Research Article

A Study to Evaluate the Efficacy of Enlightenment Programme on Knowledge Regarding Organ Donation among the Youths of Hubballi, Karnataka

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Abstract: Background: Organ donation is providing an organ and tissue to replace someone's organ who needs a transplant. Organ Transplantation is one of the biggest achievements of modern era and can save or largely embark the lives of other people. Donation may be for research or, more commonly, healthy transplantable organs and tissues may be donated and transplanted into another person. **Objectives:** 1) To assess the level of knowledge regarding organ donation among the youths of Hubballi by giving pre test. 2) To find out the preparedness for organ donation among the youths of Hubballi. 3) To identify the commitment towards organ donation among the youths of Hubballi. 4) To evaluate the effectiveness of Enlightment programme regarding the organ donation among the youths of Hubballi by giving post test. 5) To find out a correlation between knowledge, preparedness and commitment regarding organ donation among the youths of Hubballi. 6) To find out an association between pretest awareness, preparedness and commitment of youths with their selected socio-demographic variables. **Methodology:** An Evaluative approach was used to conduct study with Pre Experimental: One group Pretest Posttest research design. The study was conducted among 300 youths of selected areas of Hubballi. Sample was selected using Probability; stratified random sampling technique. Data was collected by Structured Questionnaire to assess knowledge and Structured Interview Schedule to assess preparedness and commitment. Data analysis was done using descriptive and inferential statistics. **Results:** Overall result of the study revealed that in pre test, 240 (80%) of participants were having average knowledge, 30(10%) each of participants were having poor and good knowledge regarding organ donation. In posttest all 300(100%) of participants were having good knowledge regarding organ donation. As come to preparedness that in pretest, 240(80%) of participants were moderately prepared, 50(16.7%) participants were weakly prepared and 10(3.3%) of participant was strongly prepared for organ donation. In posttest, the 160(53.3%) of participants were moderately prepared and 140(46.7%) of participants were strongly prepared for organ donation. As come to commitment in pretest, 222(74%) of participants commitment was weak and 78(24%) of participants commitment was strong regarding organ donation. In posttest, the 54(18%) of participants commitment was weak and 246(82%) participants commitment was strong regarding organ donation. There was no correlation between knowledge and preparedness scores of participants regarding organ donation and there is no association between knowledge of participants regarding organ donation and their socio demographic variables. **Conclusion:** Knowledge and preparedness scores during pretest were average and moderate and are increased as good after enlightenment program. The enlightenment program was effective to enhance and improve the

Knowledge and preparedness of participants regarding organ donation. Structured enlightenment program was effective to increase the commitment of participants regarding organ donation.
Keywords: Organ donation, Knowledge, Preparedness, Commitment.

Introduction

"Don't think of organ donations as giving up part of yourself to keep a total stranger alive. It's really a total stranger giving up almost all of themselves to keep part of you alive."

Organ donation is when an individual allows an organs of their own to be taken off and transplanted to terminally ill or irreversible organ failure person, by rule, either by written consent while the donor is alive or dead with the assent of the next of kin. Organ donation is providing an organ and tissue to replace someone's organ who needs a transplant. Organ Transplantation is one of the biggest achievement of modern era and can save or largely embark the lives of other people. Donation may be for research or, more commonly, healthy transplantable organs and tissues may be donated and transplanted into another person. Common transplantations include kidneys, heart, liver, pancreas, intestines, lungs, bones, bone marrow, skin, and corneas. Some organs and tissues can be donated by living donors, such as a kidney or part of the liver, part of the pancreas, part of the lungs or part of the intestines [1-5].

Every year organ donation day is observed on 13th of August. Due to lack of adequate knowledge, there are wrong conception, myths and anxiety in peoples about organ donation. To inspire normal human beings to oath to donate organs after death, and to increase the awareness about the significance of organ donation is the aim of this day. In India every year about: 500,000 people die because of non-availability of organs, 200,000 people die due to liver disease, and 50,000 people die because of heart disease. Moreover, 150,000 people awaiting a kidney transplant but only 5,000 get among them [3-6].

A deceased donor can generally donate the Organs and tissues with the age limit of:
Kidneys, liver: 70 years, Heart, lungs: 50 years, Pancreas, Intestine: 60-65 years, Corneas, skin: 100 years, Heart valves: 50 years and Bone: 70 years.

The organ of the donor can be transplanted to the patient who it needs immediately. The Ministry of Health and Family Welfare has urged people all of communities to come forth and generously donate organs to help the noble cause of saving precious lives. The Ministry had launched the 6th World and first ever Indian Organ Donation Day and Organ Donation Congress 2010 in New Delhi. NOTTO (National Organ Tissue Transplant Organization) is celebrating 6th Indian Organ Donation Day on 27th November 2015. On this day Union Health Ministry has appealed to its officials to take the pledge to donate their organs, thereby saving thousands of lives [7-10].

A study on knowledge, attitude and practices about organ donation among college students in Chennai, Tamil Nadu revealed that though all the participants were aware of the term organ donation, knowledge about different aspects was low. 86.1% were not aware of legislation. 75% of respondents were in favor of organ donation, but only about 2% were registered for organ donation.

Statement of the Problem

A study to evaluate the efficacy of enlightenment programme on knowledge regarding organ donation among the youths of Hubballi, Karnataka.

Objectives

The objectives of the study are
1) To assess the level of knowledge regarding organ donation among the youths of Hubballi by giving pretest.
2) To find out the preparedness for organ donation among the youths of Hubballi.

3) To identify the commitment towards organ donation among the youths of Hubballi.
4) To evaluate the effectiveness of Enlightment programme regarding the organ donation among the youths of Hubballi by giving posttest.
5) To find out a correlation between knowledge, preparedness and commitment regarding organ donation among the youths of Hubballi.
6) To find out an association between pretest awareness, preparedness and commitment of youths with their selected socio-demographic variables.

Methodology

Research approach : Evaluative research approach.

Research design : Pre Experimental: One group Pretest Posttest design

Variables under Study:
Variables
Independent Variables : Enlightenment programme

Dependent Variables : Knowledge, preparedness and commitment regarding organ donation among the youths.

Extraneous variables : Age, gender, religion, status of education, family income, area of residence, marital status, type of family, occupational status, previous knowledge regarding organ donation, previous familial history of organ donation, familial history of organ transplantation and sources of information regarding organ donation.

Setting of the study : The study will be conducted at selected areas of Hubballi.

Population : The population in the present study comprises of youths residing in the selected areas of Hubballi.

Sample : In the present study the sample is the youths of selected areas of Hubballi.

Sample Size : 300

Sampling Technique : Probability: Stratified random sampling.

Inclusion criteria : Adults
1) Residing at selected areas of Hubballi.
2) Who are willing to participate in study.
3) Who available at the time of data collection.
4) Who are at the age from 18 to 40 years
5) Who able to understand Kannada and English.

Exclusion criteria : Adults
1) Who are sick at the time of data collection.

Tools and Techniques:
The following tools are intended to use for data collection;
✓ **Part –I** : Information on demographic variables of respondents.
✓ **Part-II** : Structured Questionnaire to assess knowledge.
Structured Interview Schedule to assess preparedness and commitment.

Ethical consideration
Research proposal will be approved by Ethical Committee. Prior permission will be taken by concerned authority. Informed written consent will be taken from each selected sample.

Analysis and Interpretation of Data (Results)
Organization of Findings
The analysis of the data is organized and presented under following sections
Section 1: Description of Selected Personal Variables

Table 1. Frequency and percentage distribution of participants according to socio demographic variables (n=300)

S. No	Demographic variables	Frequency (f)	Percentage (%)
1	**Age (in yrs)**		
	a) 18-25	39	13
	b) 26-30	142	47.3
	c) 31-35	70	23.3
	d) 36 - 40	49	16.3
2	**Gender**		
	a) Male	182	60.7
	b) Female	118	39.3
3	**Religion**		
	a) Hindu	211	70.3
	b) Muslim	51	17
	c) Christian	38	12.7
	d) Other	00	00
4	**Educational Status**		
	a) No formal education	00	00
	b) Primary school	21	7
	c) High school	59	19.7
	d) PUC	102	34
	e) Degree and above	118	39.3
5	**Family Income (Rs/Month)**		
	a) Upto 10,000	21	7
	b) 10,001–20,000	88	29.3
	c) 20,001–30,000	143	47.7
	d) More than 30,000	48	16
6	**Area of Residence**		
	a) Urban	253	84.3
	b) Rural	47	15.7
7	**Marital status**		
	a) Married	133	44.3
	b) Unmarried	167	55.7
	c) Divorced	00	00
8	**Type of family**		
	a) Nuclear	199	66.3
	b) Joint	92	30.7
	c) Extended	9	3

9	Occupational Status		
	a) Unemployed	91	30.3
	b) Student	110	36.7
	c) Self employed	50	16.7
	d) Private/Government Service	49	16.3
10	**Previous knowledge regarding organ donation**		
	a) Yes	192	64
	b) No	108	36
11	**History of organ donation in family**		
	a) Yes	42	14
	b) No	258	86
12	**History of organ transplantation in family**		
	a) Yes	22	7.3
	b) No	278	92.7
13	**Source of information regarding Organ donation**		
	a) Formal education	30	10
	b) Books/journals	140	46.7
	c) Mass media	121	40.3
	d) Seminar/workshop	9	3

Section 2: Description of knowledge scores of participants regarding organ donation
Level of knowledge and preparedness
Knowledge scores

Table 2. Frequency and Percentage distribution of respondents according to level of knowledge regarding organ donation (n=300)

Level of knowledge					
Pretest scores			Posttest scores		
Poor	**Average**	**Good**	**Poor**	**Moderate**	**Good**
f (%)	**f (%)**	**f (%)**	**f (%)**	**f (%)**	**f (%)**
30(10)	240 (80)	30 (10)	00	00	300 (100)

The data presented in the table 2 shows that, in pretest, 240(80%) of participants were having average knowledge, 30(10%) each of participants were having poor and good knowledge regarding organ donation. In posttest all 300(100%) of participants were having good knowledge regarding organ donation.

Preparedness Scores

Table 3. Frequency and Percentage distribution of respondents according to level of preparedness regarding organ donation (n=300)

Level of preparedness					
Pretest scores			Posttest scores		
Weak	**Moderate**	**Strong**	**Weak**	**Moderate**	**Strong**
f (%)	**f (%)**	**f (%)**	**f (%)**	**f (%)**	**f (%)**
50(16.7)	240 (80)	10 (3.3)	00	160(53.3)	140 (46.7)

The data presented in the table 3 shows that, in pretest, 240(80%) of participants were moderately prepared, 50(16.7%) participants were weakly prepared and 10(3.3%) of participant was strongly prepared for organ donation. In posttest the 160(53.3%) of participants were moderately prepared and 140(46.7%) of participants were strongly prepared for organ donation.

Commitment Scores

Table 4. Frequency and Percentage distribution of respondents according to level of preparedness regarding organ donation (n=300)

Level of Commitment			
Pretest scores		**Posttest scores**	
Weak	**Strong**	**Weak**	**Strong**
f (%)	**f (%)**	**f (%)**	**f (%)**
222 (74%)	78 (24%)	54 (18%)	246 (82%)

The data presented in the table 4 shows that, in pretest, 222(74%) of participants commitment was weak and 78(24%) of participants commitment was strong regarding organ donation. In posttest the 54(18%) of participants commitment was weak and 246(82%) participants commitment was strong regarding organ donation.

Section 3: Description of findings related to effectiveness enlightenment program on knowledge of participants regarding organ donation

Table 5. Comparison of pretest and posttest mean knowledge scores (n=300)

Aspects	Statements	Max. score	Range score	Knowledge Scores		Paired 't' Test
				Mean	**SD**	
Pre-test	40	40	9	21.50	2.37	24.92*
Post-test	40	40	7	28.93	2.03	
*Significant at 5 % level						

The data presented in table 5 indicates the overall mean pre-test, post-test and enhancement knowledge scores of participants regarding organ donation. The findings reveal that the post-test mean knowledge scores was found higher [mean=28.93, SD of 2.03] when compared with pre-test mean knowledge score value which was 21.50 with SD of 2.37. The statistical paired 't' implies that the difference in the pretest and post-test values and are found statistically significant at 5% level (P<0.05) with a paired 't' value of 24.92. There exists a statistical significance in the enhancement of knowledge score indicating the positive impact of enlightenment program.

Table 6. Comparison of pretest and posttest mean preparedness scores (n=300)

Aspects	Statements	Max. score	Range score	Preparedness Scores		Paired 't' Test
				Mean	**SD**	
Pre-test	11	33	13	15.23	3.62	15.64*
Post-test	11	33	11	20.46	3.22	
*Significant at 5 % level						

The data presented in table 6 indicates that the overall mean pre-test, post-test and enhancement preparedness scores of participants regarding organ donation. The findings reveal that the post-test mean preparedness scores was found higher [mean=20.46, SD of 3.22] when compared with pre-test mean preparedness score value which was 15.23 with SD of 3.62. The statistical paired 't' implies that the difference in the pretest and post-test values and are found statistically significant at 5% level (P<0.05) with a paired 't' value of 15.63. There exists a statistical significance in the enhancement of preparedness score indicating the positive impact of enlightenment program.

Table 7. Comparison of pretest and posttest mean commitment scores (n=300)

Aspects	Statements	Max. score	Range score	Commitment Scores		Paired 't' Test
				Mean	**SD**	
Pre-test	6	6	4	2.96	0.95	16.86*
Post-test	6	6	3	4.24	0.79	
*Significant at 5 % level						

The data presented in table 7 indicates that the overall mean pre-test, post-test and enhancement commitment scores of participants regarding organ donation. The findings reveal that the post-test mean commitment scores was found higher [mean=4.24, SD of 0.79] when compared with pre-test mean commitment score value which was 2.96 with SD of 0.95.

The statistical paired 't' implies that the difference in the pretest and post-test values and are found statistically significant at 5% level (P<0.05) with a paired't' value of 16.86. There exists a statistical significance in the enhancement of commitment score indicating the positive impact of enlightenment program.

Section 4: Description of finding related to association between pre test knowledge, preparedness and Commitment of participants on organ donation and their socio demographic variables.
i) Findings related to association between knowledge and socio demographic variables
Computed Chi-square value for association between level of knowledge of participants regarding organ donation and their selected demographic variables is found to be statistically significant at 0.05 levels for educational status and occupational status of participants and not found statistically significant for other socio demographic variables.

ii) **Findings related to association between preparedness scores and socio demographic variables**
Computed Chi-square value for association between level of preparedness of participants regarding organ donation and their selected demographic variables is found to be statistically significant at 0.05 levels for age, educational status, religion and sources of information of participants and not found statistically significant for other socio demographic variables.

iii) **Findings related to association between commitment scores and socio demographic variables**
Computed Chi-square value for association between level of commitment of participants regarding organ donation and their selected demographic variables is found to be statistically significant at 0.05 levels for gender and not found statistically significant for other socio demographic variables.

Section 5: Description of finding related to correlation between pretest knowledge, preparedness and commitment values of participants about donation of organ
Findings related to relationship between knowledge and preparedness scores
In order to, find out the correlation of pretest knowledge and preparedness scores of participants a correlation coefficient was computed by using Karl Pearson's Coefficient of correlation. The data are presented in below table 8.

Table 8. Correlation coefficient of pretest knowledge and Preparedness scores (n =300)

Score	Groups	
	Mean score	**Correlation coefficient**
Pretest knowledge score	21.50	- 0.03
Pretest preparedness score	15.23	

The data presented in table 8 shows that the correlation between pretest knowledge and preparedness scores of participants regarding organ donation is found not significant at p<0.05 levels.

Findings related to relationship between preparedness and commitment scores
In order to, find out the correlation of pretest preparedness and commitment scores of participants a correlation coefficient was computed by using Karl Pearson's Coefficient of correlation. The data are presented in below table 9.

Table 9. Correlation coefficient of pretest preparedness and commitment scores (n =300)

Score	Groups	
	Mean score	**Correlation coefficient**
Pretest preparedness score	15.23	-0.042
Pretest commitment score	2.96	

The data presented in table 9 shows that the correlation between pretest preparedness and commitment scores of participants regarding organ donation is not found significant at p<0.05 levels.

Findings related to relationship between knowledge and commitment scores
In order to, find out the correlation of pretest knowledge and commitment scores of participants a correlation coefficient was computed by using Karl Pearson's Coefficient of correlation. The data are presented in below table 10.

Table 10. Correlation coefficient of pretest knowledge and commitment scores (n =300)

Score	Groups	
	Mean score	**Correlation coefficient**
Pretest knowledge score	21.50	-0.119
Pretest commitment score	2.96	

The data presented in table 10 stated that the correlation between pretest knowledge and commitment scores of participants regarding organ donation is found no significant at p<0.05 levels.

Conclusion
The conclusion drawn on from the present study includes the following-
1) Knowledge and preparedness scores during pretest were average and moderate and are increased as good after enlightenment program.
2) The enlightenment program was effective to enhance and improve the knowledge and preparedness of participants regarding organ donation.
3) Structured enlightenment program was effective to increase the commitment of participants regarding organ donation.
4) There was significant association found between the knowledge scores of participants and education and occupational status of participants.
5) There was significant association found between the preparedness scores of participants and age, educational status, religion and sources of information.
6) There was significant association found between the commitment scores of participants and gender of participants.

Conflicts of interest: There is no conflict of interest of any kind.

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