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ATTITUDE AND KNOWLEDGE TOWARDS ORGAN DONATION AMONG MEDICAL STUDENTS AT SHER-I-KASHMIR INSTITUTE OF MEDICAL SCIENCES MEDICAL COLLEGE BEMINA SRINAGAR

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ABSTRACT

Background and Objectives: Organ donation is crucial for saving lives, but misconceptions and cultural factors often hinder its acceptance. This study aims to assess the knowledge and attitudes toward organ donation among undergraduate medical students in Srinagar.

Methods: A cross-sectional study was conducted among 200 undergraduate medical students at SKIMS Medical College. Data were collected using a self-administered, structured questionnaire that covered demographic information, knowledge of organ donation, and attitudes toward it. Ethical clearance was obtained, and written informed consent was taken from all participants.

Results: The majority of participants (60%) were male, aged 19-23 years, with 78% being Muslim. All participants (100%) were aware of organ donation in India, and 99% believed it could save lives. 72% thought organs could be donated after death, and 78% supported organ donation to save lives. The most common organs identified for donation were kidneys (50%), eyes (26%), and heart (10%). While 62.5% were unwilling to donate organs, 72% were open to receiving organs. Religion was the primary reason for refusal (56%). Most participants (100%) supported the implementation of laws regulating organ donation. No participants had ever donated an organ.

Conclusion: Medical students showed good knowledge of organ donation, but their willingness to donate was significantly influenced by religious beliefs. Educational efforts are needed to address misconceptions and encourage organ donation among healthcare professionals in training.

INTRODUCTION

Organ donation is the process when a person allows an organ of their own to be removed and transplanted to another person, legally either by consent while the donor is alive or dead with the consent of the next of kin. The issue of organ-transplantation is multifactorial and complex ones involving legal, ethical, medical, organizational and social Factors¹⁻⁴. Donation may be for research

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or more commonly health, transplantable organs and tissues may be donated to be transplanted into another person. Common transplantations include kidneys, heart, lower pancreas, intestines, lungs, bones, bone marrow, skin and corneas. Some organs and tissues can be donated by living donors, such as kidneys or part of the liver, part of the pancreas, part of the lungs or part of the intestines but most donations occur after the donor has died. Organ failure is a major concern world-wide, so promoting organ donation (OD) in all countries is essential⁵.

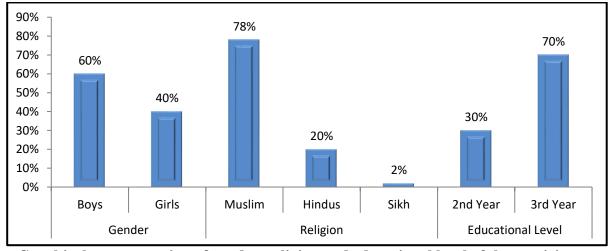
Currently there are two problems related to organ transplantation, on one hand there is dearth of organ donors and a long waiting list, on the other hand in the third world countries like India, Pakistan, Philippines and other countries, every year thousands of people from united states, Australia, Europe and middle east come in search of poor donors who are ready to donate their organ for financial recompense. The growing number of successful transplants has increased the hope for life, and the technological advancements in medicine, awareness and acceptance among the doctors have increased the need for more donors. There is a gap in the number of patients requiring organ transplant and possible donors. 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 degrees of willingness for organ donation among populations⁵. This study is an attempt to know the knowledge and attitude towards organ donation amongst students in Srinagar.

MATERIAL AND METHODS

This cross sectional study was carried among 200 undergraduate medical students to assess the knowledge and attitude towards organ donation. The questionnaire was used to collect information on gender, age, religion and attitude of respondents towards 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 clearance from the research committee of the Medical College. Data was collected through pre-validated, self-administered structured questionnaires prepared by studying the literature. 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 undergraduate medical students at different professional levels participated in the study from SKIMS Medical College belonging to the age group 19-23 years. Majority of the students (40%) belonged to 22 years of age and least (20%) were of 20 years. 120 (60%) were boys and 80 (40%) were girls. 78% were Muslims, 20% Hindu and 2% were Sikh. Majority of the participants were at professional level 3 followed by professional level 2.



Graphical representation of gender, religion and educational level of the participants

Table No. 1: Level of knowledge/awareness towards organ donation (n=200)

Table No. 1. Level of knowledge/awareness towards organ donation (n=200)		
Parameter		Percentage
Do you have any information regarding the occurrence of organ donation in India?	Yes	100.0%
	No	0.0
Do you think organ donation can save lives?	Yes	99%
	No	0.0
When do you think organs can be donated?	Alive	10%
	Brain death	18%
	After death	72%
Reasons for organ donation	To save someone's life	78%
	Out of compassion/ sympathy	6%
	For money	20%
	As a responsibility	4%
Reasons for organ donation	Newspaper	40%
	Television	20%
	Family and friends	4%
	Internet	30%
	Others	6%
Which organ do you think can be donated?	Eye	26%
	Pancreas	10%
	Liver	8%
	Skin	3%
Reasons for organ donation	Bone marrow	1%
	Heart	10%
	Lung	1%
	Kidney	50%
Do you think there is danger to the health of the donor from	Infection	63%
	Rain	22%
	Weakness	15%

When asked for reasons supporting organ donation 78% believed that organ donation can save someone's life, 20% opined for money, 6% were of the opinion that it was out of compassion / sympathy, 4% considered it as responsibility. In response to a query of information regarding organ donation it was found that the main source of information was newspaper / magazines 40% followed by internet (30%), television 20%, family and friends 40% and others 6%. It was found that regarding individual organ donation, participants were of the opinion that the most common organ that can be donated is the kidney (50%), eye (26%), heart (10%), skin (3%), bone marrow and lugs (1%) respectively. When asked regarding danger to the health of the donor from organ donor infection 63% was considered to be the most common cause followed by pain (22%). When asked whether the students were willing to donate their organs, it was found that 62.5% were unwilling to donate organs, the most common reason was found to be religion (56%) followed by cadaveric manipulation (32%) and 2% disfigurement. It was found that 72% were willing to receive organs, 28% were unwilling. When asked whether there should be a law regarding organ donation. It was found that the majority of the students, almost 100%, were in favour of it. When asked whether it was right to charge money for organs it was in the ratio of 50:50. None of the participants have ever donated any organ (100%). When asked about their views on when organs can be donated, 72% of participants were of the opinion that organs could be donated after death, 18% thought that organ donation could take place in brain death. When asked about the knowledge regarding the occurrence of organ donation in India it was found that 100% of medical students knew about it. When asked about the reason for organ donation, 78% participants agreed that organ donation can be transplanted.

DISCUSSION

The findings of our study regarding knowledge and awareness towards organ donation are in concordance with previous studies conducted in different parts of the world. Our study revealed that all (100%) of the medical students had knowledge regarding organ donation in India, which aligns with the findings of a study conducted by Ramadurg UV et al., (2018) where medical students demonstrated a high level of awareness regarding organ donation⁶. Similarly, a study by Annadurai K et al., (2013) reported that medical students were well-informed about organ donation policies and procedures⁷. Our study found that 99% of the participants believed that organ donation could save lives. This is similar to the study conducted by Bapat U et al., (2010), where 98% of participants acknowledged the life-saving potential of organ donation⁸. Another study conducted by Bardell T et al., (2003)⁹ also indicated that a majority of medical students recognized organ donation as a means to save lives. Regarding the timing of organ donation, 72% of our participants believed that organs could be donated after death, 18% during brain death, and 10% while alive. These findings are consistent with a study by Sander SL et al., (2005)¹⁰, where a majority of students supported posthumous organ donation, with a smaller percentage acknowledging the possibility of organ donation during brain death and while alive. The reasons cited for organ donation in our study showed that 78% of the participants considered saving someone's life as the primary motivation. This is in agreement with the study by Saleem T et al., (2009)¹¹, where the altruistic aspect of organ donation was the predominant reason among medical students. However, 20% of our participants also considered financial gain as a reason for organ donation, similar to findings by Khan N et al., (2011)¹², who reported financial incentives as a secondary motivation in certain demographics.

In terms of sources of information regarding organ donation, our study found that newspapers/magazines (40%) were the most common source, followed by the internet (30%), television (20%), and family and friends (4%). Our present study results match with the data of the previous studies in Pakistan, where the major source of information came to be Television and print media (Saleem T et al., 2009¹¹ and Khan N et al., 2011)¹². Regarding knowledge about specific organs that can be donated, our study found that kidney donation was the most commonly recognized (50%), followed by eyes (26%), heart (10%), liver (8%), and skin (3%). A study by Paul B et al., (2019)¹³ also confirmed about the knowledge of the participants about the donation of eye (97%) and kidney (91%). Tamuli RP et al., (2019)¹⁴ found that awareness about donation of eye (82.5%), kidney (77.5%), liver (35.83%) and heart (35.83%), whereas only 11.67% believed that most of the organs can be donated.

Our study revealed that 62.5% of participants were unwilling to donate their organs, citing religious beliefs (56%) as the primary deterrent, followed by concerns about cadaveric manipulation (32%) and disfigurement (2%). These findings align with those of a study by Chung CK et al., (2008)¹⁵, which highlighted religious constraints as a major barrier to organ donation.

Interestingly, while a majority (72%) of our participants were willing to receive an organ transplant, 28% expressed unwillingness. In a study by Rydzewska M et al., (2018), the most common reason for family refusal to receive organs from the deceased is emotions after the death of a close relative (88%) and then the religious belief (41, 82%). When asked about the necessity of a legal framework regarding organ donation, nearly all of our participants (100%) agreed on the importance of such regulations. This finding is consistent with the study by Balajee KL et al., (2010)¹⁷, where a vast majority of medical students supported the implementation of stringent laws governing organ donation. None of the participants in our study had previously donated any organ (100%), which is similar to findings by Krupic F et al., (2017), where a majority of medical students had not been involved in organ donation.

CONCLUSION

In conclusion, the present study indicates that while medical students possess good knowledge about organ donation, there are significant concerns and hesitations about donating organs, with religion being the primary factor influencing their decisions. Educational initiatives are necessary to address misconceptions and encourage a more favorable attitude towards organ donation among future healthcare professionals.

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