Transplantation of human organs both by natural and manmade substitution is a landmark in curative techniques in the field of science and technology. Successful transplantation of human kidney, heart and liver besides saving the lives of hopeless patients have led to certain complex problems of religion, ethical, philosophical, moral, legal, political and economically nature. Organ transplantation is the procedure of replacing diseased organs, parts of organs, or tissues by healthy organs or tissues. The Resource of organ may be living or deceased donor. In this era of science and technology it is common procedure used in medical science throughout the world. Human organ transplantation helps us in two ways. It provides the possibility of saving of life and secondly it provides the best result in term of quality of life and reduces the long term health care costs. Transplantation of human organ is best and reliable therapies in comparison to the dialysis. In case of dialysis it is time consuming and as well as costly. Due to organ transplantation thousand of life have been saved and improved the health of thousands of people. In spite of all these facts, regrettably many people will not benefit from this therapeutic procedure. There is shortage of organ donors all over the world. Shortage of human organ is due to unawareness, weak legal frame work, lack of uniform legal frame work regarding transplantation of human organ. In some countries it is very tough task to get government permission for the human organ transplantation like USA. In other hand some countries like Iraq human organ transplantation is a recognized as a commercial transactions. Human organ is treated as a property of human being.

Brain –Stem death
According to black’s Law Dictionary meaning of death is “the cessation of life: the ceasing to exit, defined by physicians as total stoppage of the circulation of blood: and the cessation of the animal and vital function consequent thereon: such respiration, pulsation etc”. The registration of birth and death Act, 1969, says that death means “the permanent disappearance of all evidence of life at any time after live birth has taken place.” The Indian Penal Code, 1860 has another perceptive regarding the definition of death. As per section 46 of Indian Penal Code defines the death as death of human being. There is no well defined definition of death and also does not gives us ideas about Brain-stem Death. There is classical definition of death. As per that definition death means cessation of three independent vital body functions: circulation, respiration and brain activity. Cessation of breathing and loss of heart beat are still viewed by many as crucial death signs. Notion is that the death is not exclusively associated with breathing and heart beat. Transplantation of Human Organ Act, 1994 defines death as stage at which all functions of the brain stems have permanently and irreversibly ceased and is so certified by board of Medical Experts. It is difficult to convince the family member about the concept of Brain death even after telling them about patients’ Brain death there are not ready to give up and go through with ventilator process. There is no legal section for disconnecting life support, including the ventilator. This has led to

Organ Donation in India

major ethical predicament on the ground. The family is informed that relative is dead and asked for consent for donation. But if they refuse and request that the body be handed over, their request to withdraw life support is turned down. Thus the declaration of brain death is not possible in every hospitals except where the Transplantation of Human organ take place. This led to bizarre situation where the cadaver donor had to be shifted to another recognized institution only for the purpose of organ retrieval. The question of whether brain death can be declared independent of organ donation is still an open question. In reality brain death individuals are still hooked on the intensive organ support measures. Being a developing nation we have scarcity of Intensive care unit in India. As because of this fact we are not able to provide this intensive Care unit facility to all.

Recognition of Cadaver Transplantation or tissue donation The removal of organ from the dead body raises the moral question and whether commercialization of organ can be allowed. Organs transplantation is primarily intended to protect the interest of recipients. But there are three categories of people involved in this-the physician, the donor, the recipients and the relatives and dependents of the donor and recipients. The balancing of conflicting interest of these people is a complex question. The consent to donate organ cannot, in most cases, be a free consent. The financial condition of donor may have an influence on him. Due to the technological and medical advancement in India now the value of cadavers has gone up because of its beneficial use of its part of transplantation. After the invention of brain death concept it is now easy to obtain an organ from the diseased person. Transplantation from the dead person also avoids so many issues which might be related to ethical as well as commercialization of the organs. Consent of the diseased person and proper authorization committees is the main legal issues related to the cadaver donor. Now the question is that can a healthy person by will donate his organ? In Williams vs. Williams the court of appeal in England held that a person cannot by will or otherwise dispose of his body after death and that any directions given by him are not binding on his personal representatives and survivors. The court said “there is no property in or ownership of dead body that man cannot by will dispose of his dead body.” According to the instruction given by a person who died, as to the disposal of his body, could be therefore disregarded by his personal representatives. However, the advancement in medical technology and the need for human parts for research and therapeutic purposes changed the traditional trend.

By a living person under express Authority-
According to Sub section (1) of section 3 of Transplantation of Human Organ Act, 1994 any donor may, in such manner and subject to such conditions as may be prescribed, authorize the removal, before his death, of any human organ of his body for therapeutic purpose. According to Section 3(2) of the Transplantation of Human Organ Act, 1994 “if any donor had, in writing and in the presence of two or more witnesses (at least one whom is a near relative of such person) unequivocally authorized at any time before his death, removal of any human organ of his body, after his death, for therapeutic purposes, the donor shall, unless he has any reason to believe that the donor had subsequently revoked the authority aforesaid , grant to a registered medical practitioner all reasonable

7. Panday Sk,”Brain death and our transplant law”, Issues Medical Ethiscs. 2001 p,51
8. Mahalswar K.P.S”Medical Negligence and The Law 1991 p.g 156

9. (1882) 20 Ch.D 659
10. ibid
11. Sub Section (1) of Section of Transplantation of Human Organ Act, 1994.
facilities for the organ removal, for therapeutic purposes, of that human organ from the dead body of the donor\textsuperscript{12} It means an adult who is sound mind can express his desire to donate organs through will and after the death; his organs can be removed for Transplantation. When authorities reasonable believe that the deceased had not expressed any objection, his organ can be removed with the approval of near relatives. According to Sub clause 3 of section 3 says that where no such authority as is referred to in sub section (2) of Section 3 of the Transplantation of Human Organ Act, 1994, was made by any person before his death but no objection was also expressed by such person to any of his human organs being used after his death for the therapeutic purposes, the person lawfully in the possession of the dead body of such person may, unless he has reason to believe that any near relative of deceased person has objection to any of deceased person’s human organs being used for therapeutic purposes, authorize the removal of any human organ of the deceased person for its use of therapeutic purposes.

**Live Donors**-living organ donors are those donors who donate organ like one kidney, a part of pancreas or part of lung to an ailing person for his/her therapeutic benefits during life. In India donation of organs from living as well as brain death stem dead donors for transplantation into patients for therapeutic purpose was made legal under the Transplantation of Human Organs Act, 1994.\textsuperscript{13} The Act was amended in 2011 that legalized swap transplants among compatible living donor and recipients pairs under Transplantation of Human Organ Act, 2011\textsuperscript{14}which was followed by Gazette notification of Transplantation of Human Organ and tissue Amendment rules, 2014. However, organ donation from living donor is restricted mostly to two organs-one kidney or apart of liver only.

**Living/ Cadaveric organ or issue donation**

There are two type of living donors who can donate organs-

1. **Known Organ Donor**
   a. Near Related organ Donors
   b. Other than Near Relatives

2. **Unknown Organ Donors**
   a. Purely Altruistic donors
   b. Quasi-altruistic donor
   c. Non –altruistic donors

1. **Known Organ Donors**- this category of organ donors are always known to the recipient- either through biological or long –existing social relationship. Such donors share a bond of love and affection with the recipient. They share organs to save the life of their loved one. However the lot of document is required by ‘competent authority’/ authorization committee to authenticate.

   a. **Near Related Organ Donor**- As per Transplantation of Human Organ and tissue rules, 2014, the transplant of organ is permitted between near relatives like spouse , mother, father, brother, sister, son, daughter, grandfather, grandmother and grandchildren after approval by Competent authority. The Competent Authority ensures that donor-recipient relationship is genuine and there is no coercion or pressure on the donor.

   b. **Other Near Relatives**: - In India, organ donation by other than near relatives like friends , uncles ,aunts , cousins etc. is also permitted but only after approval by the “Authorization Committee” of the hospital, a district or hospital.

\textsuperscript{12} Section 3 of The Transplantation of Human Organ Act, 1994.
\textsuperscript{13} Sub Section 1 of section 3 of the Transplantation of human Organ Act, 1994.
\textsuperscript{14} Section 1 of the Transplantation of Human Organ Amendment Act,2011.
Table 1. Showing requirement of various document and their purpose for facilitating living donation and Transplantation as per Transplantation of Human Organ Rules, 2014

<table>
<thead>
<tr>
<th>S. No</th>
<th>Documents Required</th>
<th>Purpose of the Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ration Card or Pan or Aadhaar card or Voter Identity card or Password.</td>
<td>For identity and proof of residence</td>
</tr>
<tr>
<td>2</td>
<td>Birth Certificate, Marriage Certificate, other relationship Certificate from Tehsildar or, sub divisional Magistrate Or Metropolitan Magistrate or Sapanch.</td>
<td>For ensuring existence of Relationship among Indians.</td>
</tr>
<tr>
<td>3</td>
<td>Relationship certificate to be certified by senior embassy as per Form no. 21</td>
<td>For ensuring existence of relationship of foreign nationals having embassy in India</td>
</tr>
<tr>
<td>4</td>
<td>Relationship Certificate to be certified by Govt. of that Country to which the foreigner belongs as per form 21</td>
<td>For Ensuring existence of relationship of foreign nationals not having embassy in India</td>
</tr>
</tbody>
</table>

The Authorization committee is supposed to meet regularly to Scrutinize application for organ donation. Its work involves ensuring that living donor is doing the deed purely out of love and affection for the recipient. This is done through personal interviewer of the donor, recipients and members of their families. Such interviews are recorded on video. The Indian System is very cautious in giving a stamp of approval to donor recipient tie-up due to gross social and economic equalities, absence of national health insurance policy and reported organ trade cases.  

Table No.2 Depicting Form Numbers and purpose of these forms for facilitating living organ donation and transplantation as per Transplantation of Human Organ Rules 2014

<table>
<thead>
<tr>
<th>S. No</th>
<th>Number</th>
<th>Purpose of Form</th>
<th>To Be filled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Form 1</td>
<td>For organ Donation From Living near related Donor</td>
<td>Living related donor</td>
</tr>
<tr>
<td>2</td>
<td>Form 2</td>
<td>For organ donation from living spousal donor</td>
<td>Living spousal Donor</td>
</tr>
<tr>
<td>3</td>
<td>Form 3</td>
<td>For organ donation from “other than near relative” donor</td>
<td>Living known “other than near relative” donor</td>
</tr>
<tr>
<td>4</td>
<td>Form 4</td>
<td>For the Certificate of Medical fitness of living donor</td>
<td>Registered Medical practitioner</td>
</tr>
<tr>
<td>5</td>
<td>Form 5</td>
<td>For certificate of genetic relationship of living donor with recipient.</td>
<td>Head of pathology certifying relationship.</td>
</tr>
<tr>
<td>6</td>
<td>Form 6</td>
<td>For Spousal living donor</td>
<td>“Competent authority” in case of Indian nationals and by “Authorization Committee” in case of foreigners after verifying the marriage through documentary evidence.</td>
</tr>
</tbody>
</table>

2. **Unknown Organ Donor**—these are the donors who are unknown to the recipient. The two do not share any bond of love.

   a. **Purely altruistic donors**—Many people donate organs to strangers in response to their appeals in print or electronic media; others donate to anyone on a waiting list or initiate a domino chain of organ donation.  

   b. **Quasi Altruistic Organ Donors**—A quasi altruistic donor donates an organ after receiving the same organ either from a living donor or a deceased donor. Such kind of quasi—altruistic organ donors are usually heart or liver domino donors. The quasi—altruistic domino liver donates his liver to another recipient after getting a part of liver either from a living donor or from a deceased donor. In these cases the donor gets a chance to become a recipients and donor simultaneously.  

   c. **Non—Altruistic organ donors**—In this Category the donor unknown to the recipient. Donors donate organ to stranger in exchange for getting the best matched organ for their own relatives or friends to whom they intend to donate organs. This type of Transplant is called swap transplant.

   it is important to note that no hospital or institution can perform organ retrieval and transplant surgeries without getting a license from “appropriate Authority” that is constituted by the state Government.

<table>
<thead>
<tr>
<th>S. No</th>
<th>Number</th>
<th>Purpose of Form</th>
<th>To Be filled By</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Form 7</td>
<td>Application for Approval of Transplantation from living donor.</td>
<td>Jointly by proposed recipient and proposed donor.</td>
</tr>
<tr>
<td>8</td>
<td>Form 8</td>
<td>Certificate by the Authorization Committee of hospital, district or state</td>
<td>The “Authorization Committee” where Transplantation has to take place (to be issued on letter head)</td>
</tr>
<tr>
<td>9</td>
<td>Form 9</td>
<td>Certificate by “competent Authority” in case of near relative other than spousal donation</td>
<td>“Competent Authority”</td>
</tr>
<tr>
<td>10</td>
<td>Form 10</td>
<td>Verification certificate in respect of domicile status of recipient or donor</td>
<td>Tehsildar or other authorized officer required only for donor other than near relative / recipients if they do not belong to state where transplant hospital identified for operation is identified.</td>
</tr>
<tr>
<td>11</td>
<td>Form 11</td>
<td>Certificate of relationship between donor and recipient in case of foreigner</td>
<td>Embassy Concerned Person.</td>
</tr>
</tbody>
</table>

17. Ibid
18. Ibid
Table No.: Showing number and purpose of various forms for obtaining license by organ Transplantation/ retrieval hospitals from the “Appropriate Authority” in accordance with Transplantation of Human Organs and Tissue Rules 2014

<table>
<thead>
<tr>
<th>S.No</th>
<th>Form Number</th>
<th>Purpose of the Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Form 12</td>
<td>Application for registration of hospital to carry out organ or tissue transplantation other than cornea.</td>
</tr>
<tr>
<td>2</td>
<td>Form 13</td>
<td>Application for registration of hospital to carry out organ or tissue retrieval other than cornea retrieval.</td>
</tr>
<tr>
<td>3</td>
<td>Form 16</td>
<td>Certificate of Registration for 'performing organ/ tissue Transplantation and/ or tissue banking/</td>
</tr>
<tr>
<td>4</td>
<td>Form 17</td>
<td>Certificate of renewal of Registration.</td>
</tr>
</tbody>
</table>

The Act also provides the provision and procedure regarding removal of human organs, in case of unclaimed bodies in the hospital and prison. There is a separate authority Authority for removal of human Organs, in case of unclaimed bodies in hospital or prison.

“In the case of dead body lying in the hospital or prison and not claimed by any of the relatives of deceased person within forty-eight hours from the time of death of concerned person, the authority for the removal of any human organ from the dead body which so remains unclaimed may be given, in the prescribed from, by the person in charge, for the time being, of the management or control of the hospital or prison, or by an employee of such hospital or prison authorized in this behalf by the person in charge of the management or control thereof.”

If on a reasonable enquiry the authorities are unable to locate near relatives within forty-eight hours. Organs must from cadaver be obtained very soon after death: they may however, subsequently be preserved for some hours by cooling and other procedures. The Time factor in Transplantation of human Organ Act, 1994 diffuses the transplantation purpose, because most of vital organs need to be transplantation purpose most of the vital organs needs to be transplant- ed from cadaver very soon after the death. These provisions shall be understood as removal of an organ for transplantation. Various Authorities under Transplantation of Human Organ Act, 1994 for the Removal and transplantation of human organ.

- **Appropriate Authority**: To give a grant registration to hospitals for the transplantation and removal of organ and tissues there are certain standards for the hospitals. Appropriate Authority do inspections and investigations regarding such standard and make inquiry after receiving any complaint regarding the breach of such standard.

- **Advisory Committee**: Advisory committees’ main function is to give advice to the appropriate Authority regarding hospitals standard and necessary equipments and facilities, Facilities like intensive care units etc.

- **Authorization Committee**: The main functions of Authorization Committee is to review each case regarding living donor. To do strict scrutiny about the living donor free consent. And ensure that whether the donor is subject to exploitation or not. To know the fact that whether there is commercial transaction in between donor and donees or not to avoid commercial activities. All proceeding of Authorization committee is videographer and gives

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19. Sub Section 1 of Section 5 of the Transplantation of human Organ Act, 1994


21. Rule 30 of the Transplantation of Human Organ Rule(Amendment)2014
Organ Donation in India

There are so many organs which can be donated by the person after natural death of the person but there are religious sentiment of the people because of that on one is ready to donate their organ even after the death. Consent of the person is also again an issue for organ donation because consent might be given by the person under pressure or any other reason. Availability of donor is the main problem in India. Lack of institutional frame work, unawareness among people and improper infrastructural facilities are the factors for the low rate of organ donation in India. Specially there are so many social and cultural myths regarding cadaveric organ donations. Administrative complexity and conservative mind set of the peoples also the reason for low rate of organ donation in India.

The Indian law enables authorities of hospitals or jails where the person dies to allow removal by registered medical Practitioner. According to section 3 of Transplantation of Human organ Act, 1994 the authority given under sub section I or sub section 2 of section 3 shall be sufficient warrant for the removal, for therapeutic purposes, of the human organ: but no such removal shall be made by any person other than the registered medical practitioner. 

There is huge gap between demand and supply of Organ in India. As per sources last five year organ donation rate is 594 donors per years. And demand is very high even 4 lakh people are dying due to waiting for the transplantation of organ. The scarcity of organ is the main reason for theirs death. The data show that how much important organ donations in India. Organ Transplantation is one of the revolutionary steps in the area of Medical Science. The most of the people think that technological development in the area of Organ Transplantation is one of the greatest achievements of the modern medical science. It is advancement in the fields of medicine which contributed tremendous improvement in world wide. The human organ transplantation has raised so many ethical, social, economic and religious controversies in India as well as in the world. Trading of Organ is very common in Asian nations, due to this Medical Tourism has been growing day by day. The People from all over world come here to get an organ donor at the cost of some money. The poor person and the venerable section of the society are victim of these organ sales. In India there is proper law for the Organ Transplantation even after that in the name of fiduciary relationship people used to sale there organ to other person. Apart from commercialization of the organ donation other bigger issue is the scarcity of organ donor.

Current Scenario of Organ Donation in India-

<table>
<thead>
<tr>
<th>Years</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of donors</td>
<td>313</td>
<td>411</td>
<td>573</td>
<td>772</td>
<td>905</td>
</tr>
</tbody>
</table>

Source-National Organ and tissues transplantation Orgnisations

The Indian law enables authorities of hospitals or jails where the person dies to allow removal by registered medical Practitioner. According to section 3 of Transplantation of Human organ Act, 1994 the authority given under sub section I or sub section 2 of section 3 shall be sufficient warrant for the removal, for therapeutic purposes, of the human organ: but no such removal shall be made by any person other than the registered medical practitioner. 

22. Clause (a) and clause (b) of Sub Section 4 of the Section 9 of the Transplantation of Human Organ Act, 1994
23. https://notto.gov.in/ accessed on 30th of November at 1:40 PM
25. Dhingra Indu”Gift of Life from the dead” Indian Express, March 1995 p.8
is dead. Deena V.Union of India the Supreme Court approved the validity of the provision and expressed its view as follows: “the act of hanging causes the least pain imaginable on account of the fact that death supervenes instantaneously the conclusion that the system of hanging is a painless as is possible in the circumstances. A question arise whether a convict sentenced a death can be permitted to donate his organs if he wants to do so for the benefit of others. His last wish is always respected. If it is his last wish, he will have to be permitted to donate organs. This leads to another question as to how his life is to be terminated. Death by hanging may not help procuring the organ in the healthy condition

**Conclusion**

Due to organ transplantation thousand of life have been saved and improved the health of thousands of people. In spite of all these facts, regrettably many people will not benefit from this therapeutic procedure. There is shortage of organ donors all over the world. Shortage of human organ is due to unawareness, weak legal frame work, lack of uniform legal frame work regarding transplantation of human organ. In some countries it is very duff task to get government permission for the human organ transplantation like USA. In other hand some countries like Iraq human organ transplantation is a recognized as a commercial transactions. Human organ is treated as a property of human being. In last 50 years transplantation has become a successful worldwide practice. Legal tools are a necessity in organ procurement to allow transplant surgeons to remove organs from potential sources. In the area of organ transplantation majorly two organizations is operational like World Health Organization, The Asian Society of Transplantation. In 1987 the fortieth World Health Assembly, concerned at the trade for profit in human organs, initiated the preparation of the first WHO Guiding Principles on Transplantation, endorsed by the Assembly in 1991 in resolution. These Guiding Principles have greatly influenced professional codes and practices as well as legislation around the world during almost two decades. After a consultation process that took several years, the Sixty-third World Health Assembly adopted resolution, endorsing the updated WHO Guiding Principles and identifying areas of progress to optimize donation and transplantation practices. Organ donation and transplant rates vary widely across the globe, but there remains an almost universal shortage of deceased donors. The unmet need for transplants has resulted in many systematic approaches to increase donor rates, but there have also been practices that have crossed the boundaries of legal and ethical acceptability. Recent years have seen intense interest from international political organizations, led by the World Health Organization, and professional bodies, led by The Transplantation Society. Their efforts have focused on the development of a series of legal and ethical frameworks, designed to encourage all countries to eradicate unacceptable practices while introducing programmes that strive to achieve national or regional self-sufficiency in meeting the need for organ transplants. These programmes should seek to reduce both the need for transplantation and also develop deceased donation to its maximum potential. Living donation remains the mainstay of transplantation in many parts of the world, and many of the controversial—and unacceptable—areas of practice are found in the exploitation of living donors.

27. A.I.R 1983 S.C 1155 at p.1186