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**A DESCRIPTIVE STUDY TO ASSESS THE
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A Descriptive Study to Assess the Knowledge Regarding Organ Donation among Health Personnel's Working In Selected Hospitals of Punjab

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Abstract – Abstract currently the demand for transplant organs far outstrips the supply in the UK. This problem is even more severe for the Asian population, who has been shown to be disproportionately over-represented on transplant waiting lists in some regions of the UK. Several commentators have suggested that religious and cultural traditions may be the major determinant preventing Asians from donating organs. An exploratory qualitative study was undertaken with the aim of examining the influence of religious beliefs, amongst other things, on the extent and direction of public attitudes towards organ donation in a cross-section of the Asian population in Luton.

This study indicates that, in the population studied, culture and religion play a much less prohibitive part in determining the level of organ donation than previously suggested. However, there is a desire to be aware of the religious stances so that people can make a more informed decision. The emphasis should clearly been a reconsideration of the presently inadequate approaches to organ procurement and on devising and supplementing these with more appropriate ones. An example of the failure to inform effectively the relevant populations about important developments is that only two of the 32 Muslims in the survey had heard of the Tatwa' by the Muslim Legislative Council permitting organ donation.

INTRODUCTION

Organ transplantation is one of the greatest miracles of the last century. It has resulted in many patients getting a renewed lease of life. Transplantation would not be possible but for organ donation by fellow human beings living, after natural death and also after 'brain death'. This article is written to give Rotarians relevant information on this highest altruistic act.

The history of transplantation is an epic journey describing the medical community's quest to understand how the human body works and its most daring efforts to defy illness and death. Between the lines, too powerful to capture in words, is its most important component - the generosity of organ and tissue donors, and the courage of transplant recipients. *Sushruta*, one of the earliest surgeons in the recorded history lived nearly 150 years before Hippocrates vividly described the basic principles of plastic surgery in his famous ancient treatise *Sushruta Samhita* 1, 2 in 600 B.C. He was probably the first surgeon to perform plastic surgical operations more than 2500 millennia ago. This is something we all Indians should feel proud of.

Organ donation is the process of removing tissues or organs from a live, naturally dead and Brain dead

person to be used in another to sustain his/her life. Organs donation and transplants is governed by Transplant of Human Organ Act (THOA) promulgated in 1994 and has been recently amended in 2011. The Act is ratified by the State Governments and GR issued accordingly for conducting the transplant activities in the respective States. The aims of the Act are to regulate removal, storage and transplantation of human organs for therapeutic purposes and to prevent commercial dealings in organs.

Organs can be obtained from live donors related or unrelated. Live related donors have to be necessarily first relatives who include grand-parents, parents, siblings, spouse, children and grand-children. Law is easy on live first degree related organ donors. The other category includes other relatives or a well wisher such as a family friend who donates organs on humanitarian grounds. In the latter case the transplant has to be cleared by a State Government Authorized Committee. The main purpose of the Authorizing Committee is to rule out any commercial dealing in the process. Unfortunately all over the world live donors can never meet the huge number of organs required for transplant. The other and only source is deceased/cadaver but more specifically brain-dead person. A single Deceased organ donor can save the lives of up to eight people by donating

the heart, lungs, liver, kidneys, pancreas and intestines. Tissue donors are naturally or Brain dead who can donate eyes, bone, soft tissue, heart valves, veins and skin. They can improve lives of more than 50 people. Sometimes eyes and other tissues are recovered for research purposes. This type of donation has the potential to benefit generations to come, as researchers work to find the causes and cures for a variety of medical conditions.

Due to various scam and sting operations being reported in the news, and prosecution of medical professionals thereupon in such cases, the medical fraternity is scared of granting permission for donation of human organs on one ground or another. Those cases that are refused permission go to the courts for justice. There is a long protracted procedure in the courts and many times such cases get death earlier than the verdict. All this needs a critical evaluation that whether the act is serving the purpose for which it was enacted or it is the hindrance in a noble cause of donation of human organs.

Most of the reputed institutions have made it a policy that they will operate upon only those cases where the donor is near relative i.e. spouse, son, daughter, father, mother, brother or sister; and permission of the authorization committee to donate the organ and operation is not required. Due to the fact that many medical professionals have been caught unaware because they did not knew the intricacies of law. They were supposed to check the affidavits whether they were genuine or not.

Without any training for such purposes obviously they relied upon these documents and when these documents turned out to be fake, the axe of law fall on them. They were supposed to find the genuineness of the donor without any investigative powers with them. But keeping in mind the urgency of the situations they took decisions and made judgments which in a few cases turned out to be wrong. After the cases were made out against medical professional the entire medical profession got scared. Then the authorization committees felt that they have to be cautious to save themselves from inadvertent passionate wrong decisions. In this process they became overcautious and in the process of verifying all the documents it started taking a long time.

Medical professionals were in a dilemma that they had taken a solemn oath they will try to save the life of the patient by all means. When they were sitting in such committees they were not trying to save the life of critically ill patients of renal failure but trying to rule out that there is no monetary involvement in these organ donations. They were at great pains, when they had to deny permission as now they were not trying to save the life of the patient but were just acting contrary to it.

To lessen this burden on the conscious of medical profession it was suggested that some senior police officer and some revenue officer should be the

member of such authorization committees. Police officers will be able to establish the identity of the donor as they had investigative teams with them. They will be able to rule out the monetary transaction. Revenue authorities could verify the affidavits so they were made members.

After the introduction of these members it was thought that the process will become simpler and it will take less time. But it was a general feeling that this is a tricky situations and nobody wanted to take onus for decisions and waiting time for the renal failure patients did not decrease.

As the donors were mostly from a different state than the recipient, a question arose that which of the authorization committee will give permission for donation, whether the committee where the recipient is living, donor is living or where the patient is getting operated. Appropriate authority took the decision that authorization committee of the place, where the hospital carrying out renal transplantation is situated, will take the decision.

This raised a problem of verifying the persons from very distant places. Papers were sent back to the different states for verifying the antecedents of the donors and recipients. This process took a lot of time. During this time patients, many a times became more critical. The purpose of the Human Organ Transplantation Act was to provide for the regulation of removal, storage and transplantation of human organs for therapeutic purposes and for the prevention of commercial dealings in human organs and for matters connected therewith or incidental thereto.

"Donor" means any person, not less than eighteen years of age, who voluntarily authorizes the removal of any of his human organs for therapeutic purposes. "Human organ" means any part of a human body consisting of a structured arrangement of tissues which, if wholly removed, cannot be replicated by the body; therapeutic purposes" means systematic treatment of any disease or the measures to improve health according to any particular method or modality; and "transplantation" means the grafting of any human organ from any living person or deceased person to some other living person for therapeutic purposes.

Where the body of a person has been sent for post-mortem examination for medico-legal purposes by reason of the death of such person having been caused by accident or any other unnatural cause; or for pathological purposes, the person competent under this Act to give authority for the removal of any human organ from such dead body may, if he has reason to believe that such human organ will not be required for the purpose for which such body has been sent for post-mortem examination, authorize the removal, for therapeutic purposes, of that human organ of the deceased person provided that he is

satisfied that the deceased person had not expressed, before his death, any objection to any of his human organs being used, for therapeutic purposes after his death or, where he had granted an authority for the use of any of his human organs for therapeutic purposes after his death, such authority had not been revoked by him before his death.

No registered medical practitioner shall undertake the removal or transplantation of any human organ unless he has explained, in such manner as may be prescribed, all possible effects, complications and hazards connected with the removal and transplantation to the donor and the recipient respectively.

It has been observed that most of the times surgeons involved in organ transplantation do not tell exactly what is needed to be told and just explain it is a simple operation and they need not be afraid. This is not a good practice. It is the need of the hour that donor is told clearly as per the law so that later on donor does not feel cheated.

Any person who renders his services to or any hospital and who, for purposes of transplantation, conducts, associates with, or help in any manner in, the removal of any human organ without authority, shall be punishable with imprisonment for a term which may extend to five years and with fine which may extend to ten thousand rupees. Where any person convicted under sub-section (1) is a registered medical practitioner, his name shall be reported by the Appropriate Authority to the respective State Medical Council for taking necessary action including the removal of his name from the register of the Council for a period of two years for the first offence and permanently for the subsequent offence.

In India, brokers bring together potential donors and recipients, arrange payments, take large commissions, and sometimes bilk the poor of the sums due them. In the state of Punjab, intensive media investigations, such as by the magazine Frontline, uncovered widespread corruption from doctors to high ranking police officers. In parts of Northern India, which is a major center for organ trade, local government colludes with traffickers. A number of high-ranking police officers have been implicated in threatening, intimidating and assaulting donor-sellers who came forward to file complaints (Swami, 2003).

Also, it is common that moneylenders force debt-ridden people into selling organs. In some cases they have the backing of local political leaders. Organ 'donors' are recruited by 'agents' to sell a spare organ in order to cancel crippling debts, to pay for a necessary operation, or to cover large family expenses. Enforcement has been weak and misplaced.¹³ In India, while some doctors have been

charged, no doctor to date has been convicted of organ trafficking. Recipients of trafficked organs also do not fall under the criminal law and remain largely invisible (Pearson, 2004).

ORGAN DONATION IN INDIA AND THE WORLD

There is a huge shortage of life sustaining organs in India and other South Asian countries. Unfortunately there is a general lack of awareness hence prospective Brain dead patients are unable to donate the required organs. Tamil Nadu has taken note of the situation and has taken immense creditable steps in increasing awareness leading to unprecedented success. Other States need to emulate their success story forthwith. As compared to the developed world we are way behind (See tables below). It is not that people do not want to donate organs, they would certainly want to, provided they are aware of the same. In Tamil Nadu six out of 10 people come forward to donate organs. Social organizations such Rotary can help in increasing public awareness.

Organ Donation Rate per Million population		World Organ Donation Rate per Million population	
Tamil Nadu	1.15	Spain	35.1
Maharashtra	0.26	Britain	27
Gujrat	0.30	USA	26
Karnataka	0.28	Canada	14
Andhra	0.15	Australia	11
Kerala	0.36	Poland / Hungary	06
Delhi-NCR	0.29	Hongkong	05
Punjab	0.43	Turkey	1.5
		India	0.5

Organ Donors are living proof – that death can bring life, that sorrow can turn to hope, and that a terrible loss can become the greatest gift of all. While death is an inevitable end of all lives, the organs of such people can continue to support life in other people, who are in a desperate need for the organs. This very idea that the deceased will continue to exist in not one but several people can be heartening to the bereaved family. There is no substitute for a healthy organ required by a patient, who lives a miserable life. The source of healthy organs is a Brain dead person.

In India with a population of over a billion the brain dead donors are just about 50 every year (0.05/million). However if we can improve the rate to 2/million, we could do away with live kidney donors and the scandals associated with it. At 3/million, we could take care of all SAARC countries' demand for organs. Anywhere between two and three million Indians may have died in the last five years because they could not get an organ transplant. Every 13 minutes a person is added to the waiting list of organ recipient. Every day 17 loose the fight. It is paradoxical that a country like ours with a billion plus population should have shortage of organs for

transplantation. But, unfortunately, not even 10% get it. As our age expectancy is ever increasing, organ diseases and problems like diabetes-one of the main causes of kidney failure-are expected to rise, creating even greater demand for organ donations. It is estimated that the annual requirement of kidneys in India is about 2 lacs, but just about 3000 kidney transplants are taking place.

LEGAL ASPECT AND THE 'TRANSPLANTATION OF HUMAN ORGAN ACT'

The donation process without any legal formalities is limited to the near relatives and includes the spouse of the recipient. The near relatives organ donor (mother, father, brothers, sisters, son, daughter and spouse) has to provide prove of their relationship by genetic testing and/or legal documents. The inclusion of spouse as a possible donor was controversial, as it was felt that this was potentially exploitable and marriages could be performed for the sole purpose of transplantation and later absolved. However, so far such instances of donation have not come to light.

By accepting brain death as a form of death and going by the general figures that indicate that 1 to 2% of hospital deaths are due to brain death; it was hoped that the law would be able to facilitate the conversion of some of these brain death patients as organ donors. The law at the same time was expected to give a boost to the development of solid organ transplant programmes other than kidney, such as of liver, heart, lungs and pancreas. Since the act has been passed approx. 1300 such transplants from cadaver donors have been performed of various organs and it averages at 100 cadaver transplants a year. The donations itself have been sporadic and confined to a few states such as Tamil Nadu, Andhra Pradesh, Gujarat, Maharashtra and Delhi and the numbers have not been able to cater to the demand for organs(2).

Form 1	Consent Form - From Donor for Live Related or Unrelated Organ Donation
Form 2	Certificate to be issued By Medical Practitioner To Organ Donor Before Considering For Organ Donation
Form 3	Certificate by Medical Practitioner Establishing Relationship as Based On HLA Antigen Tests
Form 4	Certificate by Medical Practitioner Before donation and transplantation Between Spouses
Form 5	Consent form for organ donation after death Donor Card
Form 6	Certificate Of Consent By Person having Lawful possession of the Body in Event of Death (including Brain Death)
Form 7	Certificate Of Consent By Person having Lawful possession of the Body in Event of Death (including Brain Death) where deceased has Given Prior Approval for Organ Donation
Form 8	Brain Death Certificate
Form 9	Informed Consent From Parents for Organ Donation of Their Child (Less Than 16years)
Form 10	Application For Approval For Transplantation Live Donor Other Than Near Relative
Form 11	Application For Registration Of Hospitals To Carry Out Organ Transplantation
Form 12	Certificate of Hospital Registration to undertake transplant activities
Form 13	Office Of The Appropriate Authority for renewal of certificate of registration by a hospital

The shortage of organs has been due to the reluctance of many family members to donate due to

fear of the surgery causing loss to their health, smaller nuclear families with unmatched donors and a deceased donor programme that is still to evolve fully. This shortage has resulted in an organ trade. In most instances the media expose has indirectly pointed a finger at the medical professionals and the middle man when nabbed has often confessed their involvement. However, it is only in a few instances that clinicians have been prosecuted or barred from practice. Interestingly it has been noted that whenever there is a sting operation on this subject in a state or region it quickly migrates to another and it may be possible that the same group of middle men or a group of people are involved. After one such case that involved donors from many states, the Indian intelligence agency called the 'Central Bureau of Investigation' took up the case to look into the modus operandi of the whole organ trade in India.

SIKH FAITH GROUP

General Thoughts and Sikh Perspective on Organ Donation - General Thoughts An open question on general thoughts around organ donation revealed the following themes:

- Specific religious values
- Fears regarding the process of donation
- Mistrust of "the system"
- Lack of awareness of the shortage of organs
- Presence of cultural barriers
- The presence of community infrastructure

In relation to Sikh perspectives on organ donation, the following themes emerged:

- Concept of Giving
- Reincarnation
- Process of death
- Traditional funeral timeline

The faith representatives highlighted a number of religious values relevant to the topic of organ donation. These included the concepts of giving and compassion ("seva" and "daan"); the belief in karma and the idea that the body is a "package for the soul" and therefore not needed after death. They described that cremation was the final act of "detachment" from the physical world. They reported that from a religious perspective and in their experience, the regular discussion of karma and reincarnation means death is not a taboo subject within the Sikh communities. A number of specific fears were identified by participants. These included concern regarding the

physical appearance of the body after the organs had been removed, as Sikh funeral ceremonies typically involve open coffins. There were also questions over the process of donation and its interference with the traditional funeral timeline.

The Role of Faith Representatives - In response to questions about the current role of faith representatives in raising awareness about organ donation, and the extent to which they are approached by members of their communities for advice, there were examples of a strong socioeducational infrastructure and grass-roots engagement with their communities on issues such as child adoption. Specifically concerning organ donation, they reported that members of their communities discuss personal examples openly and this is the main form of information sharing. The representatives pointed out that they are confident in engaging in dialogue about organ donation. Any uncertainties people had about the process were around cultural factors and faith representatives were willing and able to reassure them. They explained the ongoing success of the co-ordinated efforts to raise the awareness of blood donation at Gurudwaras and community centres nationally.

They saw no barriers to taking on a similar role with respect to organ donation. **Cultural, Personal and Religious Influences** - The representatives felt that there is an overlap between the cultural, personal and religious influences.

1. Cultural influences : Group members spoke about the presence of cultural factors which have an impact upon people's views on organ donation and emphasised the influence of traditional beliefs and practices from the Punjab region of India on Sikh's living in the UK. For instance they highlighted that members of their communities may feel that donated organs could be used in witchcraft. They also explained that the idea of giving blood for ill relatives was a common and widely accepted practice in India and that this is reflected in the opinions and practices of Sikhs in the UK. They felt that the major influences on people's decisions came from Punjabi Sikh culture, especially for older generations. Representatives discussed the presence of cultural stories about organs being "misused" (for example in witchcraft or being sold) or "wasted" and not treated respectfully.

2. Personal Influences : A lack of trust in the system of organ donation was discussed. Questions raised included who would receive donated organs (whether they would be "sold to rich people" or go to people from other countries) and whether organs would be wasted. They recognised the impact of media on people's lives and health decisions and thought that this could be utilised to greater effect.

3. Religious Influences : Particular religious beliefs such as compassion "deya", "karma," "daan" and the idea that it was "insikhi" not to give were discussed. As mentioned above, there was a recurrent theme of the body as a vessel for the soul, and at the point of death there is detachment of the soul from the physical world. They reported that talking about death is part of the "code of conduct," so they felt that there were no specific religious barriers in relation to this. They mentioned that there could be general concerns from community members around the physical appearance of the body at the time of the funeral and interference with the traditional funeral timeline.

CONCLUSION

India has a important role to play in Asia and has the capacity to lead the way in transplant surgery. It has the law for it, the expertise and the hospital infrastructure to support the programme. It needs to streamline the implementation of its law, and promote the deceased donation programme. If the deceased donation programme is successful, it can not only take care of shortage of organs but also help in stopping organ commerce. NGO organizations like MOHAN have given some hope that the deceased donation programme can become a reality in India.

It can be concluded that there is a wide gap in terms of organ donation on the basis of 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. Further people who can donate organ assume that organ donation generally comes from addicts and poor people. Adequate knowledge may change the attitude of people towards organ donation. 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. Organ donation means that a person pledge during his life time that after death organ from his /her body can be used for transplantation to help terminally ill patients and giving them a new lease of life .There are two ways of organ donation i.e living related and cadaver related organ donation.

To reduce the mortality and morbidity, the health personnels should have thorough knowledge regarding organ donation. The present study was conducted to assess the knowledge regarding organ donation among health personnels in selected hospitals of Jalandhar City, Punjab. Using convenience sample technique 100 health personnels were selected who were working in ICU,

ICCU, Medical ward, Surgical ward of SGL, Patel, Apex, Satyam Hospitals Jalandhar ,City,Punjab. The concepts of the study were based on health promotion model.

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