### ABSTRACT

The problem of blindness all over world is as old as mankind itself. It has been estimated that every five seconds one individual goes blind in the world. Globally the number of blind and visually disabled persons is growing rapidly. The leading causes for blindness are cataract (55%), trachoma (20%), glaucoma (0.8%), malnutrition (2%), and injuries (1.2%). Childhood blindness is one of the major problems occurring due to optic nerve atrophy (20%), congenital malformations (15%), infection, and trauma. In India, there are approximately 120 lakh blind in both eyes and 80 lakh blind in one eye, which is about one fourth of the total blind population of the world. The diseases of the cornea are one of the major causes of blindness in India for which the vision can be restored by eye donation. The number of people awaiting corneal transplant is out numbering the available donor tissues. Corneal Transplantation is the only effective restoration for the replacement of human tissues in the eye. Hence the investigator felt the need to conduct a study to assess the knowledge and attitude of nursing students on eye donation in selected nursing colleges. The quantitative approach descriptive correlation research design was conducted for 100 B.Sc (basic) nursing students in private nursing colleges in Jaipur, by adopting purposive Quota sampling technique. The tool was prepared by extensive review of various literature. The tool contains 3 sections. Section-A is demographic variables of B.sc (nursing) student. And section-B includes 45 structured knowledge questionnaires regarding eye donation and section-c contains 14 questions regarding attitude on eye donation. The data was collected by structured questioner method. The collected data were compiled and analyzed with help of descriptive and inferential statistics. The result showed highest percentage (49%) of the students had average knowledge and only 7% had excellent knowledge regarding eye donation. The Mean, median and standard deviation of knowledge questionnaire were 18.67, 20.5 and 5.27 respectively, Majority (72%) of the students had positive attitude towards eye donation. The Mean, median and standard deviation of attitude scale were 36.55, 37 and 6.11 respectively, the computed Karl Pearson correlation co efficient showed that there was a positive correlation between level of knowledge and attitude score of nursing students towards eye donation and There was no significant association of knowledge and attitude with demographic variables of the study at .05 level of significance. Providing support and education to students in health sciences programs is one means of facilitating the goal of increasing the eye donation available for transplant in our communities.

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Research Article



## INTRODUCTION

The problem of blindness all over world is as old as mankind itself. It has been estimated that every five seconds one individual goes blind in the world. Globally the number of blind and visually disabled persons is growing rapidly. The leading causes for blindness are cataract (55%), trachoma (20%), glaucoma (0.8%), malnutrition (2%), and injuries (1.2%). Childhood blindness is one of the major problems occurring due to optic nerve atrophy (20%), congenital malformations (15%), infection, and trauma. In India, there are approximately 120 lakh blind in both eyes and 80 lakh blind in one eye, which is about one fourth of the total blind population of the world. This means 14.9 out of every 1000 people in India are blind compared to just 3 per 1000 in the developed countries. Blindness in most cases is avoidable that is, either preventable or curable. Of the 120 lakh blind, approximately 103 lakh are curable by relatively simple operations, unfortunately yet they remain uncured. About 96 lakh persons suffer from cataract which can be cured by a simple operation. Seven lakh of Indian population suffering from corneal blindness, mostly children in their early childhood, can be cured by corneal transplantation. The cornea can get damaged through accidents, chemical burns, flying debris or road accidents, infections, malnutrition as well as Children while playing with sharp objects (e.g. bows and arrows, pen, pencil, etc.) can accidentally damage their cornea. Corneal blindness can also happen to elders. Some of the industrial causes are chemical burns, flying debris or road accidents. The cornea can get damaged due to infections and malnutrition also [1,2].

Organ transplantation to be a viable option for patients with end-stage organ failure, tumors of heart, lung and liver etc. Live donors transplants are a viable alternative for patient in need of new organs who however depend entirely on the generosity of donors and their family who are willing to make their life saving gift to recipient. Organ transplantation helps patient to lead an active and normal life. There is a severe lack of donor eyes in India as only 4,500 corneal operations are being performed every year.

There are a few compelling reasons why one need to donate eyes and these include 1.5% of the population are unnecessarily blind, 25% live below the poverty line; 2.5 million children are suffering, including those who don't have the correct spectacles 32% are under 15, 60% of blind children will not make it to adulthood. 75% live in rural areas, there are 12,000 ophthalmologists in the country but the majorities of them live and work in the urban areas, 40% live in rural areas in central & northern India where there is little access to quality eye care services. Any person of any age can donate eyes. Even if the deceased has medical history of hypertension, diabetes, asthma, tuberculosis etc., and even spectacle

wearers and people who have undergone cataract operation can donate eyes

The diseases of the cornea are one of the major causes of blindness in India for which the vision can be restored by eye donation. The number of people awaiting corneal transplant is out numbering the available donor tissues. Corneal Transplantation is the only effective restoration for the replacement of human tissues in the eye. This is considered as a precious and possessed gift of sight for millions of people all over the world.

There is a severe lack of donor eyes in India as only 4,500 corneal operations are being performed every year, while 30,000 new victims are added each year to the long list of 7 lakh patients already waiting to be cured. Although there are enough qualified surgeons and plenty of potential patients, corneal transplantation cannot be carried out due to lack of donor corneas. Eye donation means people pledging to donate their eyes after death to be used for corneal grafting for restoring sight to corneal blind people. In India there are more than 80 lakh deaths every year but sadly the corneal donations do not exceed a few thousand.

Eye donation is an act of donating one's eyes after his/her death. Eyes are removed only after death. All one needs to do is bequeath his or her eyes by taking a simple pledge to donate the eyes after death. A person wishing to donate eyes should make close family members aware of their intentions. Any person of any age can donate eyes. Even if the deceased has medical history of hypertension, diabetes, asthma, tuberculosis etc., and even spectacle wearers and people who have undergone cataract operation can donate eyes. Death due to unknown causes People, who die due to infections such as rabies, syphilis, infectious hepatitis, septicemia, and AIDS, cannot donate.

The World Health Organization (W.H.O) estimates that for every 5 seconds, someone goes blind. Globally 37 million people are blind and of these nearly 10 lakhs blind people are willing for corneal transplantation. Nursing students are the future health care providers for the community. Well informed nursing students could be expected to influence eye donation rates. . Health-care professionals' attitude towards eye donation and their willingness to approach relatives of a brain dead patient, significantly influence the bereaved family's decision-making process on consent. Increased eye procurement therefore depends on attitudes of health professionals toward eye donation. In clinical practice, nurses are the first professionals to identify a potential donor and notify the eye transplant coordinator or team. Hence the investigator felt the need to conduct a study to assess the knowledge and attitude of nursing students on eye donation in selected nursing colleges [3,4].



## Title

“A study to assess the knowledge and attitude regarding eye donation among students in selected nursing colleges in Jaipur”.

## OBJECTIVES OF THE STUDY

- To assess the knowledge of the students of nursing colleges regarding eye donation.
- To measure the attitude of nursing students regarding eye donation.
- To find out the co-relation between knowledge and attitude regarding eye donation among students in selected nursing college.
- To develop an information booklet regarding eye donation.

## METHODS

The research approach used for the study was quantitative. The conceptual framework was based on the Theory of Planned Behaviour (TPB) of Icek Ajzen (1988, 1991). A descriptive correlation research design was used for this study. The target population is B.Sc nursing students except 1st years and accessible population is 100 B.Sc (basic) nursing students in private nursing colleges in Jaipur, selected by non probability purposive Quota sampling technique. The tool was prepared by extensive review of various literature, and validation of tool was obtained from expert opinion in the field of nursing.. The tool contains 3 sections. Section-A is demographic variables of B.sc (nursing) student. And section-B includes 45 structured knowledge questionnaires regarding eye donation and section-c contains 14 questions regarding attitude on eye donation. Pilot study was conducted for the 10% of the total sample and feasibility of the tool and study was observed. The study was found feasible. Actual data collection was done for 100 B.Sc nursing students from various private nursing college in Jaipur The collected data were compiled and analyzed with help of descriptive and inferential statistics.

## RESULTS

Majority (50%) of students were within the age group of 20-21 years, Majority of the participants (67%) were males. Majority (95%) of the subjects belonged to Hindu religion; Majority (99%) of the participants did not have any of their family members who had donated their eyes. Majority (99%) of the participants didn't have any family members who had pledged their eyes. All (100%) of the participants' acquaintances had not donated their eyes. All (100%) of the participants' acquaintances had not pledged their eyes.

Highest percentage (49%) of the students had average knowledge and only 7% had excellent knowledge regarding eye donation. The mean, median and standard

deviation of knowledge questionnaire were 18.67, 20.5 and 5.27 respectively. Area-wise analysis of the knowledge showed that the mean percentage (61%) of knowledge scores was highest in the area of definition of eye donation and least (46.66%) in the area of procedure of eye donation.

This finding is supported by a study conducted by Suresh K. (1995) among 2522 urban population to assess the awareness of eye donation and willingness to pledge eyes for donation in urban population of India. The data was collected by interview method. The results showed that age-gender adjusted prevalence of eye donation was 73.8% but only 1.9% had pledged their eyes. In illiterate subjects significantly less awareness was found subjects aged 70 years or more, subjects of lower socioeconomic status, females and Muslims. Awareness of eye donation was 44.9%. Willingness to pledge eyes for donation was significantly lower in Muslims than in Hindus, and in subjects aged 60 years or more. The study revealed that the information about distribution and demographic association of awareness and willingness for eye donation could help in developing strategies to increase procurement of corneas for dealing with corneal blindness [5-7].

1. Majority (72%) of students had positive attitude towards eye donation 18% of the students had highly positive attitude and least (10%) had negative attitude towards eye donation. The mean, median and standard deviation of attitude scores were 36.55, 37, and 6.11 respectively.

This study finding is supported by a study conducted on undergraduate nursing students' attitudes towards organ donation in an Italian university. The study's source population consisted of third-year undergraduate nursing students enrolled in seven nursing schools from an Italian university during 2008. Respondents completed self-administered quantitative with 61 questions, including the Organ Donation Attitude Scale. Findings Of the study showed that 378 students contacted, 183 (48%) completed all survey questions; 140 were females (76.5%). The median score of students' attitude scores towards organ donation was 151 (the attitude is positive when the score is higher than 161). No significant correlations were found to exist between attitude and demographic variables of the study.

2. The computed Karl Pearson correlation coefficient showed that there was a positive correlation between level of knowledge and attitude score of nursing students towards eye donation. But there was significant correlation between knowledge and attitude of nursing students regarding eye donation.

3. There was no significant association of knowledge and attitude with demographic variables of the study at 0.05 level of significance.



### Recommendations

Keeping in view of the present research study findings, the following recommendations have been made.

- A similar study can be undertaken on a larger sample of nursing students.
- A study can be conducted to evaluate the

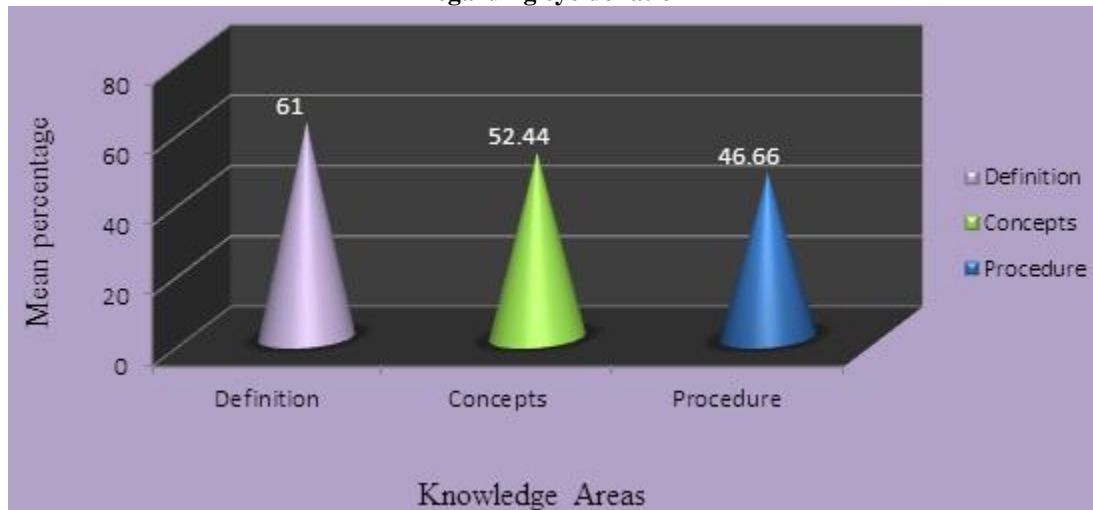
effectiveness of planned teaching programme on eye donation among nursing students.

- A similar study can be undertaken among adults in rural community.
- A similar study can be conducted among different health care professionals.

**Table 1. Mean, median and standard deviation of attitude scores**

Mean	Median	SD	Attitude
36.55	37	6.11	Positive

**Figure 1. Bar diagram showing Area- wise mean, SD and mean percentage of knowledge scores of nursing students regarding eye donation**



### CONCLUSION

Health care professionals have a responsibility to be informed about the eye donation and preservation process. Health care educators should ensure that students are provided with a curriculum that offers the opportunity to increase students' understanding of eye donation and various cultural beliefs (with opportunities to discuss their

own beliefs). Then when those students become health care professionals, they will be able to provide support and information to families when the situation arises. Providing support and education to students in health sciences programs is one means of facilitating the goal of increasing the eye donation available for transplant in our communities.

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