



COMPARISON OF AWARENESS OF EYE DONATION AMONG FIRST YEAR AND FINAL YEAR MBBS STUDENTS.

Ophthalmology

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ABSTRACT

Context: Nearly 1.9 million corneal blind patients are already there across India, and approximately 20,000 are added every year. This results in demand for eye donation annually to combat corneal blindness. Hence awareness regarding the same is very essential. **Aim:** To assess the awareness and perception of first-year and final-year MBBS students towards eye donation. **Settings and design:** A cross-sectional, comparative study was conducted in N.C. Medical college and hospital. First and final-year medical students were chosen as participants of study. **Methods and Material:** A questionnaire (Google form) was filled out by participants consisting of 11 questions, that include participants' demographic profile, awareness, and sources of information about eye donation, motivational force, pledging, reason for non-donation and their willingness towards eye donation. **Statistical analysis used:** The data was compiled in a Microsoft Excel spreadsheet and analysed using SPSS software. **Results:** 214 participants filled out the questionnaire. 100 % of final year and 96% of first-year MBBS students ($P < 0.02$) were well appraised of eye donation. Most of the students in both groups were motivated by Social and Print media regarding eye donation. It was also seen that the maximum number of students had knowledge that prior pledging can be done in eye banks and online, and many students wanted to pledge for eye donation but due to the objection by family members, they were restricted. **Conclusion:** Awareness of eye donation is higher among final-year MBBS students compared to first-year MBBS students.

KEYWORDS

Medical Graduates, Eye Bank, Eye Donation, Knowledge.

INTRODUCTION:

Eye donation involves the recovery, preparation, and delivery of donated eyes for corneal transplantation and research purposes.^[1] Based on the current accessibility and its consumption rates of donor eyes, there is fourfold increase in demand over current availability.^[2] This study focuses on the medical students at a tertiary care teaching hospital. They were chosen as they represent our country's young and well-trained cadre. The intention of this study is to measure the knowledge, willingness, and barriers regarding eye donation among medical students and thus enhance the awareness of eye donation and importance of promoting this endeavour.

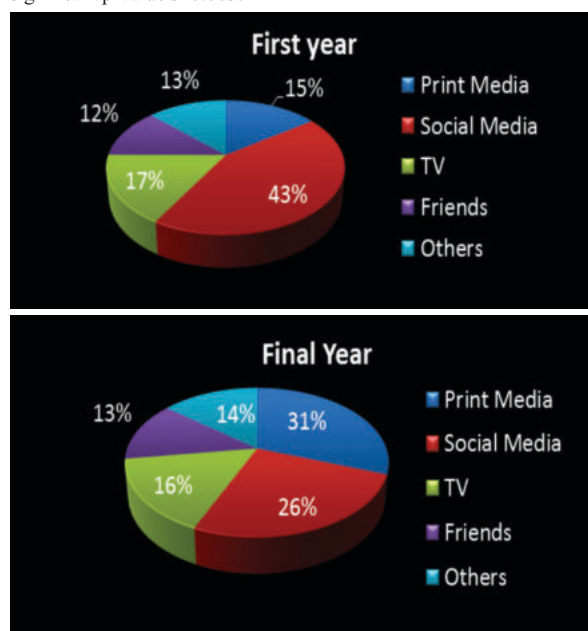
MATERIALS AND METHODS:

A cross-sectional and comparative study was carried out in a tertiary care teaching hospital of rural area of panipat (N.C. Medical College and Hospital, Israna, Panipat). First and final year medical students were chosen as the participants of study. The scarcity of availability and increased requirement of donor eyes were explained to them and consent was obtained. They were given close-ended, semi-structured questionnaire in English and were asked to answer via google form consisting of 11 questions that includes participants' demographic profile, awareness and sources of information about eye donation, motivational force, pledging, reason for non-donation, and their willingness towards eye donation. The total time allotted to complete the questionnaires was 45 minutes. The responses of 214 MBBS students (96 first year and 118 final medical year students) who completed more than 50% of questionnaire were analysed. Excel sheet was used for data entry and SPSS software was used for analysis of study. The value of $P < 0.05$ was taken as statistically significant. The non-responded questions by the students were taken as a negative response for analysis.

RESULTS:

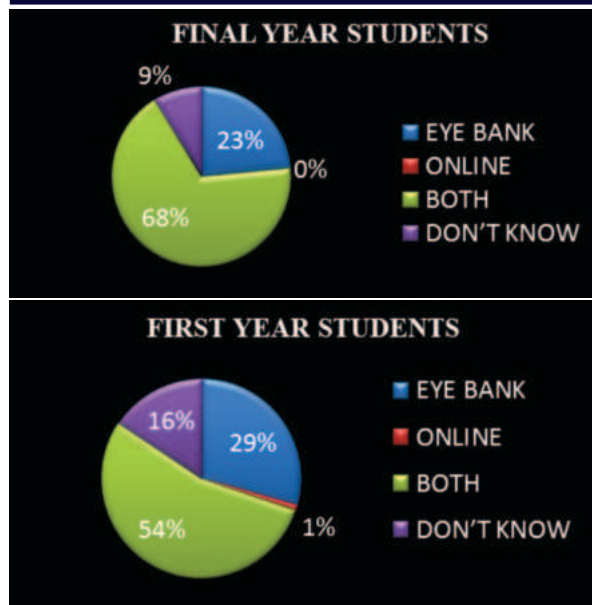
Table shows the distribution of students according to their awareness and willingness for eye donation. Among the first year medical students, 95.80% were aware about eye donation and among the final year students from these 90.50% were showing 100% were aware of this. This data had a significant p-value of 0.02. It was also seen that among the first year students 90.50% students showed the willingness for eye donation in comparison to 82.8% students from final year. This data had a non-significant p-value of 0.1. It also shows the distribution of students according to pledging and technical aspect for eye donation. Among the first year students 9.5 % pledged for eye donation and among final year students 17.2% pledged for eye donation. This data had non-significant p-value of 0.051. Among the first year

students 58.2 % students were aware of the fact that family member can donate eyes of a deceased person and among final year students 81.9 % students were aware of this. This data had a significant p-value of < 0.001 . It also shows the distribution of students according to their knowledge about eye donation. Among the first year students 85.3 % Students were aware of the fact that persons wearing glasses can do eye donation and among the final year student 91.50% had this knowledge. This data had a non-significant p-value of 0.07. It was also seen that among the first year students 44.1 % students had the knowledge that person who underwent cataract surgery can do eye donation in comparison to 62.3 % students from final year. This data had a significant p-value of 0.003.



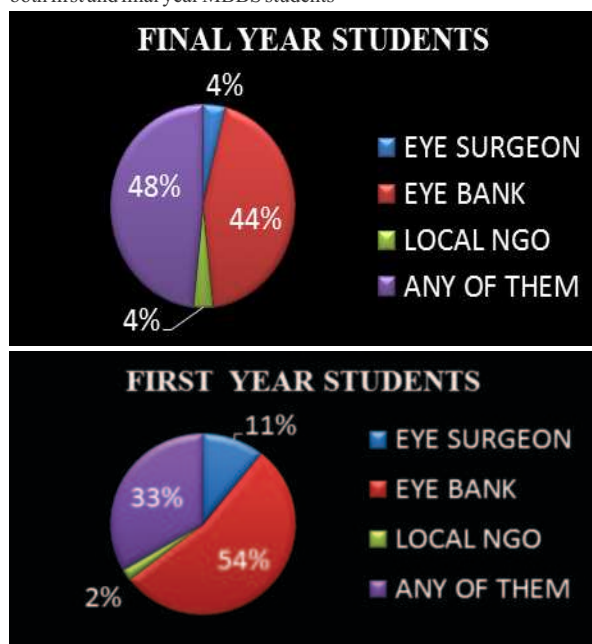
BAR GRAPH 1- SOURCES OF INFORMATION

Print and social media were two most common sources of information regarding eye donation in both Groups [Bar graph 1]. Bar Graph 1 depicts the various sources of information about eye donation in both first and final year MBBS



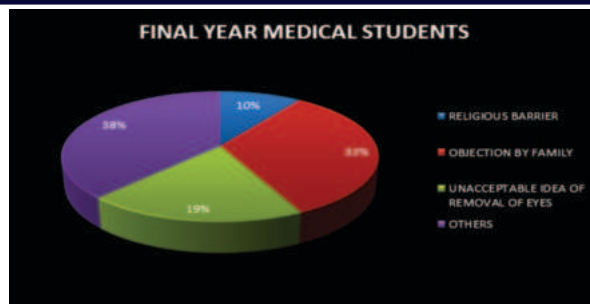
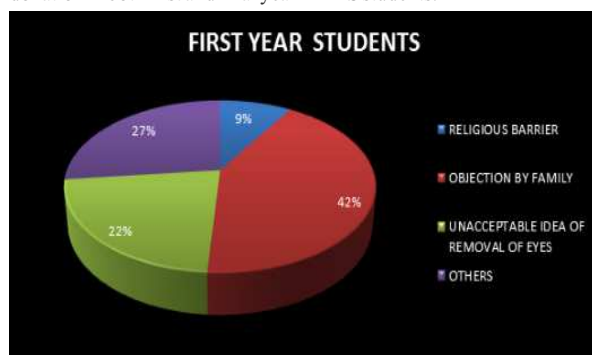
BAR GRAPH 2-WHERE CAN YOU PLEDGE FOR EYE DONATION?

Bar Graph 2 depicts the knowledge about pledging for eye donation in both first and final year MBBS students



BAR GRAPH 3- WHOM TO CONTACT FOR EYE DONATION?

Bar Graph 3 depicts the knowledge about whom to contact for eye donation in both first and final year MBBS students.



BAR GRAPH 4 - Reasons for not pledging/donation of eyes

Bar Graph 4 depicts the Reasons for not pledging/donation of eyes. The most common reason for not pledging eyes was objection from family which was 42.2% percent of first year MBBS students and 33% of final year MBBS students.

DISCUSSION-

According to the results of this study, 95.80% of first year MBBS students and 100% of final year MBBS students knew that eyes can be donated after death. Sushma et al, with a similar study, ^[3] found that awareness among medical and paramedical students in tertiary care hospitals was 99.2 percent, which is considered much closer to the desired result. Efforts must be made to identify knowledge and awareness gaps among students, especially students in health services, and move education from a curriculum-based model to a holistic intellectual approach. ^[4]

When asked about the sources of awareness about eye donation, the majority of participants indicated that the media is their main source of information. The accelerated development of technology and increased access to the Internet has allowed the younger generation to easily gather information. This shows the important influence of the mass media on young people. ^[5] Similarly, Kacheri et al. ^[1] found that 46 percent of participants considered media as their main source of information. Access to information is no longer a problem, but ensuring that information reaches the target audience has become a significant obstacle due to many disruptions. Either via translation errors or the sheer volume of information released, the intended message is lost. These factors should be considered, especially when creating educational materials. ^[6]

In this study, the most common reason to not pledge eyes was objection from family member which was 42.2% percent of first year MBBS students and 33% of final year MBBS students. It differs from similar studies conducted by Basnet et al. ^[7] and Williams and Muir ^[8], where students justified their refusal mainly due to lack of knowledge and awareness. Although 17.2% of final year MBBS students and 9.5% of the first year MBBS students answered that they are ready to become an eye donor, the question remains how many donations will follow, when that time comes, given the societal and familial norms that act as barriers. India regards the family as a sacred institution. Some pledges may not be result into eye transplantation if they are left to the discretion of loved ones. ^[9] Basic reincarnation religious beliefs dominate the majority. The aim is to strengthen the belief system in individuals who adapt to the collectivism prevailing in Eastern societies, which social scientists describe as influencing decisions affecting most aspects of life.

Despite measures to increase public awareness to improve eye donation, the gap between demand and supply of corneas in our country is huge. ^[10] Eye donation is celebrated in India from 25th august to 8th September every year since 1986 after following the pledge to donate eyes by our late Prime Minister of India, Shri Rajiv Gandhi, on the occasion of his birthday, i.e., on 25th August. ^[11]

The pledge is a public awareness campaign to improve eye donation rates in India. ^[12] Until then, the concept of promise applies; final year medical students were more experienced than first year students in our study. In addition, the knowledge of medical about promise is much higher compared to previous studies. ^[13] Eye transplant rates are low in India and establishing eye banks is essential to combat this problem. ^[14]

CONCLUSION-

It was discovered that final year medical students have a greater

awareness than first year medical students. Medical students are the backbone of the healthcare system and can be a major source of inspiration for patients and their relatives to donate their eyes. Regular eye donor awareness campaigns are necessary for the community as well as for medical students attending hospitals and institutions. In the long run, this will make the nation's eye donation program more intense in order to assist clear the backlog. Medical students can participate actively in eye donation campaigns as volunteers and, with appropriate training in counselling approaches, as counsellors for eye donation. Although hospitals underuse this resource, hospital fatalities are a good supply of fresh tissue for curing corneal blindness. Therefore, knowledgeable and astute medical and nursing personnel can be quite helpful in swaying the patient party and convincing them to support this admirable cause.

Key Message:

Eye donation is the need of the hour as people are turning blind daily. Awareness among medical students for this Nobel cause is very much needed to motivate people for eye donation.

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