

A descriptive study to assess the awareness regarding organ donation among adults visiting the medical OPD of KGMU, Lucknow with a view to increase their awareness about organ donation through educative material

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Abstract

Background: Organ transplantation has become a viable treatment for an increasing number of patients suffering from irreversible organ failure. Organs can be donated when the person is living or after death and also when the person is brain dead. Organ shortage has become a public health crises due to increased demand which continues to surpass supply. Patients were waiting for a kidney transplant and there were delay to receive the organ, and an urgent need the numbers of unexpected death occur due to not receive the organ on time. The study was conducted with objective to assess the awareness towards Organ Donation among general population.

Material and Methods: A descriptive study carried out to assess the awareness towards Organ Donation among 200 people visiting medical OPD. The participants was chosen non probability convenient sampling technique. Selection of participants was done on the basis of inclusion and exclusion criteria and then informed consent were taken. A self structured questionnaire was used to collect the data. The descriptive and inferential statistics was used to analyse data based on objectives and hypotheses.

Results: The study findings have shown that out of 200 samples, 9 (4.5%) had Poor awareness, 94 (47%) had average awareness, 95 (47.5%) had good awareness, and 2(1%) had very good awareness. The association among demographic variables shows that occupation, income and education are significant as their P (0.05) value is less then calculated value.

Conclusion: In the current study, majority of the samples were aware about organ donation but still peoples have less awareness regarding registration, who can be a donor, common organ for donation, ideal time for organ donation, and which organ can be donated during live or death are the areas where still awareness need to be more high. Thus by giving right knowledge to them they can be pooled into the category of future organ donors.

Key words: Organ donation, Awareness, Adults

Date of Submission: 18-05-2022

Date of Acceptance: 02-06-2022

I. Introduction

An individual life starts by birth and ends with death. Between these two ends of life the individual suffers from many problems, some of them are physical such as disease condition. In some condition they recover early and go back to their work but some of them suffers from such diseases in which individual's condition is not reversible as earlier such as end stage organ failure and disease leads to death.⁽¹⁾

Organ donation is when a person allows an organ of their own to be removed and transplanted to another person, legally, either by consent while the donor is alive or dead with the assent of the next to kin. Organ transplantation has become a viable treatment for an increasing number of patients suffering from irreversible organ failure.⁽²⁾ The organs for donation are obtained from two sources deceased and living donors. Organs can be donated when the person is living or after death and also when the person is brain dead.⁽³⁾ Brain death is a condition in which brain losses all function which is irreversible including the brain stem. The most commonly donated organ before death is kidney and after death is eye.⁽⁴⁾

For an ever-increasing number of patients with life – threatening illness, organ transplantation provides the best or the only hope of life.⁽⁵⁾ According to Annual Report OPTN/SRTR In 2015, 119,362 peoples were at

waiting list and only 33,612 have undergone organ transplant while there were only 15,947 donors⁽¹⁰⁾ Today, transplanting solid organs is a common therapeutic strategy for patients with end-stage organ failure with promising effects for survival and quality of life. Organ donation is a person giving his or her permission while alive for the donation of their organs after death. However, because of a lack of donation, the number of patients on the waiting list is increasing. As deceased donation rates are low, most donations are done from the relatives of the patients.⁽⁷⁾

According to the research done among college students in Thiruvallur and Chennai city, India 2018 among 486 students 225(46%) were not aware of the organ transplantation act, hence it is important to assess the awareness of organ donation among the population. The Times of India survey 20 Feb 2019, reported that 4 Lakh patients require kidney transplantation annually, 8500 transplantation done per year, 90% living donor and 10% donor.

Organ transplantation saves thousands of lives every year but the shortage of donors is a major limiting factor to increase transplantation rates. To allow more patients to be transplanted before they die on the wait-list an increase in the number of donors is necessary³. Patients with devastating irreversible brain injury, if medically suitable, are potential deceased donors and strategies are needed to successfully convert them into actual donors. Multiple steps in the process of deceased organ donation can be targeted to increase the number of organs suitable for transplant for this we need to aware the population about organ donation.⁽⁷⁾

Awareness regarding organ donation will help in improving the knowledge about organ donation. They can get aware about different types of organs that can be donated during and after life. They will be able to know the process for registering as an organ donor. The importance of donating organ and saving life of others will also be promoted by the study.

II. Materials and Methods

A descriptive study was used towards organ donation to assess the awareness at OPD, KGMU, Lucknow among 200 samples were taken from the general population who is visiting medical OPD of KGMU in the year 2021. A total 200 sample (both male and female) of aged ≥ 18 years were for in this study.

Study Design: Descriptive.

Study Location: This was a tertiary care teaching hospital based study done in medical OPD of KGMU at King George Medical University Hospital, Shah Mina Road, Chowk, Lucknow, Uttar Pradesh.

Study Duration: November July 2021.

Sample size: 200 patients.

Sample size calculation: The sample size was estimated on the basis of convenient sampling. The target population from which we have conveniently selected our sample. We assumed that the confidence interval of 10% and confidence level of 95%.

Subjects & selection method: The study population was drawn from medical OPD of KGMU hospital who are coming for OPD.

Inclusion criteria:

1. Adults more than 18 yrs of age.
2. The people who knows Hindi and English language Aged ≥ 18 years,

Exclusion criteria:

1. All the children.
2. People who are not willing to give consent.
3. People came with emergent condition.
4. Patients with genetic disorders
5. Patients with a history of drug or alcohol abuse.

Procedure methodology

After written informed consent was obtained, a well-designed self structured questionnaire was used to collect the data of the samples retrospectively. The questionnaire included socio-demographic characteristics such as age, gender, religion occupation ,income,source of information, education and residence. Self structured questionnaire tool consist 20 set of questions, which was categorized as very good, good, average and poor. The tool was self-structured which was reviewed by past studies, expert opinion has been taken, suggestion were incorporated and then it was framed for final data collection. Reliability was done by using test and retest method on 20 samples and the reliability was 0.92 which indicates tool was reliable. Pilot study has been done on in the medical OPD's the permission has been obtained from concerned authority prior to study. After conducting pilot study it was noted that the study was feasible. In the year 2019 the main data collection has been started with permission letters from the ethical committee of the university, Institute, administration and

OPD in-charge. Every participants was taking 20 minutes to fill the questionnaire. After filling the questionnaire educative material i.e. information booklet was given to them and it was explained by the researcher directly to the sample for generating awareness.

III. Results

Description of demographic variables: The majority of adults 115(57.5 %) belonged to the age group of 21-40 years and 44 (22%) belonged to the age group <18 years and 35 (17.5 %) belonged to the age group of 41-60 years. Highest numbers of adults were male 158 (79%), and female were 42 (21%). There were 86 (43%) of adults had graduate education, 46 (23%) were studied intermediate school, and 46 (23%) of adults were post graduates. As per the religion highest number 176 (88%) of adults were Hindu, most 98 (49%) of the adults had non-medical job, 72 (36%) of the adults were unemployed. Majority of adults 113 (56.5%) belonged to rural area whereas 87 (43.5%) belonged to urban areas. As per the income 59 (29.5%) of the adults had Rs 10,000-50,000 income per month, followed by 45 (22.5%) had less than Rs 10,000 income per month. The highest source of information came from social media that is 83 (41.5%), followed by from health care worker i.e. 62 (31%), and other sources were 26 (13%) respectively.

Awareness on organ donation among adults: Out of 200 samples 9 (4.5%) of them had poor awareness, 94 (47%) had average awareness, 95 (47.5%) had good awareness, and 2 (1%) had very good awareness in relation to organ donation. The mean score is 10.27 and SD is 2.7211.

Item analysis of awareness on organ donation: Around (87.5%) of samples knows the importance of organ donation, (74.5%) of them were aware about the factors that are important during organ donation, followed by (74%) knew the criteria to qualify as an ideal organ donor, and (72.5%) would like to donate organs. Majority (69.5%) of people knows about the factors depend on organ donation, (54.4%) knows the organ which is donated after death, (53.5%) knows where they can manually register their self for organ donation, and (49.5%) had awareness on method for registration of organ donation. Nearly half (49%) believes family consent is important for organ donation, (47%) knows about time duration for donating eye after the death, 46% knows about who can become an organ and tissue donor, (43%) samples are aware about the most needed organ for transplant in India, (41%) have a knowledge regarding whom they can donate organs legally when they alive, and only (29%) have knowledge about the ideal time for organ donation, (28%) knows that who can give consent for organ donation, and (26.5%) have an idea about which organ can be donated during live.

Association of awareness with their selected demographic variables: The below table depicted that the socio demographic variables such as occupation, income and education have significant association with awareness level at 0.05 level. However other variables did not have any association with awareness level.

Table 1: Association of awareness with their selected demographic variables

N=200

Variables	Category	Sample	Respondent's Awareness				P Value	X ² Value
			Very Good	Good	Average	Poor		
Age	< 20 Years	45	1	16	24	4	16.92 df=9	5.20
	21-40 Years	111	1	54	53	3		
	41-60 Years	38	0	23	15	0		
	61-80 Years	6	0	2	3	1		
Gender	Female	158	1	78	73	6	12.59 df=6	4.63
	Male	42	1	15	24	2		
Religion	Hindu	176	2	82	86	6	16.92 df=9	8.61
	Muslim	16	0	9	6	1		
	Christen	2	0	1	1	0		
	Others	6	0	4	2	0		
Occupation	Medical	30	0	12	16	2	12.59 * df=6	25.84
	Non- medical	70	1	48	19	2		
	Unemployed	100	1	31	64	4		
Income	<10,000	46	1	14	28	3	21.03 * df=12	35.11
	10,000-50,000	58	0	27	29	2		
	50,000- 1 Lakh	23	0	14	8	1		

	More than 1 Lakh	14	0	9	4	1		
	No income	59	1	29	28	1		
Source of Information	Social media	81	1	36	42	2	16.92 df=9	8.36
	Health care worker	61	1	27	30	3		
	Others	26	0	17	9	0		
	No information	32	0	13	16	3		
Education	High school	22	0	5	14	3	16.92 * df=9	18.62
	Intermediate	46	1	16	27	2		
	Graduate	86	1	44	38	3		
	PG & above	46	0	30	15	1		
Residence	Urban	108	1	56	48	3	7.82 df=3	2.82
	Rural	92	1	39	46	6		

IV. Discussion

Our study reveals that 9(4.5%) of the samples has poor awareness, 94(47%) has average awareness, 95(47.5%) has good awareness, 2(1%) has very good awareness and in this study three demographic variables are significant (education, source of income, occupation), These findings were consistent with the study done by Monalika Singh (2017) in which she found that 146 participants(25.3%) had poor knowledge, (70.5%) had medium and 4.1% had good knowledge about organ donation, in which none of the variables were significant.

In our study, out of 200 samples 9 (4.5%) of the samples has poor awareness, 94(47%) has average awareness, 95(47.5%) has good awareness, 2(1%) has very good awareness. The study was compared with two researches, Raktim Pratim Tamil et. al among undergraduates and postgraduates of North east India in which 285 participants were aware about organ donation. A total number of 12(3.33%) have signed up for organ donation. More than half (186) 51.67% of study groups have lack of awareness regarding organ donation. On comparing it with Praveen Singh Shekhawat conducted a cross sectional study among the 100 adults in which 81 were aware of term organ donation whereas 26 participants had never heard of the term organ donation.

In present study the socio demographic variables such as occupation, income and education have significant association with awareness level at 0.05 level. Other research with same has been done where only one association has been seen that is from education only.

V. Conclusion

In the current study, majority of the samples were aware about organ donation but still peoples have less awareness regarding registration, who can be a donor, common organ for donation, ideal time for organ donation, and which organ can be donated during live or death are the areas where still awareness need to be more high. Still peoples are lacking they could not help any other person for organ donation by lacking in on these given above areas still some of the people are taking this as economical source, some are having different – different stigma and myths which we can change it by spreading knowledge and awareness about organ donation. So by giving right knowledge to them they can be pooled into the category of future organ donors.

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Ms. Manisha Anand. "A descriptive study to assess the awareness regarding organ donation among adults visiting the medical OPD of KGMU, Lucknow with a view to increase their awareness about organ donation through educative material." *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, 11(03), 2022, pp. 01-04.