



KNOWLEDGE AND ATTITUDES ABOUT ORGAN DONATION AMONG COMMERCE COLLEGE STUDENTS

Rakesh Shah¹, Alpesh Patel¹, Vaibhav Ramanuj¹, Nitin Solanki¹

Financial Support: None declared
Conflict of interest: None declared
Copy right: The Journal retains the copyrights of this article. However, reproduction of this article in the part or total in any form is permissible with due acknowledgement of the source.

How to cite this article:
Shah R, Patel A, Ramanuj V, Solanki N. Knowledge and Attitudes about Organ Donation among commerce college students. Ntl J of Community Med 2015; 6(4):533-535.

Author's Affiliation:
¹Asst Prof, Dept of Community Medicine, Smt. N. H. L. Municipal Medical College, Ahmedabad

Correspondence:
Dr. Rakesh Shah
Email: rrshahad1@yahoo.co.in

Date of Submission: 15-09-15
Date of Acceptance: 22-12-15
Date of Publication: 31-12-15

INTRODUCTION

Organ donation is defined as the removal of tissues from the human body, from a living or dead person, for the purpose of transplantation as a treatment¹. Organ transplantation is the most preferred treatment modality for end-stage organ disease and organ failures². Organ transplants save thousands of lives every year. The success rates of transplant surgery have improved remarkably. It offers a better quality of life and also has better long-term survival benefits. Patients deemed fit for transplantation by the transplant team often wait expectantly for a donor organ. The inadequate supply of cadaver organs is especially crucial for heart, lung and liver recipients, since these patients cannot be maintained for long on mechanical devices, unlike pa-

tients with end-stage renal disease (ESRD) who can be maintained on dialysis³.

There is an increasing discrepancy between the number of patients on the waiting list for organ transplantation and the available number of deceased donor organs³. The result: some of these people die while waiting for that "Gift of Life." According to World Health Organization (WHO), with the rise in cases of kidney disease and renal failure, there are at least 200,000 people on waiting lists for kidneys. Different approaches are taken to meet this demand like live donation and cadaveric donation⁴.

The statistics from the Indian subcontinent are dismal and only 499 cadaver transplants including heart, liver and kidney have been performed in

ABSTRACT

Introduction: Organ transplants save thousands of lives every year. Lack of information is one of the leading causes for poor organ donation. So this study was conducted to evaluate the knowledge and attitudes about organ donation among commerce college students.

Materials and methods: In this cross sectional study desired information was collected from 200 students of a commerce college of Ahmedabad using a predesigned close ended questionnaire data through face-to-face interaction.

Results: Among 200 students 87.5% had heard about organ donation; 18.5% students' relatives had donated one or more organ; 46.5% students would be willing to donate organs of a brain dead relative; 62.5% respondents like to donate their own organ; and 43.5% students were aware of parliamentary law in India regarding organ donation in case of brain death.

Conclusion: Awareness of organ donation was high and some want to become donors. 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, students, attitudes, awareness

India from the year 2000 to 2009⁵. Kidney transplants are the most commonly performed. Transplants of the heart, liver and lungs are also regularly carried out. As medicine advances, other vital organs (including the pancreas and small bowel) are also being used in transplants. Tissue such as eyes, heart valves, skin and bone can also be donated⁶.

According to a study by the U.S. Agency for Healthcare Research and Quality (AHRQ), people often do not have all the information they need to make decisions about donating a family member's organs nor do they have a clear understanding of the donation process⁷.

In this context the present study was conducted to evaluate the knowledge and attitudes about organ donation among commerce college students.

MATERIALS AND METHODS

A cross-sectional study was conducted in one of the commerce college of Ahmedabad. Primary data containing sample size of 200 was collected. The study was held from 1st May 2013 to 30th June 2013. A pre-designed close ended questionnaire was used to interview the people participating in the study concerning socio- demographic features, current knowledge, attitudes, and behavior about organ donation and transplantation. The questionnaire was applied to participants via face-to-face interviews. Informed verbal consent was obtained from each subject following a detailed explanation of the objectives and protocol of the study.

RESULTS

The study population consisted of 200 respondents of whom 73.5% were male and 26.5% were female. 92.5% belonged to Hindu religion followed by Muslim (7.0%) and Christian (0.5%) (Table 1)

Table 2 shows that audiovisual media such as television (70 %), newspapers (69%), internet (66 %) and radio (57%) were the major source of information about organ donation.

Total 87.5% respondents had heard about organ donation, of which 61.5% replied that organ can be donated after death, 12% during life and 26.5% both. 32.5% respondents replied that we can buy and sell organ while 67.5% denied. About 43.5% students were aware of brain death. Among all students interviewed, 18.5 % students told that their relatives had donated one or more organ and 46.5% students would be willing to donate organs of a brain dead relative, as next of kin.

Table 1: Gender and religion wise distribution of study sample

Variable	Students (n=200) (%)
Gender	
Male	147 (73.5)
Female	53 (26.5)
Religion	
Hindu	185 (92.5)
Muslim	14 (07.0)
Christian	1 (00.5)

Table 2: Sources from which knowledge of organ donation was first known (Multiple answers)

Sources	Students (n=200) (%)*
Television	140 (70)
Newspaper	138 (69)
Internet	132 (66)
Radio	114 (57)
Magazine	98 (49)
Brochures	65 (32.5)
Others	40 (20)
No response	27 (13.5)

Table 3: Awareness about organ donation (n=200)

Awareness about organ donation	Students(%)
Heard about organ donation	175 (87.5)
Organ can be donated	
After death	123 (61.5)
During life	24 (12.0)
Both	53 (26.5)
Organs can be bought and sold	65 (32.5)
Heard of brain death	87 (43.5)
Have relatives whose organs have been donated	37 (18.5)
Donate organs of a brain dead relatives, as the next of kin	93 (46.5)
Favour of organ donation	125 (62.5)
Willing to carry an organ donor card & inform family members about your organ donation after death	91 (45.5)
Aware of parliamentary law in India about organ donation after brain death	87 (43.5)

62.5% respondents said they would like to donate their organ, while 37.5% said “no to organ donation”. However only 45.5% students were willing to carry an organ donor card and inform their family members about organ donation after death. 43.5% students were aware of parliamentary law in India regarding organ donation in case of brain death (Table 3).

The study also show that 85% respondents were aware of eye donation followed by kidney (79.5 %) heart (67 %), liver (57%), lung (44.5%), skin (37.5%), pancreas (36%), bones (35 %) and small intestine

(32.5%). Total 61 (30.5%) were reported that all organs listed here can be donated.

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 procedures⁸. Rapid advancement in research pertaining to transplantation of organs and tissues have however, failed to meet the increasing demand for donor organs resulting in severe shortage of donor organs⁹.

The major source of information was through media, mainly television, radio, internet and newspaper. A similar pattern of frequently cited media sources of organ donation has been reported in a study of Rumsay et al¹⁰.

Even though 87.5 % of respondents had heard about organ donation, we found that only 62.5% participants were willing to donate their organs under any circumstances. However only 45.5% students were willing to carry an organ donor card and inform their family members about organ donation after death. This motivation is slightly higher than that reported by Saleem et al¹¹ and Sana Maroof et al¹². In a study reported by Minniefield, 40% of the younger age group was well aware of organ donation¹³. In a study on university students in Brazil aiming to assess awareness and opinions about organ donation, it was concluded that there are different opinions and different levels of awareness among students considering age, religion, and religious practices and level at school¹⁴.

In our study, awareness about donation of different organs varied from 85%, 79.5%, 67% and 57% about eye, kidney, heart and liver donation respectively. In a study done by Yeun et al, the level of awareness was greatest about kidney and eye donation¹⁵.

A lot of social and cultural factors are involved along with imprudent religious beliefs which prevent people from donating their organs. Another reason is the emotional association families have with the dead bodies of their loved ones as well as the sanctity of the dead body.

CONCLUSION

Awareness of organ donation was high and some want to become donors. 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

Purposive sampling was used. 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.

REFERENCES

1. Wikipedia, Organ donation, (Online) (Cited 2013 Jul 13), available from URL: http://www.en.wikipedia.org/wiki/Organ_donation.
2. Filho MA, Ramalho H, Attitudes and awareness regarding organ donation in the western region of Sao Paulo, *Transplant Proc*, 1995;27:1835.
3. Usha Bapat, Prashanth, Organ Donation, Awareness, Attitudes and Beliefs among Post Graduate Medical Students, *Saudi J Kidney Dis transpl*, 2009;20(1):174-180.
4. Garwood P, Dilemma over live-donor transplantation, *Bull World Health Organ* 2007, 85: 5-6.
5. Cadaver Transplant Registry: From the Mohan Foundations in Hyderabad & Chennai, ZTCC - Mumbai and SORTE -Cochin, ZCCK Bangalore.
6. Organ donation: raising awareness within the NHS, *Issue 76: November 2010*, 1-2.
7. Clinical Decision making: Organ donations increase when families have good information about the donation process. (Online), available from URL: <http://www.ahrq.gov/RESEARCH/jul01/701RA2.htm>.
8. El-Shoubaki H, Bener A and Al-Mosalamani Y, "Factors Influencing Organ Donation and Transplantation in State of Qatar", *Transplantations medizin* 2006, 18, S. 97.
9. Wig N, Gupta P, Kailash S, Awareness of brain death and organ transplantation among selected Indian population, *J Assoc Physicians India*, 2003;51:455-8.
10. Rumsay, Hurford DP, Cole AK, Influence of knowledge and religiousness on attitudes towards organ donation, *Transplant Proc* 2003;35(8): 2845-50.
11. Saleem T, Ishaque S, Knowledge, attitudes and practices survey on organ donation among a selected adult population of Pakistan, *BMC Medical Ethics* 2009; 10: 5.
12. Sana Maroof, Nimrah Kiyani, Awareness about organ donation especially kidney donation in Nurpur Shahan, a rural community area in Islamabad, *J Pak Med Asso*, Vol. 61, No. 8, August 2011, 828-832.
13. Minniefield JW, Muti P Organ Donation Survey Results of a Buffalo, New York, African American Community, *J Nat Med Assoc*, 2002; 94: 979-86.
14. Ziaja J, Cierpka L, Krol R, Szczepanski MS, Tyryban M, Sketa S. Transplant procedures in social awareness opinion poll of Silesian province citizens on living donor organ transplantation. *Ann Transplant* 2003;8(4):43-5.
15. Yuen CC, Burton W, Chiraseveenuprapund P, Elmore E, Wong S, Ozuah P, *J Nat Med Assoc* 1998; 90: 13-8.