

KNOWLEDGE AND ATTITUDE OF PEOPLE TOWARDS ORGAN DONATION

Nahida Khan¹, Zahid Masood², Nadia Tufail¹, Hina Shoukat¹, KTA Ashraf³, Sumera Ehsan⁴, Sabeeka Zehra⁵, Nosheen Battol⁵, Sadia Akram⁵, Sehrish Khalid⁵

¹Lecturer, Dept. of Community Medicine, UMDC, Faisalabad.

²Associate Professor, Dept. of Community Medicine, UMDC, Faisalabad.

³WHO Focal Person in Pakistan, Islamabad.

⁴Lecturer, Punjab Medical College, Faisalabad.

⁵Student, UMDC, Faisalabad.

ABSTRACT

Objective:

Study and analyze the knowledge and attitude of people towards organ donation among adult population.

Study design:

A cross sectional study.

Setting and duration:

The study was conducted from 1st May 2011 to 30th June 2011 in the Madina Teaching Hospital Faisalabad by interviewing the people visiting the hospital as attendants.

Materials and methods:

Primary data containing sample size of 200 was collected through convenience sampling. A predesigned close ended questionnaire was used to collect data through face-to-face interaction with people at Madina Teaching Hospital, Faisalabad. For analysis of primary data SPSS version 17 was used.

Results:

Statistically significant association of knowledge about organ donation with education ($p=0.000$) and socioeconomic status ($p=0.003$) was observed. Attitude towards organ donation was significantly associated with age ($p=0.017$), education ($p=0.000$) and socioeconomic status ($p=0.001$). Majority (67.4%) of respondents thought that their religion allows organ donation and it should be promoted. Television (46%) came out as the major source of information. Only 27% knew about any law regulating organ donation. Lack of knowledge was seen among people regarding law for organ donation in Pakistan. 90% thought that organ donation was considered to be ethically correct. None of the respondents was actual donor.

Conclusion:

It can be concluded that there is a wide gap in terms of organ donation on the basis of education and socioeconomic status among the sample population. People who can donate seem to be reluctant to donate their organs to those in need (recipient) due to the lack of knowledge and fear of organ being misused. Further people who can donate organ assume that organ donation generally comes from addicts and poor people. Adequate knowledge may change the attitude of people towards organ donation. Multi-sectoral approach (e.g, electronic and print media, religious scholars, doctors and teachers) should be used to promote awareness of organ donation. Further studies are needed to motivate the general population for organ donation.

Keywords: Organ donation, attitudes, awareness, Faisalabad

Corresponding Author:

Dr. Zahid Masood, Associate Professor,
University Medical & Dental College,
Faisalabad.

Email: zahidmd27@gmail.com

INTRODUCTION

Thousands of lives in the world can be saved by organ transplantation. In the Holy Quran it has been mentioned that "and whoever saves the life of a person is as if he has saved the life of the whole of humankind".¹

An organ transplant is the moving of a whole or partial organ from one body to another (or from a donor site on the patient's own body), for the purpose of replacing the recipient's damaged or failing organ with a working one from the donor site. Organ donors can be living or deceased (previously referred to as cadaveric). Organ donation is also referred to the removal of the tissue of human body from a person who has recently died, or from a living donor, for the purpose of transplantation. People of all ages may be organ and tissue donors.²

Transplantation is increasingly seen as the best solution to end-stage organ failure. End stage kidney disease, for instance, can only be repaired with a kidney transplant. Without it, the patient will die or require dialysis for years.³

We are facing two problems currently, on one hand there is a shortage of organ donors. Each organ of body has its own waiting list, but the lists share common characteristics there are more organs needed than are available. Though many lives are saved through organ donation, many people die while waiting on a list. On an average about 106 people are added to an organ waiting list every day and 18 people die each day for an organ.⁴ On the other hand, there is an alarming situation in the Third World countries of "organ tourism" Every year thousands of people from Europe, Middle East, United States and Australia come to India, Pakistan, China, Egypt, Philippines, and other countries in search of poor donors, who are willing to give one of their kidneys for financial compensation.⁵ Pakistan is one of the favorite resorts worldwide as far as the "transplant tourism" is concerned.⁶

We live in Pakistan in which there is majority of Muslims. Views of different Muslim scholars differ about organ transplantation. Some religious scholars think that organ transplantation is prohibited in Islam⁷ while other think that only living persons can donate the body parts as mutilation and disfigurement of dead bodies is prohibited.⁸

In order to halt illegal sale of body parts, curb exploitation of human rights, and to regulate the transplantation of human organs and tissues the Government of Pakistan formally introduced a transplant specific legislation. This law known as the Transplantation of Human Organs and Tissues Ordinance 2007 provides that cadavers can be used as a

source of organs in Pakistan and living donors of at least 18 years of age, any close relative can be a donor according to it but must donate voluntarily and without duress or coercion.⁹ The law exclusively deals with the ethical and procedural issues likely to arise from organs and tissues transplant. In addition to regulating the transplant processes, it also encompasses legal provisions to illegitimate donation of organs.

For a better public awareness and as a goodwill gesture, the then President of Pakistan, on the 17th March 2010, became the first President to donate all his body organs, after signing a landmark bill to regulate the transplant of human organs in the country.¹⁰

In Pakistan there is a high prevalence of chronic liver diseases and chronic renal failure, transplantation being the best solution for both. A number of people all over the world die waiting for an organ. So our study comes at a point in the time when organ donation is one of the vigorously debated bioethical and medical issues.

To assess the knowledge and attitude of population regarding organ donation is the initial strategy to promote organ donation and this is made possible through this study.

Objective of the study

The aim of this study was to determine the knowledge, attitudes, awareness, and determinants of organ donation and transplantation in sample population.

MATERIALS AND METHODS

Study type

A cross-sectional study was conducted at Madina Teaching Hospital, Faisalabad, where a number of people visit daily as attendants of their patients. Most of the respondents were attendants of patient and a few of them were doctors and para-medical staff.

Sample

Primary data containing sample size of 200 was collected. The adult population falling between age group of 18-60 was preferred. The study was held from 1st May 2011 to 30th June 2011.

Questionnaire:

A pre-designed close ended questionnaire was used to interview the people participating in the study. The interview was conducted via face-to-face interaction.

Statistical Analysis:

The data was analysed using the SPSS version 17 for windows. The level of statistical significance was considered as $p < 0.05$.

RESULTS

A total of 200 individuals were interviewed for research from which 28 were those who never heard about organ donation. Table 1 shows the socio-demographic characteristics of those 28 individuals.

Table 1. Socio-demographic characteristics of people unaware of term organ donation.

Socio-demographic variable	Frequency (n=28)	%age
Sex:		
1. Male	16	57.2
2. Female	12	42.8
Age:		
1. 18-30	14	50.0
2. 30-45	8	28.6
3. 45-60	6	21.4
Education:		
1. Uneducated	19	67.8
2. Primary	4	14.3
3. Middle	2	7.2
4. Matric	0	0.0
5. Inter	1	3.5
6. Graduate	2	7.2
7. Post-graduate	0	0.0
8. Others	0	0.0
Occupation:		
1. Government Employee	2	7.2
2. Businessman	1	3.5
3. Other	25	89.3
Religion:		
1. Muslims	27	96.5
2. Non-Muslims	1	3.5
Monthly Income(Rs.):		
1. <5000	12	42.8
2. 5000-20000	12	42.8
3. 20000-50000	0	0.0
4. >50000	0	0.0
5. Others	4	14.4
No. of dependent family members:		
1. <2	2	7.1
2. 2-5	11	39.3
3. 5-10	9	32.1
4. >10	2	7.1
5. None	4	14.4

n = sample size

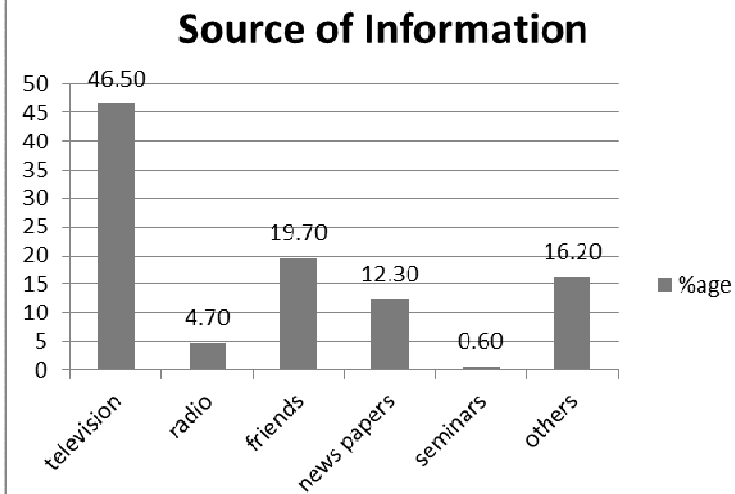
Out of 200, 172 were aware of organ donation. The socio-demographic characteristics of those 172 individuals are shown in Table 2. Among the participants 96% were Muslims.

Table 2. Socio-demographic characteristics of people aware of term "Organ Donation"

Socio-demographic variable	Frequency (n=173)	%age
Sex:		
1. Male	67	38.7
2. Female	106	61.3
Age:		
1. 18-30	99	57.3
2. 30-45	50	28.9
3. 45-60	24	13.8
Education:		
1. Uneducated	29	16.7
2. Primary	20	11.6
3. Middle	22	12.7
4. Matric	32	18.5
5. Inter	3	1.7
6. Graduate	58	33.6
7. Post-graduate	6	3.5
8. Others	3	1.7
Occupation:		
1. Government Employee	19	10.9
2. Businessman	21	12.2
3. Other	133	76.9
Religion:		
1. Muslims	166	95.9
2. Non-Muslims	7	4.1
Monthly income (Rs.):		
1. <5000	28	16.2
2. 5000-20000	66	38.2
3. 20000-50000	15	8.6
4. >50000	14	8.1
5. Others	50	28.9
Number of dependent family members:		
6. <2	2	1.2
7. 2-5	47	27.2
8. 5-10	53	30.6
9. >10	21	12.1
10. None	50	28.9

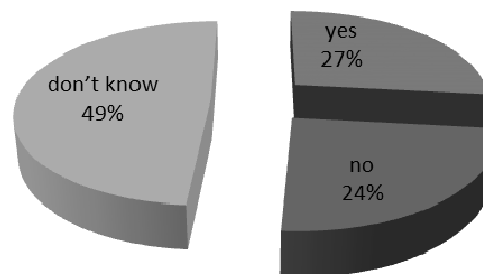
Regarding question "Does religion allows organ donation?" 67.4% respondents replied as "yes", 6.9% as "no" and 25.5% replied that they did not know. In response to query, and "What kind of people donates their organ?". 43.6% replied that mostly poor people who are in need of money donate their organ followed 26.1% who are addicts.

The major source of information came out to be television (46.5%). This finding is important because electronic media can be used for further awareness of people. The second major source of information was friends (19.70%).

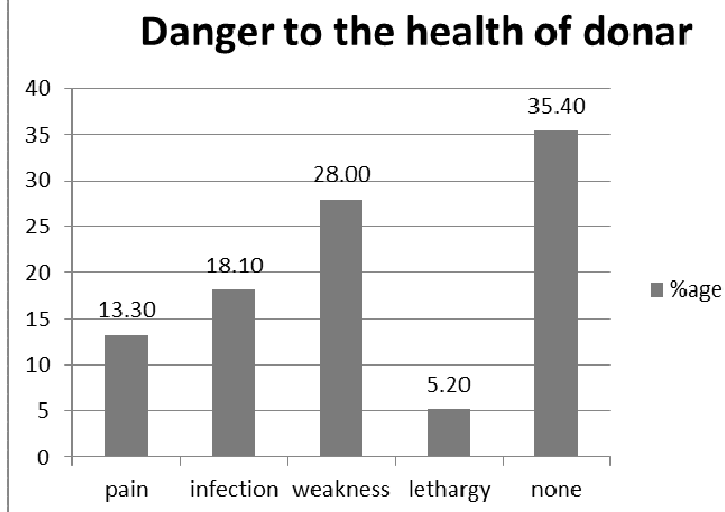


For judging the knowledge regarding law about organ donation in Pakistan 49% respondents didn't know about the law. However 27% of people knew about the law of organ donation in Pakistan.

Awareness about prevailing law in Pakistan



35.4% of respondents were unaware that organ donation may cause any harm to the organ donor and rest of the respondents 64.6% replied that the organ donor may suffer from pain, infection, weakness and lethargy.



90% considered organ donation ethically correct. While 8% considered it ethically wrong, followed by 2% of people who didn't have any view about its ethical consideration.

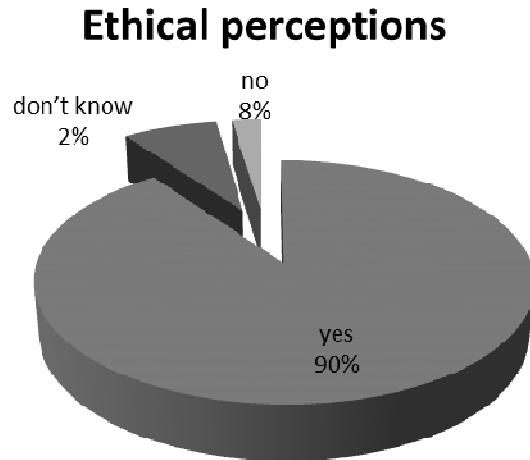


Table 3 shows the proportion of individuals with knowledge in relation to various socio-demographic variables. Statistically significant association was present between sex and knowledge ($p=0.049$). However, there was no significant association regarding sex and attitude ($p=0.246$).

Knowledge and age were not significantly associated ($p=0.575$), but attitude was significantly associated with age ($p=0.017$). Socioeconomic status was found to have a statistically significant association with knowledge ($p=0.003$) and motivation to donate ($p=0.001$).

Table 3. Socioeconomic variables with knowledge and attitude.

Socio-demographic variables	Knowledge		Attitude	
	Frequency (n=200)	%age	P-value	P-value
Sex:				
Male	82	41.0	0.049	0.246
Female	118	59.0		
Age:				
18-30	112	56.0	0.575	0.017
30-45	58	29.0		
45-60	30	15.0		
Education:				
Un-educated	47	23.5	0.000	0.000
Primary	24	12.0		
Middle	24	12.0		
Matric	32	16.0		
Intermediate	04	02.0		
Graduate	60	30.0		
Postgraduate	06	03.0		
Other	03	01.5		
Monthly income:				
<5000	39	19.5	0.003	0.001
5000-20000	78	39.0		
20000-50000	15	07.5		
>50000	14	07.0		
Others	54	27.0		

Out of 172, 144 replied that organ donation should be promoted. The belief of 71.5% was that their basic objective of organ donation is to save someone life, remaining on basis of sympathy (15.2%), financial basis (1%) and others (22%) respectively. Regarding attitude towards donating their own organ 33.7% respondents said that it will depend upon circumstances, 23.8% respondents would opt to donate their organ to the family members only and 15.1% individuals said that they will never donate their organ.

DISCUSSION

Organ and tissue transplantation has become an integral part of health care in every nation. Organ donation is a community service, which saves lives, improves quality of life and has cost benefits for society. In recent years, the cost of transplantation has become significantly lower, and organ transplantation is one of the most effective lifesaving procedures.¹¹

Contrary to finding of our study, a study from Nigeria showed that the willingness to donate an organ was not significantly associated with gender ($p=0.47$).¹² This may be attributed to different cultures and social set up in two countries.

Observation in our study is comparable with a study done in Brazil which reported that 87% of respondents were in favor of organ donation and its promotion.¹³

Finding in this study is comparable with a study done in China is where 49.8% of respondents were willing to donate their organs and among them 62% respondents nominated relatives to be their most likely recipients.¹⁴ A study from Qatar reported that the majority of people preferred donating organs to their close relatives and friends.¹⁵ This may be attributed to trust of donar that his/her organ would be really life saving for known recipient compared to unknown.

In our study 67.5% of respondents replied that religion allows organ donation and for that reason they will show motivation for organ donation in future comparing to those who responded that religion do not allow organ donation and that is why they were reluctant to donate their organ in future. In the 1986 Resolution of the Pan-Islamic Council Jurisprudence on Resuscitation

Apparatus in Amman, Jordan, Muslim scholars adopted a Western definition of death. However, this Council failed to address the scientific flaws and the arbitrary nature of this definition designed solely for the purpose of permitting cadaveric organ donation. This omission potentially has sociocultural consequences.¹⁶ The UK Muslim Law Council ruled in 1996 that organ transplantation is entirely compatible with Islamic beliefs. Yet, in Singapore, which has a presumed consent system, Muslims are automatically exempt from it, and Islamic countries generally have a low rate of carriage of organ donor cards.¹⁷

Comparing with another similar study depicted that the reason behind refusal to organ was an unawareness of population, regarding religious proclamations about organ donation.¹⁸ Our present study results match with the data of the previous study in Pakistan, where the major source of information came to be Television and print media.¹⁹

27% of respondents actually knew that there was law in Pakistan which regulates the future practice related to organ transplantation and 24% replied that there was no law while 49% said that they did not know about that law which may be attributed to lower literacy rate in the country. This finding points towards the need to give adequate knowledge regarding law in Pakistan.

CONCLUSION

It can be concluded that there is a wide gap in terms of organ donation on the basis of education and socioeconomic status among the sample population. People who can donate seem to be reluctant to donate their organs to those in need (recipient) due to the lack of knowledge and fear of organ being misused. Further people who can donate organ assume that organ donation generally comes from addicts and poor people. Adequate knowledge may change the attitude of people towards organ donation. Multi-sectoral approach (e.g, electronic and print media, religious scholars, doctors and teachers) should be used to promote awareness of organ donation. Further studies are needed to motivate the general population for organ donation.

Limitations

There are certain limitations in this study:

1. Convenience sampling was used which is not better than probability sampling.
2. The study was conducted at Madina Teaching Hospital in which only a selected group of population belonging to lower socioeconomic and middle socioeconomic status visits.
3. Sample size is small.

However this study may have encouraged a number of people to know about organ donation and improve their knowledge while giving answers to the questions of questionnaire. Further studies can be done to motivate the general population for organ donation.

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