

# Study To Assess the Effectiveness of Information Booklet on Knowledge and Attitude Regarding Organ Donation Among Non Health Professional Students At Selected College of Jabalpur City

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## ABSTRACT

**BACKGROUND** organ donation is a unique social activity, every donor can save 8 lives and enhance over 75 lives, a living donor can donate his/ her one kidney, a segment of liver, a portion of pancreas and intestine and even a lobe of lung. after cardiac death, as blood circulation stops, the solid organs become unusable for transplantation. after cardiac death, as blood circulation stops, the solid organs become unusable for transplantation. so, solid organs like heart, lung, liver, pancreas and kidney can be donated by brain-dead donors as blood still circulates in these organs at the time of retrieval. but tissues like corneas, bone, skin and heart valves can be donated within first 24 hrs. of cardiac death. experts say that the organs from one donor can save or help as many as 50 people.

**Method** the study utilised evaluative research approach with one group pretest post test design the data was collected from selected college of Jabalpur City using Purposive Sampling Technique the sample comprised of 60 Non Health Professional students. The tool used was self structured knowledge questionnaire to asses knowledge and Self Designed Thurstone Attitude Scale to assess the attitude of Non Health Professionals. Pretest was conducted and subject were given Information Booklet to the subject and after a week post test was conducted **Results:** In the present study the pretest knowledge the majority had 41(85%) average knowledge and 9(15%) had poor knowledge while the pre-test knowledge score was 12.51 and SD was 4.06. and in post test the majority had 47(78.3%) good knowledge and 12(20.6%) had average knowledge while 1(1.1%) had poor knowledge, the post test knowledge score mean is 40.96 and SD is 2.79. which indicates there is rise in knowledge level of Non Health Professionals also the study found that 78.3% of non health professional had adequate knowledge, 53.1% had a positive attitude, towards organ donation. The Calculated value of Paired 't' test is 1.8544 which is higher than the table value of 't' which indicates that the information booklet was highly significant.

**Keywords:** Organ Donation, Information Booklet, Knowledge, Attitude, Non Health Professional

## INTRODUCTION

Organ donation is a unique social activity that has a direct influence on the delivery of healthcare to a wide range of patients. Transplantation is the treatment of choice that improves life expectancy and quality of life. "Organ donation is the donation of biological tissue or an organ of the human body, from a living or dead person to a living recipient in need of a transplantation". Organs can be donated by three types of donors- living, brain-dead and dead donors. There are two types of organ donation: Living and deceased. There are three different ways of donating organ. These are known as: Donation after brain stem death, donation after circulatory death, living organ donation. In donation after brain stem death, death is diagnosed by brain stem tests.

Donating organ, tissue or eye is an incredible and noble gift to the society in which we live because we can give someone a second chance to live. There is currently an insufficient supply of donor organs to meet the demand for organ transplantation worldwide. Many people suffering from end stage organ failure die while waiting for organ donors, Organ donation not only saves the lives of dying people but also improves the quality of life of many as in case of cornea, skin, or bone transplantations. Organ transplantation is the most preferred treatment modality for end-stage organ disease and organ failures. Many organs such as cornea, kidney, and liver are commonly transplanted to human recipients. However, the need for the transplants is high and the gap between organs available for transplantation and the number of patients waiting for a transplant is widening globally. Similar to the developed countries, a situation exists in India where there is a chronic shortage of organs available for transplantation. This shortage is primarily attributed to a limited number of organ donations in our country. A study from India, done in the last decade has shown that less than 50 % were willing to consider organ donation. The patients on palliative care can serve as source of organs and tissues. However, the systems and pre-requisites for successful organ donation among them are lacking.

Education about organ donation is not routinely incorporated in our educational system even in medical and nursing curriculum. A course of study needs to be objective and sufficiently informative to encourage independent thought that will lead to measured decisions to donate and can be conveyed with justification to relatives. This education helps them to engage fully with organ donation and transplantation and has directly resulted in continuous rise in the number of families willing to provide consent to donation. It needs to be recognized that while the individual decision whether or not to donate should be paramount, in many cases the final decision rests with relatives. Indeed, the most common reason for lack of organ donation is a failure to obtain consent from relatives of the potential donor. This is attributed to a failure to be aware of the prior wishes of the deceased families not being made fully. Communicating an intention to donate to family members is frequently omitted.

## NEED OF THE STUDY

According to the report of recent studies done in India, at least more than 5 lakhs of the Indians are dying every year just because of the failure of their major functioning organs anytime. They still want to live their life as they are not fully satisfied with their life and want to live more but just because of the natural calamities they are unable to do so. The organ transplantation could play a major role in their beautiful life by increasing their period of living a life more than expectations. The donor of the organs represents the character of God in the life of organ transplanted person. One organ donor can save more than 8 lives in his life by donating his well function organs. The Organ Donation Day campaign, which

is celebrated every year at August 13th, provides a great opportunity in everyone's life come ahead and pledge to donate their precious organs.

The primary legislation related to organ donation end transplantation in India, Transplantation of Human Organs Act, was passed in 1994 and is aimed at regulation of removal, storage and transplantation of human organs for therapeutic purposes and for prevention of commercial dealings in human organs.

### OBJECTIVES OF THE STUDY

- To assess the pre-test and post-test level of knowledge regarding organ donation among non-health professional students.
- To assess the effectiveness of information booklet on knowledge regarding organ donation among non-health professional students.
- To assess the effectiveness of information booklet on attitude change related to organ donation after intervention among non-health professional students.
- To find out the association between post-test level of knowledge and attitude regarding organ donation and the selected demographic variables among non-health professional students.
- To assess the correlation between knowledge and attitude regarding organ donation among non-health professional students.

### HYPOTHESIS

- **H1:** There will be significant difference between the pre-test and post-test level of knowledge regarding organ donation among non- health professional students.
- **H2:** There will be increase in knowledge score after intervention of information booklet related to organ donation among non- health professional students.
- **H3:** There will be attitude change after intervention of information booklet related to organ donation among non- health professional students
- **H4:** There is a significant association between the post-test level of knowledge among non- health professional students and with their selected demographic variables
- **H5:** There is a significant correlation between knowledge and attitude regarding organ donation

### RESEARCH METHODOLOGY

The study utilised a **Evaluative Research Approach with One Group Pretest Post-Test Design** for the study. The data was collected from selected colleges of Jabalpur city by using **Non Probability Convenient Sampling Technique to select subject on the basis of sample criteria**. The sample size comprised of **60 Non health Professional** who were studying in **Laxmi Bai Sahuji Group of Institutes** of Jabalpur City. The tool used for collecting demographic data **Self Structured Multiple Choice Questionnaire** on knowledge regarding Organ Donation and **Self Modified Attitude Scale** was used to assess the Attitude of Non Health Professional towards organ donation

#### Inclusion criteria

- students who are willing to participate.
- students who are present on the day of data collection.
- students including males and females.
- students who know to read, write, understand Hindi and English.

- students only in first year.

### Exclusion criteria

- students who are sick
- students who are exposed to any teaching programme related to organ donation in the past.
- students who are not willing to participate.

### VALIDITY OF THE TOOL

The tool was given to ten experts for validation which included doctor & nursing experts in medical & surgical nursing. The experts were requested to give their opinion regarding relevancy, accuracy and appropriateness of the items for further modifications. Based on the suggestions modification and rearrangement were done. The demographic data consists of 10 items, 30 items were of the knowledge questionnaire the attitude scale consists of 10 statements

### RELIABILITY OF THE TOOL

.The reliability of the instrument was estimated by test-retest method by using Karl Pearson coefficient correlation. The reliability value of the instrument was 0.91 for knowledge and 0.85 for attitude and it was found to be statistically reliable for the main study.

### RESULTS

S.No	Variables	Frequency	Percentage
1	<b>AGE</b>		
	17 - 20 year	9	15%
	20-22year	29	49.00%
	22-25 year	17	28%
	more than 25 yr	5	8%
2	<b>GENDER</b>		
	male	22	36.6%
	female	38	63.3%
3	<b>MEDIUM OF EDUCATION</b>		
	English	48	80%
	Hindi	12	20%
4	<b>RESIDENCE</b>		
	Rural	5	8%
	Urban	55	92.00%
5	<b>RELIGION</b>		
	Hindu	27	45%
	Muslim	12	20%
	Christian	06	10%
	Sikh	10	16%

	other	05	8%
6	<b>FAMILY INCOME</b>		
	Below 10000rs	0	0.00%
	10001-20000rs	3	5
	20001-30000rs	17	28.00%
	Above 30001	40	67%
7	<b>TYPES OF FAMILY</b>		
	Nuclear	45	75%
	Joint	15	25%
8	<b>ANY PREVIOUS KNOWLEDGE ABOUT ORGAN DONATION</b>		
	No	38	63.00%
	Yes	22	37.00%
9	<b>HAVE YOU ATTENDED SIMILAR TYPE OF EDUCATIONAL PROGRAMME</b>		
	Yes	5	8.00%
	No	55	92.00%
10	<b>HAVE YOU SEEN ANY CASE OF ORGAN DONATION IN YOUR FAMILY AND SOCIETY</b>		
	yes	6	10.00%
	No	54	90.00%

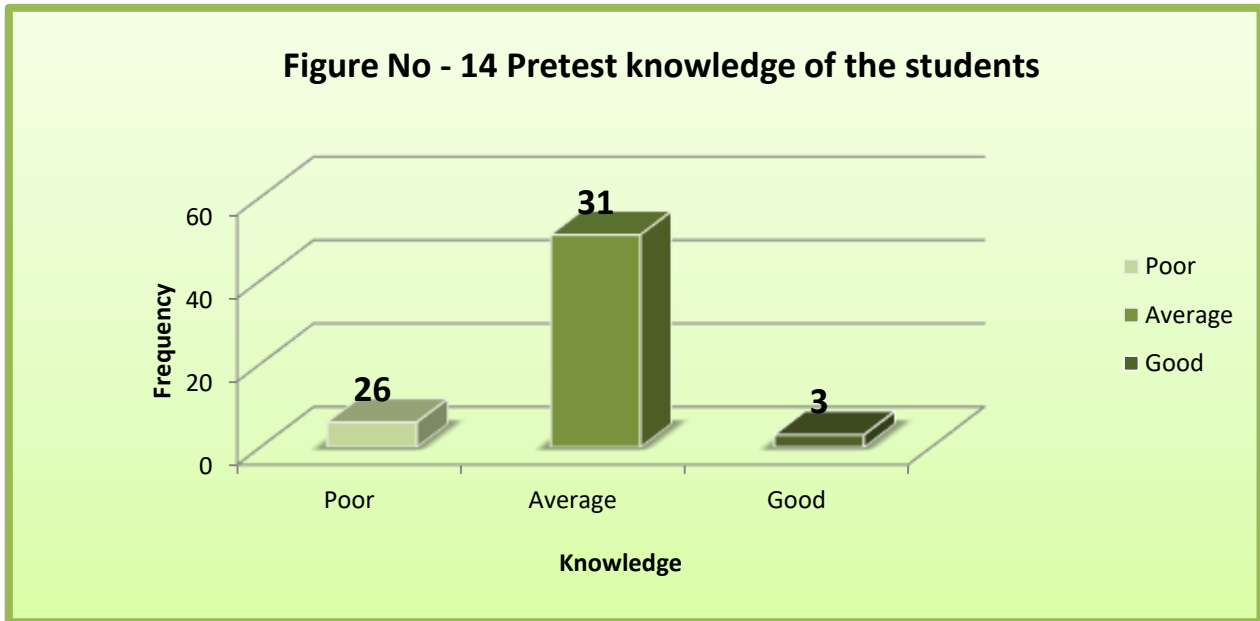
Finding related to Demographic Variable indicate that the majority of the students were Aged between 20-22years i.e. 29(49.00%) the majority students were female 38(63.3%) the medium of education was english i.e. 48(80%) the majority residence were urban i.ei. 55(92%) the majority followed Hinduism i.e. 27( 45%) thier family income was above 30001 i.e. 40(67%) most students belonged to nuclear family i.e. 45(75%), 38(63%) did not had any knowledge about organ donation, 55(92%) student did not attend any similar king of education programme and 54 (90%) had not seen any case of organ donation in family and society

**ASSESSMENT OF PRETEST KNOWLEDGE SCORE OF STUDENTS ( N =60)**

S.No	Category	Frequency	Percentage	Mean	SD
1	Good	3	5%		
2	Average	31	51.6%	16.78	3.77
3	Poor	26	43.3%		

There were 60 samples included in the study for assessment of pre test knowledge score, out of which 3(6%) had good knowledge score, 31(51%) had average knowledge score and 26(43%) had poor

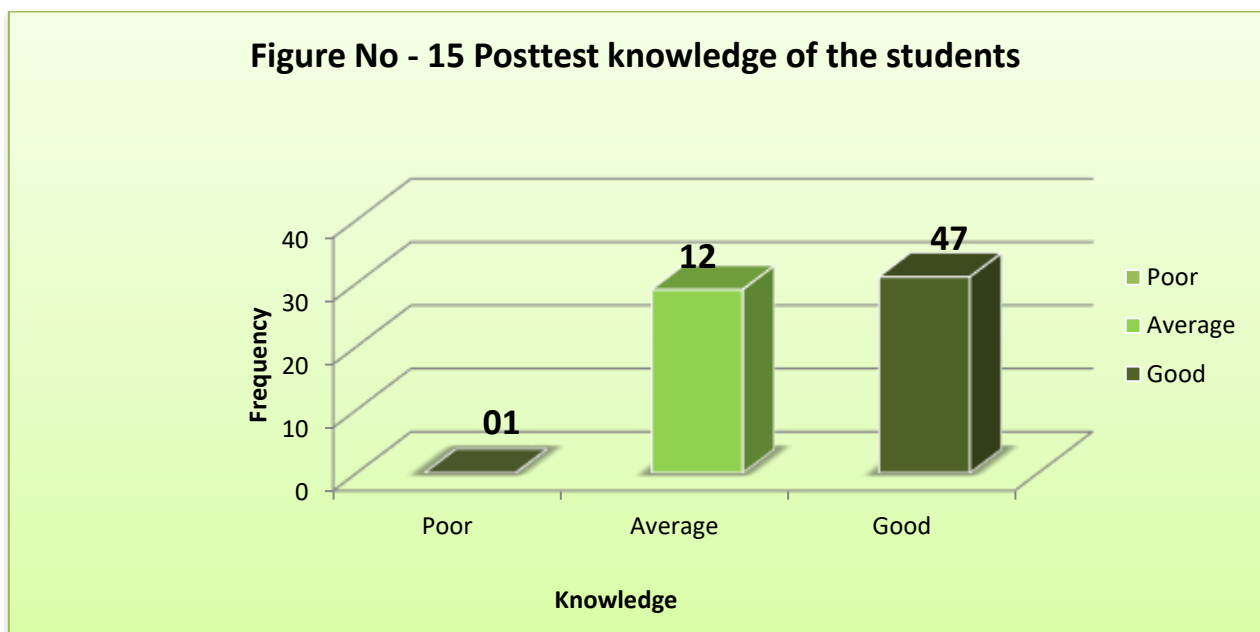
knowledge score regarding Organ Donation The mean pre test knowledge score were 16.78 and SD was 3.77



**ASSESSMENT OF POSTTEST KNOWLEDGE SCORE OF STUDENTS (N = 60 )**

S.No	Category	Frequency	Percentage	Mean	SD
1	Good	31	51.6%		
2	Average	28	46%	23.06	3.25
3	Poor	01	01		

In the post test it was found out that, out of 60 samples, 47(78.3%) had gained good knowledge score and 12(20.6%) had gained average knowledge score. Whereas 1(1.%) were found to have poor knowledge score. The mean post test knowledge score were 23.06 and SD was 3.25.

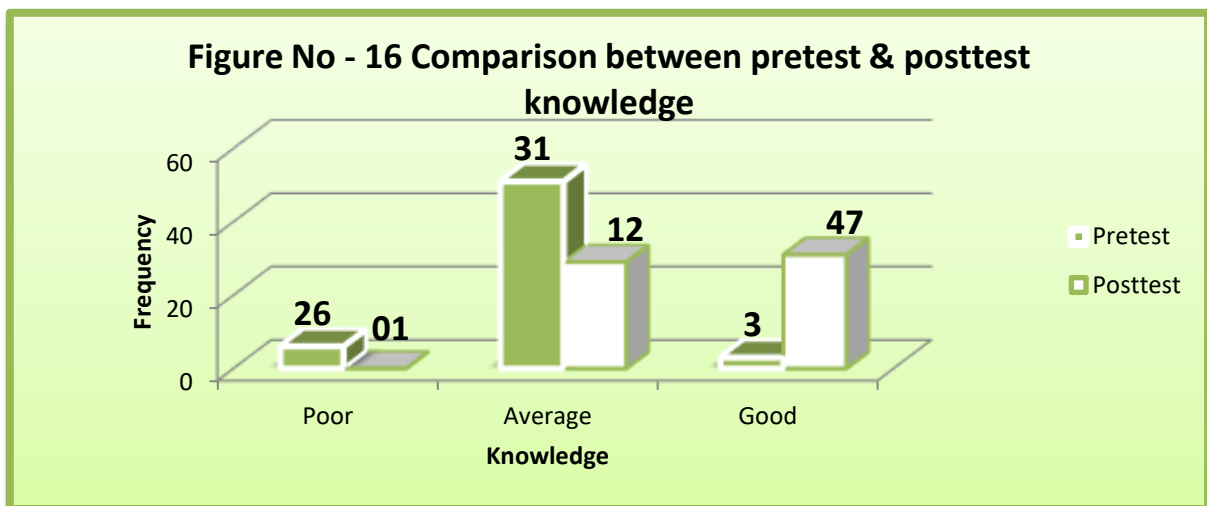


Thus, it fulfils objective no 1. and hypothesis H1 To assess the pre-test and post-test level of knowledge regarding organ donation among non-health professional students and H1: There will be significant difference between the pre-test and post-test level of knowledge regarding organ donation among non- health professional students.

**COMPARISON OF PRE & POST KNOWLEDGE OF STUDENTS (N = 60)**

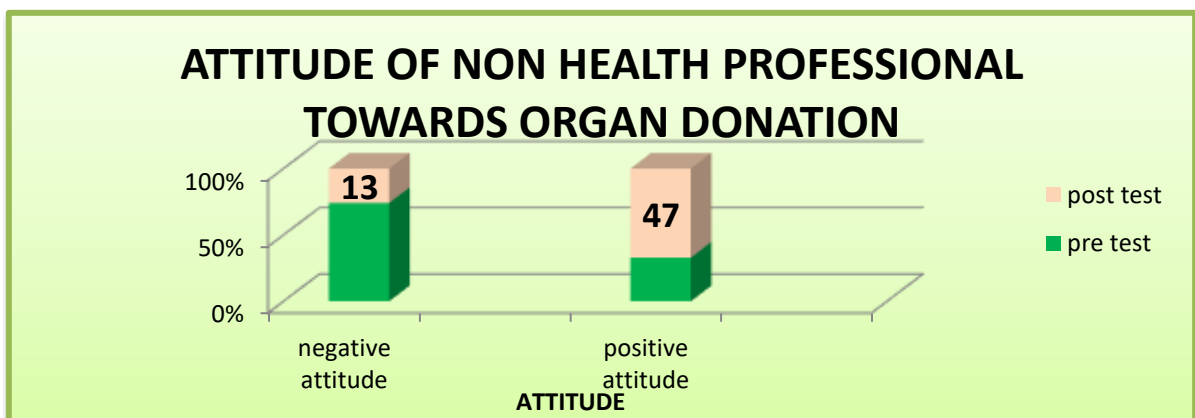
S.No	Description	Mean	SD	t-Test	Mean difference
1	Pretest Knowledge	16.78	3.77	3.71	19.2
2	Posttest Knowledge	23.06	3.25		

The comparison between pre and post test knowledge made by t-test. The pre test and post test knowledge was statistically tested by applying t-test method at the level of 0.05%. In this case the calculated value of t is less than the table value=2.326.



This indicates that the information booklet was effective in improving the knowledge of the non health professional students. Thus, it fulfils the objective no. 2 hence the hypothesis H2: There will be increase in knowledge score after intervention of information booklet related to organ donation among non- health professional students was accepted.

**ATTITUDE SCALE OF NON HEALTH PROFESSIONALS TOWARDS ORGAN DONATION N=60**



In Attitude Scale found out that, out of 60 samples, 47(78.3%) had positive attitude towards organ donation. Whereas 13(21.6%) were found to have negative attitude towards organ donation. thus, it fulfils objective no. and hypothesis **H3**: There will be attitude change after intervention of information booklet related to organ donation among non- health professional students

**SIGNIFICANCE LEVEL OF KNOWLEDGE**

KNOWLEDGE OF NON HEALTH PROFESSIONALS							
	Poor	Average	Good	DF	CHI VALUE	P VALUE	INFERENCE
<b>AGE</b>							
17-20	1	4	4	16	44	0	MS
20-22	0	13	17				
22-25yr	0	7	10				
ABOVE 25yr	0	4	1				
<b>GENDER</b>							
FEMALE	1	15	22	4	53	0.34	NS
MALE	0	13	9				
<b>MEDIUM OF EDUCATION</b>							
English	0	19	29	18	48.4	0.0008	S
Hindi	1	9	2				
<b>RESIDENCE</b>							
Urban	0	25	30	4	10.45	0.36	NS
Rural	1	3	1				
<b>RELIGION</b>							
Hindu	0	17	10	16	15.32	0	MS
Muslim	0	4	8				
Christian	0	0	6				
Sikh	0	5	5				
Others	1	2	2				
<b>FAMILY INCOME</b>							
Below 10000rs	0	0	0	6	10.45	0.36	NS
10001-20000rs	1	1	1				
20001-30000rs	0	11	6				
Above 30001	0	16	24				
<b>TYPE OF FAMILY</b>							
Nuclear	0	18	27	8	10.48	0.32	NS
Joint	1	10	4				
Any previous							



knowledge about organ donation							
Yes	0	2	20	4	23.43	0.0002	S
No	1	26	11				
Have You Attended Any Similar Type Of Education Programme							
Yes		2	3	12	16.64	0.43	NS
No	1	26	28				
Have You Seen Any Case Of Organ Donation In Family / Society							
Yes	0	0	6	4	10.34	0.058	S
No	1	28	25				

**FINDINGS RELATED TO THE ASSOCIATION OF POST-TEST LEVEL OF KNOWLEDGE AMONG NON- HEALTH PROFESSIONAL STUDENTS AND WITH SOCIO DEMOGRAPHIC VARIABLES**

**MOST SIGNIFICANT :** In association of knowledge related to organ donation with demographic variable Age and Religion is most significant with chi value 44 & 15.32 and p value 0 so  $p < 0.05$

**SIGNIFICANT :** In association of knowledge related to organ donation with demographic variable medium of education is significant chi square value 48.4 & p value is 0.0008, previous knowledge about organ donation is significant with chi square value 23.43 & p-value 0.0002 and have you seen any case of organ donation in family and society is significant with chi-square 10.34 & p value 0.058 so  $p < 0.05$

**NON SIGNIFICANT:** the other variable were found to be non significant

**SIGNIFICANCE LEVEL OF ATTITUDE**

ATTITUDE OF NON HEALTH PROFESSIONALS TOWARDS ORGAN DONATION						
	POSITIVE ATTITUDE (N=47)	NEGATIVE ATTITUDE (N=13)	DF	CHI-VALUE	P-VALUE	INFERENCE
<b>AGE</b>						
17-20	4	3	16	440.9	0	MS
20-22	22	7				
22-25yr	15	2				
ABOVE 25yr	4	1				
<b>GENDER</b>						
FEMALE	29	9	4	5.345	0.267	NS

MALE	18	4				
MEDIUM OF EDUCATION						
English	44	4	16	44.28	0.008	S
Hindi	3	9				
RESIDENCE						
Urban	47	8	4	93.8	0.35	NS
Rural	0	5				
RELIGION						
Hindu	27	1	16	138.95	0	MS
Muslim	3	9				
Christian	6	0				
Sikh	10	0				
Others	2	3				
FAMILY INCOME						
Below 10000rs	0	0	6	9.25	0.282	NS
10001-20000rs	2	3				
20001-30000rs	7	10				
Above 30001	40	0				
TYPE OF FAMILY						
Nuclear	31	4	8	9.024	0.45	NS
Joint	6	9				
Any previous knowledge about organ donation						
Yes	20	2	4	20.235	0.0025	S
No	27	11				
Have You Attended Any Similar Type Of Education Programme						
Yes 5	4	1	12	5.942	0.387	NS
No 55	51	12				
Have You Seen Any Case Of Organ Donation In Family / Society						
Yes 6	6	0	4	22.364	0.000238	S
No 54	48	13				

## **FINDINGS RELATED TO THE ASSOCIATION OF ATTITUDE CHANGE AMONG NON-HEALTH PROFESSIONAL STUDENTS AND WITH SOCIO DEMOGRAPHIC VARIABLES**

**MOST SIGNIFICANT:** In association of attitude change among non health professionals towards organ donation with demographic variable Age with chi value 440.95 & p value 0 so  $p < 0.05$  and Religion is most significant with chi value 138.95 & p value 0 so  $p < 0.05$  is most significant

**SIGNIFICANT :** In association of attitude change among non health professionals related to organ donation with demographic variable medium of education is significant chi square value 44.28 & p value is 0.0008, previous knowledge about organ donation is significant with chi square value 20.235 & p-value 0.0002 and have you seen any case of organ donation in family and society is significant with chi-square 22.364 & p value 0.000238 so  $p < 0.05$

**NON SIGNIFICANT :** the other variable were found to be non significant

## **DISCUSSION**

Findings in the present study indicated that the knowledge score of non health professional students related to organ donation was increased by 47(78.3%) good knowledge score and 12(20.6%) had gained average knowledge score Whereas only 1(1.%) were found to have poor knowledge score. The mean post test knowledge score were 23.06 and SD was 3.25. The comparison between pre and post test knowledge made by t-test  $t = 0.007$  statistically tested by applying t-test method at the level of 0.05%. In this case the calculated value of t is less than the table value = 1.685 is significant at 0.05 level of significance

Finding of the present study show the assess of attitude towards organ donation indicates majority 78.3% showed positive attitude towards organ donation and only 21.7% showed negative attitude towards organ donation

Finding related to effectiveness of information booklet showed that The Calculated value of Paired 't' test is 1.8544 which is higher than the table value of 't' which indicates that the information booklet was highly significant.

Finding to assess the correlation between knowledge and attitude regarding organ donation among non-health professional students found that the t-test compared result showed positive correlation than calculated value  $t = 2.974$  which is greater than  $t = 1.685$  at 0.05 level of significance.

## **CONCLUSION**

The study focused on improving the knowledge and attitude of non health professionals about organ donation as dramatically the number of patients waiting for organ donation have increased Demographic, socioeconomic and cultural characteristics have been related with different prevalence of willingness to organ donation among population. One of the main limiting factors for organ donation is the low amount of knowledge and awareness to families that consent to donate will only be possible if continually similar programme will be applied to different population

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