

“EVALUATING THE IMPACT OF STRUCTURED EDUCATIONAL INTERVENTION ON KNOWLEDGE OF EYE DONATION AMONG NON-MEDICAL UNDERGRADUATE STUDENTS IN SELECTED EDUCATIONAL INSTITUTIONS OF KANPUR, UTTAR PRADESH”

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Abstract:

One of the main causes of vision impairment, especially in environments with limited resources, is corneal disorders.¹ The lack of donor corneas limits the success of corneal transplantation, despite the fact that it can successfully restore vision. Many patients in India continue to put off receiving treatment due to the disparity between supply and demand.

This scarcity is largely caused by a lack of knowledge and false beliefs about eye donation, particularly among non-medical people². Educational interventions have the potential to enhance comprehension and foster favourable attitudes regarding donations.

In this study, 60 non-medical undergraduate students chosen by convenience sampling participated in a Single-group pre–post study. A standardized questionnaire was used to gather information both before and after a teaching program. The results demonstrated that participants' starting knowledge levels were low. Their comprehension of eye donation significantly improved after the intervention. The instructional program's efficacy was validated by statistical analysis.

According to the study's findings, organized educational techniques can raise awareness and possibly encourage more people to donate their eyes.

Keywords: effectiveness, Knowledge, Eye donation, Non-medical students.

INTRODUCTION:

Eye donation is considered a generous and altruistic act that significantly contributes to restoring vision and enhancing the quality of life of individuals affected by corneal blindness. Although medical advancements and awareness regarding organ donation have increased over time, a noticeable gap still exists between the willingness of individuals to donate and the actual rate of eye donations. This gap is largely influenced by limited awareness, prevailing myths, cultural factors, and inadequate knowledge about the procedure

and its benefits. Structured teaching programs serve as effective educational strategies to improve understanding and address common misconceptions. Educational activities that are thoughtfully designed can improve understanding, address common misconceptions, and gradually build a more positive perception of eye donation³. With this perspective, the study explores how a structured teaching program influences the knowledge of eye donation among non-medical undergraduate students in selected colleges of Kanpur, Uttar Pradesh. The insights

gained may be useful in shaping more effective awareness strategies, ultimately encouraging eye donation and contributing to improved community health.

NEED FOR THE STUDY:

Eye donation is a vital aspect of organ donation that can significantly improve the quality of life for individuals suffering from corneal blindness and other ocular diseases.⁴ Despite advancements in medical science and increased awareness campaigns, the rate of eye donation remains insufficient to meet the growing demand for corneal transplants⁵. Many people are unaware of the process, eligibility criteria, and the life-changing benefits of donating eyes after death. Conducting this study in selected colleges at Kanpur, U.P., is important because it can assess the current level of knowledge among students and evaluate the impact of structured educational interventions. The findings can guide future awareness campaigns and educational strategies, ultimately contributing to an increase in eye donation pledges and helping reduce the burden of preventable blindness in the region.

PROBLEM STATEMENT:

“Evaluating The Impact Of Structured Educational Intervention On Knowledge Of Eye Donation Among Non-Medical Undergraduate Students In Selected

Educational Institutions Of Kanpur, Uttar Pradesh”

OBJECTIVES OF THE STUDY:

- ❖ To Measure Non-medical undergraduate students' initial level of awareness regarding eye donation.
- ❖ To compare knowledge scores before and after an organized educational intervention in order to evaluate its effect.
- ❖ To investigate the connection between the students' chosen demographic traits and baseline knowledge scores.

❖ HYPOTHESIS:

H₀₁-The pre-test and post-test mean knowledge scores on eye donation among undergraduate students who are not medical students will not differ statistically significant.

H₀₂: Among non-medical undergraduate students, there won't be a statistically significant correlation between pre-test knowledge scores on eye donation and specific demographic characteristics.

H₁: The mean knowledge scores of non-medical undergraduate students about eye donation will alter statistically significantly between the pre-test and post-test.

H₂: Among non-medical undergraduate students, pre-test knowledge scores on eye donation will be statistically significantly correlated

with certain demographic characteristics.

❖ ASSUMPTIONS:

1. Non-medical degree students may have insufficient knowledge regarding importance of eye donation.
2. Structured teaching programme may be effective in enhancing knowledge regarding importance of eye donation.
3. Non-medical degree students may participate in the study and respond correctly.
4. Selected demographic variables may influence the non- medical degree students about importance of eye donation.

LIMITATIONS:

- The study was confined to non-medical degree students from selected colleges in the study area.
- The study's modest sample size of 60 participants may have an impact on the findings' external validity and generalizability.
- The study only included students who were accessible during the time of data collection.

- Only pupils who could read and speak English fluently were allowed to participate.

METHODOLOGY:

RESEARCH APPROACH: An Evaluative quantitative research approach was adopted for this study.

RESEARCH DESIGN: One group pretest–post test design was used in this study.”

SETTING OF THE STUDY:

Undergraduate non-medical students from particular Kanpur, Uttar Pradesh, educational institutions made up the study's target population.

SAMPLE: Non-medical undergraduate students enrolled in the chosen colleges made up the study sample.

SAMPLING TECHNIQUE:

A non-probability convenience sampling method was used to select participants who were available and willing to participate in the study.

SAMPLE SIZE: The total sample size comprised 60 non-medical degree students.

VARIABLES UNDER STUDY

DEPENDENT VARIABLE:

Undergraduate students who are not medical students' level of knowledge about eye donation.

INDEPENDENT VARIABLE: organized educational program about eye donation.

DESCREPTION OF THE TOOL

A structured questionnaire was developed to collect data for the study. The tool was divided into two parts.

Part A: This section comprised nine items that captured the demographic profile of the participants. It included variables such as age, gender, Religion, marital status, family structure, educational attainment, monthly household income, housing location, and information source.

Part B: It contains structured questionnaire. It can be divided into four sections

- **Section I:** Questions related to knowledge on visual blindness
- **Section II:** Questions related to knowledge on organ donation
- **Section III:** Questions related to knowledge on eye donation
- **Section IV:** Questions related to knowledge on eye banking

This section consists of structured questionnaire of 36 questions related to knowledge on importance of eye donation. All questions put together carry a total of 36 marks. 36 questions were developed with multiple choices with correct answer. Each question carries one mark.

SCORING:

- Above 75%- Adequate knowledge

- 50-75%- Moderate knowledge
- Below 50%- Inadequate knowledge

S. no	Variable	Frequency	Percentage
	of information	05	13.9%
a.	TV	10	27.7%
b.	Radio	12	33.3%
c.	Newspapers	13	36.1%
d.	Friends		
e.	Doctor		

DATA ANALYSIS:

The collected data were organized and analysed in accordance with the objectives and hypotheses of the study. Data analysis involves arranging and interpreting information in a meaningful way to answer research questions and test hypotheses. Both descriptive and inferential statistics were used to interpret the findings.

The results were presented under the following sections:

Section 1: Participants' demographic characteristics were distributed by frequency and proportion.

Section 2: Knowledge ratings on eye donation are distributed among undergraduate students who are not medical students.

Section 3: A paired t-test was utilized to assess the disparity between the mean pre-test and post-test knowledge scores.

Section 4: Relationship between certain demographic factors and pre-test knowledge results.

SECTION 1: Participants' demographic characteristics were distributed by frequency and proportion.

Table:1- Frequency and percentage distribution of participants based on their source of information regarding eye donation.

(N= 60)

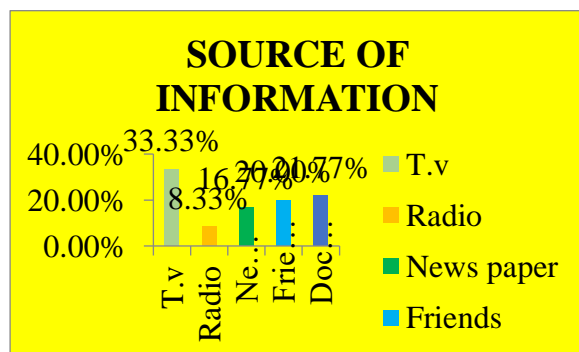


Figure-1: Percentage distribution of participants based on their source of information about eye donation.

Table 1 & Figure1: Shows that according to their source of information majority of sample 20(33.3%) were obtained from TV, 05(8.33%) were obtained from Radio, 10(16.77%) were obtained from Newspaper, 12(20.00%) were obtained from Friends, 13(21.77%) were obtained from doctors.

Section 3: A paired t-test was utilized to assess the disparity between the mean pre-test and post-test knowledge scores.

Tes t	M ean	Sta nda rd error of - mean	Sta nda rd Dev iati on	Var iance	Pair ed t-valu e	Res ult
Pr e- te st	12 .1 8	0.7 82	6.06	36. 723	Calc ulat ed t- valu e =3.8 31	tCal =3.8 31 ttab =2.0 43
P os t- te st	22 .7 5	0.6 80	5.27 0	27. 772	=3.8 31 Crite rion valu e of t at 60- 1=5 9 Deg rees of free dom	calc ulat ed >t- table valu e is Sign ifica nt

					t- valu e= 2.04 3	
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Table-2: 2 The average score following the after the test (22.75) is significantly higher than the average score prior to the test (12.18), This improvement implies that the levels of knowledge have improved. Furthermore, the estimated t-value of 3.831 at the 0.05 level of significance indicates that there is a statistically significant difference between the pre-test and post-test scores, indicating that the change is unlikely to have happened by accident.

THE STUDY'S MAIN CONCLUSIONS ARE AS FOLLOWS:

- ❖ **The first objective of the study was to Measure Non-medical undergraduate students' initial level of awareness regarding eye donation.**

Age: According to age majority of samples 30(50.00%) were in age group between 18-22years, 25(41.67%) were in age group between 22-26 years, 05(08.33%) were in age group between above 27 years.

Gender: According to Gender, majority of samples 40 (66.7%) were male, and 20(33.3%) were Females.

Religion: According to their religion majority of the samples 28(46.77%) were Christian, 20(33.33%) were Hindu's, 10(16.77%) were Muslim, 02(03.33%) were others.

Marital status: The majority of participants (91.77%) were single, while 8.33% were married.

Type of family: The majority of participants (51.77%) belonged to joint families, while 26.77% were from nuclear families and 21.66% belonged to extended families.

Educational status: According to their educational status majority of sample 27(45.11%) were B.com, 05(08.33%) were B.A, 20(33.33%) were B.Z.C, 08(13.33%) were B.sc.

Family income per month: According to their monthly income majority of samples 30(50.00%), were in the income group of RS 10,000/ to 20,000, 20(33.33%) were in RS 5,000/ to 10,000/-, 10(16.77%) were in the group of above 20,000

Place of living: According to their place of living majority of sample 35(58.33%) were lives in urban, 25(41.77%) were as Rural.

Source of information: According to their source of information majority of sample 20(33.3%) were obtained from TV, 05(05.33%) were obtained from Radio, 10(16.77%) were obtained from News Pepar, 12(20.00%) were obtained from Friends, 13(21.77%) were obtained from Doctors.

❖ **The second objective of the study was to compare knowledge scores before and after an organized educational intervention in order to evaluate its effect.**

❖ Just 6.67% of those who took part of study exhibited adequate knowledge in the pre-test, compared to 70.00% who showed inadequate knowledge and 23.33% who showed moderate knowledge.

After the session, participants' knowledge clearly improved, according to the post-test results. Of the participants, 45% showed a moderate level of knowledge, and half (50%) attained an adequate level. Only 5% of respondents were still classified as insufficient, suggesting a general improvement in comprehension.

❖ **The third objective of the study was Examining the association between pre-test knowledge of the significance of eye donation and certain demographic characteristics among students**

pursuing non-medical degrees was the third goal of the study.

❖ There is a meaningful difference between the pre-test and post-test knowledge scores on eye donation. The calculated t-value (3.831) is higher than the critical table value (2.043) at the 0.05 level of significance, indicating that the improvement in knowledge is statistically significant and not due to chance. This result validates that the organized teaching program was successful in raising the non-medical undergraduate students' level of knowledge and supports the research premise.

A number of demographic factors, including as age, gender, religion, marital status, family type, education level, monthly family income, residence, and information sources, were shown to be significantly correlated with the pre-test knowledge scores.

❖ **RECOMMENDATIONS**

✚ A comparative study could be carried out to evaluate the effectiveness of structured teaching programs among paramedical students.

✚ Future studies may include larger sample sizes and diverse populations, and can be designed as

longitudinal studies for better generalization.

✚ A qualitative approach may also be used to gain deeper insights into attitudes toward eye donation.

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