

# A STUDY ABOUT INCLINATION OF PEOPLE TOWARDS ORGAN DONATION

PERVAIZ ZARIF<sup>1</sup>, MUHAMMAD ASIF<sup>2</sup>, ZUBIA IQBAL<sup>3</sup>

<sup>1</sup>Department of Forensic Medicine & Toxicology, PGMI, Lahore. <sup>2</sup>Sialkot Medical College, Sialkot.

<sup>3</sup>Department of Forensic Medicine & Toxicology, PGMI, Lahore

Correspondence: drasif\_hameed@hotmail.com

## ABSTRACT

**Objective:** People with nonfunctioning organs waiting for donation are increasing but provision of viable organs is not meeting the need. As many of the Pakistanis are poor who sell their organs for money. This has led to illegal transplants. Now a legal way has been adopted by the Government to prevent this illegal trafficking of human organs. This study was carried out to know the willingness of peoples about organs donation.

**Material Methods:** From general population by convenience nonprobability method 130 subjects both males and females of age 18 years and above were requested to answer the questionnaire.

**Results:** 130 subjects included 102 males and 28 females. 59.8% males 32.1% females were willing for organ donation. 55.26% of educated and 31.25% of uneducated were willing for organ donation.

**Conclusion:** To prevent illegal donation of organs and to alleviate present level of organ donation it is pertinent to improve health education levels in general people.

## INTRODUCTION

As the patients holding up to get their diseased organs to be replaced by healthier ones all over the globe are being increased the requirement of availability of viable organs is also being increased. Need to formulate new procedures to cope with this situation is being dealt now better than before.<sup>1</sup> World health organization says that surgically removing organs from healthy persons can put them to develop life threatening complications. So peoples must also be motivated to gift their organs after death.<sup>2</sup> Total organs transplanted in 2016 throughout the world were 135860 which were increased by 7.25%. 34854 organs were gifts from dead ones. 89823 kidneys, 30352 liver 7626 heart transplants were done globally in 2016.<sup>2</sup> According to these reports Spain is the first one with 33-35 gifts of organs per one million peoples during the last twelve months.<sup>2</sup>

Shifting the healthy organ can be done within the same individual or within individuals of same species. This transfer is a complicated process.<sup>3</sup> Children are badly affected due to unavailability of donated organs, in regions of world where people don't have road map to follow.<sup>4</sup> That road map may include maximum utilization of diseased parts of body, decreased disposal of viable organs, motivating the peoples to gift their organs to the needy ones and making the transfer of organs safe.<sup>5</sup> One of the multiple reasons for low

donation can be religious one.<sup>6</sup> In Pakistan to cope with low donation of organs and legalizing the donation legislation has been made. An act called Transplantation of Organ and Tissues Act, 2010 was enacted. It evaluates and monitors the organ donation and transplant. In Pakistan 915 kidneys and 177 liver transplants took place in 2016. All donations were from living ones. Donations from dead bodies were zero.<sup>2</sup>

**Objectives:** To explore the trends in people of about organ donation both in life and after death.

**Material and Methods:**

**Study Design:** Cross sectional study.

**Study Setting:** Sialkot medical college.

**Sample Size:** 130.

**Sampling Technique:** Both males and females were selected through nonprobability sampling (convenience sampling) method from general population (Lahner, et al., 2017).

**Samples Selection:** Inclusion criteria: Both males and females of age between 14 years and above were included.

**Data Collection.** After taking informed oral consent. Confirmation of age was made by national identity card. Then every participant was asked about age, education, marriage and willing or non-willingness for organ donation. Data collected was undertaken to Statistical analysis by using SPSS version 21.

## RESULTS

130 individuals of different ages and both sexes were requested to take part in the study. Total 102 males and 28 females took part constituting 78.5 % males and 21.5% females, as shown in table no 1. 19 females were

not willing 9 were willing to donate their organs. 41 males were not willing 61 were willing for organ donation.

**Table No 1.** Frequency and percentage of both genders showing willingness

	Frequency	Percentage	Willing	Not willing	Willing %
<b>Males</b>	102	78.5	61	41	59.8%
<b>Females</b>	28	21.5	9	19	32.1%

Among them 114 (87.7%) were educated and 16(12.3%) were uneducated. 11 uneducated were not willing 5 uneducated were willing to donate their organs. 51 educated were not willing 63 educated were willing to donate their organs. As depicted in table no 2.

**Table No 2.** Frequency and percentage of educated and uneducated showing willingness

	Frequency	Percentage	Willing	Not willing	Willing %
Educated	114	87.7	63	51	55.26 %
Uneducated	16	12.3	5	11	31.25%

Different age groups are shown in table no 3.

**Table No 3.** Frequency and percentage of various age groups showing willingness

Age	14-18	19-23	24-28	29-33	34-38	39-43	44-48	49+
<b>Willing</b>	8	16	13	18	7	10	1	3
<b>Not Willing</b>	5	15	11	8	5	6	4	5
<b>Percentage</b>	10.1	23.8	18.5	15.3	10.1	12.3	3.8	6.1
<b>Frequency</b>	13	31	24	20	13	16	5	8

Total trend is depicted in table no 4.

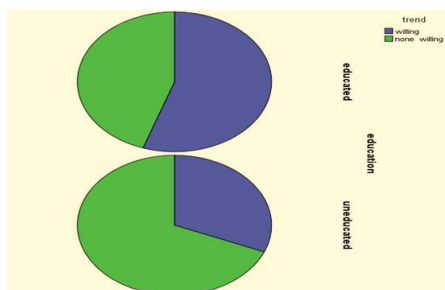
**Table No 4.** Frequency and percentage of total willing and not willing subjects

	Frequency	Percent
<b>Willing</b>	68	52.3
<b>not willing</b>	62	47.7
<b>Total</b>	130	100.0

Descriptive statistics of marital status shown in table no 5.

**Table No 5.** Frequency and percentage of married and unmarried showing willingness

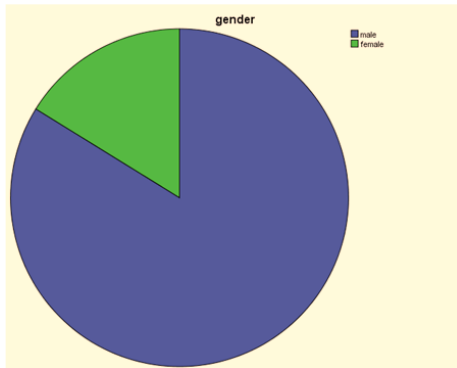
	Frequency	Percentage	Not willing	Willing	Willing%
<b>Married</b>	88	67.7	42	46	52.2
<b>unmarried</b>	42	32.3	18	24	57.1



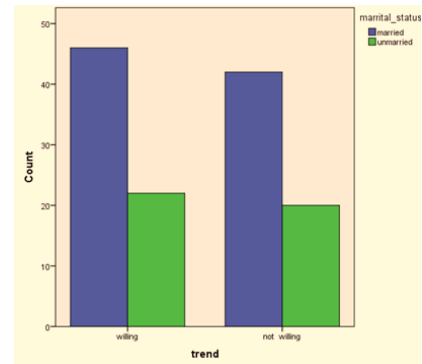
**Figure No 1.** Pie chart of trend in educated and uneducated



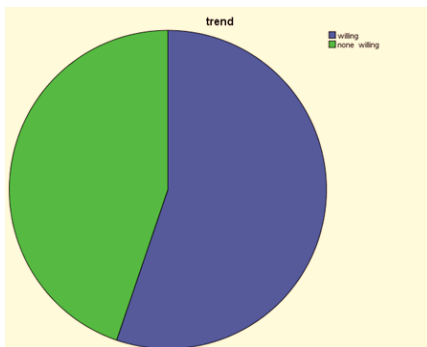
**Figure No 2.** Pie chart showing trends in married and unmarried



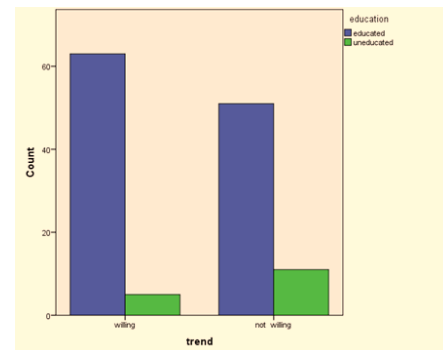
**Figure No 3.** Pie chart showing males and females percentage



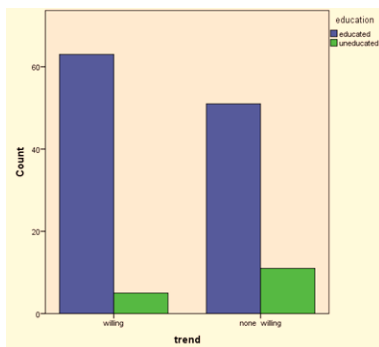
**Figure No 7.** Bar chart showing trends in married and unmarried



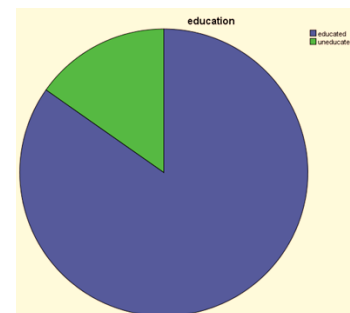
**Figure No 4.** Pie chart showing trends percentage



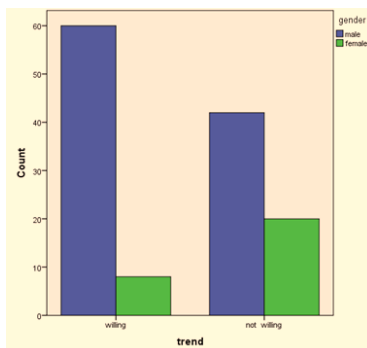
**Figure No 8.** Bar chart showing trends in married and unmarried



**Figure No 5.** Bar Chart of trend in educated and uneducated



**Figure No 9.** Pie chart showing Education Trend



**Figure No 6.** Bar Chart of trend in Gender

## DISCUSSION

Since last ten years throughout the world campaign to gift different organs like kidneys, liver, eye etc., has been at higher level than before. In Pakistan a similar study was carried out in 2012.<sup>7</sup> According to that survey 95 individuals were selected among which 64.21% were males and 35 % were females. Among them 52.46% males and 41.18% females were willing to donate organs . While in this study 130 individuals took part 78.5 % males and 21.5 % females. Now in these study 59.1% males and 32.1% females were willing to donate their organs. This clearly indicates that trend to donate organs is more in males than females as was

seen in previous study. In this study 67.7% were married 32.3% were unmarried. Among them 52.2% married were willing and 57.1% unmarried were willing to gift their organs. Trend of donation organs in married is less than that in unmarried as was shown in another study in which 46.43% married 51.28% unmarried were willing. Major age group was 36-45 with 61.54% willing in that study while now 19-23 years age group has highest 23.8% willing for organs donation.

One of the reasons of low trend in organ donation might be religious one. Most of the people either don't have any knowledge or their knowledge is at a low level on organ donation. That knowledge can neither satisfy them nor others to take a positive decision.<sup>6</sup> In Middle East countries organ donations is mainly from living individuals who are close relatives. Donation of organs from nonliving is much low which can be increased because of increased occurrences of incidences of unseen and unexpected events. Health education to the people must be increased as well as legal and medical decisions about death must be made clear.<sup>8</sup>

In UK as peoples awareness about organ donation has been raised. Standards of looking after both the donors and recipients have been taken up to such a safety level that postoperative complication rates have been decreased. Successful transplants have been at high<sup>9</sup>. WHO has said that Pakistan is among four countries where human organs are being sold to rich persons from all over the world simply to get money.<sup>10</sup> Legally in Pakistan an ordinance has been passed to eliminate this illegal gifting of organs. It has been passed that only blood relations can be donated with human organs. Only permitted hospitals can do transplantation of human organs. No organs can be donated to foreigners without permission from government. Not obeying the law may lead to 10 years imprisonment along with fine of 10 lakh rupees.<sup>11</sup>

A study carried out in Punjab showed that among those persons gifting their kidneys 34% were poor. Most of donors did it only for money. Mostly are uneducated and most of the time they don't get the said amount. After nephrectomy they become unable to perform at their best in job. Most of the recipients come from KSA, UAE, Europe and America.<sup>12</sup> According to another study 5.7% of kidney donors had hepatitis B and 27% had hepatitis C.<sup>13</sup>

In a survey to know about knowledge of peoples about donation of organs it was found that 66.2%, 51.5%, 46.4% of individuals had knowledge that kidney, blood and eyes respectively, can be gifted. Willing to donate organs, 40.2% belonged to age group below 30 years. Most of donors said they would like to donate to their relatives, and to the same religion. Their

knowledge about religious permission was very little, only 32.8%.<sup>14</sup>

## CONCLUSION

It is necessary to improve health education levels especially in females. It can be easily done with the help of LHW and outreach team of every basic health unit working at community level.

## REFERENCES

1. Rizvi, A. H. S., Naqvi, A. S., Zafar, N. M. & Ahmed, E.. Regulated compensated donation in Pakistan and Iran. *Current Opinion in Organ Transplantation*. 2009; 14, 124-128.
2. Organization, W. H. Global observatory on donation and transplantation. Available in: <http://www.transplant-observatory.org/pages/home.aspx>. Accessed in March. 2019.
3. Matesanz, R., Mahillo, B. & Alvarez Mar Carmona, M. International figures on donation and transplantation-Newsletter Transplant. Spain: Organización Nacional de Trasplantes (ONT). 2014.
4. Martin, D. E., Nakagawa, T. A., Siebelink, M. J., Bramstedt, K. A., Brierley, J., Dobbels, F., et al. Pediatric deceased donation—A report of the Transplantation Society meeting in Geneva. *Transplantation*. 2015; 99, 1403-1409.
5. Allen, A., Kim, W., Xiong, H., Liu, J., Stock, P., Lake, J., et al. Survival of recipients of livers from donation after circulatory death who are relisted and undergo retransplant for graft failure. *American Journal of Transplantation*. 2014; 14, 1120-1128.
6. Oliver, M., Woywodt, A., Ahmed, A. & Saif, I. *Organ donation, transplantation and religion*. Oxford University Press. 2010.
7. Jawad, i., Mughal, M., I., and Ehsan, N. Organs Donation Trends In Pakistani Population. *Pakistan Post Graduate Medical Journal*. 2012; 23(3), 76-82.
8. Shaheen, F. Organ donation in the Middle East countries. *Ethnicity & disease*. 2009; 19, S1-16-7.
9. Johnson, R. J., Bradbury, L. L., Martin, K. & Neuberger, J. Organ donation and transplantation in the UK—the last decade: a report from the UK national transplant registry. *Transplantation*. 2014 ; 97, S1-S27.
10. Turner, L. 'Medical tourism' initiatives should exclude commercial organ transplantation. *Journal of the Royal Society of Medicine*. 2008; 101, 391-394.
11. Raza, M. & Skordis-Worrall, J. Pakistan's Kidney Trade: An overview of the 2007 Transplantation of

- Human Organs and Human Tissue Ordinance. To what extent will it curb the trade? JPMA. The Journal of the Pakistan Medical Association. 2012; 62, 85-89.
12. Naqvi, S. a. A., Ali, B., Mazhar, F., Zafar, M. N. & Rizvi, S. a. H. A socioeconomic survey of kidney vendors in Pakistan. Transplant International .2007; 20, 934-939.
  13. Naqvi, S. a. A., Rizvi, S. a. H., Zafar, M. N., Ahmed, E., Ali, B., Mehmood, K., Awan, M., Mubarak, B. & Mazhar, F. Health status and renal function evaluation of kidney vendors: a report from Pakistan. American Journal of Transplantation. 2008; 8, 1444-1450.
  14. Saleem, T., Ishaque, S., Habib, N., Hussain, S. S., Jawed, A., Khan, A. A., Ahmad, M. I., Iftikhar, M. O., Mughal, H. P. & Jehan, I. Knowledge, attitudes and practices survey on organ donation among a selected adult population of Pakistan. BMC medical ethics. 2009; 10, 5.