



A STUDY TO ACCESS THE KNOWLEDGE OF MEDICAL STUDENTS REGARDING ORGAN DONATION

Education

Dr. Hetal Chauhan	Associate Professor, Department of General Medicine, NHL Municipal Medical College, Ahmedabad.
Dr. Kartik Patel	2 nd Year Resident, Department of General Medicine, NHL Municipal Medical College, Ahmedabad.
Dr. Samuvel Vasava*	2 nd Year Resident, Department of General Medicine, NHL Municipal Medical College, Ahmedabad. *Corresponding Author

ABSTRACT

Organ transplantations save lives of patients with terminal organ failure and improve quality of life. However there is a huge gap between demand and supply of human organs. The only way to increase organ donations is to educate the health care professionals & public about the importance of organ donation and encourage them to become organ donor. As healthcare professionals are the most suitable person to carry the message to community, their knowledge and attitude towards organ donations should be studied. **Aim:** This study is determined to access the knowledge of medical students regarding organ donation. **Methods:** A Cross sectional study was conducted in a medical college of Ahmedabad. 100 medical students were included and they were given questionnaires designed to capture the knowledge and attitude toward organ donation. Responses were collected and analysed by Microsoft Excel and SPSS version 20. **Results:** 100% students were aware about the term organ donation. 90% students knew organization that work for organ donation awareness in city. 85% students were aware of the transplantation of human organ act 1994. 70% knew any hospital in city where organ transplantation is performed. **Conclusion:** The result of study revealed that there exists a knowledge gap among the medical students regarding organ donation & there is an urgent need for addressing this knowledge which will help in improving the organ donation rate in our country.

KEYWORDS

Awareness, Medical students, Organ donation, Transplantation.

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 treatment. Approximately, 25 different organs and tissues can be transplanted such as liver, heart, kidney, liver, pancreas, cornea, bone marrow, blood, skin, and ligaments^[1].

The organ supply for transplantation does not match the increasing demand in most of the countries. In 2017, Spain has highest donor rate in world (46.9 per million people) followed by Portugal (34.0 per million people), Belgium (33.6 per million people), Croatia (33.0 per million people), US (32.0 per million people) while in India it is 0.8 per million people^[2]. Thus, INDIA has the lowest rates of organ donation in the world. In India, almost 500,000 people die every year due to non-availability of organs. Annually, 175,000 kidney patients, 50,000 heart patients, 50,000 liver patients and 1 lakh corneal blind patients await transplant each year but only 5000, 30700 and 25000 donors are available respectively^[3]. It is estimated that 1.5 lakh brain death occurs due to road traffic accidents (RTA) and if even 5-10% of them result in organ harvest, there would be no need for live organ donation^[4].

Organ donation and transplantation is an important aspect of treatment of chronic organ failure in today's era of medicine. During the past few decades, organ donation has increased widespread as the modality of treatment in many end organ diseases. But this form of treatment needs consideration of many factors like ethical or medico-legal aspects. Knowledge, attitude and behaviour of healthcare professionals are important factors in fostering an environment that can encourage and promote organ donation among the entire population and especially in relatives of brain dead patients in hospital. Hence, this study was carried out to determine the present level of knowledge and attitude of medical students toward organ donation & to identify the areas where the knowledge is lacking.

Methods

A descriptive, cross-sectional study was done in medical students of a college at Ahmedabad. All medical students who were willing to participate by filling the questionnaire were enrolled into the study. Students were briefed about the background and purpose of the study. A questionnaire adapted to the study requirements from the published research was designed to capture the knowledge toward organ donation. The questionnaire were consist of information such as age, gender, cast, awareness about organ donation, which organs can be donated, act of transplantation, organizations/ hospital working for organ transplantation etc. Responses were collected and analysed by

Microsoft Excel and SPSS version 20.

RESULTS

The study population consisted of 100 respondents. There were 60 male & 40 female students. All participants were in age group of 22-26 years. 80% were Hindu, 14% were Muslim and 6 % were Christian. 50% were postgraduate students and 50% were interns. All questions were answered by all participants. There was no significant difference of knowledge regarding organ donation between two genders. Majority responded that their source of knowledge about organ donation was mass media (90%). Only 10% responded as medical education. 100% respondents were aware about the terms of organ donation and brain death. Knowledge regarding which organs can be donated was highest about liver and kidney donation (both 100%) followed by cornea (90%), bone(60%), skin(45%), pancreas (40%), intestine (25%), heart(25%), lung (10%)and brain (1%). 84% knew that kidney can be donated while a person is alive. Other responses were as in figure 1.

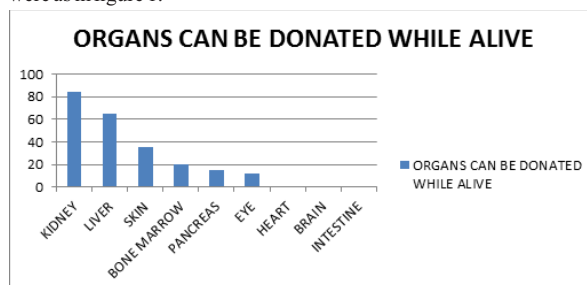


figure 1

85% students were aware of THE TRANSPLANTATION OF HUMAN ORGAN ACT 1994. 90% responders were aware of any organization which work for organ donation awareness in city, 70% students knew hospitals in city where organ transplantation is performed. Among them only 40% were sure about kidney transplant, 30% were sure about liver transplant and 20% were sure about corneal transplant was being carrying out in respective hospitals in their city.

Among all, no one had registered for donation of organs after his/her death, but 90% of them had a thought to donate organs after death. 10% had never thought about that. All of them (100%) were ready to receive organs from others if they needed sometime.

65% participants had encouraged for organ donation few times, only 20 % responders were successful once only. They found various difficulties like religious and cultural believes against organ donation, lack of knowledge, myths and fear of surgery, lack of trust on hospital etc. (figure 2)

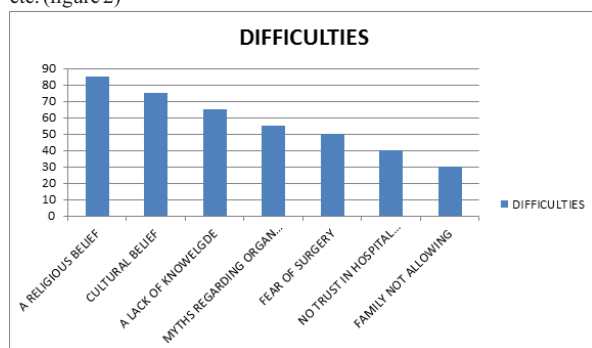


Figure 2

Responders also experienced that people do not become ready for organ donation easily, but when became ready, various reasons were to help others (100%), wish of patients (40%), to set example for others (20%), personal experience of its importance (12%). People commonly become ready for donation of organs of kidney (70%), eye (80%) and liver (50%). Participants also suggested that organ donation awareness efforts should be intensified and predominant sources for that could be mass media communication (100%), school and college education (60%), government policy (55%), community and friends (45%).

DISCUSSION

The present study provides important insights into knowledge and attitude of organ donation among postgraduate students and interns. Major source of information for organ donation was mass media communication in medical students. This was similar to various studies conducted in India and abroad^[5,6]. All students were aware of organ donation term similar to H. Bilgel et al^[7]. Most of them were Hindu similar to study done by T. Suchitra et al^[8]. Awareness regarding donation of cornea, kidney and liver after death were higher than other organs which is similar to study conducted in northeast Brazil^[9]. Many students knew the hospitals in the city which performs organ transplantation of various organs. But very few were sure about which organ transplantations are performed there. 10 % students were not aware that any organization exists in their city working for awareness. This was similar to study conducted in India, which showed only 42% were aware of organization about organ donation^[10]. 90% were willing to donate organs similar to Usha et al.^[11]

In this Study, we found that knowledge regarding organ donation in medical students was limited. This could be due to the paucity of teaching on the topic of organ donation in the undergraduate medical curriculum. This is similar to Bardell et al^[12]. Chung et al^[13] reported low levels of confidence among medical students in Hong Kong while approaching potential donors and their families. Most students believed their medical curriculum was inadequate in providing transplant-related knowledge. It has been shown in previous studies as well that health professional can positively influence the opinion and attitudes of patients & their relatives, leading to higher rates of organ procurement^[14].

Students also experienced that people don't become ready for organ donation easily because of lack of knowledge among the entire population and many myths and belief accepted by people with organ donation. An interesting observation made was that 85% considered that religious belief were a limiting factor for organ donation. This highlights importance of involvement of social scientist along with health care professional in the developing country^[15]. They also felt that Mass media is an important channel for spreading awareness identified by various studies as well^[16]. To increase awareness and to prepare patients' relatives for organ donation effectively, team of some dedicated persons with involvement of social workers should be appointed.

CONCLUSION

The present study revealed that a knowledge gap exists among the

medical students regarding organ donation & there is an urgent need for addressing this knowledge which will help in improving the organ donation rate in our country. This topic should be included in medical curriculum to increase the overall competence of medical graduates in the country regarding organ donation. Increase in awareness of people by various modalities of communication can also lead to positive impact in increase donation rate in our country.

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