

## Study Of Level Of Awareness And Knowledge About The Organ Donation In Undergraduate Medical Students

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**Abstracts:** Background: Advances in the field of donation and transplantation parallel level of development in health sciences of the country in question. The most important factor on this subject is insufficient number of donated organs and tissues to meet the requirements for those on the waiting list for transplantation. Healthcare professionals are thought to be more knowledgeable, and sensitive about organ, and tissue transplantation. Purpose of our study is to determine the level of awareness and knowledge about organ donation in Medical students. Methodology: We determined the level of awareness and knowledge about organ donation of 1<sup>st</sup> year undergraduate medical students. Study has been carried out at physiology department GMERS Medical College, Gandhinagar. They were be given self made questionnaire which contains very basic questions about organ donation awareness and were given sufficient time of 3 days to fill it up. The data obtained was analysed by Epi info software. Results: From the survey it is found that there is very less awareness and knowledge about organ donation in 1<sup>st</sup> year undergraduate medical students who will be main source for spreading knowledge about organ donation and convincing as well as performing the organ donation. Conclusion: A well organized and systemic approach and execution of planning is necessary to improve the number of organ donors by improving the knowledge and system in doctors. A positive and aesthetic approach is necessary with Provision of small amounts of 'up-to-date' information in a simple language than using medical language with a careful selection of words. [Patel A NJIRM 2015; 6(4): 78-81]

**Key Words:** Organ donation, Medical students.

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**Introduction:** Organ-donation is the donation of biological tissue or an organ of the human body, from a living or dead person to a living recipient in need of a transplantation<sup>1</sup>. Advances in the field of donation and transplantation parallel level of development in health sciences of the country in question. However developments in science and technology are not sufficient for the countries to reach the required level in domains of organ donation and transplantation. The most important factor on this subject is insufficient number of donated organs and tissues to meet the requirements for those on the waiting list for transplantation.

The number of individuals waiting for organ and tissue transplantation is increasing every day not in proportion but also with the rate of organ, and tissue donation. Therefore, number of organ and tissue transplantations does not reach the levels to meet the requirements of those waiting for transplantation. One of the most important stages in organ transplantation is doubtless the procurement of organ or tissue. In our country, as seen in other Asian, and Middle East countries, number of donations do not meet the increased

requirements for transplantation. Healthcare professionals are thought to be more knowledgeable, and sensitive about organ, and tissue transplantation. However superiority of this sensitivity and knowledge to the general population is still debatable.

With this prior knowledge, we intended to evaluate the level of awareness, and knowledge in the Medical students.

**Material and Methods:** Cross sectional Study is performed in Undergraduate medical students in their 1<sup>st</sup> year of GMERS medical college, Gandhinagar. Study is done in around 140 students. Study participation criteria: Inclusion criteria, undergraduate medical students from GMERS medical college Gandhinagar can participate in the study. Exclusion criteria, Students who have obtained MBBS degree or higher qualifications are excluded from the study.

**Testing procedure:** All 1<sup>st</sup> year Undergraduate medical students of GMERS medical college Gandhinagar, who give their consent and all subjects who are willing to participate in the study

and given consent will have to fill up the questionnaire<sup>2</sup> forms prepared in printed forms within 3 days. The questionnaire contains some personal information and some basic questions to get idea about the level of awareness in medical students. Questionnaire is self prepared with the help of some materials.

All the forms are collected, Data gathered is analysed by using Epi-Info software. Analysis is done to recognize the extent of awareness about donating the organs by discussing the answers to the questions in the questionnaire. Then the areas where improvement is to be done identified and steps are suggested to improve the knowledge and awareness about organ donation.

**Results:** Since doctors have a pivotal role to play in organ donation, it was interesting to learn about their views on the subject. When we see about awareness almost 69% have a thought about donating organ the remaining didn't even think about organ donation.

At first sight the students should have introductory lecture or overview of importance of organ donation then they will be able to influence others for donating the organs. When asked about preferences 40% replied to donate kidney as 1st preference, then heart 25%, cornea 22%, bone marrow 8%, liver 5%, lungs 0%. This shows the students have some awareness about important organs to be donated. But Only 3% are registered or affiliated to organ donating program, remaining were not found to be related to any program of organ donation.

So very few are truly involved in the organ donation. 90% of all think people do not convince easily, Of them most suggest hesitation as a leading reason for not convincing for organ donation other reasons may be it is difficult to raise such issues to critically ill or they do not believe (10%) in organ donation. Religious beliefs, compensation was also found to be the cause for difficulty in convincing about organ donation.

When asked about the age group which is most willing to donate, 60% suggested people above 50 years have favourable attitude and 25% suggested age group of 25-50 years.

Conclusion	
69 %	Have a thought of organ donation
Kidney	Most important organ to be donated
30 %	Had Family discussion about your wish to donate
3%	Affiliated to any organ donation program
30 %	Encouraged others for organ donation
Religious belief	Most common difficulty in convincing a person
60 %	Age group most willing to donate (>50 years)
10%	Do people convinced easily - Yes
15 %	Awareness about "Transplantation of human organs act"

Most prevalent reason for donation as per their thought is to help people, which is a noble cause to donate. Lack of information or awareness is found as most common cause for very less organ donation among them. And the lesser important causes suggested are lack of support of relatives, very Few suggested religious, inefficient physicians etc.. as a cause of refusal of organ donation. The problem of approaching a critical patient (who may die soon) for harvesting his/her organs is indeed a sensitive issue. One of the most important, yet most difficult conversations for a doctor comes when approaching a family about organ donation when a patient is diagnosed as brain-dead. But the reason for worry is only 15% are aware about transplantation of human organ act.

The concept and practice of organ donation is still at an primary stage The above findings show that we still have a long way to go to before organ donation can become full fledged practice. Lack of proper infrastructure, counseling organizations, socio-economic and ethical problems and a huge gap between legislation and implementation need to be overcome to bridge the large difference between donors and the ever growing waiting list of recipients.

**Discussion:** Successful transplantation of bone, soft tissue and corneas came first, with many advances made between 1900 and 1920. After that improvements are going on regularly except number of organ donors which is very slow to

increase. According to an article on the website of the MOHAN foundation (Multi Organ Harvesting Aid Network) An audit of 155 brain death patients (1996 to 2001) – at SRMC (Sri Ramachandra Medical College & Research Institution, Chennai, India) showed that - Only 30 of these 155 brain dead patients (19%) became organ donors. (60 kidneys and 3 hearts, 1 Liver were retrieved from these patients)<sup>3</sup>. A study done by N Wig, P Gupta, S Kailash suggested The most alarming feature was that the awareness of the concept of brain death and its importance for organ donation was extremely low. Only small number of individuals was aware that brain death is legal in India<sup>3</sup>. D. Mekahli, A.Liutkus, S.Fargue, B.Ranchin, P.Cochat found Regarding their knowledge about which organs could be transplanted, 95% of the respondents were aware of the possibility to transplant a face and 14% thought that xenotransplantation was performed nowadays in their study done in 1<sup>st</sup> year medical students<sup>4</sup>. Sri T Sucharitha et. Al in a study on undergraduate medical students found low level of awareness and knowledge among them<sup>5</sup>. M Phani kumar et. al in his study regarding knowledge of eye donation in UG medical students showed that knowledge regarding the place of eye donation, time limit to collect cornea, storage, age limit, contraindications, whom to contact were still not known clearly<sup>6</sup>. Umesh Y. R.et. al, in his study of 70 medical students found only 27% knew about the organs that could be donated<sup>7</sup>. Christina KY Chung et. Al, found significant discrepancy between attitudes and actual commitment to organ donation, possibly influenced by the inconvenience of registering and lack of knowledge about the process<sup>8</sup>. Theodore D. et. al concluded that 78.9% of subjects (medical students) claimed ignorance of the existing legislation concerning transplantations and organ donation in greece<sup>9</sup>. N. Khan, Z. Masood, N. Tufail showed in their study that education and socioeconomic status among the sample population. People who can donate seem to be reluctant to donate their organs to those in need (recipient) due to the lack of knowledge and fear of organ being misused<sup>10</sup>. In a study Ali et al. found that In the students' opinion, most commonly donated organs and tissues were kidney, cornea, blood and platelet. Ideal candidates for donating organ were parents (81%). Regarding list of options for preference to receive

an organ, most of the students agreed on young age group patients and persons with family<sup>11</sup>. Saad A. Al- Ghanim showed that those who had information and knowledge on deceased organ donation concept were more willing to donate organs and tissues. Lack of information, personal attitudes and religious beliefs were among the objecting reasons for deceased organ/ tissue donation<sup>12</sup>. Study done by Özgür Enginyurt, Nilay Taş, Erdal Özer has laid out that the level of staff Ministry of Health Ordu University Training and Research Hospital knowledge about organ and tissue donation and also staff interest are not enough<sup>13</sup>.

**Conclusion:** A well organized and systemic approach and execution of planning is necessary to improve the number of organ donors by improving the knowledge and system in doctors. Doctors need to play a better and stronger role in changing the mindset. There is need for a social organization/ intermediary to broach this sensitive issue with the relatives. A sensitive, thoughtful communications between doctors and the families of these patients could potentially improve organ donation rates. Prior research has correlated a family's understanding of brain death and donation consent rates. Due to the extreme sensitivity surrounding the end of a patient's life, experts recommend the following techniques for doctors when interacting with family members:

A positive and aesthetic approach is necessary with Provision of small amounts of 'up-to-date' information in a simple language than using medical language with a careful selection of words. Minimize the number of staff members who talk to families about brain death. Frequent explanations might be necessary.

Government and medical authorities can do and have nearly started doing more to educate the society about organ donation and its great potential to save lives. Experts have confidence that once people have the facts, they will be far more likely to register as donors. In an effort to overcome the misunderstanding regarding religious beliefs and organ donation, religious leaders should take the initiative to educate the people by communicating to society from their religious stage, to talk about the benefits and

myths of donating organs from a religious as well as a scientific point of view. But lastly and more importantly, it is the individuals who can make all the difference.

So in the end we can then save countless lives and they could include our own lives and the lives of our loved ones.

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Conflict of interest: None
Funding: None
Cite this Article as: Patel A, Sanghavi S, Diwan J, Study Of Level Of Awareness And Knowledge About The Organ Donation In Undergraduate Medical Students. Natl J Integr Res Med 2015; 6(4):78-81