

A Study to Assess the Effectiveness of Self Instructional Module on Knowledge Regarding Selected Organ Donation among Under Graduate Students of Selected Colleges of the City

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Abstract

A study was carried out to assess the effectiveness of self instructional module on knowledge regarding selected organ donation among undergraduate students in selected colleges of the city. This study was based on the quantitative approach. The samples were 60 undergraduate engineering students in selected colleges during the study period. Non-probability convenient sampling technique was used. In this study, there was a marked improvement in the post test score as mean was 20.66 compared to pre-test mean score 7.03. The calculated 't' value was much higher than the tabulated 't' value at 0.05 levels of significance. Thus it was statistically interpreted that the self instructional module on selected organ donation among undergraduate students was effective.

Keywords: Organ Donation; Undergraduate Students; Self Instructional Module.

Introduction

Organ donation is a life-saving and life-transforming medical process where organs are removed from a donor and transplanted into someone who is very ill or dying from organ failure. The gifts of organ and tissue by donation are a vital part of transplantation. Without the gracious decision of the donor or donor's family to give the "gift of life" by donation, there would be no post transplantation miracles.

Almost 1.5 lakh people in India need kidneys, but only 3000 of them are lucky to receive them. Only 1 out of 30 people who need a kidney receive one. 90% of people in the waiting list die without getting an organ. India's annual liver transplant requirement is 25,000 but we manage only about 800. 70% liver transplants are taken care of by a live donor, but 30% are dependent on cadaver donations.

Today's students are the pillars of tomorrow's world. They should have adequate knowledge and

desirable attitude towards organ donation to overcome the problem of organ shortage. Most of the students who do not belong to the medical fraternity do not have much knowledge regarding organ donation. This study will help the engineering students to gain knowledge regarding selected organs donation and inspire them to contribute individually in increasing the number of organ donors nationwide. Hence, the researcher decided to conduct a study to recognize the effectiveness of self instructional module on organ donation.

Objectives of the Study

- To assess the pre-test knowledge score regarding selected organ donation among under graduate students.
- To assess the effectiveness of self instructional module on knowledge regarding selected organ donation among under graduate students.
- To associate the post test knowledge score with selected demographic variables.

Hypothesis

Hypothesis was tested at 0.05 levels of significance

- H_0 -There will be no significant difference in pre-test and post test knowledge score regarding

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selected organ donation among undergraduate students.

- **H₁**-There will be significant difference in pre-test and post test knowledge score regarding selected organ donation among undergraduate students.

Ethical Aspect

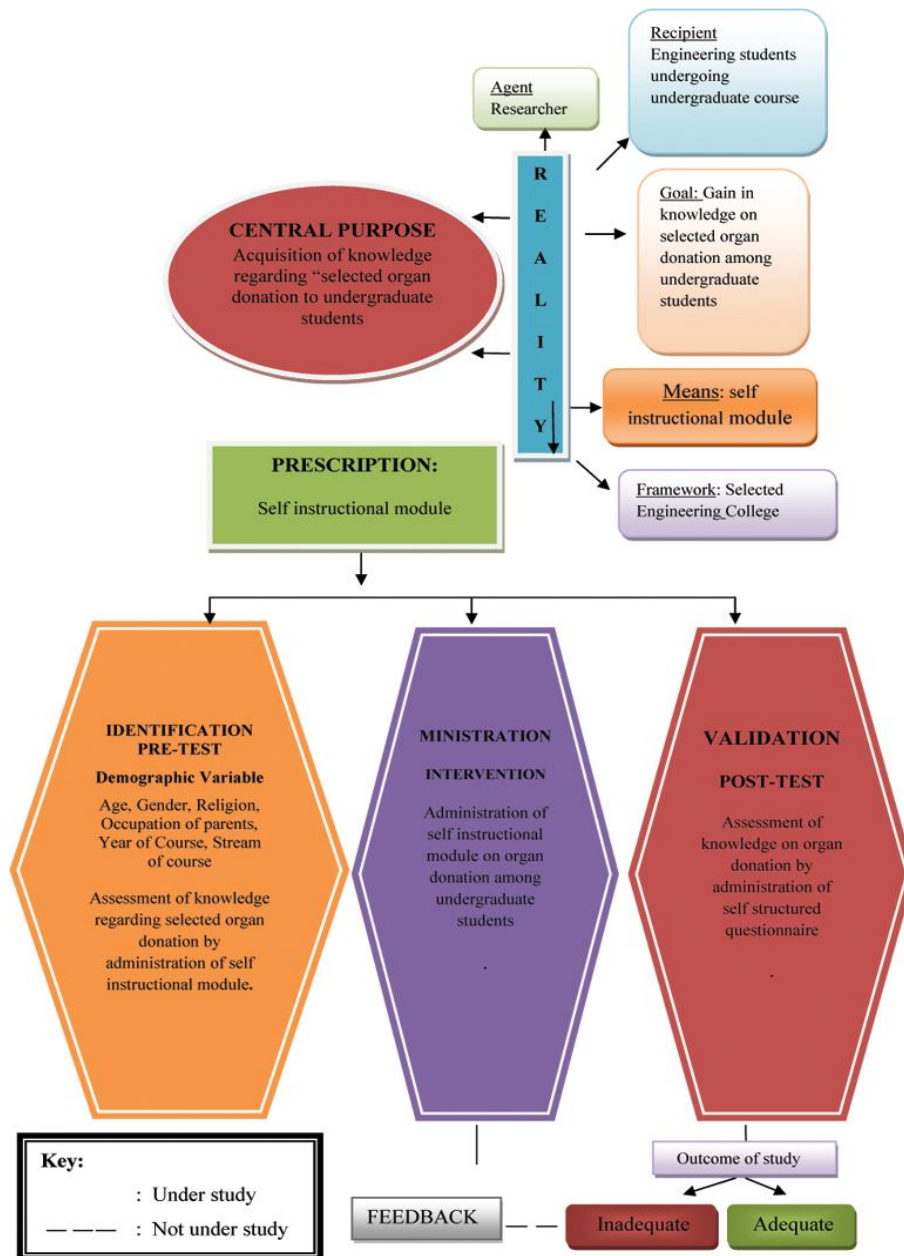
The study proposal was accepted by the ethical committee of the institution. Permission was obtained by the concerned authorities of the colleges before conducting the study. Consent letter was

obtained from individual samples after explaining them the research process in their own language. Confidentiality regarding the samples information was maintained by using code numbers by the investigator.

Conceptual Framework

The Conceptual framework for research study presents the reasoning on which the purposes of the proposed study are based. The Conceptual framework selected for the study was based on Ernestine Wiedenbach’s “Prescriptive Theory” (Helping Art of Clinical Nursing).

Fig. 1: Conceptual framework on Ernestine Weidenbach’s Theory



Review of Literature

An extensive review of the research and the non research literature, related to the present study was done to broaden the understanding and gain insight into the selected problem. The attempt was made through Journal review, Textbooks, Medline, Pubmed, Google, Wikipedia, Mendeley, Chocrane review etc. in order to widen the understanding of the research problem and the methodology of the study. It helped in developing the instruments of the study and in selection of the variables to be included in the study.

In the present study, the literature review has been organized in categories under following headings:

1. Literature related to knowledge and attitude on organ donation.
2. Literature related to organ donation and organ transplant.
3. Literature related to the effectiveness of self instructional module.

Research Methodology

- (a) *Research approach:* Quantitative approach
- (b) *Design:* Pre experimental- one group pre test post test research design
- (c) *Setting:* Selected Colleges of the city
- (d) *Variables of the study*
Independent Variable: Self instructional module
Dependent Variable: Knowledge regarding selected organ donation.
Demographic Variables: Age, Gender, Religion, Occupation of parents, Year of Course, Stream of Course
- (e) *Population:* Students of engineering colleges
- (f) *Target population:* Under graduate students of engineering colleges
- (g) *Accessible population:* Under Graduate students of selected colleges
- (h) *Sample:* Under graduate students of selected engineering colleges
- (i) *Sample size:* 60 students
- (j) *Sampling technique:* Non probability convenient Sampling Technique.

Criteria for the sample

Inclusion criteria

The graduating students

- Available at the time of data collection.
- Studying in selected Engineering Colleges
- Who know English/ Hindi

Exclusion criteria

- Not willing to participate in the study.
- Who have undergone teaching program on organ donation

Tools

The tools used in this study consist of two sections:

- Section - 1 consist of questionnaire on demographic data
- Section - 2 consist of self structured questionnaire on knowledge regarding selected organ donation.
- Section- 3 self Instructional Module

Method of analysis

The data obtained was analyzed and interpreted by descriptive and inferential statistics based on the objectives of the study.

Results

Table 1 shows that majority, 40% of samples were of age group of 24years and above, 36.7% were of age group of 21-23 years, and 23.3% were of age group of 18-20 years. 43 (71.7%) of the samples were males and 17(28.3%) were females. Maximum, 27(45.0%) were Hindus and only 3 (5%) were Muslims. Most of the sample, 29(48.3%) of sample's parents are undergraduates and only 2(3.3%) had primary education. Maximum, 29(48.3%) of samples had family income in the range of Rs.15001-20000, 24 (40.0%) had family income of more than Rs.20001, 6(10.0%) of them had family income of Rs. 10001-20000 and only 1(1.7%) had family income below Rs.10000. 31(51.7%) were residing in urban areas and 29 (48.3%) in rural areas. Majorities, 26 (43.3%) of samples belonged to electrical branch, 15 (25.0%)

Table 1: Percentage wise distribution of undergraduate students according to their demographic variables

n=60

| Demographic Variables | Frequency Age(yrs) | Percentage (%) |
|--|-----------------------|----------------|
| 18-20 years | 14 | 23.3 |
| 21-23 years | 22 | 36.7 |
| 24 years and above | 24 | 40.0 |
| Gender | | |
| Male | 43 | 71.7 |
| Female | 17 | 28.3 |
| Religion | | |
| Hindu | 27 | 45.0 |
| Muslim | 3 | 5.0 |
| Christian | 17 | 28.3 |
| Buddhist | 9 | 15.0 |
| Others | 4 | 6.7 |
| Educational qualifications of parents | | |
| Illiterate | 3 | 5.0 |
| Primary | 2 | 3.3 |
| Secondary | 6 | 10.0 |
| Higher Secondary | 9 | 15.0 |
| UG | 29 | 48.3 |
| PG | 11 | 18.3 |
| Monthly Family Income(Rs) | | |
| Rs 5000-10000 | 1 | 1.7 |
| Rs 10001-15000 | 6 | 10.0 |
| Rs 15001-20000 | 29 | 48.3 |
| > Rs 20001 | 24 | 40.0 |
| Area of residence | | |
| Urban | 31 | 51.7 |
| Rural | 29 | 48.3 |
| Branch/Course in Engineering | | |
| Mechanical | 7 | 11.7 |
| Civil | 7 | 11.7 |
| Electrical | 26 | 43.3 |
| Electronics | 15 | 25.0 |
| Others | 5 | 8.3 |
| Awareness about organ donation | | |
| Yes | 32 | 53.3 |
| No | 28 | 46.7 |
| Source of knowledge regarding organ donation (n=32) | | |
| Family | 3 | 9.37 |
| Friends | 6 | 18.75 |
| Relatives | 2 | 6.25 |
| Health Workers | 8 | 25 |
| Mass Media | 12 | 37.5 |
| Others | 1 | 3.12 |

were studying electronics, 7(11.7%) of the samples were studying mechanical and civil engineering respectively. 32 (53.3%) of the samples had

information regarding organ donation and 28 (46.7%) of them does not have any information regarding organ donation.

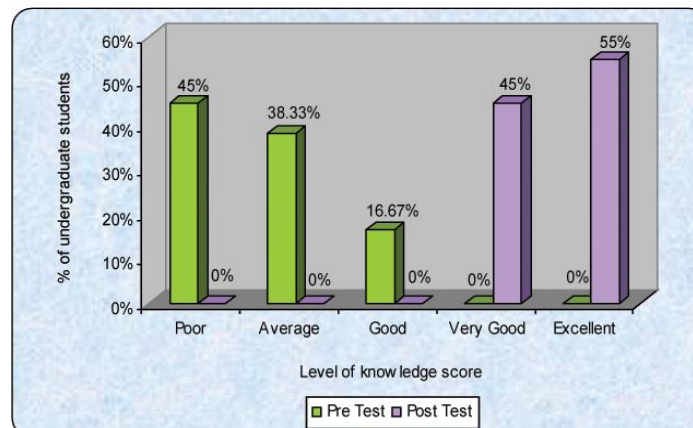
Fig. 2: Bar diagram showing Comparison of knowledge score in pre and post test

Fig.1 shows that in pre-test, 27(45%) of the undergraduate students were having poor level of knowledge, 23(38.33%) had average and 10(16.67%) of them had good level of knowledge score, whereas

in post test, 27(45%) of the undergraduate students were having very good level of knowledge and 55% of them had excellent level of knowledge score.

Table 2: Effectiveness of Self Instructional Module regarding selected organ donation among undergraduate students

| Tests | Mean | SD | t-value | Table value | d.f. | p-value | Significance |
|-----------|-------|------|---------|-------------|------|---------|--------------------|
| Pre Test | 7.03 | 3.28 | 30.16 | 2.00 | 59 | 0.000 | Highly Significant |
| Post Test | 20.66 | 1.61 | | | | | |

This table shows the comparison of pretest and post test knowledge scores of undergraduate students in selected colleges of city in relation to selected organ donation. Mean, standard deviation values are compared and student's paired 't' is applied at 5% level of significance. The tabulated value for n=60-1 i.e., 59 degrees of freedom was 2.00. The calculated 't' value are much higher than the tabulated value at 5% level of significance for overall knowledge score which is statistically acceptable level of significance. In addition the calculated 'p' values for overall knowledge regarding selected organ donation in undergraduate students was 0.000 which is ideal for any population. Hence it is statistically interpreted that the self instructional module on knowledge regarding selected organ donation in undergraduate students was effective. Thus the H₁ is accepted.

Analysis also revealed that there is no association between knowledge score with any of the selected demographic variable.

Implication of the Study

The findings of this study have implications for nursing practice, nursing education, nursing administration, and nursing research.

Nursing Practice

- ❖ Health care services are an essential component of community health care nursing, the role of the personnel is to conduct the project and participate in national programs to increase the number of organ donors.
- ❖ It will also help the nurses to keep update knowledge regarding various aspects of organ donation.
- ❖ The Self instructional module can be used for imparting knowledge regarding various aspects of organ donation to health team members.

- ❖ Self instructional module would serve as a ready reference material for the health team members. The information is particularly useful for the nurses for educating the relatives about the benefits of donating organs.
- ❖ This study will help the nurses for coordinating health care services to health care professionals.

Nursing Education

- ❖ Nurse who are up to date with the knowledge about organ donation are the better person to impart the knowledge to the nursing student which will ultimately increase the number of organ donors.
- ❖ Now-a-days, much emphasis is given on comprehensive care in the nursing curriculum. So this study can be used by nursing teachers as an informative illustration for nursing students.
- ❖ Self instructional module could help educators to use it as a tool for teaching.
- ❖ Students must be given clinical field assignment, in which they must be given opportunity to interact with people and create awareness regarding organ donation.
- ❖ Teacher training programs must also include the topic of organ donation.
- ❖ Efforts can be taken to include organ donation in nursing curriculum to increase the knowledge of student nurses.

Nursing Administration

- ❖ Findings of the study can be used by the Nursing Administrator in creating policies and plans for providing education to the staff nurses and health professionals.
- ❖ It would help the nursing administrators to be planned and organized in giving continuing

education to the nurses and to others for applying and updating the knowledge of organ donation.

- ❖ The result of the study contributes to the body of knowledge of nursing.
- ❖ In service education must be conducted for the nurses to create awareness regarding organ donation.

Nursing Research

- ❖ The findings of the study have added to the existing body of the knowledge in relation organ donation which will enhance the knowledge and would help to keep it updated.
- ❖ Other researchers may utilize the suggestions and recommendations for conducting further study.
- ❖ The tool and technique used has added to the body of knowledge and can be used for further references.

Conclusion

After detailed analysis, this study leads to the conclusion that there was a significant increase in the knowledge of undergraduate engineering students after the introduction of self instructional module. To find the effectiveness of planned teaching program paired 't' test was applied and post test score was significantly higher at 0.05 level than that of pre test score. The post test findings revealed that 27(45%) of the undergraduate engineering students were having very good level of knowledge and 55% of them had excellent level of knowledge score.

Hence, it was concluded undoubtedly that the written material prepared by the investigator in the form of self instructional module helped the undergraduate engineering students to improve their knowledge about organ donation and found to be effective as a teaching strategy.

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