

Awareness of Organ Donation and Transplantation among Health care Professionals: A Prospective Study

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ABSTRACT

Context: The act of saving lives has reached a remarkable goal. With the process of organ donations, life can still go on for the unfortunate people with malfunctioning organs. A positive attitude of the health care professional (HCP) toward life-saving organ donation programs could be a first step toward realizing this goal.

Objective: In this present study, an attempt had been made to probe this issue from the HCP because their attitude as a mediator or a donor can aid the process of organ donation.

Materials and methods: It is a cross-sectional questionnaire involving 95 male and female HCPs (physicians, nurses, lab technicians, and students) in the study. A questionnaire with 30 questions on various aspects of organ donation was given to answer as "Yes" or "No."

Results: The results showed that having sufficient information and knowledge on the same was found to be just 25%. About 95% of them were very supportive of organ donation and 80% of them were willing to donate to a stranger. However, weak responses in the area of willingness to be a living donor were obtained, and it was really a hard fact to notice that nobody had registered as a donor.

Conclusion: It is apparent from the study that though there was some level of awareness and willingness about organ donation, a high proportion of the participants did not have positive attitudes toward organ donation.

Keywords: Attitude, Donor, Health care professional, Knowledge, Organ donation.

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INTRODUCTION

Each year, hundreds of people die while waiting for an organ transplant. There is a shortage of organs, and the

gap between the number of organs donated and the number of people waiting for a transplant is getting larger. Transplants, as an option, have successful outcomes, and the number of people needing a transplant is expected to rise steeply due to an aging population and an increase in organ failure.

Almost 1.5 lakh people in India need a kidney; however, only 3,000 of them receive one. Only 1 out of 30 people who need a kidney receive one. About 90% of people in the waiting list die without getting an organ. India's annual liver transplant requirement is 25,000, but we manage to obtain only about 800. About 70% liver transplants are taken care of by a live donor, but 30% are dependent on cadaver donations.¹

The act of saving lives has reached a remarkable goal. With the process of organ donations, life can still go on for the unfortunate people with malfunctioning organs. Everyone should be an organ donor because, each day, approximately 60 people out of 100 receive an organ transplant, but another 17 people on the waiting list die. A single organ and tissue donor could save or enhance the lives of more than 50 people.²

Key Reasons for Shortage of Organ Donors in India

- Ignorance and lack of knowledge about organ donation
There is a major lack of awareness about organ donation in India, and recent polls and surveys reveal that people would come forth with their wish to donate, if they had received more information.
- Registering one's wish to donate
A major reason for the shortage of organs is that many people have not recorded their wish about organ donation or discussed it with their families.
- Myths and beliefs
Myths and misconceptions about organ donation discourage potential donors from making the decision to donate organs or tissue after death.¹
More than 5 lakh Indians are dying annually just because of the failure of their major functioning organs. Organ transplantation could play a major role in their precious life by increasing their period of living more than the expectations. The donor of the organs plays a role of God in the life of the person to whom the organ is transplanted. One organ donor can save more

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than 8 lives in his life by donating his well-functioning organs.³

"Anybody can be a donor; depending on the medical condition, organs and tissues can be donated for transplant," said Bhardwaj in TOI August 2016.⁴ One can get a new life through organ transplantation donated by someone else.³

Organ donation is when a person allows healthy transplantable organs and tissues to be removed, either after death or while the donor is alive, and transplanted into another person. Organs that can be transplanted are kidneys, heart, liver, pancreas, intestines, lungs, bones, bone marrow, skin, and corneas.

Some organs and tissues can be donated by living donors, such as a kidney or part of the liver. While views of organ donation are positive, there is a large gap between the numbers of registered donors compared with those awaiting organ donations at a global level.⁵

In Turkey, about 80% of all transplants are based on living donors, and cadaver transplants account for about 0.5 pmp/year.⁶ In 2005, a study in Qatar showed that 30 to 39% were willing to donate after death, while only half of them were willing to be living donors. Hence the HCP's can play a key role in the lives of every individual to help make a personal decision to be a living donor. In almost every country, the organ supply for transplantation does not match the increasing demand; HCPs may play an important role in eliminating the barriers and help increase organ donation.⁶ The only way to increase organ donation is to educate the medical community and the public about the importance of becoming an organ donor.

As a first step, it is necessary to assess the personal views, knowledge, attitudes, and willingness of the HCP in medical field regarding organ donation. Keeping this in mind, an effort has been made to perform a questionnaire-based cross-sectional study and test the depth of knowledge on organ donation among the staff and students of a tertiary care hospital.

MATERIALS AND METHODS

This is a cross-sectional study to determine the level of knowledge and willingness of HCPs toward organ transplant and donation in a tertiary care hospital, Mumbai. We included 95 study participants of whom were 26 doctors, 36 nurses, 7 paramedical staff, and 26 nursing students of the 4th year of the Bachelor of Sciences, who are likely to encounter possible diseased organ donors or live donors.

They were requested to complete a previously validated anonymous questionnaire modified according to local circumstances. The questionnaire covered different variables

on sociodemographic characteristics, 20 items measuring the knowledge and attitude and 5 items each measuring the opinions and willingness toward organ donation by the self and those on whose behalf the he or she might need to make a decision, as well as for transplantation. The items used answers, such as "yes" or "no." The survey was conducted during September and October 2016. It was completely anonymous, voluntary, self-administered, collected on the spot, and stored confidentially. Data were entered in the Microsoft Excel spreadsheet, and analysis was done to express the results in percentage.

RESULTS

The analysis of the questionnaire was divided into three sections. The first section focused on the sociodemographic characteristics of the 95 respondents. As per Table 1, 63% were of <30 years of age. The majority were females. Forty-nine percentage had undergone graduation, 39% postgraduation, and 12% diplomas. About 73% of the participants were full-fledged medical professionals of different branches, and 27% were nursing students. About 58.94% belonged to Christianity and 33.68% to the Hindu religion. A total of 91% were from a urban background. The opinion and willingness on organ donation was assessed in the second section of the questionnaire.

Table 1: Sociodemographic characteristics of studied health care professionals (n = 75)

Demographic variables	Frequency	Percentage
Age		
• <30	60	63.16
• 30–49	24	25.26
• >50	11	11.58
Gender		
• Male	18	18.95
• Female	77	81.05
Marital status		
• Unmarried	56	58.95
• Married	39	41.05
Educational status		
• Diploma	11	11.58
• Graduate	47	49.47
• Postgraduate	37	38.95
Job profile		
• Doctor	26	27.37
• Nurse	36	37.89
• Lab technician	07	7.37
• Student	26	27.37
Religion		
• Muslim	07	7.36
• Christian	56	58.94
• Hindu	32	33.68
Place of living		
• Urban	86	90.53
• Semi-urban	09	9.47

Totally, 66 of the respondents were found saying that they had sufficient knowledge, and only 29 of them were not confident about their knowledge level. About 91 of them voiced out that in no way do religious beliefs interfere with organ donation. At the same time, 19 of them wanted to be buried or cremated with all organs intact, and 30 of them feared disfigurement and pain after surgery. The majority (98) of them said that it was a good idea that the physicians maintained information on organ donations in their clinics (Graph 1).

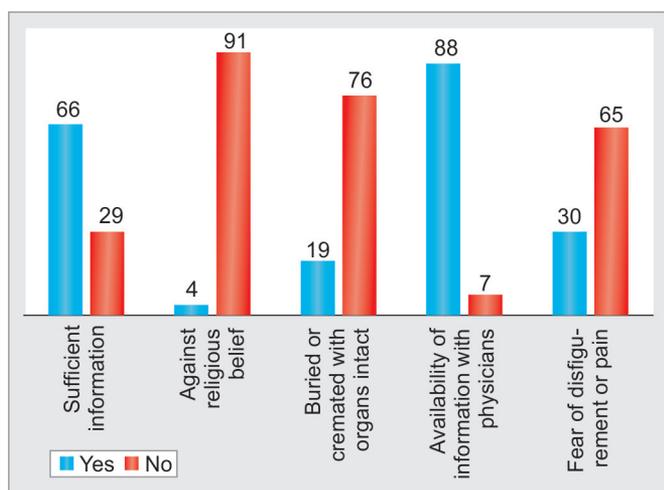
About 95.7% strongly supported organ donation and 43.1% of them had already discussed with a family members on organ donation. About 60% of them were willing to consent for organ donation to a brain dead family member even though it was not discussed at all in his or her life time, and the willingness to donate to a stranger was a highly appreciable attitude at 80%. Surprisingly, less than 25% of them were willing to be a living donor. However, the willingness to support, encourage, and motivate organ donation is excellent; at

the same time, self-motivation is required to be a donor (Graph 2).

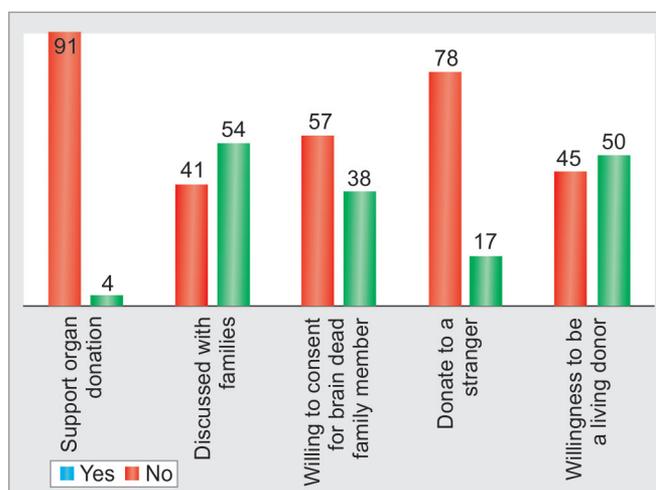
Overall, assessment of awareness of organ donation through the knowledge questionnaire revealed (Graph 3) that 25% of them had very good knowledge and almost 23% had poor knowledge. When their knowledge was compared, physicians (80.77%) were significantly highly aware and 57.69% of nursing students possessed good knowledge. However, nurses (33.33%) and lab technicians (57.15%) were found not having enough information and knowledge, although their personal opinion was 66% on having sufficient information (Graph 4).

DISCUSSION

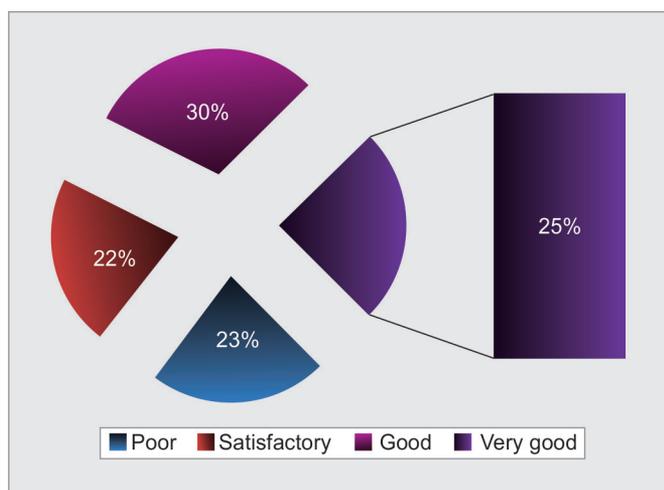
In India, about 200,000 kidneys and 100,000 livers are needed every year, but only 2 to 3% of the requirement is fulfilled.⁷ Organ transplantation could be a miracle for the person who has lost hope for life. Their only ray of hope is in the hands of willing donors. Many people lose their lives because of nonavailability of organs.⁸



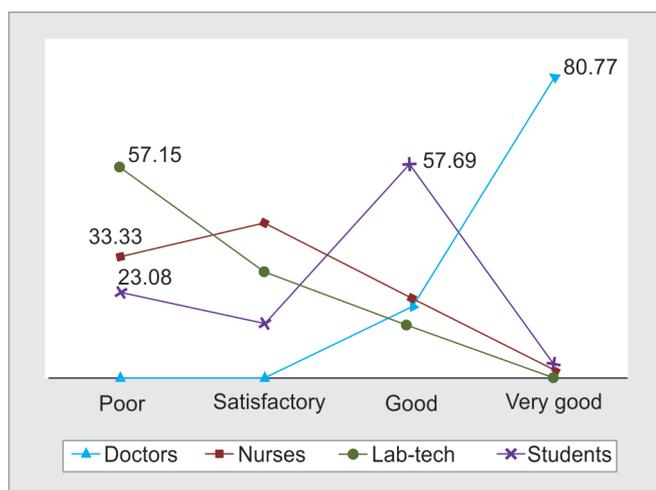
Graph 1: Attitude of health care professionals – opinion



Graph 2: Attitude of health care professional – willingness



Graph 3: Knowledge regarding organ donation among the study participants



Graph 4: Knowledge regarding organ donation among the study participants according to their job profile

In addition to governmental and infrastructural support, a successful organ donation program requires awareness in society and the commitment of HCPs. A positive attitude of HCPs toward life-saving organ donation programs could be a first step toward realizing this goal. Therefore, a realistic approach would necessitate an assessment of knowledge and attitude of health care workers toward organ donation.⁶

The majority of participants in our study were young and less than 30 years of age, and over 75% were women. The predominance of women can be credited to the overwhelming majority of women in the nursing field. A positive influence of younger age on willingness to become living kidney donors has been reported.⁸ However, willingness to be a living donor was not influenced by age in our study population though discussed with family members, and this again shows the need for education and motivation even among the HCPs.

The majority of nurses and nursing students were Christians, while 41% were Hindus or Muslims. The impact of religion on the attitude toward organ donation was not seen in the present study. Osama et al⁹ reported in 2012 that the attitudes of Qatar HCPs in no way had a negative influence on organ donation when religious beliefs were concerned.

A study among medical students in Turkey showed that about 17.1% of them were willing to donate their organs without any hesitation, and around 27.4% were for donating a relative's organ.⁶ However, the current study is contradictory to the fact the almost 55% were not willing to be a living donor, whereas they were comfortable donating the diseased organs of the relatives.

It was expected that the study population would show high chances of having practical knowledge about organ donation by virtue of their profession. Considering the variations in the education status, it was observed that higher awareness and willingness to donate organs were observed among people who were more educated. This observation is similar to the observation made in the study from Delhi.¹⁰ Significant level (80.77%) of knowledge was seen only in the doctors and (50.69%) moderately seen in the nursing students. Though they were aware of the fact the India is in need of donors, the current study revealed the lack of readiness to be a self-donor. Reassuringly, about 45% of participants showed a necessity to know more about organ donation. These figures highlight the lack of awareness about organ donation as well as a willingness to know more about it.

Major Findings from the Current Study

- The best outcome of the result was about 95.17% supporting organ donation, although willingness to be a living donor is low.

- Doubts about transplantable organs still exist among the participants.
- Profession or practicability has not effectively influenced the awareness of organ donation.
- Even after having discussed with family member regarding organ donation, fear still exists.
- Requires strong encouragement to becoming a living donor.
- Among the HCPs, it was found that the level of knowledge about organ donation and the willingness to donate an organ was higher among the doctors. This fact is similar to what has been reported by Osama et al.⁹
- None of them is registered as a donor.

It is apparent from the study that though there was some level of awareness of and willingness toward organ donation, a high proportion of the participants did not have a positive attitude toward organ donation. To maximize the benefit of the organ-donation process, educating the aspiring and experienced HCPs seem to be an important part of the process.

CONCLUSION

In conclusion, this study made an attempt at assessing the attitudes of HCPs, who are likely to give first-hand information to the people in health care. They can bring about an awareness on the need for organ donation and distribute messages about organ donation to many. They can also motivate and encourage others as well as themselves to remove any hesitation regarding donating organs. They can register as organ donors and carry the "Donor card" with them. It has been documented that a largely positive attitude through proper education is likely to increase the awareness and thus, improve organ donation rates.

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