RESEARCH
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"AWARENESS AND ATTITUDE TOWARDS ORGAN DONATION AMONG ADOLESCENTS OF SELECTED COLLEGES IN BELAGAVI- A CROSS-SECTIONAL STUDY."

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Abstract
Organ transplantation is medical approach where an organ is detached from body of donor and fixed in body of receiver. The procedure is performed to fix a damaged or missing organ. Heart, kidneys, lungs, liver, brain, intestine, pancreas, and thymus are the organs that are transplanted successfully. Tissues includes bones and tendons, cornea, skin, heart valve, nerves and veins. Kidneys, liver and heart stand in first, second and third row respectively in frequently transplanted organs whereas, in terms of tissues, corneas as well as musculoskeletal grafts are often transplanted.[1]

The number of deceased organ donation is on rise in Karnataka. There were 39, 60, 78 and 87 deceased organ donors in 2014, 2015, 2016 and 2017 respectively in Karnataka. Likewise, number of donated organs by deceased donors were 114, 158, 214 and 249 in 2014, 2015, 2016 and 2017 respectively.[16]

The best way to promote the awareness may be done through the college students as they are the most suitable population to carry the message to the community. Through them, it is possible to enhance the social support for organ donation and embolden public to register for organ donation. Hence, it is important to assess the personal views, level of awareness, mindset as well as thoughts of the pupil regarding organ donation.

Objectives

1. To assess the awareness and attitude towards organ donation among adolescents of selected colleges
2. To determine the association between awareness and attitude regarding organ donation among adolescent with selected demographic variables
3. To determine the correlation between awareness and attitudes regarding organ donation among adolescents.

Key words: Awareness, Attitude, Adolescents, Organ donation, College.

Introduction:

Organ transplantation was first performed during 18th century. The failure rate of transplantation was very high during initial phase, but successful organ transplantation had performed by the researchers from mid-20th century. Kidneys, eyes, livers, pancreas, hearts, lungs, heart-lungs, intestines are now considered as restorative treatment.[2]

In the present days, organ transplantation is an accepted treatment procedure for the life-saving therapy for organ failure. Recent data of World Health Organization Global Observatory on Donation and Transplantation shows that around 130,000 organ transplants are being performed worldwide but it is also assumed that the number of total transplants cover only around 10% of the global need. The extreme shortage of organs leads to increased mortality rate of the people in the waiting list. This situation also results in unethical and illegal ways by wealthy people to receive organs generally from poor and vulnerable people.[10]

Spain stands in the foremost list of organ donation and transplant with the rate of 46.9 donors per million population and there were 5261 surgeries. Spain has been able to be a global leader in terms of organ donation and transplantation for 26 years.[11] In the context of United Kingdom, organ donation rate is higher in Wales with 25.4 followed by England with 24.4 donations per million population in 2018.[12]

More than 114,000 people including children, men and women are registered on the national transplant waiting list of United States till August 2017. Though the waiting list was very high, only 34,770 transplants were conducted in 2017. Statistics shows that 20 people in United States die every day in a hope of receiving a donor. In every 10 minutes, a new person joins the waiting list. Although 95% of American adults are in favor of organ donation, only 54% have pledged for organ donation. Eight life-saving organs can be donated by a single person. Comparing the statistics of 1991 and 2017, the figure of organ donors has elevated from 6,953 to 16,473 and organ transplants from 15,756 to 34,770 but there is a tremendous expansion of

waiting list for organ transplantation from 23,198 to 115,000. The number of organ donors and transplants have raised up. In the contrary, the number of clients short listed for organ transplant continues to become much greater. In 2017, total 42,609 organs were donated, among which 36,407 from deceased donor and 6,181 from living donor. Likewise, number of deceased donors were 10,281 and living donors were 6,181.[13]

The need for organ transplant all over the globe has increased massively. India is also facing the same scenario. 1 lakh 50 thousand Indian experience kidney failure each year but only 3 thousand patients among them obtain donor. Correspondingly, about 2 lakh patients die every year due to liver cancer/failure. Only 15 hearts are available for 50,000 heart attack patients. 90% people in waiting list of India die due to shortage of organ.[14]

The number of deceased organ donation is on rise in Karnataka. There were 39, 60, 78 and 87 deceased organ donors in 2014, 2015, 2016 and 2017 respectively in Karnataka. Likewise, number of donated organs by deceased donors were 114, 158, 214 and 249 in 2014, 2015, 2016 and 2017 respectively.[16]

HYPOTHESIS

H0: There will be a significance correlation between Awareness and attitude towards organ donation with selected socio demographic variables.

RESEARCH METHODOLOGY

RESEARCH APPROACH:

Quantitative research approach was most relevant for the investigations. to identify awareness and attitude towards organ donation among adolescents of selected colleges.

RESEARCH DESIGN

To reach the objective of this study research design utilized for the study was "Cross-sectional design was used in the study".

SETTING OF THE RESEARCH

This study was conducted in PU Colleges of Belagavi

SAMPLE SIZE

There were 325 respondents in the study based on the simple random sampling Techniques

CRITERIA FOR SELECTION OF SAMPLES

Inclusion criteria for sampling

- Adolescents who are interested to participate.
- Adolescents who are available during the study period.
- Both male and female adolescents.

Exclusion criteria for sampling

- Adolescents who are not interested to participate.
- Adolescents who are not available during data collection

TOOL FOR DATA COLLECTION

In this study data collection instrument were Self-structured Awareness Questionnaire and Attitude scale regarding organ donation.

DEVELOPMENT AND DESCRIPTION OF THE TOOL

In the present study, a structured awareness questionnaire and attitude scale regarding organ donation were developed. The following steps were carried out in preparation of the tool:

- Literature review
- Validity of the tool
- Pretesting
- Reliability check

The structured awareness questionnaire consists of two sections:

Section 1: Items on selected demographic variables (age, gender, educational status, area of residence, family income) and organ donation related information (source of information regarding organ donation).

Section 2: It consists of total 20 structured multiple-choice questions with four options to assess awareness of adolescents regarding organ donation.

Section 3: It consists of three-point Likert scale to measure the attitude of the respondents.

DATA COLLECTION AND PROCEDURE

Ethical clearance and formal written permission were obtained from concerned authority for main research study. The main study was conducted from 15th December 2018 to 1th February 2019.

THE STEPS USED IN DATA COLLECTION

Step 1: Formal permission was obtained from belonging authority to conduct the research study.
Step 2: Selection of sample.
Step 3: Researcher introduced and clarified objectives of research study to the respondents.
Step 4: Obtained the informed and written consent from all the participants.
Step 5: Conducted pre-test by using Structured Awareness questionnaire regarding organ donation.
Step 6: Conducted main study using Structured Awareness questionnaire regarding organ donation.
Step 7: Analysis and interpretation of data was done using descriptive and inferential statistics.

ANALYSIS OF DATA

Data was analyzed using descriptive and inferential statistics by SPSS software. Descriptive statistics is used to describe the sample characteristics. Descriptive statistics used for the study are mean, median, mode, standard deviation, percentage, frequency and range. Inferential statistics is used to test the significance.

The plan for data analysis was organized in the following manner:

- Organizing the data on a master sheet in the form of the objective of the study.
- Computation of frequency, percentage, mean, median, standard deviation and range to describe the data.
- Classification of awareness scores was done using mean and standard deviation as follows:

➢ Good Score: (X+SD)
➢ Average Score: (X+SD) - (X-SD)
➢ Poor Score: (X-SD)

"1" mark was given to right answer and "0" was given to wrong answer for each 20 awareness items.

A score of "3" was given to agree, "2" was given to neutral and "1" was given to disagree responses for each 10 attitude items.

Inferential statistics were used to draw the following conclusion.

RESULT

Data was collected through structured awareness questionnaire and attitude scale on organ donation. A total of 325 adolescents of selected pre-university colleges of Belagavi were enrolled in the study using simple random sampling technique. Analysis of collected data was done using descriptive and inferential statistics.

Collected data was presented as follows:

DESCRIPTIVE

- Frequency and percentage
- Mean
- Standard deviation and Standard error
- Karl Pearson's co-efficient of correlation

INFERENTIAL

- Chi-square test
- Independent 't' test
- Dependent 't' test
- One-way ANNOVA test

PRESENTATION OF THE DATA

The obtained data is presented under following section:

- **Section I:** Findings on of demographic characteristics of adolescents.
- **Section II:** Findings on levels of awareness wise distribution
- **Section III:** Findings on association between demographic characteristics with level of awareness
- **Section IV:** Findings on level of attitude wise distribution
- **Section V:** Findings on association between levels of attitude towards organ donation with demographic characteristics
- **Section VI:** Findings on correlation between awareness and attitude scores towards organ donation

Section I

SECTION I: DISTRIBUTION OF PARTICIPANTS BY DEMOGRAPHIC CHARACTERISTICS

Table 1: Distribution of participants by demographic characteristics

n=325

Demographic characteristics	No of respondents	% of respondents
Ages		
15yrs	73	22.46
16yrs	147	45.23
17yrs	91	28.00
18yrs	14	4.31
Educations		
Eleven	118	36.31
Twelve	207	63.69
Gender		
Male	127	39.08
Female	198	60.92
Religions		
Hindu	268	82.46
Muslim	48	14.77
Christian	3	0.92
Others	6	1.85
Area of residence		
Rural	230	70.77
Urban	95	29.23
Monthly income of the family		
< Rs. 5000	110	33.85
Rs. 50001 -10,000	110	33.85
Rs. 10,001-15000	79	24.31
> Rs 15000	26	8.00
Food habit		
Vegetarian	165	50.77
Mixed	160	49.23
Are you aware of organ donation		
Yes	323	99.38
No	2	0.62
Source of information		
Mass media	99	30.46
Friends	132	40.62
Health personnel	94	28.92
Total	325	100.00

Table 1 indicates that majority 147(45.23%) of the participants were 16 years and minority 14(4.31%) were 18 years of age. Maximum 207(63.69%) of the participants were studying in grade twelve and minimum 118(36.31) were studying in grade eleven. Majority 198(60.92%) of the participants were male and minority 127(39.08%) of the participants were female.

Characteristics	Levels of awareness								Chi-square	p-value
	Low level	%	Average level	%	High level	%	Total	%		
Ages										
15yrs	23	31.51	31	42.47	19	26.03	73	22.46	7.7580	0.2560
16yrs	39	26.53	75	51.02	33	22.45	147	45.23		
17yrs	15	16.48	45	49.45	31	34.07	91	28.00		
18yrs	3	21.43	7	50.00	4	28.57	14	4.31		
Educations										
Eleven	16	13.56	65	55.08	37	31.36	118	36.31	12.2510	0.0020*
Twelve	64	30.92	93	44.93	50	24.15	207	63.69		
Gender										
Male	27	21.26	61	48.03	39	30.71	127	39.08	2.1770	0.3370
Female	53	26.77	97	48.99	48	24.24	198	60.92		
Religions										
Hindu	68	25.37	131	48.88	69	25.75	268	82.46	4.9350	0.5520
Muslim	10	20.83	23	47.92	15	31.25	48	14.77		
Christian	1	33.33	0	0.00	2	66.67	3	0.92		
Others	1	16.67	4	66.67	1	16.67	6	1.85		
Area of residence										
Rural	53	23.04	109	47.39	68	29.57	230	70.77	3.3300	0.1890
Urban	27	28.42	49	51.58	19	20.00	95	29.23		
Monthly income of the family										
< Rs. 5000	29	26.36	55	50.00	26	23.64	110	33.85	4.2060	0.6490
Rs. 50001 -10,000	21	19.09	56	50.91	33	30.00	110	33.85		
Rs. 10,001-15000	21	26.58	36	45.57	22	27.85	79	24.31		
> Rs 15000	9	34.62	11	42.31	6	23.08	26	8.00		
Food habit										
Vegetarian	52	31.52	75	45.45	38	23.03	165	50.77	8.9210	0.0120*
Mixed	28	17.50	83	51.88	49	30.63	160	49.23		
Aware of organ donation										
Yes	80	24.77	157	48.61	86	26.63	323	99.38	0.9020	0.6370
No	0	0.00	1	50.00	1	50.00	2	0.62		
Source of information										
Mass media	23	23.23	43	43.43	33	33.33	99	30.46	3.9270	0.4160
Friends	36	27.27	65	49.24	31	23.48	132	40.62		
Health personnel	21	22.34	50	53.19	23	24.47	94	28.92		
Total	80	24.62	158	48.62	87	26.77	325	100.0		

Majority 268(82.46%) of the participants were Hindu followed by Muslim 48(14.77%) and other religions 6(1.85%) and Christian 3(0.92%). Maximum 230(70.77%) of the respondents were residing in rural area and minimum 95(29.23%) of the respondents were residing in urban area. Equal number 110(33.85%) of the respondents were having family income < Rs. 5000 and Rs. 5001- 10,000. Maximum 165(50.77%) of the respondents were vegetarian and minority 160(49.23%) consumed mixed diet. Majority 132(40.62%) of the respondents stated friends as the source of information of organ donation and minority 94(28.92%) of the respondents had heard about organ donation from health personnel.

Table 2: Levels of awareness wise distribution

n=325

Levels of awareness	No of respondents	% of respondents
Low level (<mean-SD)	80	24.62
Average level (>=mean-SD, <mean+SD)	158	48.62
High level (>=mean+SD)	87	26.77
Total	325	100.00

Table 2 indicates that majority 158(48.62%) of the respondents had average level of awareness and minority 80(24.62%) of the participants possessed low level of awareness about organ donation.

Table 3: Association between levels of awareness towards organ donation with demographic characteristics

n=32

*p<0.05

Table 3 revealed that there was significant relationship between levels of awareness towards organ donation with education (chi-square value=12.2510, p-value= 0.0020*), and food habit (chi-square value=8.9210, p-value=0.0120*) but no any significant relation between levels of awareness and other demographic variables like age (chi-square value=7.7580, p-value=0.2560), gender (chi-square value=2.1770, p-value= 0.3370), area of residence (chi-square value=3.3300, p-value= 0.1890), monthly income of the family (chi-square value=4.2060, p-value= 0.6490) and source of information (chi-square value=3.9270, p-value= 0.4160) at 5% level of significance was observed.

Table 4 Levels of attitude wise distribution

n=325

Levels of attitude	No of respondents	% of respondents
Disagree (<mean-SD)	44	13.54
Neutral (>=mean-SD, <mean+SD)	229	70.46
Agree (>=mean+SD)	52	16.00
Total	325	100.00

Table 4 indicates that majority 229(70.46%) of the participants were neutral towards organ donation (>=mean-SD, <mean+SD) and minority 44(13.54%) of the respondents were disagree towards organ donation (<mean-SD).

Table 5: Association between levels of attitude towards organ donation with demographic characteristics

n=325

Characteristics	Levels of attitude								Chi-square	p-value
	Low level	%	Average level	%	High level	%	Total	%		
Ages										
15yrs	4	5.48	55	75.34	14	19.18	73	22.46	9.1930	0.1630
16yrs	21	14.29	103	70.07	23	15.65	147	45.23		
17yrs	17	18.68	59	64.84	15	16.48	91	28.00		
18yrs	2	14.29	12	85.71	0	0.00	14	4.31		
Educations										
Eleven	18	15.25	79	66.95	21	17.80	118	36.31	1.1010	0.5770
Twelve	26	12.56	150	72.46	31	14.98	207	63.69		
Gender										
Male	19	14.96	87	68.50	21	16.54	127	39.08	0.4620	0.7940
Female	25	12.63	142	71.72	31	15.66	198	60.92		
Religions										
Hindu	34	12.69	191	71.27	43	16.04	268	82.46	9.2580	0.1600
Muslim	7	14.58	34	70.83	7	14.58	48	14.77		
Christian	2	66.67	0	0.00	1	33.33	3	0.92		

Others	1	16.67	4	66.67	1	16.67	6	1.85		
Area of residence										
Rural	28	12.17	167	72.61	35	15.22	230	70.77	1.8980	0.3870
Urban	16	16.84	62	65.26	17	17.89	95	29.23		
Monthly income of the family										
< Rs. 5000	16	14.55	78	70.91	16	14.55	110	33.85	3.0530	0.8020
Rs. 50001 -10,000	16	14.55	76	69.09	18	16.36	110	33.85		
Rs. 10,001-15000	7	8.86	57	72.15	15	18.99	79	24.31		
> Rs 15000	5	19.23	18	69.23	3	11.54	26	8.00		
Food habit										
Vegetarian	21	12.73	120	72.73	24	14.55	165	50.77	0.8500	0.6540
Mixed	23	14.38	109	68.13	28	17.50	160	49.23		
Aware of organ donation										
Yes	44	13.62	227	70.28	52	16.10	323	99.38	0.8440	0.6560
No	0	0.00	2	100.0	0	0.00	2	0.62		
Source of information										
Mass media	14	14.14	70	70.71	15	15.15	99	30.46	2.9960	0.5590
Friends	18	13.64	97	73.48	17	12.88	132	40.62		
Health personnel	12	12.77	62	65.96	20	21.28	94	28.92		
Total	44	13.54	229	70.46	52	16.00	325	100.0		

Table 5 indicates that there was no any significant association between levels of attitude towards organ donation with demographic characteristics like age (chi-square value=9.1930, p-value= 0.1630), education (chi-square value=1.1010, p-value= 0.5770), gender (chi-square value=0.4620, p-value= 0.7940), religion (chi-square value=9.2580, p-value= 0.1600), area of residence (chi-square value=1.8980, p-value= 0.3870), monthly income of family (chi-square value=3.0530, p-value= 0.8020), food habit (chi-square value=0.8500, p-value= 0.6540) and source of information (chi-square value=2.9960, p-value= 0.5590) at 5% level of significance.

Table 6: Comparison of demographic characteristics with respect to mean awareness scores towards organ donation by one-way ANOVA and independent t test

n=325

Characteristics	Mean	SD	F / t value	p-value
Ages				
15yrs	14.27	1.69	1.9838	0.1163
16yrs	14.41	1.50		
17yrs	14.81	1.49		
18yrs	14.57	1.28		
Educations				
Eleven	14.85	1.26	3.1285	0.0019*
Twelve	14.30	1.65		
Gender				
Male	14.61	1.56	1.0118	0.3124
Female	14.43	1.52		
Religions				
Hindu	14.47	1.53	0.2584	0.8553
Muslim	14.62	1.61		
Christian	15.00	2.65		
Others	14.33	1.03		

Area of residence				
Rural	14.57	1.51	1.3773	0.1694
Urban	14.32	1.60		
Monthly income of the family				
< Rs. 5000	14.31	1.59	1.1905	0.3134
Rs. 50001 -10,000	14.69	1.49		
Rs. 10,001-15000	14.53	1.49		
> Rs 15000	14.38	1.65		
Food habit				
Vegetarian	14.28	1.66	-2.5630	0.0108*
Mixed	14.72	1.37		
Aware of organ donation				
Yes	14.49	1.54	-0.9231	0.3567
No	15.50	0.71		
Source of information				
Mass media	14.63	1.61	0.7007	0.4970
Friends	14.39	1.47		
Health personnel	14.52	1.56		
Total	14.50	1.54		

*p<0.05

Table 6 replicates that there was significant relation between education (F / t value= 3.1285, p-value=0.0019*) and food habit (F / t value= -2.5630, p-value=0.0108*) with respect to mean awareness scores towards organ donation by one-way ANOVA and independent t test (*p<0.05). There was no any significant relation between age (F / t value= 1.9838, p-value=0.1163), gender (F / t value= 1.0118, p-value=0.3124), religion (F / t value= 0.2584, p-value= 0.8553), area of residence (F / t value= 1.3773, p-value=0.1694), monthly family income (F / t value= 1.1905, p-value=0.3134), and source of information (F / t value= 0.7007, p-value=0.4970) with respect to mean awareness scores towards organ donation by one-way ANOVA and independent t test (*p<0.05).

Table 7: Comparison of demographic characteristics with respect to mean attitude scores towards organ donation by one-way ANOVA and independent t test

n=325

Characteristics	Mean	SD	F / t value	p-value
Ages				
15yrs	25.30	1.64	3.7522	0.0113*
16yrs	24.63	1.88		
17yrs	24.49	2.31		
18yrs	23.71	2.43		
Educations				
Eleven	24.57	2.22	-0.9247	0.3558
Twelve	24.78	1.88		
Gender				
Male	24.66	2.18	-0.3093	0.7573
Female	24.73	1.91		
Religions				
Hindu	24.70	2.02	0.6181	0.6037
Muslim	24.85	1.92		

Christian	23.33	3.21		
Others	24.33	2.07		
Area of residence				
Rural	24.71	2.05	0.1172	0.9067
Urban	24.68	1.94		
Monthly income of the family				
< Rs. 5000	24.66	2.02	1.2861	0.2791
Rs. 50001 -10,000	24.57	2.16		
Rs. 10,001-15000	25.06	1.78		
> Rs 15000	24.35	1.98		
Food habit				
Vegetarian	24.70	2.02	-0.0694	0.9447
Mixed	24.71	2.02		
Aware of organ donation				
Yes	24.70	2.02	-0.5598	0.5760
No	25.50	0.71		
Source of information				
Mass media	24.52	2.07	1.0078	0.3662
Friends	24.69	1.95		
Health personnel	24.93	2.04		
Total	24.70	2.01		

*p<0.05

Table 7 shows significant relation was found among age categories (F / t value= 3.7522, p-value=0.0113*) with respect to mean attitude scores towards organ donation by one-way ANOVA and independent t test (*p<0.05). There was no any significant relation between education (F / t value= -0.9247, p-value=0.3558), gender (F / t value= -0.3093, p-value=0.7573), religion (F / t value= 0.6181, p-value=0.6037), area of residence (F / t value= 0.1172, p-value=0.9067), monthly family income (F / t value= 1.2861, p-value=0.2791), food habit (F / t value= -0.0694, p-value=0.9447) and source of information (F / t value= 1.0078, p-value=0.3662) with respect to mean attitude scores towards organ donation by one-way ANOVA and independent t test (*p<0.05).

Table8: Correlation between awareness and attitude scores towards organ donation among adolescents of colleges in Belagavi

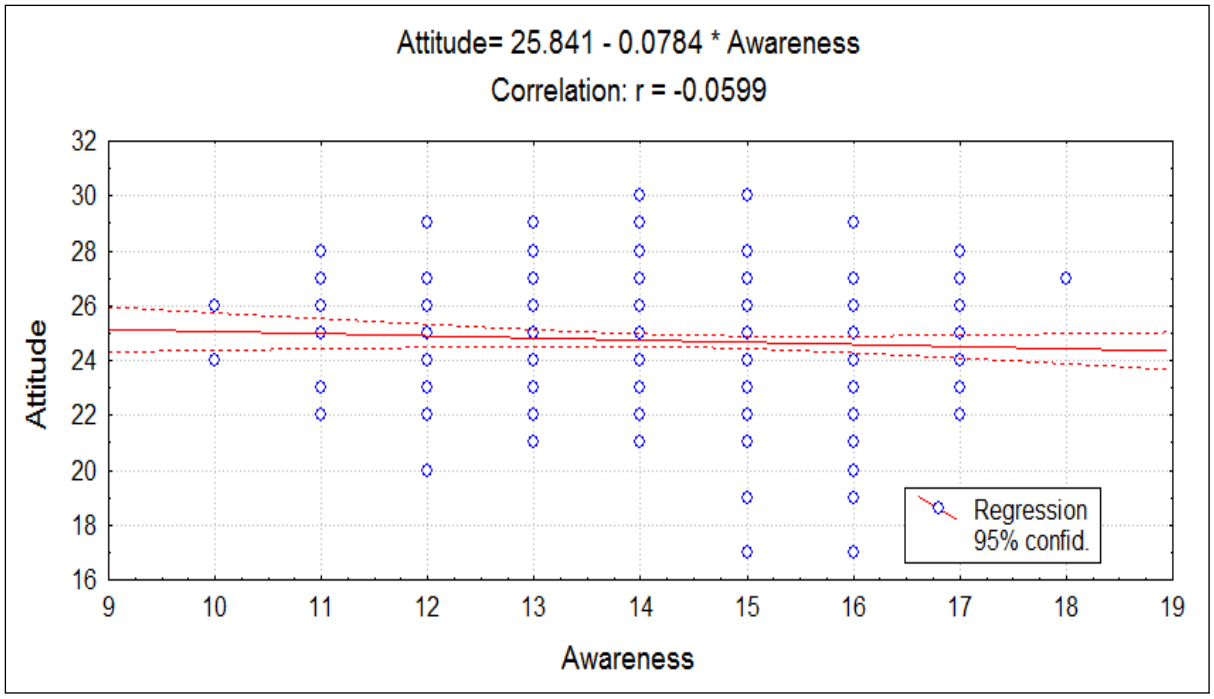
n=325

Variables	Correlation between awareness scores towards organ donation			
	r- value	r^2	t-value	p-value
Attitude scores	-0.0599	0.0036	-1.0787	0.2815

*p<0.05

Table 8 shows no significant correlation statistically among awareness and attitude scores towards organ donation among adolescents of colleges in Belagavi (r- value=-0.0599, r^2= 0.0036, t-value= -1.0787, p-value=0.2815).

Figure: Scatter plot between awareness and attitude scores towards organ donation among adolescents of colleges in Belagavi



DISCUSSION

Findings related to socio-economic demographic variables of the subjects

a) **Age:** In the present study, majority 147(45.23%) of the participants belongs to 16 years, 91(28%) belonged to 17 years, 73(22.46%) belonged to 15 years while 14(4.31%) belonged to 18 years.

b) **Education:** Among 325 participants, majority 201(62.69%) were studying in grade twelve and 118(36.31%) were studying in grade eleven.
A similar study was conducted in Turkey in 2011/12 among high school student. 179 students of 10th and 11th class were included as study subjects.[11]

c) **Gender:** In the present study among 325 study subjects, majority 198(60.92%) were female and 127(39.08%) were male. A similar study was conducted at Saudi Arabia in 2014 among medicos. Total 481 respondents were included in the study among which 52% were female and 48% were male.[5]

d) **Religion :**In current study maximum 268(82.46%) of the participants were Hindu, 48(14.77%) were Muslim, 3(0.92%) were Christian and 6(1.85) were from other religions. The result is consistent with the study conducted at Chennai in 2012 to assess awareness, attitude and belief among medical students towards organ donation in South India. 206 participants were included in the study. Majority 90.1% of the respondents followed Hinduism.[21]

e) **Area of residence:** Among 325 respondents, majority 230(70.77%) were residing in rural area and 95(29.23%) in urban area.

f) **Monthly income of the family:** In current study, maximum 110(33.85%) of the participants had <Rs. 5,000 and Rs. 5,001-10,000 family income per month. 79(24.31%) of the respondents had Rs. 10,001- 15,000 and 26(8%) had >Rs. 15,000 monthly family income.

g) **Food habit:** In the present study majority 165(50.77%) of the participants consumed vegetarian diet and 160(49.23%) consumed mixed diet.

h) **Awareness of organ donation:** Among 325 respondents, majority 323(99.38%) of the participants had idea of organ donation and 2(0.62%) were not had idea of organ donation. Similar finding was found in the study was conducted at Pakistan among medicos. Among 158 respondents, 98.8% had awareness about organ donation.[13]

i) **Source of information:** In current study, maximum 132(40.62%) participants stated friends, 99(30.46%) mass media, 94(28.92%) health personnel as source of information. Contrast to the present study findings, results showed by a study conducted at Maharashtra, majority of participants stated television as the major source of information regarding organ donation.[15]

Findings on levels of awareness wise distribution:

In the present study, level of awareness has been classified into three categories; Low level, Average level and High level. Majority of the respondents 158(48.62%) had average level of awareness, 87(26.77%) had high level and 80(24.62%) had low level of awareness regarding organ donation. These findings were consistent with the study conducted at Chandigarh. The study showed that the mean ± SD knowledge score of respondents was 10.56 ± 2.1 with the range of 5-17. Majority 75% of the respondent had average knowledge.[14]

Findings on association between demographic variables with awareness level:

In current study, the association between demographic variables with awareness level regarding organ donation was done using chi-square test. There were 8 variables placed in demographic characteristics, among them chi-square value showed significant association with education (chi-square

value=12.2510, p-value= 0.0020*) and food habit (chi-square value=8.9210, p-value=0.0120*) at p<0.05 level. Rest of the 6 variables such as age, gender, religion, area of residence, monthly family income, source of information showed no significant association with level of awareness regarding organ donation at 0.05 level. Contrast to the present study, results showed in a study conducted at Faisalabad depicted that significant association was found between awareness about organ donation with socio-economic status (p=0.003) and level of education (p=0.000).[12]

Findings on association between levels of attitude towards organ donation with demographic characteristics

The study revealed that no any significant association between levels of attitude towards organ donation with demographic characteristics like age, education, gender, religion, area of residence, monthly income of family, food habit and source of information at 5% level of significance.

Same results have found in the study done at Chennai in 2012 to assess awareness, attitude and belief among medical students towards organ donation in South India. The study revealed no significant correlation was found statistically among attitude, belief regarding organ donation and demographics. [21]

Findings on correlation between awareness and attitude scores towards organ donation

In the present study, there was no any significant correlation statistically between awareness and attitude scores regarding organ donation (r- value=-0.0599, r^2= 0.0036, t-value= -1.0787, p-value=0.2815).

Contrast to the present study findings, results showed by a study conducted at South India stated that there was positive correlation among mean awareness and attitude of respondents. [24]

SUMMARY

A research study was carried out to assess awareness and attitude towards organ donation among adolescents of selected colleges of Belagavi. A cross-sectional research method was adopted in the study. The research approach selected for this study was descriptive approach. Samples were selected by using simple random sampling technique and the sample size consisting of 325 adolescents. Data was gathered using self-structured awareness questionnaire and attitude scale. Descriptive and inferential statistics were used to analyze the gathered data.

Study was intended at accomplishing the following objectives:

- To assess the awareness and attitude towards organ donation among adolescents of selected colleges.
- To determine the association between awareness and attitude regarding organ donation among adolescent with selected demographic variables.
- To determine the correlation between awareness and attitudes regarding organ donation among adolescents.

Study assumes that adolescents may be aware of organ donation. The dependent variables were awareness, attitude regarding organ donation and independent variable was adolescents of selected colleges. The conceptual frame work used in the research was based on General System Theory.

In order to collect the data regarding awareness and attitude regarding organ donation, structured questionnaire and attitude scale were developed. The structured questionnaire was constructed in three sections. Validation of tool was done by 7 experts from department of Community Health Nursing. Pilot study was conducted on 12th December 2018 at Government Sardar PU College, Belagavi. Written and informed consent was obtained from each respondent. 325 respondents were selected based on the inclusion and exclusion criteria. Structured awareness questionnaire and attitude scale were used to collect information regarding organ donation. Collected data was analysed using descriptive and inferential statistics.

The results of the research study showed that: Majority 58(48.62%) participants had average awareness level and minority 80(24.62%) possessed low awareness level about organ donation.

There was significant relationship between levels of awareness towards organ donation with education (chi-square value=12.2510, p-value= 0.0020*), and food habit (chi-square value=8.9210) but no significant relation was found between levels of awareness and other demographic variables like age, gender, area of residence, monthly income of the family and source of information.

Majority 229(70.46%) of the participants were neutral towards organ donation and minority 44(13.54%) were disagree towards organ donation.

There was no any significant association between levels of attitude towards organ donation with demographic characteristics like age, education, gender, religion, area of residence, monthly income of family, food habit and source of information.

There was significant relation between education (F / t value= 3.1285, p-value=0.0019*) and food habit (F / t value= -2.5630, p-value=0.0108*) with respect to mean awareness scores towards organ donation by one-way ANOVA and independent t test (*p<0.05). There was no any significant relation between age, gender, religion, area of residence, monthly family income, and source of information with respect to mean awareness scores towards organ donation by one-way ANOVA and independent t test.

There was significant relation between age (F / t value= 3.7522, p-value=0.0113*) with respect to mean attitude scores towards organ donation by one-way ANOVA and independent t test (*p<0.05). There was no any significant relation between education, gender, religion, area of residence, monthly family income, food habit and source of information with respect to mean attitude scores towards organ donation by one-way ANOVA and independent t test.

There was no any significant correlation statistically between awareness and attitude scores of organ donation. (r-value=-0.0599, r^2= 0.0036, t-value= -1.0787, p-value=0.2815).

The investigator really had a great experience for carrying out the present study. The guidance, direction and continuous support from the guide, various experts and cooperation from the participants played vital role in the successful completion of the study.

Conclusion

The best way to promote the awareness may be done through the college students as they are the most suitable population to carry the message to the community. Through them, it is possible to enhance the social support for organ donation and embolden public to register for organ donation. Hence, it is important to assess the personal views, level of awareness, mindset as well as thoughts of the pupil regarding organ donation.

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