# A Study to Assess the Effectiveness of Self Instructional Module on Knowledge regarding Organ Donation among the Students of Arts and Science in Selected College, Bangalore

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#### Abstract

Objectives of the Study: 1. To assess the pretest knowledge regarding organ donation among the students of arts and science. 2. To assess the posttest knowledge regarding organ donation among the students of arts and science. 3. To compare the effectiveness of pretest and posttest level of knowledge among the students of arts and science. 4. To associate the knowledge regarding organ donation with selected demographic variables. Methodology: Research Design: Preexperimental one group pre and post test design. Setting of Study: Padmashree Institute management sciences. Population: Arts and sciences students. Sample: 40 Art students. Sampling Technique: Simple random sampling technique by using lottery method. Description of the tool: A) Demographic variables. B) structure questionnaire Used to assess the awareness. Data Analysis: Descriptive and inferential statistics were used. Major Findings of the Study: Majority of the subjects (87.5%) 35 in the age group of 21 years and above. Regarding information on organ donation 36 (90%) had heard information on organ donation trough Television, New paper, Radio. Regarding blood donated 14 (35%) had donated blood. The study results shows that 75% of them were had moderate knowledge, 17.5% subjects were had adequate knowledge and 7.5% subjects were had inadequate knowledge in pretest. Whereas after administration of SIM 37.5% subjects were had moderate knowledge, 60% subjects were had adequate knowledge and 2.5 % subjects were had inadequate knowledge. It shows the after administration of SIM majority of the subjects had improved the knowledge regarding organ donation. Conclusion: The present study revealed that majority of the subjects had moderate knowledge regarding organ donation. Whereas after administration Self Instructional modules majority of subjects had adequate knowledge on organ donation. Study concluded that the Arts and sciences and young students were to educated to understand the importance of organ donation, and come forward to donate organ.

**Keywords:** Self Instructional Module; Simple Random Sampling Technique; Arts and Sciences Students.

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Recived on 16.09.2017, Accepted on 13.10.2017

## Introduction

Life is a dynamic process. It starts from birth and ends into death. In between come different stages of life with different diseases and problems. The medical advancement and technology has begun to save lives and the most miraculous achievement of modern medicine is organ donation which has power to save the life of people [1].

Organ or tissues are removed and put into another person's body replacing the organ may be the only treatment of choice for a patient who is chronically ill such as ESRD, tumors of lungs and liver. Live donors transplantations are available alternatives for the patient in need of new organs who however depends entirely on the generosity of donors and their families who are willing to make are usually between 18-60 years. Organ donations helps patient to lead an active and normal life. However she may live for another 5 to 8 years after transplantation [2]. The demand for organ transplantation has rapidly increased all over the world during the past decade due to the increased incidence of vital organ failure, the rising success and greater improvement in post transplant

outcome. However, the unavailability of adequate organs for transplantation to meet the existing demand has resulted in major organ shortage crisis. Hence the public should know the importance of organ donation so the researcher felt need to conduct study on effectiveness of SIM on knowledge regarding organ donation among the students of art and science

India's first organ transplant was conducted in the 1970s (It was a kidney transplant) 1. India has made a few strides forward since but a lot more needs to be done: The number of transplants done annually has been gradually rising o Currently around 5,000 kidneys, 1000 livers and around 15 hearts are transplanted annually. There is a poor Organ Donation Rate -0.26 per million in India, compared to some of the better performing countries such as America's 26, Spain's 35.3, and Croatia's 36.5 per million respectively. o With a 1 per million-donation rate, India would have 1,100 organ donors or 2,200 kidneys, 1,000 hearts, 1,100 Livers, 1,100 Pancreas and 2,200 Eyes. This should take care of almost all current demands for organs. o At a 2 per million-donation rate there would be 2,200 organ donors and the above figures would double. Then there would be no necessity to undertake living kidney donations. Quantifying the problem - There is a need of roughly 200,000 kidneys, 50,000 hearts and 50,000 livers for transplantation each year.

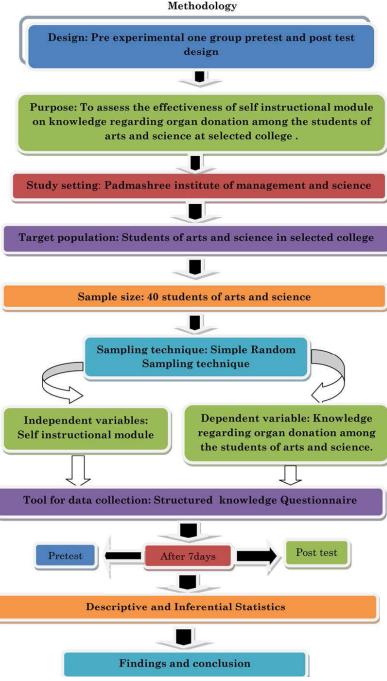
Statement of the Problem

A study to assess the effectiveness

of self-instructional module on knowledge regarding organ donation among the students of arts and science in selected college Bangalore.

## Objectives of the Study

- 1. To assess the pretest knowledge regarding organ donation among the students of arts and science
- 2. To assess the posttest knowledge regarding organ donation among the students of arts and science



- 3. To compare the effectiveness of pretest and posttest level of knowledge among the students of arts and science
- To associate the knowledge regarding organ donation among students of arts and sciences and with their selected demographic variables.

#### Results

Section 1: Description of demographic variables based on level of knowledge among the students of arts and science.

The Table 1 Depicts the frequency and percentage distribution of students to assess the knowledge among students of arts and science by age, sex, religion, family monthly income, educational status, source of information.

With regard to age to assess the knowledge on organ donation among the students of arts and science, 3(7.5%) of them belong to 17-18 years, 2(5%)

of them belong to 19-20 years and 35(27.5%) of them belong to 21 years.

In relation to the gender of students, to assess the knowledge on organ donation among the students of arts and science 14(35%) of them were male and 26(65%) of them were female.

Regarding religion of the students 38(95%) of them belong to Hindu religion, 2(5%) of them belong to Muslim religion and none of them belong to Christian religion.

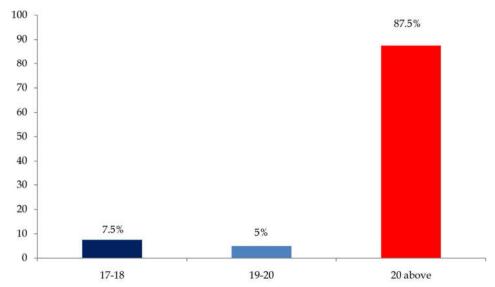
It was found from the present study that 8(20%) of them belong to undergraduate students and 32 (80%) of them belong to postgraduate students.

It was found from the present study that 4(10%) of them have family monthly income of 5,000-10,000, 18(45%) of them have family monthly income of 10,001-15,000 and 18(45%) of them have family monthly income of 15,001 and above.

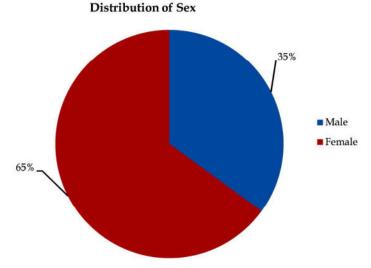
The study reveals that 14(35%) of them have 0donated blood and 26(65%) have not donated blood.

**Table 1:** Frequency and percentage distribution of students of arts and science by age, sex, religion, education, family monthly income, blood donation, heard of organ donation and source of information. N=40

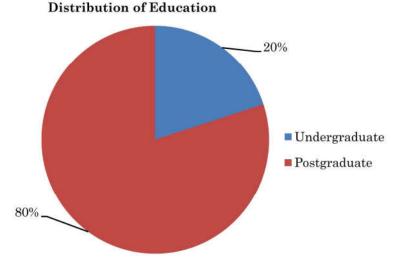
51. No	Demographic Variables	Frequency N=40	Percentago
1.	Age		
	17-18yrs	3	7.5%
	19-20yrs	2	5%
	21 yrs and above	35	87.5%
2.	Sex		
	Male	14	35%
	Female	26	65%
3.	Education		
	Undergraduate	8	20%
	Post graduate	32	80%
4.	Religion		
	Hindu	38	95%
	Muslim	2	5%
	Christian	0	0
5.	Family monthly income		
	Less than 1000	4	10%
	10001-15000	18	45%
	15001 and above	18	45%
6.	Have you donated blood?		
	Yes	14	35%
	No	26	65%
7.	Have you heard about organ donation?		
	Yes	36%	90%
	No	4	10%
8.	If yes source of information (36)		
	Newspaper	16	44.4%
	Radio	1	2.7%
	Television	23	63.8%



Graph 1: Percentage distribution of demographic variable according to age

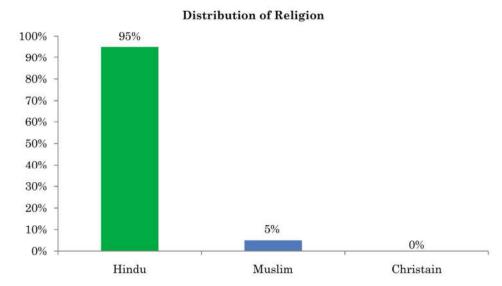


Graph 2: Percentage distribution of demographic variable according to sex



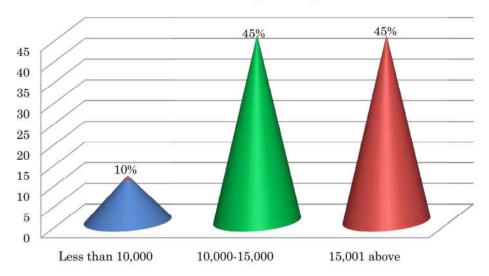
Graph 3: Percentage distribution of demographic variable according to education

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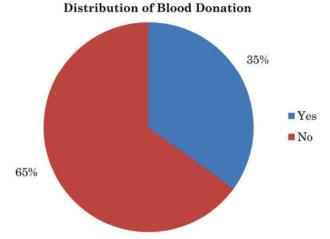


Graph 4: Percentage distribution of demographic variables according to religion

## **Distribution of Family Monthly Income**

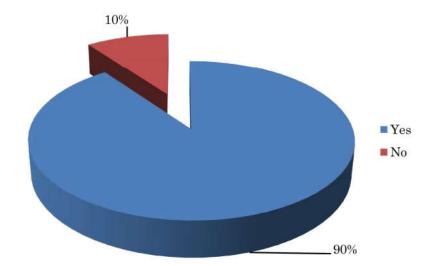


Graph 5: Percentage distribution of demographic variable according to family monthly income

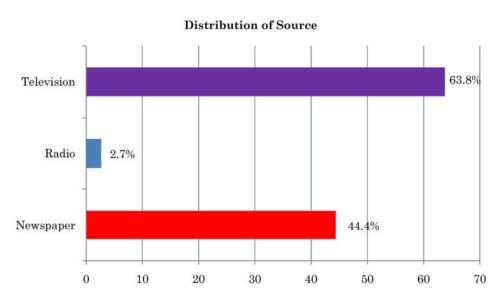


Graph 6: Percentage distribution of demographic variable according to blood

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**Graph 7:** Percentage of people who have heard of organ donation %



Graph 8: Percentage distribution of source of information

With regard to have you heard about organ donation, 36(90%) of them have heard of organ donation and 4(10%) of them haven't heard of organ donation.

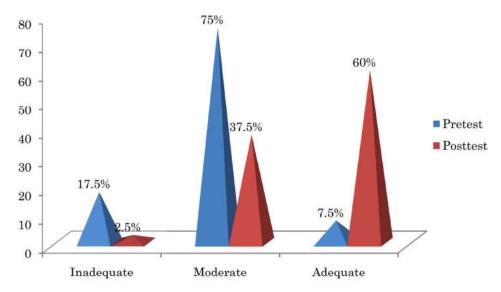
With regard to source of information 44.4%(16) of them have got information from newspaper, 2.7%(1) from radio and 63.8%(23) from television.

Section 2: Assessment of level of knowledge on organ donation among the students of arts and science

Table 2 shows that 75% of them were had moderate knowledge, 17.5% subjects were had adequate knowledge and 7.5% subjects were had inadequate knowledge in pretest. Whereas after

Table 2: Frequency and percentage distribution of level of knowledge on organ donation among the students of arts and science. N=40

Sl. No.	Level of Knowledge	Pı	etest	Post Test		
	C .	Frequency	Percentage	Frequency	Percentage	
1.	Inadequate knowledge	7	17.5	1	2.5	
2.	Moderate knowledge	30	<i>7</i> 5	15	37.5	
3.	Adequate knowledge	3	7.5	24	60	
	Overall	40	100	40	100	



Graph 9: Percentage distribution of level of knowledge

**Table 3:** Mean, standard deviation and mean score percentage of level of knowledge among students of art and science.

	Pretest			Posttest					
	Max score	Range score	mean	SD	Mean %	Range score	mean	SD	Mean %
Level of knowledge	22	7-18	12.4	2.32	56.36%	12-21	16.5	2.92	73.86%

Table 4: Range, Mean, SD and Mean Score Percentage of enhancement in knowledge regarding organ donation among student of art and science N=40

S. No	Aspects of knowledge	Max score	Enhancement				Paired t	p. value
			Range	Mean	SD	Mean percentage		
1.	Level of knowledge	22	0-9	3.9	1.44	17.7	16.9***	P<0.001

Note: \*\*\*- Significant at 1% level for 39df(i.e. P<0.001)

administration of SIM 37.5% subjects were had moderate knowledge, 60% subjects were had adequate knowledge and 2.5% subjects were had inadequate knowledge. It shows the after administration of SIM majority of the subjects had improved the knowledge regarding organ donation.

Table 3 shows that level of knowledge maximum score was 22, the range score was (7-18), mean was 12.4, the standard deviation was 2.32 and mean percentage was 56.36% in the pretest where as in the post test the range score was (12-21), mean was 16.5, standard deviation was 2.92 and mean percentage was 73.86%. It is shows improvement knowledge level after administration of SIM.

Table 4 given above shows the range was 0-9, mean score was 3.9, with standard deviation of 1.44, mean score percentage of 17.7 and the paired 't' value

was 16.9 at the level of P<0.001. It shows there was statistical significant at P<0.001 level .

Section3: Association between of level of knowledge regarding organ donation among students of arts and science with selected demographic variables

The association of level of knowledge among regarding organ donation among students of arts and sciences with their selected demographic variables in relation to demographic variables such as age, gender, religion, education, family monthly income, donated blood, heard of organ donation and source of information chi squure test was carried out it shows sources of information was statically significant whereas other rest of the variables were not significant in association with the level of knowledge among students regarding organ donation.

## Hypotheses Testing

- $\mathbf{H}_{1}$ -There will be significant difference between the mean pre-and post-test level of knowledge on organ donation among the students of arts and science.
- $\mathbf{H}_0$ -There will be no significant difference between the mean pre-and post-test level of knowledge on organ donation among the students of arts and science.

Table 3 given above shows the range was 0-9, mean score was 3.9, with standard deviation of 1.44, mean score percentage of 17.7 and the paired 't' value was 16.9 at the level of P<0.001. It shows there was statically significant difference at p<0.001 level. Hence research hypothesis accepted and null hypothesis rejected.

- **H**<sub>2</sub>-There will be significant association between level of knowledge on organ donation among the students of arts and science with their selected demographic variables.
- **H**<sub>0</sub>-There will be significant association between level of knowledge on organ donation among the students of arts and science with their selected demographic variables.

The association of level of knowledge among regarding organ donation among students of arts and sciences with their selected demographic variables in relation to demographic variables such as age, gender, religion, education, family monthly income, donated blood, heard of organ donation and source of information chi squure test was carried out it shows sources of information was statically significant whereas other rest of the variables were not significant in association with the level of knowledge among students regarding organ donation. Hence research hypothesis accepted and null hypothesis rejected.

### Discussion

The findings of the study shows in the pretest 3(7.5%) subject had adequate knowledge whereas in after administration of Self instructional module 24 (60%) had gained knowledge regarding organ donation.

Similar study was conducted in Male and female students of first year medical, dental and nursing colleges participated in the study. A questionnaire with 55 questions on various aspects of organ donation was given to them to answer by choosing yes/no/don't know or right/wrong/don't know in 30 minutes. The results showed that about 60% of the

students had sufficient knowledge about the shortage of harvested organs and compatibility check. About 90% of them were aware of the need of organ donation and they extended their support for the act. But hardly 7% of them registered for the same. They were also weaker in the areas like time lapse between harveting and transplanting the organ, who could donate to whom, cadaver donations, methods of promoting organ donation and regarding the payment to be made to the donors or his relatives. After collecting the papers for evaluation, the participants were educated with more emphasis on the weaker areas.

#### Conclusion

Many teaching strategies can be used to improve the knowledge on organ donation among young students or public to make awareness on organ donation. other porgamme can organize the NGO and other organization to make note on important of organ donation. Transplantation experts can play a major role in addressing the problem and clarifying the need and the benefit of OD for the patients. Lastly, Mass media must explain and broadcast the legislative laws controlling the process of OD in the state.

## Conflict of Interest

Author don't have any conflict of interest.

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