

Attitude and Knowledge toward Organ Donation among Arts and Science Students

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Abstract

Aim: A cross sectional study was undertaken to study the attitude and knowledge towards organ donation among, higher secondary students, graduate students and post graduate students at different arts and science colleges in Srinagar (Jammu and Kashmir).

Material and Method: 200 students participated in the study between the age group of 17 to 21 years. The students responded to self-administered questionnaires (pre validated) that comprised of seventeen questions.

Result: The students responded completely to the self-administered questionnaires that comprised of seventeen questions. Out of 200 students who participated in the study 118 (59%) were male and 82 (41%) were female. Majority of the students 164 (82%) had information about organ donation and were of the opinion that organ donation can save lives 136 (68%). Majority of the participants 111 (55.5%) believed that organs can be donated after death. The main source of information regarding organ donation was found to be newspaper and magazines 87 (43.5%), followed by television/radio 63 (31.5%) and the most common organ that can be donated was considered to be kidney 81 (40.5%) followed by eye 62 (31%). 115 (57.5%) of participants were unwilling to donate organs based on their religious belief. It was found that 64 (32%) of students were willing to receive organ and majority of students 136 (68%) were against charging of money for organs but were in favour of formulation of law regarding organ donation 183 (91.5%).

Conclusion: This study suggested that majority of students had information about organ donation and were of the opinion that organ donation can save lives but most of them were unwilling to donate organs based on their religious belief. Further study should be conducted to know the awareness and attitude towards organ donation among general public.

Key words: Organ donation, Students, Knowledge, Attitude

Introduction

Many organs from dead person are being removed to be transplanted into the living for giving relief for disease or for increasing life expectancy. The tissues and organs may be acquired from living persons or

from cadavers¹. In certain conditions like liver failure and end stage kidney disease, organ transplantation is considered to be the best alternative². Currently there are two problems related to organ transplantation, on one hand there is dearth of organ donors and a long waiting list, on the other hand in the Third world countries like India, Pakistan, Philippines, and other countries, every year thousands of people from United States, Australia, Europe and middle east, come in search of poor donors who are ready to donate their organs for financial recompense³. The growing number of successful transplantations has increased the hope for life, and the technological advancements in medicine,

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awareness and acceptance among the doctors have increased the need for more donors. There is a vast gap in the number of patients requiring organ transplant and possible donors⁴. The decision to donate the organ is a crucial process prior to transplantation. It is influenced by personal or family opinions that are strongly influenced by various factors like demographic, socioeconomic, and cultural distinctiveness resulting in varying degree of willingness for organ donation among populations⁵. This study is an attempt to know the knowledge and attitude towards organ donation amongst the students in Srinagar.

Methodology

A cross sectional study was carried out among 200 higher secondary students, undergraduate students and post graduate students, to assess the knowledge and attitude towards organ donation. Questionnaire was anonymised, used to collect information on gender,

age, religion and attitude of respondents toward organ donation. Information was sought on the reasons for approving or disapproving organ donation. The researcher distributed the questionnaire and collected the data after getting the clearance from the ethical committee of the university. Data was collected through pre-validated self-administered, structured questionnaire prepared by studying the literature^{4, 11}.

All the respondents were briefed about the study before administering the questionnaire and written consent was taken for participating in the study.

Result

A total of 200 under graduate students, graduate students and post graduate students participated in the study from different colleges in Srinagar belonging to age group of 17 to 22 years. Majority of students (33%) belonged to 20 years of age and least (7%) were of 17 years.

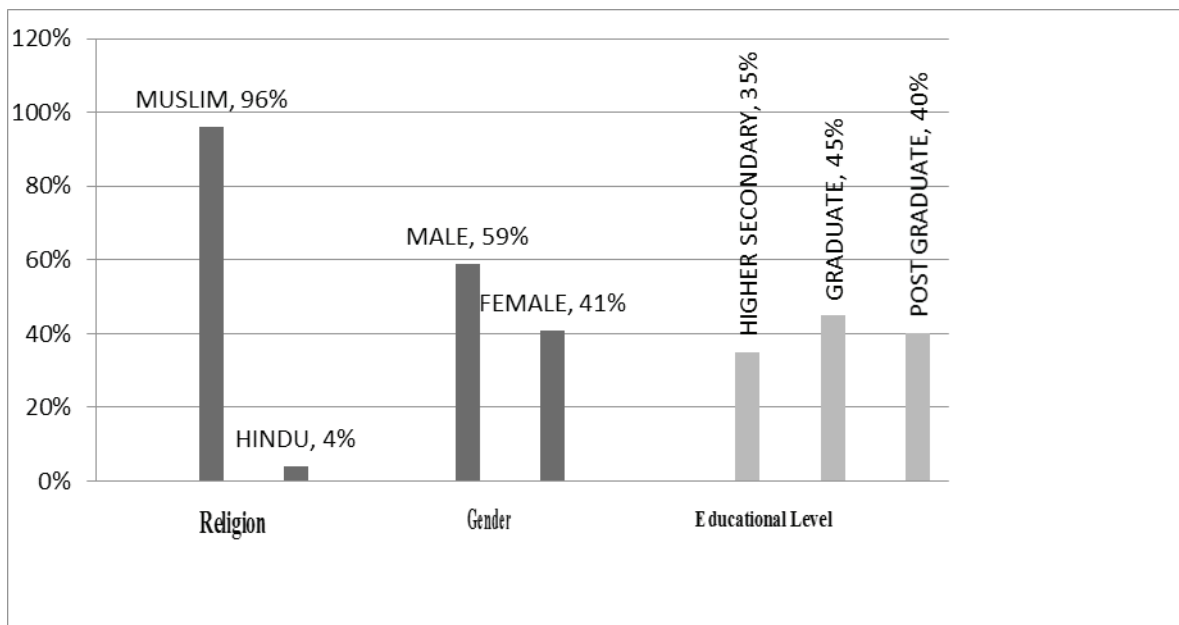


Figure 1: Graphical presentation of religion, gender and educational level

Out of 200 students who participated in the study 118 (59%) were male and 82 (41%) were female. Out of 200 students 96% were Muslims and 4% were Hindu. Majority of the participants were graduate 90 (45%), followed by higher secondary 70 (35%) and post graduate 40 (20%)

Table no 1: Level of knowledge / awareness towards organ donation

Parameter	Frequency (n=200)	Percentage (%)
Do you have any information regarding the occurrence of organ donation in India?		
Yes	164	84%
No	36	18%
Not sure	---	---
Do you think organ donation can save lives?		
Yes	173	86.5%
No	7	3.5%
Not sure	20	10%
When do you think organs can be donated?		
Alive	70	35%
Brain death	19	9.5%
After death	111	55.5%
Reasons for organ donation.		
To save someone's life	136	68%
Out of compassion / sympathy	14	7%
For money	32	16%
As a responsibility	18	9%
From where did you obtain information about organ donation?		
Newspaper, magazines, books	87	43.5%
Television / radio	63	31.5%
Family and / or friends	14	7%
Internet	30	15%
Others	6	3%
Which organ do you think can be donated?		
Eye	62	31%
Liver	15	7.5%
Pancreas	---	---
Skin	9	4.5%
Bone marrow	5	2.5%
Heart	25	12.5%
Lung	3	1.5%
Kidney	81	40.5%
Do you think there is danger to the health of the donar from		
Infection	113	56.5%
Pain	36	18%
Weakness	51	25.5%
None	---	---

When asked about the knowledge regarding occurrence of organ donation in India it was found that majority of the students 164 (82%) knew about it. When asked whether organ donation can save lives, 173 (86.5%) of participants agreed, 7 (3.5%) participants disagreed whereas 20 (10%) were not sure. When asked about their views on when organs can be donated, 111 (55.5%) of participants were of the opinion that organs could be donated after death, 70 (35%) believed that

organs could be donated during one's lifetime and 19 (9.5%) thought that organ donation could take place in brain death. When asked for reason supporting organ donation, 136 (68%) believed that organ donation can save someone's life, 14 (7%) were of the opinion that it was out of compassion/sympathy, 32 (16%) opined for money and 18 (9%) considered it as a responsibility. In response to a query of information regarding organ donation it was found that the main source of information

was newspaper and magazines 87 (43.5%), followed by television/radio 63 (31.5%), internet 30 (15%), family and friends 14 (7%) and others 6 (3%). It was found that regarding individual organ donation, participants were of the opinion that the most common organ that can be donated is kidney 81 (40.5%), eye 62 (31%), heart 25

(12.5%), liver 15 (7.5%), skin 9 (4.5%), bone marrow 5 (2.5%) and lung 3 (1.5%) respectively. When asked regarding danger to the health of the donar from organ donation infection 113 (56.5%) was considered to be the most common cause followed by weakness 51 (25.5%) and pain 36 (18%).

Table 2: Attitude towards organ donation

Parameters	Frequency n=200)	Percentage (%)
Will you be willing to donate your organs?		
Yes	36	18%
No	115	57.5%
Not sure	19	9.5%
If no give reasons		
Cadaveric manipulation	58	29%
Disfigurement	27	13.5%
Religion does not permit	115	57.5%
Can lead to organ trade	----	
Would you be willing to receive an organ?		
Yes	64	32%
No	49	24.5%
Not sure	87	43.5%
Have you donated any organ?		
Yes	-----	-----
No	200	100%
Not sure	-----	-----
Do you think it is right to charge money for organs?		
Yes	24	12%
No	136	68%
Not sure	30	15%
Should there be a law regarding organ donation?		
Yes	183	91.5%
No	12	6%
Not sure	5	2.5%

When asked whether the students were willing to donate their organs, it was found that 36 (18%) of the participants were willing to donate organs, 115 (57.5%) of participants were unwilling whereas 19 (9.5%) were not sure. Among those who were unwilling to donate organs, the most common reason was found to be religion 115 (57.5%), followed by cadaveric manipulation 58 (29%) and disfigurement 27(13.5%). It was found that 64 (32%) of students were willing to receive organ, 49 (24.5%) were unwilling and 87 (43.5%) students were not sure regarding organ donation. When asked whether there should be a law regarding organ donation it was found that majority 183 (91.5%) of students were in favour of it, 12 (6%) were against it and 5 (2.5%) were not sure. When asked whether it was right to charge money for organs, majority of the students were against it 136 (68%), 24 (12%) were in favour of it and 30 (15%) were not sure. None of the participants have ever donated any organ 200 (100%).

Discussion

This study is an attempt to know the knowledge and attitude of arts and science students towards organ donation as most of studies have been carried out on doctor/nurse and general population. This study suggested that majority of students 164 (82%) were aware of organ donation. Majority of the students were of the opinion that organ donation can save lives 136 (68%). 111 (55.5%) believed that organs can be donated after death but 115 (57.5%) of participants were unwilling to donate organs based on their religious belief. 64 (32%) of students were willing to receive organ but were against charging of money for organs 136 (68%). 183 (91.5%) were in favour of formulation of law regarding organ donation. Shoubaki H carried out a study from October 2003 to May 2004 on 1600, Qataris and non-Qataris males and females aged 17 years which showed that 67.8% male and 70.4% female participants were aware of organ donation and transplantation. 61.4% of males and 70.4% of females disagreed the idea of importing organs from out- side and 79.9% males and 87.6% female did not agree to organ donation for money⁶. In May 2004, Ashraf O et al conducted a study on 357, males and females attending the medical and surgical outpatient department and found that knowledge regarding organ donation in Pakistan and rest of the world was 65.5% and 72.8% respectively. Television

47.9% was the major source of information. According to 93.6% of participants organ donation could save life and that 84% were of the opinion that organs could be donated after death. Majority, 97.5% were in favour of formulation of law regarding organ donation¹¹. In 2005, Bogh L carried out a study on 689 staff members of intensive care unit in 17 ICUs in 15 hospitals in northern Denmark and found that 11% participants were against organ donation. 49% of the ICU health care professionals were willing to donate their own organs after death. 74% of the general Danish population was willing to donate organs after death. 95% of the doctors were positive to organ donation compared to 81% of the nurses. 70% of the doctors were willing to donate their own organs after death compared to 45% of the nurses⁷. A study was conducted by Saleem T et al in 2009 on 440 adults in Karachi, Pakistan and found that 35.3% of participants were in favour of organ donation. Television was the major source of information. Only 3.5% had themselves donated an organ with only one person being an actual kidney donor⁸. A study conducted by Annadurai K between January 2012 to September 2012 on 400 college students belonging to 18 years and above at Hindustan Arts & Science College, Chennai, Tamil Nadu showed that all the participants were aware of the term organ donation but knowledge about different aspects was low. 86.1% were not aware of legislation. 75% of respondents were in favor of organ donation and only 2% were registered for organ donation⁹. Badrolhisam NI conducted a study in 2012 on 213 Malaysian population and found that majority of Malaysians were not aware of the shortage of organ donors in Malaysia. Some of the participants were willing to donate their organs even if their religious believes opposes organ donations¹⁰. A study was carried out by Satish KV in 2014 on 200 undergraduate students, postgraduate students, nurses, teachers and public and found that 73% were aware about organ donation, 18% had never heard about it and 9% did not respond. 66% felt organ donation is done to save someone's life, 9% believed it was out of compassion/ sympathy, 9% opined that it was for money, 10% consider it as a responsibility and 6% gave other reasons. 90% of the people felt that there is some amount of risk involved in organ donation. 28% of participants felt that their organs would be misused. 78% of the participants were willing to donate organs after their death⁴.

Conclusion

Finding of the study revealed that the majority of the students were aware of organ donation and were of the opinion that organ donation can save lives, but were unwilling to donate organs based on their religious belief. Majority of the students were against charging of money for organs and were in favour of formulation of law regarding organ donation. Awareness programmes should be conducted to make the general public aware about organ donation and how it can save lives through the various mass media campaign like publishing articles in newspaper, advertisement, short films and panel discussion by experts. More extensive studies should be carried out to know the awareness and attitude towards organ donation among general public.

Conflict of Interest: None

Ethical Clearance: Taken from University Ethics Committee

Source of Funding : Self

References

1. Francis CM. Organ transplantation. In: Medical Ethics. Second edition. Jaypee Brothers Medical Publishers; 2004: 145-153.
2. Olumuyiwa O, Odusanya, Ladipo OC. Organ donation: Knowledge, Attitude and practice in Lagos, Nigeria. *Artif Organs*. 2006; 30(8): 626-629.
3. Khan N et al. Knowledge and attitude of people towards organ donation. *JUMDC*. 2011; 2(2): 15-21
4. Satish KV, Chidananda PS, Chetan S. An assessment of awareness about organ donation among public. *j e b m*. 2014; 1(12): 1518-1528
5. Çolak M, Ersoy K, Haberal M, Gürdamar D, and Gerçek O. A Household Study to Determine Attitudes and Beliefs Related to Organ Transplantation and Donation: A Pilot Study in Yapraticik Village, Ankara, Turkey. *Transplantation Proceedings*. 2008; 40: 29-33.
6. Shoubaki H, Bener A, Mosalamani Y. Factors Influencing Organ Donation and Transplantation in State of Qatar. *Tx Med*. 2004; 18: 97-103
7. Bogh L and Madsen M. Attitudes, Knowledge, and Proficiency in Relation to Organ Donation: A Questionnaire-Based Analysis in Donor Hospitals in Northern Denmark. *Transplantation Proceedings*. 2005; 37: 3256–3257
8. Saleem T et al. Knowledge, attitudes and practices survey on organ donation among a selected adult population of Pakistan. *BMC Medical Ethics*. 2009;10(5)
9. Annadurai K, Mani K, Ramasamy J. A study on knowledge, attitude and practices about organ donation among college students in Chennai, Tamil Nadu. *Prog Health Sci*. 2013; 3(2): 59-65
10. Badrolhisam NI. Knowledge, Religious Beliefs and Perception towards Organ Donation from Death Row Prisoners from the Perspective of Patients and Non-Patients in Malaysia: A Preliminary Study. *ijhss*. 2012; 2(24):197-206.
11. Ashraf O et al. Attitude towards Organ Donation: A Survey in Pakistan. *Artif Organs*. 2005; 29(11): 899-905